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Pronominal Clitics in Tocharian:
A Study in the Morphology-Syntax Interface

A dissertation submitted in partial satisfaction
of the requirements for the degree
Doctor of Philosophy in Indo-European Studies

by

Teigo Onishi

2022

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2022

ABSTRACT OF THE DISSERTATION

Pronominal Clitics in Tocharian:
A Study in the Morphology-Syntax Interface

by

Teigo Onishi
Doctor of Philosophy in Indo-European Studies
University of California, Los Angeles, 2022
Professor Hilda Koopman, Co-Chair
Professor David Michael Goldstein, Co-Chair

This dissertation examines the pronominal clitics of Tocharian A and B and develops a model that best accounts for their distribution. After reviewing the phonological, morphological, and syntactic characteristics and chief uses of the Tocharian pronominal clitics, a morphosyntactic model is developed, which accounts for the attested uses and predicts gaps in their distribution. It predicts that the Tocharian pronominal clitics cannot represent the possessor associated with a transitive subject or the complement of the adposition contained in another nominal expression. The model also suggests that when a pronominal clitic represents the possessor associated with the subject of an intransitive verb, the verb belongs to the so-called unaccusative verbs. Furthermore, it accounts for the restricted distribution of PCs in the sentences where multiple arguments are pronominal. When the indirect and direct objects of a ditransitive predicate are pronominal, pronominal clitics consistently represent the indirect object. The morphosyntactic analysis advanced in this dissertation derives this distribution since a licensor, which looks for a pronominal argument, finds the indirect object before the direct object. Tocharian pronominal clitics sometimes co-occur with the overt nominal expression it corefers with. In such cases, the doubling pronominal clitic indicates the doubled associate to be topical.

The dissertation of Teigo Onishi is approved.

Brent Harmon Vine

Stephanie J. Watkins

Olav Hackstein

David Michael Goldstein, Committee Co-Chair

Hilda Koopman, Committee Co-Chair

University of California, Los Angeles

2022

To May and Ray

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1	first person
2	second person
3	third person
ABL	ablative
ABS	absolutive
ACC	accusative
ACT	active
ADJ	adjective
ADJZ	adjectivizer
ALL	allative
CAUS	causative
COM	comitative
COMP	complementizer
CONJ	conjunction
COP	copula
DAT	dative
DEM	demonstrative
DET	determiner
DIM	diminutive
DU	dual
EMP	emphatic
F	feminine
GDV	gerundive
GEN	genitive
IMP	imperative
IMPF	imperfect
INDF	indefinite
INF	infinitive
INS	instrumental
LOC	locative
M	masculine
MID	middle
N	neuter
NEG	negative
NMLZ	nominalizer
NOM	nominative

NPST	nonpast
OPT	optative
PERL	perlative
PL	plural
PREV	preverb
PST	past
PTCL	particle
PTCP	participle
REFL	reflexive
REL	relative
SG	singular
SUBJ	subjunctive
TOP	topic
VOC	vocative

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VITA

2009	B.A. in Linguistics, Kyoto University
2011	M.A. in Linguistics, Kyoto University
2015–2017	Fulbright Fellowship, UCLA, the United States of America
2016	Teaching Assistant, Department of Classics, UCLA
2016	Graduate Summer Research Mentorship (under Prof. Brent Vine), UCLA
2016–2021	Teaching Assistant, Department of Linguistics, UCLA
2017	Graduate Summer Research Mentorship (under Prof. Brent Vine), UCLA
2021	Harry and Yvonne Lenart Graduate Travel Fellowships, UCLA
2021–2022	Dissertation Year Fellowship, UCLA

PUBLICATIONS

forthcoming. "Clitic Doubling in Tocharian B" In David M. Goldstein, Stephanie W. Jamison, and Brent Vine (eds.). *Proceedings of the 32nd Annual UCLA Indo-European Conference*, Bremen: Hempen.

2021. "Umbrian <*rs*> and <*rf*>: a synchronic and diachronic puzzle" *Indo-European Linguistics* 9:203–33.

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& Kanehiro Nishimura. 2016. "Inseparable Etymology: Latin *crīnis*, Greek κορέω, and Related forms in Germanic" In David M. Goldstein, Stephanie W. Jamison, and Brent Vine (eds.). Proceedings of the 27th Annual UCLA Indo-European Conference, 131–42. Bremen: Hempen.

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CHAPTER 1

Introduction

1.1 Goals of this dissertation

There are two goals of this dissertation: one is to collect descriptive data on the distribution of pronominal clitics in Tocharian, and the other is to formulate an explanatorily adequate theory that not only accounts for all of the descriptive facts but also predicts the existence and absence of certain types of constructions and serves as a basis for subsequent comparative morphosyntactic reconstruction of Proto-Indo-European.

In reconstructing the morphosyntactic system of a proto-language from attested languages X and Y, we need to answer the following questions either implicitly or explicitly: How much is X's morphosyntactic pattern similar to or different from that of Y? Is the similarity due to inheritance, shared innovation, or parallel innovation? How do morphosyntactic innovations occur? How do they develop diachronically? To answer these questions, one needs to have a good understanding of the synchronic morphosyntactic system of X and Y (cf. "you've got to know what to compare"; Watkins 1976: 249). Just as one needs to have a good knowledge of the synchronic phonological system of a target language in order to identify the diachronic sound changes it has undergone, one also needs to understand the synchronic morphosyntactic system of that language in order to postulate the diachronic morphological or syntactic changes that account for the empirical data. This is in the same spirit of Watkins (1976: 249), who emphasized the importance of a "more-highly bound or restricted construction" when reconstructing a morphosyntactic pattern for a proto-language. To achieve the goal of historical-comparative reconstruction, that is, to explain "how a set of attested languages came to be the way they are" (Melchert, forthcoming), first we

need a better understanding of the morphosyntactic system of the attested languages. That being said, it is not an easy task to analyze the synchronic morphosyntactic system of an extinct language since unlike living languages, negative evidence is not available: what is available to us is only the language as presented by the writers of the source documents. Therefore, to build a hypothesis we need to focus on the distribution, context and variation of those restricted constructions emphasized by Watkins. Just as a successful synchronic theory of morphosyntax may explain all of the descriptive facts and make falsifiable predictions based on an independently motivated model, a successful theory of diachronic morphosyntactic change should also be able to explain all of the synchronic models that we postulate for the attested languages and make falsifiable predictions about what morphosyntactic changes should and should not be found.

This dissertation aims to lay out the descriptive facts of Tocharian and develop a synchronic morphosyntactic model which best explains the empirical data, and makes predictions about the presence and absence of certain types of data. This in turn will form a basis for subsequent research on reconstructing the morphosyntactic system of Proto-Tocharian, Proto-Nuclear-Indo-European (PNIE), and Proto-Indo-European (PIE).[1]

1.2 Tocharian

Tocharian is one of the subgroups of the Indo-European language family and comprises two attested languages: Tocharian A and B (TA and TB). Manuscripts written in these languages were found in the present-day Xinjiang Uyghur Autonomous Region of the People's Republic of China. They were collected and published in the nineteenth and the twentieth century, and digitized in the twenty-first century.[2] The majority of scholars consider Tocharian to be the second clade to branch off from PIE since it displays (morphological) innovations that are shared with the core Indo-European languages but are absent in Anatolian and since it lacks some of the innovations

1. In this dissertation I assume that Anatolian was the first group to branch off from PIE. The rest from which Anatolian was separated is labelled as Proto-Nuclear-Indo-European. I also use the term "core Indo-European" to refer to the IE languages excluding Anatolian and Tocharian.

2. The digital corpus of Tocharian is accessible online (A Comprehensive Edition of Tocharian Manuscripts [CEToM]: https://www.univie.ac.at/tocharian/?home).

that are ubiquitously found in the core Indo-European languages.[3] Regarding the former, for example, unlike Anatolian, TA and TB have **so-*/**to-*pronouns as in the core Indo-European languages. As for the latter, Tocharian class III preterites have a preterite-stem-building suffix *-s-* in the middle paradigm and the third-person singular of the active paradigm. In contrast, this sibilant is found in all cells in the active paradigm of the core Indo-European languages. The *communis opinio* is that after Tocharian branched off, the core IE languages underwent the leveling of **s* throughout the active paradigm (Jasanoff 2003).

Tocharian morphosyntax is still less well understood compared to other ancient IE languages such as Greek and Vedic Sanskrit. It is without doubt that a better understanding of the synchronic morphosyntactic system of TA and TB and the reconstructed morphosyntactic system of Proto-Tocharian will contribute significantly to the reconstruction of PIE, PNIE and its descendants. At the same time, however, we face challenges since Tocharian is attested much later than the earliest attestation of the ancient Indo-European languages such as Hittite or Vedic Sanskrit. The earliest document of Tocharian B is dated to around the 4th or 5th century CE, and we do not know, for example, what the phonological or morphological system of its ancestral language was like in 1,000 BCE. Therefore, while we can pinpoint important archaisms in Tocharian that were lost in the other Indo-European languages, we should also expect to see a number of innovations.[4] It is therefore crucial for us to attempt to separate archaisms from innovations. From this perspective also, a better understanding of the synchronic system of Tocharian is a desideratum in the field of Indo-European studies.

1.3 Tocharian morphosyntax and pronominal clitics

It is fair to say that there has been much more research in Tocharian on historical sound changes and synchronic phonology than there has been on morphosyntactic change.[5] While the historical phonology of Tocharian has been continuously investigated since the twentieth century (e.g.,

3. See, e.g., Schmidt (1992), Winter (1997), Carling (2005), Jasanoff (2020), and Weiss (2018); for a different view, see Malzahn (2016b).

4. For example, Melchert (1978) points out that Tocharian acquired several verbal roots ending in *-tk-* from the prehistoric agglutination of the present-stem marking suffix **-ske/o-* with the root.

Pedersen 1941; Couvreur 1947; Adams 1988; Ringe 1996), it is only recently that research on Tocharian morphosyntax has begun (summarized in Adams 2015). Although several studies which focus on the Tocharian verbal system from a synchronic and diachronic perspective are available (Krause 1952; Schmidt 1974; Hackstein 1995; Malzahn 2010; Peyrot 2013b), an extensive survey on the Tocharian nominal system has yet to be carried out.[6]

Moreover, many aspects of Tocharian morphosyntax still remain to be worked out, for example, derivational morphology, morphophonological alternation (ablaut, suppletion) and its interaction with locality, causatives (cf. Seržant 2014; Malzahn 2016a), second-position clitics (cf. Winter 1959; Malzahn 2012), left periphery (Koller 2013), topic/focus constructions (e.g., verb-fronting: Hackstein 2013, 2015), *wh*-movement (e.g., Adams 2015; Hearn 2017), relative clauses (e.g., Pinault 1997), and discontinuous constituents, to name a few.

Pronominal clitics (PCs) are one of these important topics that remain to be investigated. In all cases in TB and in most cases in TA, pronominal clitics attach to a finite verb and express various syntactic relations to the verb, including direct and indirect object, and possessor of an argument. For example, in (1.1), the third-person singular PC *-ne* marks the indirect object of the verb *śilāre* 'brought'.[7]

5. Several handbooks on synchronic Tocharian grammar are now available: *TEB* I, Pinault (1992, 2008) and Adams (2015); Schulze, Sieg, and Siegling (1931) for TA. on the geographic and diachronic variation in TB, see Peyrot (2008).

6. For studies on the Tocharian locative and genitive-dative case, see Carling (2000) and Meunier (2015), respectively. Preverbs and adpositions are discussed in Hackstein (1997) and Kuritsyna (2016). On the use of demonstrative pronouns in Tocharian, see Stumpf (1971) and Kümmel (2015).

7. Peyrot (2017, 2019) states that pronominal clitics mark the object of the verb. However, marking the direct or indirect object is only one of the several attested usages (Chapter 7). In many cases, PCs do not represent the direct or indirect object but the possessor associated with the object as in (1.a), where the second-person singular PC *-c* represents the possessor associated with the theme argument *ersna* 'form = Skt. *rūpa*.' If the pronominal clitic was merely marking the object of the verb we would expect to find 3SG *-ne* rather than *-c* in this case.

(1.a) *-c* = possessor associated with the direct object *ersna* 'shape'

tot yam-c *ñakta* *śaran-ne* ¦ *asta-n=* *eṣke* *mrestiwe-śc* :
so go.NPST.ACT.1SG-2SG lord.VOC refuge-LOC bone-LOC into marrow-ALL

indri-nta-ṣṣeṃ *semen-sa* ¦ *yoku-**c*** *ersna snai* [b3] *(so)ylyñe* :
sense-PL-ADJZ.ACC.PL ladle.PL-PERL drink.SUBJ.NPST.ACT.1SG-2SG form without satisfaction

'... so often I go into your protection, o god, up to the marrow in the bones. [23b] With the ladles of the senses, I will drink **your** (beautiful) form without being satiated. [23c]'

(B241b2; verse [7¦7]×4)

(1.1) [TB] *-ne* = indirect object (goal) of *śilāre* 'brought'

śi[a8]*lāre*-***ne*** *oṅkarñai* ¦ *wñār-ne* *purwar*
bring.PST.ACT.3PL-3SG porridge.ACC.SG speak.PST.ACT.3PL-3SG accept.IMP.MID.2SG
wesan-meṃ ¦ *pinwāt rṣāka* : 1 ||
1PL-ABL alms sage.VOC

'(Nānda and Nandābala) brought the porridge **to him** (= Indra) and said to him: "Receive the alms from us, o sage!"'

(B107a7-8; verse; [7¦7¦4]×4)

Previous studies and handbooks have also noted these various uses and have attempted to make a generalization from the data. For example, Krause (1952: 204–6) and *TEB* I: 162–3 state that PCs may stand for the accusative or genitive-dative in all its syntactic relations.[8] Pinault (1992: 113; 2008: 537) describes PCs as being reserved for the functions of "complément".[9] Carling (2006: 44) briefly reviews the attested examples of PCs and concludes that they can be used in all "syntactic core positions" except for the subject (A or S).[10] Adams (2015: 149–51) describes that one of the functions is "as alternatives to genitive pronouns (whose head noun may or may not be a part of the verb phrase)".

These studies did not aim to discover the underlying principle that regulates the various uses of PCs but simply seek to make some generalizations from the empirical data. Therefore, these descriptions have no predictive power and we are still in need of an explanation as to why the Tocharian PCs behave the way they do. For example, while Carling (2006: 44) notes that the subject of an intransitive verb (S) cannot be represented by a PC, she also observes that a PC *can* be used as a dative subject in the so-called *mihi est* construction. It is not immediately clear what

8. "Zur Syntax der suffigierten Pronomina ist in Kürze folgendes zu bemerken: 1. Das Pron. suff. steht für den Akkusativ. [...] 2. Das Pron. suff. steht im Sinn eines Genetiv-Dativs mit all seinen syntaktischen Beziehungen [...]" (Krause 1952: 204); "Zur Syntax ist zu bemerken: 1. Das Pron. suff. steht für den Akkusativ [...] 2. Im Sinne eines Genitiv-Dativs mit allen seinen syntaktischen Beziehungen" (*TEB* I: 162–3)

9. "Ces pronoms enclitiques sont réservés aux fonctions de complément : complément d'objet direct, complément d'attribution, génitif possessif portant sur l'objet ou le sujet du verbe, génitif-datif d'agent." (Pinault 2008: 537)

10. A and S represent the subject of a transitive and an intransitive verb, respectively.

licenses PCs in the latter but not in the former. Likewise, Adams (2015: 21) notes that if both the direct and indirect objects are pronouns, "it seems that the indirect object is favored" to surface as a PC, but none of the generalizations formulated predicts his observation to be true or false. It is now clear that we need to develop a model that not only explains the distributional facts but also makes predictions as to what kind of constructions should or should not be allowed. Such a model will reveal a more fine-grained distribution of the PCs in TA and TB than those which are obtained by generalizing from the data.

In addition, a better understanding of PCs in Tocharian will be helpful for a better understanding of their diachrony. The Tocharian PCs do not resemble those of ancient Indo-European languages such as Hittite, Homeric Greek, Vedic Sanskrit, and Avestan in the following three respects. First, while a single sentence may have more than one pronominal clitic in these languages, there is no sentence in which a host carries multiple PCs in Tocharian (Chapter 2). Second, pronominal clitics in the ancient Indo-European languages usually have an IO and DO distinction. In contrast, the Tocharian PCs do not make a distinction in case (table 2.4). Third, pronominal clitics in the core-IE languages target the so-called second position in the clause (Wackernagel's Law; Delbrück 1878: 47–8, Wackernagel 1892). The Tocharian PCs, however, do not target second position but mostly appear immediately after the finite verb (Chapter 2).

	1SG	2SG	3SG	PL
TA	*-ñi*	*-ci*	*-ṃ*	*-m*
TB	*-ñ*	*-c*	*-ne*	*-me*

Table 1.1: Pronominal clitics in Tocharian A and B

Are these characteristics innovations? If so, how did they develop? First we need to consider if there is any diachronic model which may account for such morphosyntactic change. Only after this task has been fulfilled can we assess if language contact with non-Indo-European languages, such as Uralic, played a role in shaping the Tocharian languages (Peyrot 2019),

As of preparing this dissertation, only a brief descriptive survey of the Tocharian pronominal clitics has been carried out (Carling 2006). An extensive study as to what their precise usage is, what principle lies behind it, and how they are similar to or different from weak or clitic pronouns

found in other ancient Indo-European languages is a desideratum.

In researching this topic, there are a number of questions that may come to mind which can be roughly divided into two categories: those related to the synchronic aspect and those related to the diachronic aspect.

1. (The synchronic aspect): What are the pronominal clitics? When can we use/not use them? Why do they behave in the way they do? What principle(s) govern their usage? Are there any typological parallels in which suffixed pronouns are used in a similar manner?

2. (The diachronic aspect): How did the pronominal clitics develop? How are they similar to or different from weak/clitic pronouns in other IE languages? Did (contact-induced) grammaticalization play a role in their development?

We may answer the second group of questions only by answering the first. This dissertation tackles the first set of questions, with the hope that subsequent research can clarify the second.

1.4 Structure of this dissertation

The structure of this dissertation is as follows. The following chapter reviews the pronominal system and the pronominal clitics of TA and TB. I survey the phonological, morphological and syntactic behavior of pronominal clitics in this chapter. Chapter 3 reviews the attested usages of PCs. It shows that they are multifunctional and may represent the direct object, indirect object with various thematic roles, argument of a predicate consisting of a verb and an adverb, agent of a non-finite verb, causee, possessor of a direct or indirect object, possessor of a subject of an intransitive verb, and so on. Chapter 4 introduces the theoretical premises on which my subsequent morphosyntactic model is built. I assume that a sentence has a hierarchical structure built in the syntax, and that PCs spell out person and number features. Chapter 5 develops a morphosyntactic model that accounts for the multifunctionality of the Tocharian PCs and predicts some gaps in the data. The analysis I develop has implications for our understanding of split intransitivity in Tocharian: it is argued that by focusing on the distribution of PCs, we can single out unaccusative verbs from unergatives in Tocharian. This analysis opens up a way to under-

stand split intransitivity in Tocharian, the criteria for which have been hitherto unknown. Using the proposed diagnostic, representative unaccusative verbs are collected (Appendix I). Chapter 6 discusses predictions extracted from the analysis in Chapter 5. I show that when an IO and a DO are both pronominal, the PC always refers to the IO. My model predicts this since the licensor of a PC first finds an IO before a DO. Chapter 7 treats cases in which a PC co-occurs with the nominal expression that it refers to and hence appears to be redundant. We show that the doubling of a nominal expression with a PC indicates the doubled nominal expression to be topical. In other words, discourse participants presuppose the existence of the doubled nominal expression prior to the utterance of the speaker. Chapter 8 summarizes the preceding chapters and addresses remaining questions and problems.

CHAPTER 2

Pronominal clitics in Tocharian A and B

2.1 Introduction

As a preliminary to the analysis in the following chapters, this chapter reviews basic facts regarding the pronominal clitics (PCs) of Tocharian A (TA) and B (TB). In addition to personal and demonstrative pronouns, TA and TB have a set of PCs. These lack case distinctions and, in the plural, also person distinctions. While PCs are consistently hosted by a finite verb in TB, participles, gerundives, and nouns in a nominal clause may also host a PC in TA. PCs may be followed by an allative and ablative marker, and in this case TA attests peculiar allomorphs. PCs in TB form a single phonological word with their host, while the host-PC connection seems to be weaker when the host of a PC is a non-finite form in TA. Tocharian PCs show a mixed behavior with respect to the typology of clitics and affixes.

The structure of this chapter is as follows. Section 2.2 surveys the pronominal system of TA and TB and reviews the characteristics of the Tocharian PCs. Section 2.3 considers the nature of the Tocharian PCs with respect to the typology of clitics and affixes. It is argued that Tocharian PCs show a mixed behavior. Section 2.4 reviews the proposed etymologies of the Tocharian PCs. Finally, Section 2.5 summarizes the chapter.

2.2 The pronominal system of Tocharian A and B

This section reviews the pronominal system and the phonological, morphological, and syntactic characteristics of the pronominal clitics of Tocharian A and B. The following section (§2.2.1) outlines the pronominal system of TA and TB. TA and TB have independent personal pronouns

for first and second person, and demonstrative pronouns for third person. In addition, they have pronominal clitics. Section 2.2.2 discusses the host of the Tocharian PCs. PCs in TB consistently follow a finite verb. In TA, they mostly follow a finite verb, but they may also follow a participle, gerundive, and a noun in a nominal predicate. Section 2.2.3 reviews the first-person singular PC *-ñi* in TA, which is homophonous with the genitive-dative of the first-person singular independent personal pronoun. Section 2.2.4 treats cases in which a PC is followed by a so-called secondary case marker. PCs may be followed by a secondary ablative or allative case marker. TA attests peculiar allomorphs (i.e., *anäṣ* and *anac*) of the allative and ablative markers. Section 2.2.5 discusses cases in which gerundives accompany these allomorphs. Section 2.2.6 reviews the phonological properties of the Tocharian PCs. The PCs in TB form a single phonological word with their host, affecting the stress calculation of the host.

2.2.1 Overview of the pronominal system of Tocharian A and B

Tocharian A and B have free and bound forms of personal pronouns. I will call the former independent personal pronouns and the latter pronominal clitics. Tables 2.1 (TA) and 2.2 (TB) list the first- and second-person independent personal pronouns. TA distinguishes masculine and feminine only in the first-person, which is typologically rare (Jasanoff 1989). There are three cases: nominative, accusative, and genitive-dative.[1] In the personal pronouns of TA, this three-way case distinction is only discernible in the second-person singular. In the first-person singular and the first- and second-person plural, nominative and accusative are syncretic. In contrast, the late and colloquial TB texts attest the first- and second-person accusative plural *wesäṃ*, *yesäṃ* and genitive-dative plural *wesi*, *yesi* (Stumpf 1990: 91–3; Pinault 2008: 535; Peyrot 2008: 120–1), giving rise to a three-way case distinction in these person-number combinations as well.

TA	1SG.M	1SG.F	2SG	1PL	2PL
NOM ACC	*näṣ*	*ñuk*	*tu* *cu*	*was*	*yas*
GEN-DAT	*ñi*	*nāñi*	*tñi*	*wasäṃ*	*yasäṃ*

Table 2.1: Independent personal pronouns in Tocharian A

1. The accusative is traditionally referred to as the oblique.

TB	1SG	2SG	1PL	2PL
NOM	*ñäś, ñiś*	*twe*	*wes*	*yes*
ACC		*ci*	*wes, wesäṃ*	*yes, yesäṃ*
GEN-DAT	*ñi*	*tañ*	*wesäñ, wesäṃ, wesi*	*yesäñ, yesäṃ, yesi*

Table 2.2: Independent personal pronouns in Tocharian B

As for the third-person, demonstrative (anaphoric) pronouns serve as personal pronouns (Table 2.3). Tocharian demonstrative pronouns distinguish masculine and feminine. The neuter forms are used to refer to an immediately preceding or following utterance, and do not participate in any gender concord.

TA	3SG.M	3SG.F	3SG.N	3PL.M	3PL.F
NOM	*säm*	*sām*	*täm*	*cem*	*tom*
ACC	*cam*	*tām*	*täm*	*cesäm*	*tosäm*
GEN-DAT	*cami*	*temi*	*tmis*	*cesmi*	*tosmāśśi*
TB	3SG.M	3SG.F	3SG.N	3PL.M	3PL.F
NOM	*su*	*sā*$_u$	*tu*	*cey, cai*	*toṃ*
ACC	*ce*$_u$*, cau*	*tā*$_u$	*tu*	*ceṃ*	*toṃ*
GEN-DAT	*cwi, cpi*	*tāy*	*tuntse*	*ceṃts*	*toṃts*

Table 2.3: Demonstrative (anaphoric) pronouns in Tocharian A and B

In addition to these personal and demonstrative pronouns, TA and TB have pronominal clitics (PCs; Table 2.4). In contrast to the independent personal pronouns and the demonstrative pronouns, Tocharian PCs do not have a distinction in case. They do not have a person distinction in the plural either. For example, TB *-me* may be used for the first-person plural, second-person plural, or third-person plural reference (e.g., 2.1, 2.2, and 2.3, respectively).

	1SG	2SG	3SG	PL
TA	*-ñi*	*-ci*	*-ṃ*	*-m*
TB	*-ñ*	*-c*[2]	*-ne*	*-me*

Table 2.4: Pronominal clitics in Tocharian A and B

2. Word-final *-c* develops to *-ś* in late and colloquial texts (Schmidt 1986: 642, Peyrot 2008: 77).

(2.1) [TB] *-me* = first-person plural

*ṛṣāki ṣerpar-**me** ¦ twe ke śpālmeṃ ṛṣāke nes :*
sage.NOM.PL indicate.PST.ACT.3PL-PL NOM.2SG PTCL excellent sage COP.NPST.3SG

[Nandā and Nandābala speaking to the god Brahma:] "The sages pointed out **to us** that you$_{SG}$ are the [most] splendid sage. [1a]"

(B107a10; verse; [5¦7]×4)

(2.2) [TB] *-me* = second-person plural

ṣer-śkana se nomiye-ṣṣe bhājaṃ rerinu
sister-DIM.VOC.PL DEM.M.NOM.SG jewel-ADJZ.M.SG bowl.SG give.up.PTCP.M.NOM.SG
*star-**me** epe mā •*
COP.NPST.3SG-PL or NEG

[The Bodhisattva speaking to Nandā and Nandābala:] "Little sisters, is this jeweled bowl given up **by you**$_{PL}$ or not?"

(B107b8–9; prose)

(2.3) [TB] *-me* = third-person plural

‖ *tane araṇemi walo brāhmaṇeṃ wratsai tsäṅkor-meṃ*
then Araṇemi king.NOM.SG brahmin.ACC.PL towards rise-ABS

*käṣṣī-ñ̈e yäkne-sa asān-ne lyāmate-**me** ‖*
teacher-ADJZ.M.SG manner.SG-PERL throne.SG-LOC sit.down.CAUS.PST.MID.3SG-PL

'Thereupon the king Araṇemi rose towards the brahmins [and] let **them** sit on the throne in the manner of teachers.'

(B81b6; trans. by CEToM; prose)

The Tocharian PCs appear in a different place from where other pronouns usually appear. As these examples show, they appear immediately after finite verbs. I will review the hosts of the Tocharian PCs in the following section (§2.2.2).

2.2.2 Hosts of the Tocharian PCs

Pronominal clitics consistently appear immediately after a finite verb in TB. For example, the preterite *palātai* '(you$_{SG}$) praised X' hosts a third-person singular PC in (2.4).

(2.4) [TB] Finite verb hosting a PC

mantaṃtā pa-si *marsasta* ¦
never uphold.moral.behavior-INF forget.PST.2SG

palātai-ne *ṣu* [a5] *komt-sa* ¦ *ṣeme ślok-tsa* (:)
praise.PST.MID.2SG-3SG 7 day-PERL one strophe-PERL

'You$_{SG}$ have never forgotten to uphold (moral behavior). You$_{SG}$ **have praised him** (= the Buddha) for seven days with a single strophe. $_{[1c]}$' (B297a.a4; verse; [7¦7¦4]×4)

In TA and TB, it seems that a host may carry at most one PC: there is no example in which multiple PCs accompany a single host. While TA and TB are head-final languages in which the direct object generally precedes the finite verb, PCs always follow their host, and hence they violate Greenberg's (1963) Universal 25 ("If the pronominal object follows the verb, so does the nominal object").[3] Non-finite verbs never host a PC in TB, and when PCs represent an argument or a possessor semantically associated with the argument of a non-finite verb, they "climb" to the matrix clause to be hosted by the finite verb (Carling 2006, Adams 2015: 151). For example, the matrix finite verb of (2.5), *auntsante* '(they) began,' hosts a third-person singular PC that represents the argument of the causativized infinitive *makästsi* 'to make X run; chase X'. In other words, the PC in this example does not attach to the infinitive *makästsi* but to the finite verb in the matrix clause.

(2.5) [TB] Climbing of a PC

auntsante-ne *ścīre* *makäs-tsi*
begin.PST.MID.3PL-3SG hard run.CAUS-INF

'(They) **began** to chase **him** [= Prince Uttara] hard.'

(B88a2; trans. based on CEToM; prose)

PCs in many cases attach to the finite verb in TA. However, in some cases, participles, gerundives, and nouns in nominal clauses host a first- or second-person singular PC (Schulze, Sieg, and Siegling 1931: 166).[4] For example, a preterite participle hosts a PC in (2.6) and so does a gerundive in (2.7).

(2.6) [TA] PC hosted by a preterite participle

3. See Ashton (2011) for a syntactic analysis of PCs in TB based on the Minimalist Grammar formalism (Stabler 1997). His analysis posits that PCs move to the specifier of some projection while finite verbs (and other full nominal expressions) move to a higher position, preceding the PC.

tämyo pūk kärsnā-l wram knānmune-yo
therefore all know.NPST-GDV thing knowledge-INS
lyalyku-ci :
be.illuminated.CAUS.PTCP.M.NOM.SG-2SG

'... therefore, everything (one) should know (is) **illuminated by you**$_{SG}$ [= the Buddha] with (your$_{SG}$) knowledge.'

(A249b1; verse)

The second-person singular PC *-ci* in example (2.7) represents the subject of the gerundive.

(2.7) [TA] PC hosted by a gerundive

[a1] /// (*māski kälkā-)lyāṃ tkan-ac* ***yä-l-ci*** *k$_u$yalte* ||
difficult go.SUBJ-GDV.F.ACC.SG earth-ALL go.NPST-GDV-2SG because
meneklin-aṃ || *cämpamo träṅktsi yme*
M-LOC be.able speak-INF way

'**You**$_{SG}$ [= Bodhisattva] **should go** to a (hard-)to-reach place, because [In the M-tune:] (You are) able to speak ... the way ...'

(A56a1; trans. by CEToM; prose)

In a nominal clause where a finite copula is missing, nouns may host a PC as in (2.8). In this example, *tiri-* 'way, manner' hosts the second-person singular PC *-ci* (Schulze, Sieg, and Siegling 1931: 166–7).[5]

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4. A preterite participle hosts a PC in the following examples: *raryu-ci* (A56b1), *laltuṣ-ci* (A125b2 [2.45]), *n(ā)ṃ(tsu)-ñi* (A147a4), *lyalyku-ci* (A249b1 [2.6]), *śaśälpu-ñi* (A258b5), *kärṣto(nt)-ñ(i)* (A269 and 290b1), and *kaklyuṣu-ñi* (YQ II.1b2). As for *worpūs-[s]kam-ci* (A248a1), see (2.9). An *m*-participle hosts a PC in the following example: *rsunāmāṃ-ñi* (A67b1). A gerundive hosts a PC in the following examples: *yäl-ci* (A56a1 [2.7], A56a2, A255b5), *mäskal-ci* (A115b3), *yal-ñi* (A71a1, A189b6), *yal-ci* (YQ II.4a4), *pärskāl-anäṣ* (A456b3), *präskāll-anäṣ* (A155b3 [2.17]; A179a1), *späntāll-anac* (A61a4; A169a2 [2.41]), and *(lkā)laṃ-anäṣ* (YQ III.2b8). A noun hosts a PC in the following examples: *tiri-ci* 'manner-2SG' (A106a6 [2.8]), *puklā-ci* 'year.PL-2SG' (A255b3), *pratsak-ci* 'breast-2SG' (A378a5), *kāruṃ-c(i)* 'compassion-2SG' (A260a4), and *wärc(e)-ci* 'fault-2SG' (A326a3). In A168 b5 (2.b), although its context is limited, an adjective *(kā)lyāṇī-* 'good, excellent' (cf. Skt. *kalyāṇaka-* '[morally] good, virtuous') seems to host a second-person singular PC *-ci*.

(2.b) [TA] PC hosted by an adjective?

/// (*klo*)*pa-nt wärpnānträ k$_u$yalte kos-ne wram kā* /// [b5] /// ***(kā)lyāṇī-ci*** *puk*
suffering-PL receive.NPST.MID.3PL because how.much-COMP thing virtuous-2SG all
napeṃ ///
human

'... (they) receive the sufferings, because how much ... thing ... **your**$_{SG}$ ... (is/are) **virtuous** ... all human ... '

(A168b5; prose?)

5. See Hackstein (2012) on the prehistory of these copula-less clauses in Tocharian and other Indo-European

(2.8) [TA] PC hosted by a noun

[a6] /// *-yo hetutwati träṅkäṣ mā **tiri-ci** nāśi* – – – –
-INS Hetutwati speak.NPST.ACT.3SG NEG manner-2SG mistress
'... with ... Hetutwati speaks: "(It is) not **your**$_{SG}$ **way**, o (my) lady, ..."'

(A106a6; prose?)

There is even an example in which an adverb appears to intervene between a hosting preterite participle and a PC (2.9). In this example, the preterite participle *worpūs* 'surrounded' [PTCP.F.NOM.SG] and the second-person singular PC *-ci* appear to be separated by the adverb *skam* 'always' (Schulze, Sieg, and Siegling 1931: 166).

(2.9) [TA] *skam* 'always' intervenes between a preterite participle and a PC?

lukśanuntsāṃ kaṣ-swāñcen-yo ¦ ***worpūs*** *(s)kam **ci** kapśañi* :
bright.F.ACC.SG fathom-beam-INS surround.PTCP.F.NOM.SG always GEN.2SG body.SG
Your$_{SG}$ body [is] always **surrounded** by a bright ray which is a fathom wide. [20a]'

(A248a1; verse; [5¦5¦8¦7]×4)

However, among the 551 attestations that I have examined for TA, this is the only example in which a host-PC connection appears to be interrupted by an adverb. Therefore, one might wonder whether there is any alternative explanation available. This passage is a translation of Mātṛceṭa's *Varṇārhavarṇastotra* II.39 (cf. Pinault 2008: 286).

(2.10) *Varṇārhavarṇastotra* II.39 (Hartmann 1987: 112–3)

(*asecanakarūpāya **pra)bhābhāsuramūrtaye** /*
na(*mo 'stu*) *sarvadṛśyānā*(*m*) *darśanī*(*ya*)*tamāya* (*t*)*e* //
'To him, who has a form that cannot be satiated, **whose body shines with light**, may there be veneration to you, the most beautiful of all visible objects!'

TA *lukśanuntsāṃ kaṣswāñcenyo worpūs* (*s*)*kam ci kapśañi* 'your body (is) always surrounded by a fathom-wide bright ray' translates Sanskrit *prabhā-bhāsura-mūrti-* 'whose body is shining with light,' suggesting that *ci* in this example serves as the possessor of *kapśañi* 'body.' Since an independent personal pronoun that represents a possessor generally precedes its possessum (e.g., *tñi krant arämpāt* 'your beautiful shape' in 2.9), it seems possible to take *ci* in this example not

languages.

as a PC, but as a (grammatical) error for *tñi*, the genitive-dative of the second-person singular personal pronoun (table 2.1). It is probably motivated by the first-person singular personal pronoun *ñi* [GEN.1SG], which is homophonous with the first-person singular PC (Section 2.2.3), and also immediately precedes its possessum when it serves as a possessor. In addition, it is worth pointing out that the TA translation of the *Varṇārhavarṇastotra* shows some peculiar syntax. For example, we find two out of three rare examples of clitic right dislocation in A249 (see Chapter 7 for a discussion on this topic). Furthermore, the verse number "13" is misplaced in A245 a3: it is found after pāda 14b, not after 13d (Pinault 2008: 282–3). These facts also seem to suggest that *ci* in this example could be attributed to some kind of error.

2.2.3 The first-person singular PC *-ñi*

A word is in order regarding the TA first-person singular PC *-ñi*, which is homophonous with the genitive-dative of the first-person singular personal pronoun (table 2.1).[6] As reviewed in the previous subsection, when the genitive-dative of an independent personal pronoun functions as a possessor, it generally precedes the noun that it possesses (e.g., 2.11).

(2.11) [TA] *ñi* = Independent personal pronoun preceding a possessum

klopasu *nāṃtsu* *yaṃtrācāre* *träṅkäṣ*
depressed.M.NOM.SG COP.PTCP.M.NOM.SG mechanic.NOM.SG speak.NPST.ACT.3SG

pälkāc *nācki* ***ñi*** *klop* *caṣ*
look.IMP.MID.2PL lord.NOM.PL M.GEN.1SG suffering DEM.M.ACC.SG

"Depressed, the mechanic says: behold, you$_{PL}$ gentlemen, this misfortune **of mine**!"

(A8b5; trans. based on CEToM; prose)

Therefore, the grammatical property of *ñi* is ambiguous when it immediately follows a finite verb, participle, or gerundive and simultaneously precedes the noun it possesses. For example, the first-person singular PC *ñi* in (2.12) may be taken as a PC (translation 1) or as an independent

6. Poucha (1955: 110–1) lists 57 examples that contain a PC *-ñi*, and 130 examples of the first-person singular personal pronoun *ñi* 'my, to me'. However, his *tsäkse-ñi* in 101b2 does not exist, "126 b5 *mā lipñät ñi*" is a typo for "126 b2 *mā lipñät ñi*", and "*knaṣtär ñi* 72a2" for "*knaṣtär ñi* 71a2". *ñi* in 65 b4, 67 a4, and 92 a5 is not an independent personal pronoun but a PC (65 b4: ***(pākṣi)ññā-ñi*** *kucne tu wsār pälkoräṣ weñāṣt* '**Explain to me** what you said concerning the wheat!'; 67 a4: *bodhisattu träṅkäṣ mā ontaṃ* ***tāka-ñi*** *k$_u$yalte ñareṣināśśi klopant opyāc källā*[a5](*mām*) 'The bodhisattva says: "By no means **has there been** (satisfaction) **for me**, because (I) remember the sufferings of those (who are) in the hells ....'; 92 a5: /// *cam śkaṃ lo* ***psumār-ñi*** *k$_u$yal lykäly lykäly tuṣt-ñi* : '... and **take** this ... **away from me**! Why do you burn me finer (and) finer?').

personal pronoun (translation 2).

(2.12) [TA] *ñi* = Independent personal pronoun or a PC?

pekäntā-śśi käṣṣi-śśi ¦ käṣṣi pekant ñi naṣu :
painter-GEN.PL master-GEN.PL ¦ master painter M.GEN.1SG friend

*lokit **yeṣ** **ñi** yantär-ṣi ¦ śomiṃ cam-i spa(ktāṃ)* [a1]
guest go.IMPF.ACT.3SG GEN.1SG mechanism-ADJZ ¦ girl DEM.M.SG-GEN service
ypā :
do.IMPF.ACT.3SG

[The mechanic is speaking to his neighbors:[7]]

(1) "The painter, master of the master painters, my friend, [1a] **came to me** as a guest, (and) a mechanical girl attended to him (*lit.* 'did a service for him'). [1b]"

or

(2) "The painter, master of the master painters, my friend, [1a] **came** as a guest, (and) **my** mechanical girl attended to him (*lit.* 'did a service for him'). [1b]"

(A8b6; trans. based on CEToM; verse [7¦7]×4)

In this example, the function of *ñi*, referring to *yaṃtrācāre* 'mechanic,' is ambiguous. While it is possible to take it as a PC hosted by *yeṣ* '(he) went,' representing the goal of the motion verb (interpretation 1), we may also take it as an independent personal pronoun, representing the possessor of *yantärṣi śomiṃ* 'a mechanical girl' (interpretation 2). Therefore, for each attestation of the first-person singular PC in TA, I checked for this type of ambiguity and excluded such passages.

2.2.4 Secondary case markers and Tocharian PCs

Tocharian A and B have a set of so-called secondary case markers (table 2.5). They are phrasal clitics/affixes attached to a nominal phrase ending in the accusative. Interestingly, ablative and allative case markers may follow a PC in TA and TB.[8]

7. In this passage, the addressees, the mechanic's neighbors, look at a mechanical girl that has fallen apart into pieces (cf. A7a5–6: (*śo*[a6]*miṃ*) *mā śkaṃ tāk* '[she] was no longer a girl').

8. The following forms are attested: 1SG-ALL/ABL: *kmeñ-ñä-ścä* (Or8212.163b5); 2SG-ALL/ABL: *ñäskau-c-meṃ* (B100a1), *yaskaskemar-c-me(ṃ)* (THT1112a5), and *preksau-ś-meṃ* (IOLToch258b1); 3SG-ALL/ABL: *(wñā)-ne-ś* (B22a1), *wñā-ne-ś* (B22b8; PKAS6Db3), *wñā-ne-ś«ŧä»* (PKAS6Aa5), *wñā-n(e-ś)«ŧä»* (PKAS6Aa5), *weña-ne-ś* (PKAS6Aa6; b6), *weñāre-ne-ś* (B107a5), *śem-ne-ś* (B49a7; B63a1; B417b2), *śem-ne-(ś)* (THT1573ab6), *weṣän-ne-ścä* (B85a2), *weṣṣan-n(e)-*

	TA	TB	Major function
Instrumental	*-yo*	—	instrument
Perlative	*-ā*	*-sa*	instrument, cause
Comitative	*-aśśäl*	*-mpa*	accompaniment
Allative	***-ac***	***-ś(c)***	goal, addressee
Ablative	***-äṣ***	***-meṃ***	source
Locative	*-aṃ*	*-ne*	location, goal
Causal	—	*-ñ*	cause

Table 2.5: Secondary case markers in Tocharian A and B

The following two examples show the secondary case markers (allative in [2.13] and ablative in [2.14]) following a PC in TB.

(2.13) [TB] Allative marker *-ś* following a PC

*ñakti arjuṃ ¦ stām **nemar-ne-ś** ¦ cau eṅksate :*
god.NOM.PL Arjuna tree bend.PST.ACT.3PL-3SG-ALL DEM.M.ACC.SG seize.PST.MID.3SG
'The gods **bent** the Arjuna-tree **toward him** (= Bodhisattva). (He) took it.'

(B107b4; verse; [4¦4]×4)

(2.14) [TB] Ablative marker *-meṃ* following a PC

upanande ce$_u$ kampāl [b2] ***yaṣṣāte-ne-meṃ** mā*
Upananda DEM.M.ACC.SG cloak beg.PST.MID.3SG-3SG-ABL NEG
wsā-ne •
give.PST.ACT.3SG-3SG
'Upananda$_j$ **asked for** this cloak **from him$_k$** (= an Ājīvika ascetic), [but he$_k$] did not give [it to] him$_j$.'

(PKAS18Ab2; prose)

Likewise, we find an allative case marker following a PC in TA (2.15). TA lacks an example of an ablative marker following a PC, which is probably due to chance. The allative marker shows a peculiar allomorph when it follows a PC: instead of the expected allative marker *-ac* (table 2.5), TA attests *anac* (e.g., 2.15).[9]

śca (B93a1), *weskeṃ-ne-ś* (B107a10), *träñcā-ne-ś* (THT1507b5), *nemar-ne-ś* (B107b4), *kālat-ne-śco* (B127a3), *śänman-ne-ś* (PKAS6Cb1), *yaṣṣāte-ne-meṃ* (PKAS18Ab2), *yaskemtär-ne-meṃ* (PKNS32a6), and *tsäṅkā-ne-ścä* (IOLToch33b3); PL-ALL/ABL: *west-me-śca* (B273b3), *weṣäṃn-me-śc* (B81a1), *w(e)nt-me-ścä* (IOLToch285a3), *weñā-me-ś* (B107a5, a8, a9, b1, b8; B108a2, b9; B375b2), *weñār-me-ś* (B107b3; B108a3), *sälkāte-me-ś* (B108b4), and *...-me-ś* (THT1576fa1).

9. The following forms are attested: *anac* [ALL]: *träṅkṣ-änn anac* (A144b4), *träṅkṣ-äṃn anac* (A184b4; A200b3), *weñā-nn anac* (A95b4; A113a4), *weñā-nn «an»ac* (A313a5), *(we)ñā-ṃ anac* (A431b5), *(weñā-n) anac* (A432b3), *(we)ñār-äṃn atac*

(2.15) [TA] Allative marker *anac* following a PC

(*bārāṇas riy-ac kā*)[a3]*tse rṣivadaṃ wärt-aṃ cesäm sä*(*ksäk ārāntās*
Vārāṇasī city-ALL near Ṛṣivada forest-LOC DEM.M.ACC.PL sixty arhat.ACC.PL
kākku-r-äṣ ***we)ñā-mm*** ***anac*** || *ṣera*(*śi-niṣkramānt-aṃ* ||) ///
call.PTCP-NMLZ-ABS speak.PST.ACT.3SG-PL ALL Ṣ-LOC

'Having called these sixty arhats$_j$ in the Ṛṣivadana-wood near the city of Vārāṇasī, (he) **said to them$_j$** [in the S-tune:] ...'

(A269+A290a3; prose)

This *anac* allomorph may also appear immediately after a gerundive (e.g., 2.16).

(2.16) [TA] Allative marker *anac* following a gerundive

/// *prasky aräṣ* ¦ *lw-āśśi okāk pācarr oki* ¦ ***späntā-ll***
fear evoke.NPST.ACT.3SG animal-GEN.PL including father as trust.SUBJ-GDV
anac *mäskatär* :
ALL be.NPST.MID.3SG

'... even among the animals (he$_j$) does (not) evoke fear; (one) **could trust him$_j$** as if (he were) a father. [1c]'

(A61a4; verse; [5¦5¦8¦7]×4)

Furthermore, TA attests an ablative marker that appears immediately after a gerundive (2.17). It shows *anäṣ*, rather than *-äṣ* (table 2.5).

(2.17) [TA] Ablative marker *anäṣ* following a gerundive

[b3] /// *ntsi wsomiṃ ārṣall oki anahāl wäss oki*
poisonous.F.NOM.SG snake.NOM.SG like halāhala poison like
präskā-ll ***anäṣ*** *nāṃtsu* ///
be.feared.SUBJ-GDV.NOM.SG ABL COP.PTCP.M.NOM.SG

'(One) **could be afraid of (it[?])** like a poisonous snake (or) like a halāhala poison.'

(A155b3; prose?)

Peyrot (2017) discusses the origin of these allomorphs and proposes that **anac* arose via missegmentation of a verbal complex consisting of PT **-a*, which was a part of the inflectional ending

(for *weñār-äṃn anac* A95a5), *yeṣ-äṃn anac* (A222b6), *sämse(ñc-änn a)nac* (for *nämseñc-änn anac* A13b5-6), *...-nn anac* (A177b1), *(we)ñā-mm anac* (A269and290a3 [2.15]), *weññā-mm anac* (A436b6 [2.18]), *späntāll anac* (A61a4; A169a2 [2.41]), and *///ṣ(-)ñy oky anac* (A108a3 [2.20]). *anäṣ* [ABL]: *präskāll anäṣ* (A155b3 [2.17]; A179a1), *pärskāl anäṣ* (A456b3), and *(lkā)laṃ anäṣ* (YQ 1.22[III.2]b8).

(e.g., ACT.3PL *-*ārœ* > TB *-are*, TA *-ār*), the third-person singular PC (PT *-*nœ* >) Pre-TA *-*na*, and the allative marker *-*c* (i.e., Pre-TA *-*a-na-c* > TA *-anac*). According to him, "[w]hen *anac* was no longer understood as already containing the 3sg. *-äṃ*, the final step in the development was the addition of *anac* after *-äṃ*" (Peyrot 2017: 638, citing Pedersen 1941). His account neatly explains why this allomorph is absent in TB: apocope of *-a* did not take place in TB (e.g., ACT.3PL *-*ārœ* > TB *-are*, TA *-ār*). However, it is not clear to me why gerundives such as *späntāll anac* did not reintroduce the third-person singular PC *-äṃ* before *anac* (†*späntāl-äṃn-anac*).

Example (2.17) attests *präskā-ll anäṣ* 'to be feared' [SUBJ-GDV ABL] instead of †*präskā-l-ä(ṃ)n anäṣ* [SUBJ-GDV-3SG ABL] with a PC. In fact, there is not a single example of a gerundive carrying both a PC and *anac*/*anäṣ*. Therefore, *TEB* II: 78 separate *anac* and *anäṣ* as *an-ac* and *an-äṣ*, respectively, and list *-an-* as "Pron. suff. der 3. Pers., nur in sekundären Kasus". Likewise, Carling, Pinault, and Winter (2009: 8) list *-an-* as a "pronominal element 3rd person singular (only with secondary cases)". See also Poucha (1955: 4): "anac ... dat. sg. anäṣ ... abl. sg.". However, it is not clear to me why *-mm anac* in (2.15), which clearly contains the plural PC *-(ä)m*, also contains a third-person "singular" pronominal element.

At any rate, Thomas and Krause's description captures the fact that there is no example in which *anac* or *anäṣ* follows a first- or second-person singular PC. When these forms follow a PC, the preceding PC is either third-person singular (*-(ä)ṃ*) or plural (*-(ä)m*). If their morphological segmentation is correct, we should expect the person-indifferent plural PC *-(ä)m* to show third-person reference consistently when it is followed by *anac* or *anäṣ*. There are two occurrences of *anac* or *anäṣ* following a plural PC. Although the person-reference of *weññā-mm anac* in A436b6 is at best uncertain (2.18), *(we)ñā-mm anac* (A269+A290a3) undoubtedly has third-person reference (2.15, repeated here as 2.19).

(2.18) [TA] *-mm-* = 1PL, 2PL, or 3PL?

[b6] /// *m* ***weññā-mm-anac*** *lāñci tiri kä* ///
speak.PST.ACT.3SG-PL-ALL royal manner

'... (s/he) **spoke to { us$^{?}$/you$_{pl}$$^{?}$/them$^{?}$ }**: "... royal manner ..."'

(A436b6; prose?)

(2.19) (= 2.15) [TA] *-mm-* = 3PL

(*bārāṇas riy-ac kā*)[a3]*tse rṣivadaṃ wärt-aṃ cesäm sä*(*ksäk ārāntās*
Vārāṇasī city-ALL near Ṛṣivada forest-LOC DEM.M.ACC.PL sixty arhat.ACC.PL
kākku-r-äṣ ***we)ñā-mm-anac*** || *ṣera*(*śi-niṣkramānt-aṃ* ||) ///
call.PTCP-NMLZ-ABS speak.PST.ACT.3SG-PL-ALL Ṣ-LOC

'Having called these sixty arhats$_j$ in the Ṛṣivadana-wood near the city of Vārāṇasī, (he) **said to them$_j$** [in the S-tune:] ...'

(A269+A290a3; prose)

Therefore, it appears that *anac* [ALL] and *anäṣ* [ABL] were synchronically segmentable as *an-ac* [3-ALL] and *an-äṣ* [3-ABL], respectively. In other words, finite verbs with a PC and a secondary case marker appear to mark person twice: by a PC and *-an-* (e.g., [A184b4 and A200b3] *träṅkṣ-**äṃn an**-ac* '(he) speaks <u>to him/her</u>' [speak.NPST.ACT.3SG-<u>3SG</u> <u>3</u>-ALL]).

However, there is one puzzling example (2.20), in which *anac* immediately follows the particle *oky* 'like, as if, as it were' (cf. Skt. *iva*). For the sequence before this particle, Sieg and Siegling (1921: 61) read *ṣñy* '(one's) own'. However, this reading would amount to claim that neither a PC nor a gerundive cooccur with *anac* in this example. Schulze, Sieg, and Siegling (1931: 305), instead, read ///*ṣ-ñy*, that is, the third-person singular ending *-ṣ*, followed by the first-person singular PC *-ñi*.

(2.20) [TA] Allative marker *anac* following a particle *oki* 'like, as'

[a3] ///*ṣ-**ñy*** ***oky anac*** : *śra-l-une-yo* *papälykus*
-1SG? like ALL be.separated.NPST-GDV-NMLZ-INS torment.PTCP.F.NOM.SG
sundari pra
Sundari

'... (s/he) ...s **as if ... to me**. Having been tormented by separation, Sundari ...'

(A108a3; verse?)

Although uncertainty remains, this example potentially shows that *anac*, which is separable from a PC, is *not* limited to third-person reference. Therefore, I take *anac* and *anäṣ* to be markers that represent ALL and ABL, rather than 3-ALL and 3-ABL.

2.2.5 Gerundives followed by *anäṣ/anac*

The allative and ablative allomorphs *anac* and *anäṣ* may follow a gerundive. It seems that they are synchronically monomorphemic in this case also.

Tocharian A and B have a gerundive built on the present or the subjunctive stem. The former indicates a deontic interpretation, while the latter an epistemic interpretation (Thomas 1952). For example, the root √*i-*|*kälkā-* 'to go' forms a present stem *yä-* and a subjunctive stem *kälkā-*, and the gerundive *yä-l* built to the present stem means '(one) should go,' while *kälkā-l*, built on the subjunctive stem means '(one) could go.' Gerundives reduce valency, suppressing a nominative subject or demoting it into a genitive-dative oblique. In (2.22), for example, the agent of the gerundive is suppressed. In (2.7), repeated here as (2.23), the demoted agent is represented by the second-person singular PC *-ci*.

(2.21) Gerundives built on a transitive/intransitive stem

i. Transitive stem: e.g., TA *kropna-* 'X collects Y'

→ *kropna-l* 'Y should be collected; (one) should collect Y' (e.g., 2.22)

ii. Intransitive stem: e.g., TA *yä-* 'X goes (to Y)'

→ *yä-l* '(one) should go (to Y)' (e.g., 2.23)

(2.22) [TA] Gerundive built on a transitive stem

/// *eṣä-l* *el* *wras-s-aṃ* *ortune ya-l*
give.NPST-GDV.M.NOM.SG gift people-PL-LOC friend do.NPST-GDV.M.NOM.SG
kropna-l *pñi-ntu* ///
collect-GDV.M.NOM.SG virtue-PL
'Gifts have to be given, friendship has to be made with the beings, [and] virtues **have to be collected**.'

(A280a6; prose)

(2.23) [TA] (= 2.7) Gerundive built on an intransitive stem

[a1] /// (*māski kälkā-)lyāṃ tkan-ac **yä-l-ci** $k_u$yalte* ||
difficult go.SUBJ-GDV.F.ACC.SG earth-ALL go.NPST-GDV-2SG because
meneklin-aṃ ||
M-LOC

'**You**$_{SG}$ [= Bodhisattva] **should go** to a (hard-)to-reach place, because [In the M-tune:] ...

(A56a1; trans. by CEToM; prose)

Gerundives may be used attributively and predicatively as shown in (2.24).

(2.24) (= 2.23) [TA] Predicative and attributive use of a gerundive

[a1] /// (*māski kälkā-)lyāṃ tkan-ac yä-l-ci $k_u$yalte* ||
difficult go.SUBJ-GDV.F.ACC.SG earth-ALL go.NPST-GDV-2SG because
meneklin-aṃ ||
M-LOC

'You$_{SG}$ [= Bodhisattva] should go to a (hard-)to-reach place, because [In the M-tune:] ...

(A56a1; trans. by CEToM; prose)

In this example, the attributively used *kälkālyāṃ* shows gender, number, and case concord with the feminine accusative singular *tkan* 'earth,' to which an allative marker attaches.[10] In contrast, *yä-l* is used predicatively, and its subject is demoted and represented by a PC.

There are 6 attestations of a gerundive followed by *anäṣ/anac*. One of them is severely damaged (2.25).

(2.25) [TA] Gerundive followed by *anäṣ/anac* (1/6)

/// *l· kār **pärskā-l** **anäṣ*** ///
be.afraid.SUBJ-GDV ABL

'... (one) **could be afraid of** ...'

(A456.bb3; prose?)

In the following two examples, gerundives agree with a (suppressed) experiencer, that is, the subject of *mäskatär* and *nāṃtsu*, respectively.

10. Secondary case markers usually attach to a phrase-final accusative with which attributive adjectives concord in the accusative (the so-called GRUPPENFLEXION; *TEB* I: 91-2).

(2.26) (= 2.16) [TA] Gerundive followed by *anäṣ*/*anac* (2/6)

/// *prasky aräṣ* ¦ *lw-āśśi okāk pācarr oki* ¦ ***späntā-ll***
fear evoke.NPST.ACT.3SG animal-GEN.PL including father as trust.SUBJ-GDV
anac *mäskatär* :
ALL be.NPST.MID.3SG

'... even among the animals he$_j$ does (not) evoke fear; (one) **could trust him$_j$** as if (he$_j$ were) a father.'

(A61a4; verse)

(2.27) (= 2.17) [TA] Gerundive followed by *anäṣ*/*anac* (3/6)

///*ntsi wsomiṃ ārṣall oki anahāl wäss oki* ***präskā-ll***
poisonous.F.NOM.SG snake as halāhala-poison poison as be.afraid.SUBJ-GDV
anäṣ *nāṃtsu* ///
ABL COP.PTCP.M.NOM.SG

'(He$_j$) was **afraid of him$_k$** as if (he$_k$ were) a poisonous snake (or) like a halāhala poison, ...'

(A155b3; prose?)[11]

In these examples, the suppressed argument is the subject of the copula. TA and TB may have a suppressed argument as the subject of a copula as example (2.28) shows.

(2.28) Gerundive agreeing with a suppressed argument

mā tañ kc= āyor ***ai-lle*** ***nesau*** ¦
NEG GEN.2SG INDF gift give.SUBJ-GDV COP.NPST.1SG

'**I cannot give** any gift to you.' (B23b5; verse; [5¦8]×4+[8¦8¦5])

This example contains the gerundive *aille*, built on the subjunctive stem *ai-* 'X$_{\text{AGENT:NOM}}$ gives Y$_{\text{THEME:ACC}}$ to Z$_{\text{RECIPIENT:GEN}}$.' This gerundive alone would mean 'Y could be given to Z; (one) could give Y to Z,' but it cooccurs with a copula that agrees with the suppressed agent and means '(X) could give Y to Z.' In view of this example, we may understand the argument structures of *späntāll* in (2.26) and *präskāll* in (2.27) as follows.

11. Cf. Thomas (1952: 30): "Vor ihm furchterfüllt wie vor einer giftigen Schlange [oder] Halāhala-Gift." In contrast, Carling, Pinault, and Winter (2009: 11), followed by CEToM, seem to take *anäṣ* as representing the experiencer of *präskāll*: "/// ... to be feared by him/her like a poisonous snake [or] the halāhala poison"

(2.29) Argument structure of *späntāl* and *präskāl* (to be revised)

i. $X_{\text{EXPERIENCER:NOM}}$ $Y_{\text{THEME:INS/ALL}}$[12] √*spänt(ā)-* 'X relies on Y'

→ $Y_{\text{THEME:INS/ALL}}$ *späntā-l* '(one) could rely on Y'

ii. (2.26 =) *späntā-ll anac mäskatär* '(one) could rely on him'

iii. $X_{\text{EXPERIENCER:NOM}}$ $Y_{\text{STIMULUS:ABL}}$[13] √*pärsk(ā)-* 'X is afraid of Y'

→ $Y_{\text{STIMULUS:ABL}}$ *präskā-l* '(one) could be afraid of Y'

iv. (2.27 =) *präskā-ll anäṣ nāṃtsu*$_j$ '(he$_j$) could be afraid of him'

In these cases, we could understand a referential null object (*pro*) as the IO of the gerundives and analyze *anac/anäṣ* as simply an allative/ablative marker, without any person reference. This is in line with the analysis I developed in Section 2.2.4, where I considered *anac/anäṣ* to be monomorphemic, rather than bimorphemic.

(2.30) Argument structures of *späntāl* and *präskāl* (revised)

i. (2.26 =) pro$_{\text{3SG}k}$ *späntā-ll anac mäskatär* '(one) could rely on him$_k$'

ii. (2.27 =) pro$_{\text{3SG}k}$ *präskā-ll anäṣ nāṃtsu*$_j$ '(he$_j$) could be afraid of him$_k$'

In the following example (2.31), *akmal* 'face' seems to be the subject of *lotäk* 'turned, became.'

(2.31) [TA] Gerundive followed by *anäṣ/anac* (4/6)

/// *p(e)nu akmal* ***präskā-ll*** ***anäṣ*** *(krā)ṣiññäl* *lotäk*
also face be.afraid.SUBJ-GDV ABL be.angry.SUBJ-GDV become.PST.ACT.3SG

'... also ... (his/her) face became **(that which one) could be afraid of**, (and) (that which one) could be annoyed (with) ...'

(A179a1; prose?)

The TA root √*lotkā-* 'turn, become' connects a nominal expression with an adjective, meaning 'X became Y_{ADJ}' (see, e.g., 2.32).

12. Cf. Y is COM or PERL in TB.

13. Cf. Y is GEN or PERL in TB.

(2.32) *tām* *praṣṭ-aṃ* *cam* *suryodgam* *prātīhāri-yo* *wrasañ* *pu-k*
DEM.F.ACC.SG time-LOC DEM.M.ACC.SG sunrise miracle-INS people.NOM.PL all-EMP
wlyepe *sākre* ***l(ot)k(a)r*** ||
gentle.M.NOM.PL happy.M.NOM.PL become.PST.ACT.3PL
'At that time, all beings **became** gentle (and) happy through the marvel of the sunrise.'

(A313a3; prose)

In (2.31), there are two complement adjectives : *präskäll anäṣ* and (*krā*)*ṣiññäl*. Therefore, we could translate (2.31) as: '(His/Her) face became *präskäll anäṣ* (and) (*krā*)*ṣiññäl*.'

Malzahn (2010: 613) lists TA *krāṣiññäl* as a gerundive built on the class XII subjunctive stem of a transitive root (√*krās-* 'annoy'). However, this is the only verbal form attested for this root, and there is no reason that this root must be transitive. The corresponding TB root √*krās-* '[ACT] annoy, vex; [MID] be angry, feel irritated' is both transitive and intransitive (2.33).

(2.33) [TB] √*krās-* '[ACT] annoy, vex; [MID] be angry, feel irritated'

i. [ACT] = transitive

(*ajātaśatru*) ¦ *retke* *ṣālla* ¦ *kausal-ṣets* (:)
Ajātaśatru army destroy.PST.ACT.3SG Kosala-ADJZ.GEN.PL

räskre ***krāsa*** *tu* ¦ *pra*(*saṃnakeṃ*) ¦ ///
bitterly annoy.PST.ACT.3SG DEM.N Prasannaka
'Ajātaśatru destroyed the army of the Kosalans. [55b] It **tormented** Prasannaka very much. ... [55c]'

(B21a7; verse [5¦4¦3]×4)

ii. [MID] = intransitive

tumeṃ tanapāte ***kraṣiyate***
then patron be/get.angry.PST.MID.3SG
Then the patron **got angry**.

(IOLToch248b4; prose)

In addition, there are very few present III/IV forms that are transitive (Malzahn 2010: 372–4). The present IV *krosotär* in (2.34) is also intransitive, as expected.

(2.34) [TB] *krosotär* = intransitive (with an accusative stimulus)

[a1] – – – – – *r*«†*ä*» (:) *k*(*a*)*marttikets wakītse* ¦ *mā* *ynāñmäññe śuketse*
ruler.GEN.PL distinguished.NOM.SG NEG honor sweet.NOM.SG
¦ *su* ***krosotär*** (1)
DEM.M.NOM.SG be.annoyed.NPST.MID.3SG
'... The most excellent of the rulers, this one, the sweet [one], **is** not **angry** about honor.
[1d]'

(PKNS29a1; verse [7¦7¦4]×4)

In this example, *ynāñmäññe* 'honor, (act of) veneration' is not the theme (i.e., *'this one does not annoy *ynāñmäññe*') but the (accusative) stimulus of √*krās*- ('this one is not annoyed about *ynāñmäññe*').

In view of these examples, it is tempting to take TA √*krās*- as both transitive ('$X_{\text{STIMULUS:NOM}}$ annoys $Y_{\text{EXPERIENCER:ACC}}$') and intransitive ('$X_{\text{EXPERIENCER:NOM}}$ is angry [about $Y_{\text{STIMULUS:ACC/PERL}}$]'). If a gerundive is built on the former, it will mean *krāṣiññäl* '$Y_{\text{EXPERIENCER}}$ could be annoyed; (one) could annoy $Y_{\text{EXPERIENCER}}$', while a gerundive built on the latter would mean *krāṣiññäl* '(one) could be angry (about $Y_{\text{STIMULUS:ACC/PERL}}$).'[14]

Since *akmal* is likely to be the stimulus of *krāṣiññäl* in (2.31), I analyze that *krāṣiññäl* in (2.31) is not built on a transitive but on an intransitive stem, meaning '(one) could be angry (about Y_{STIMULUS}); (Y_{STIMULUS}) whom/which (one) could be angry about; anger-inducing.'

Likewise, TA √*pärsk(ā)*- 'be afraid' forms an intransitive stem, taking a stimulus in the ablative.

(2.35) TA √*pärsk(ā)*- 'be afraid' taking an ablative stimulus

14. TA *krāṣiññäl* may take a stimulus in the perlative as in (2.c).

(2.c) *krāṣiññäl* taking a stimulus in the perlative

/// (*mā penu tu* *sewā*)*s-aśśäl wärt-ac* *kälkā-l-une-yā* ***krāṣiññä-l***
NEG also NOM.2SG son.PL-COM forest-ALL go.SUBJ-NMLZ-PERL vex.SUBJ-GDV

'Also, you **will** not **be vexed** about going into the forest together with the children.'

(A70b1; prose?)

[b6] (*ṣñi w)l(al)uney-äṣṣ oki ālyakäṃ* ***koluney-äṣ praskanträ*** •
own death-ABL like other.M.ACC.SG killing-ABL be.afraid.NPST.MID.3PL

'(They) **are afraid of killing** another as much as they are of (their own death).'

(A262b6; Schmidt 1974: 156; prose?)

Therefore, the gerundive *präskāl* built on an intransitive stem would mean '(one) could be afraid (of $Y_{STIMULUS}$); $Y_{STIMULUS}$ whom/which (one) could be afraid of; fear-evoking.'

In example (2.31), repeated here as (2.36), *akmal* 'face' is the stimulus of √*präskā-* 'be afraid.' However, *akmal* 'face,' is not marked by the ablative but by the nominative(-accusative) since it is the subject of *lotäk*. Instead, the ablative marker appears on the gerundive that functions as the complement adjective of the stimulus, connected by *lotäk*.

(2.36) (= 2.31) [TA] Gerundive followed by *anäṣ/anac* (4/6)

/// *p(e)nu akmal* ***präskā-ll*** ***anäṣ*** *(krā)ṣiññä-l lotäk pākṣiṃ*
also face be.afraid.SUBJ-GDV ABL be.angry.SUBJ-GDV become.PST.ACT.3SG
–

' ... also (his/her) face became (1) that which one could be afraid of (and) (2) that which one could be angry about.'

(A179a1; prose?)

(2.37) [TA] Gerundive followed by *anäṣ/anac* (5/6)

/// ***(lkā)-laṃ*** ***anäṣ*** • *ṣäpnont wäṣta-käntwāñ mäskanträ* • *ymār*
see?.SUBJ-GDV.F.PL ABL creepy double-tongued.NOM.PL be.NPST.MID.3PL quickly

'... ($they_{F;PL}$) **could be seen** (as terrible) **for him**. (They) are creepy, having two-tongues. Quickly ...'

(YQ1.22[III.2]b8; prose?)

This interpretation sheds light on the problematic form ///*laṃ anäṣ* (YQ 1.22[III.2]b8). The restoration *(lkā)laṃ anäṣ* by Ji, Winter, and Pinault (1998: 152) is not compelling, since, as rightly pointed out by Peyrot (2017: 636 n. 11), it does not explain the function of the ablative *anäṣ*.

> "The feminine plural subject must be venomous snakes, but the function of the ablative object *anäṣ* is not clear to me. A restoration to (*präskā*)*laṃ anäṣ* is also difficult, because the snakes cause fear, but are not in fear [sic] themselves." (Peyrot 2017: 636 n. 11)

the root √*läk(ā)*- 'to see' does not take an experiencer or a theme in the ablative. In A358a3 (2.38), √*läk(ā)*- 'to see' takes a theme in the allative.

(2.38) [TA] √*läk(ā)*- 'to see' taking a theme in the allative

pā«†ṃ»cyā(*s kä*)*lytär-ci* ¦ *vajrapā·i* – ¦ (*śā*)*lyās pracar ānant ṣāmaṃ* ¦
right stand.NPST.MID.3SG-2SG Vajrapāṇi left brother Ānanda monk
wsokone-yo ***lkeñ****=-cy* ***akml-ac*** :
joy-INS see.ACT.NPST.3PL-2SG face-ALL
'Vajrapāṇi is standing to your right. (Your) brother Ānanda, the monk, is (standing to your) left. They **are looking at** your **face** with joy.'

(A358a3; verse; [5¦5¦8¦7]×4(?))

Taking the nominative-accusative *akmal* to be the stimulus of *präskāll anäṣ* offers an alternative interpretation of (2.37). That is, the allative marker *anäṣ* is semantically associated with a (nominative) stimulus, although it appears immediately after a gerundive.

Peyrot's restoration *(präskā)-laṃ anäṣ* 'be.afraid.SUBJ-GDV.F.PL ABL' is therefore more likely since the stimulus with this root is usually in the ablative in TA (e.g., 2.35). Also, it nicely fits the Old Uyghur translation *körgäli qorqïnčïγ bolur* 'they are horrible to look at' (Geng et al. 1988: 178–9; Peyrot 2017: 636 n. 11). The idea is that snakes are fear-evoking.

Therefore, we may restore/understand *ārṣalāñ* 'snakes' [F.NOM.PL] as the stimulus, and the gerundive *(präskā)laṃ* [F.NOM/ACC.PL] predicatively modifies it and shows agreement with it.

(2.39) YQIII.2b8: ... (†*ārṣalāñ*$_{\text{STIMULUS:F.NOM.PL}}$) ... ***(präskā)laṃ***$_{\text{F.NOM/ACC.PL}}$ ***anäṣ***
' ... (snakes) ... (they are) those which one could be afraid of.'

(2.40) Cf. A179a1: ... *akmal*$_{\text{STIMULUS:M.NOM.SG}}$ ***präskāll***$_{\text{M.NOM.SG}}$ ***anäṣ*** ... *lotäk*
'(his/her) face became that which one could be afraid of ...'

Finally, in (2.41), *späntāll anac* attributively modifies the theme *wlyepa-rake* 'a sweet word.' But in this case, the theme *wlyepa-rake* 'sweet word' is in the nominative-accusative, and the allative marker appears immediately after the gerundive.

(2.41) [TA] Gerundive followed by *anäṣ*/*anac* (6/6)

- ***späntā-ll***	***anac***	*wlyepa-ra(k)e*	- - - - - - - - -	*cami*	*cmol ko* ///
trust.SUBJ-GDV	ALL	soft-word		DEM.GEN.SG	birth

'... a sweet word, (which one) **could** (not[?]) trust ... his birth ...'

(A169a2; prose?)

To summarize, we saw that the TA allative and ablative allomorphs *anac*/*anäṣ* do not have any person reference synchronically, no matter whether they follow a PC (e.g., 2.15) or a gerundive (e.g., 2.16 and 2.17). They are not limited to the third-person singular as *-mm anac* in (2.15) and *-ṣ-ny oky anac* in (2.20) suggest. We may explain the fact that *anac/anäṣ* following a gerundive appears to show third-person reference by assuming a referential null object (2.16 and 2.17).

2.2.6 Phonological characteristics of the Tocharian PCs

Pronominal clitics form a single prosodic unit (phonological word) with their host in TB. Classical TB writes stressed /ə/ and unstressed /a/ with ⟨*a*⟩ and stressed /a/ with ⟨*ā*⟩, which enables us to infer that a PC and its host constitute a single prosodic unit when phonology calculates the accentuation of the host-PC complex (Krause 1952: 203). The basic stress pattern of TB is as follows. The primary stress of a word mostly falls on the second syllable unless the word is mono- or disyllabic, in such cases the primary stress falls on the first syllable (cf. Hackstein 2017: 1306–7). The accent in TB is morphophonemic since some morphosyntactic categories such as class V subjunctives (Jasanoff 2015) and derivatives in *-äṣṣä-*/*-äske-* with causative interpretation (so-called "Kausativa") show constant initial accent. Example (2.42i) shows that a phonological word consisting of two syllables has primary stress on the first syllable. However, when a PC *-ne* (3SG) or *-me* (PL) attaches to a disyllabic host, it makes the prosodic unit trisyllabic, and as a result, the primary stress falls on the second syllable (2.42ii).

(2.42) PCs affect the stress calculation of a verb ($_{\omega}$ = phonological word)

i. ($_{\text{PWd}}$ ó σ): /akṣa/ → [**á**kṣə] *ākṣa* 'hear.PST.ACT.3SG' (B18a1)

ii. ($_{\text{PWd}}$ σ ó σ): /akṣa-ne/ → [əkṣ**á**ne] *akṣā-ne* 'hear.PST.ACT.3SG-3SG' (B18a1)

Adams (2015: 74 n. 91) points out that of the roughly 500 examples of verb-PC combinations registered by Krause (1952), *ṣarpau-me* 'indicate' [SUBJ.ACT.1SG-PL] is the only certain case in which a PC does not affect stress calculation (cf. *ṣärpau-me* with expected peninitial accent). Krause (1952: 297) lists "*ṣarpau-me* F, A2a4" next to "*ṣärpau-me* 33 (Š)b6." Adams (2013: 718) also registers *ṣarpau-me*, citing PK AS 6C (= Krause's F, A2) a4. However, PK AS 6C a4 undoubtedly attests *ṣärpau-me*, rather than †*ṣarpau-me* (see Figure 2.1, where the first akṣara is ⟨ṣa⟩ rather than ⟨ṣa⟩). I was not able to find an attestation of †*ṣarpau-me*.[15] Malzahn (2010: 929) also registers "*ṣarpau-me*" with "(sic)", but without citation.

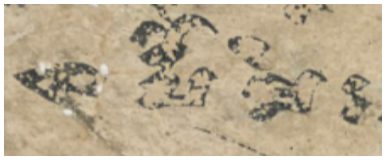

Figure 2.1: ⟨ṣa rpau me⟩ in PKAS 6C a4

Tocharian PCs are typologically classified as internal clitics, which attach to a host to project a phonological word.[16] In contrast, other clitics and the secondary case markers do not affect the stress calculation of their host and constitute a larger prosodic unit than a phonological word (identified as a Clitic Group by Koller 2015).[17] The secondary case markers in TA also behave in the same ways as clitics in that the ablative and allative allomorphs (*anac*/*anäṣ*) trigger gemination of a preceding consonant just as *oki* 'as, just' does (Koller 2015).

(2.43) ($_{\text{ClG}}$ ($_{\text{PWd}}$ *weñā-mm*) *anac*) '(s/he) spoke to them' (A269+A290a3; [2.15])

15. Adam Catt (p.c.) pointed out to me that Krause's *ṣarpau-me* stems from the poor-quality transliteration by Lévi (1933: 73).

16. This is comparable to the Latin enclitic conjunction *-que* which is also known to trigger stress-shift (see Weiss 2020: 121 and Hackstein 2017: 1307; e.g., *plḗra* 'very many.F' vs. *plērá-que*; cf. ^{x}*plḗra-que*). For different types of prosodic incorporation, see Goldstein (2016: ch. 3).

17. See Section 2.2.4 on the secondary case markers. Causal *-ñ* is exceptional in that it affects stress calculation (e.g., /kawa-ñə/ → [kəwá-ñ] *kawā-ñ* 'out of desire' (PKAS7Lb3); cf. /kawa/ → [káwə] *kāwa* 'desire' [ACC.SG]). Ablative *-meṃ* also affects stress occasionally.

Cf. ($_{\text{ClG}}$ ($_{\text{PWd}}$ *pācarr*) *oki*) ‘as if (he were) a father’ (A61a4; [2.16])

When a preterite participle or a gerundive hosts a PC in TA, the connection between the host and the clitic seems less tight than that between a finite verb and a PC because word-level sandhi is apparently absent (Schulze, Sieg, and Siegling 1931: 167). For example, underlying /-ṣ-c-/ assimilates to *-śś-* in TA. When the finite verb *tāṣ* ‘(s/he) will be’ [SUBJ.ACT.3SG] hosts the second-person singular PC (*-ci*) as in (2.44), the outcome is (/tāṣ/+/-ci/ →) *tāś-śi* ‘(s/he) will be’ [SUBJ.ACT.3SG-2SG] (*TEB* I: 73). In contrast, in (2.45), where the preterite participle *laltuṣ* ‘gone out’ hosts a second-person singular PC, the assimilation of /-ṣ-c-/ to *-śś-* is absent, and /-ṣ-c-/ surfaces faithfully.

(2.44) [TA] Assimilation of /-ṣ-c-/ to *-śś-*

///t-ac kakmuräṣ träṅkäṣ tärkor ***tāś-śi*** *mäśkit*
prince-ALL come.ABS speak.NPST.ACT.3SG permission COP.SUBJ.ACT.3SG-2SG prince
pläc w· ///
go.out.IMP.ACT.2SG

‘(The king) came to the prince and says: “**You shall have** permission, o prince. Become (a monk!) (*lit.* Go out [from the house]!) …”

(A81a3; prose)

(2.45) [TA] Lack of assimilation of /-ṣ-c-/ to *-śś-*

- ***laltuṣ*** ***ci*** *cesäm pälkoräṣ nu tmä///*
go.out.PTCP.M.NOM.PL 2SG them see.ABS CONJ

‘[Those who] went out from you … But having seen them, … ’ (A125b2)

This difference seems to indicate that PCs and non-finite forms constitute a larger prosodic group than a phonological word.[18]

(2.46) Prosodic structures of *tāś-śi* in (2.44) and *laltuṣ-ci* in (2.45)

i. ($_{\text{PWd}}$ *tāś-śi*) ‘there will be (permission) to you$_{\text{SG}}$’

18. Also note the lack of assimilation in the non-finite forms in footnote 4 (e.g., *kāruṃ-ci* instead of †*kāru(ṃ)ñ-ci* ‘compassion-2SG’ [A260a4]). Why non-finite verbs with a PC form a larger prosodic group than a phonological word is an open question.

ii. $(_{\text{ClG?}}\ (_{\text{PWd}}\ \textit{laltuṣ}\ )\ \textit{ci}\ )$ '(those who) departed'

This section reviewed the pronominal system and the phonological, morphological, and syntactic characteristics of the pronominal clitics of Tocharian A and B. The following section discusses whether the Tocharian PCs should be taken as affixes or clitics.

2.3 Tocharian PCs and the typology of clitics and affixes

Clitics are linguistic elements that display prosodically deficient phonology, anomalous morphosyntax, or both (Anderson 2005: 33). For the Tocharian PCs, we use the term "pronominal clitics" since they are pronominal and prosodically deficient, and because they show anomalous morphosyntax.

Scholars refer to the Tocharian PCs with various names. Previous approaches are divisible into two camps: those who consider them clitics and those who see them as affixes. The former includes Schulze, Sieg, and Siegling (1931), Pedersen (1941), Couvreur (1947), Adams (1988, 2015), Carling (2006), Kim (2009), Malzahn (2010), and Meunier (2015). Those who belong to the latter are: Krause (1952), *TEB* I, Schmidt (1974), Pinault (1992, 2008), Klingenschmitt (1994), Ringe (1996), and Peyrot (2013b).

The question here is whether the Tocharian PCs are clitics or affixes. Scholars have long sought a set of diagnostics by which to distinguish clitics from affixes. Perhaps one of the most influential studies is Zwicky and Pullum (1983). They used the following six criteria and concluded that the English contracted auxiliaries such as *'s* in *She's gone* are clitics, while the English contracted negative *n't* in *She hasn't gone* is an affix.

(2.47) Zwicky and Pullum's (1983: 503–4) criteria:

i. "Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems."

ii. "Arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups."

iii. "Morphophonological idiosyncrasies are more characteristic of affixed words than of clitic groups."

iv. "Semantic idiosyncrasies are more characteristic of affixed words than of clitic groups."

v. "Syntactic rules can affect affixed words, but cannot affect clitic groups."

vi. "Clitics can attach to material already containing clitics, but affixes cannot."

With respect to their criteria, Tocharian PCs show mixed behavior. Regarding (2.47i), PCs in TB are selective in that only finite verbs can host a PC in TB. In contrast, those in TA are less selective, and participles, gerundives, and nouns in a nominal clause may serve as a host (Section 2.2.2). As for (2.47ii), it is unclear whether there is any verb that cannot host any PC in TA or TB.

Regarding (2.47iii), the PCs in TB may trigger allomorphy of the copula: *ste* and *skente* are the regular finite forms of the copula in TB, third-person singular and plural, respectively. When they host a PC (e.g., *-ne*), however, we find *star-ne* (COP.NPST.3SG-3SG) and *skentar-ne* (COP.NPST.3PL-3SG), instead of †*ste-ne* and †*skente-ne*. In TA, the combination of a finite copula *naṣ* and a PC *-äṃ/-äm* is very seldom attested (Burlak and Itkin 2009),[19] and instead, we find phonologically reduced forms *n-äṃ* and *n-äm*. Moreover, the function of the PC in *näṃ* and *näm* is sometimes opaque, and at least in some cases they seem to be frozen and no longer analyzable as containing a PC (Schulze, Sieg, and Siegling 1931: 167–8, *TEB* I: 198).[20] Pinault (2008: 639) considers that *naṣ-äṃ*, *naṣ-äm* were replaced by *näṃ* and *näm*, respectively ("Les formes avec pronom suffixé, à savoir 3^{e} sg. *naṣ-äṃ*, *naṣ-äm* sont remplacées par les formes tronquées *n-äṃ*, *n-äm*"). However, his account

19. These forms are attested in the following manuscripts: *naṣ-äṃ*: A90b5; A98a4; A106b5, b6; A146b5; PKNS2b4; *naṣ-äm*: A150a5; A346b2.

20. *TEB* I: 198: "Dabei kann *näṃ*, auch in der einfachen Bedeutung von *naṣ* stehen, also ohne Pron. suff."

would amount to the claim that morphologically opaque forms (*n-äṃ* and *n-äm*) ousted morphologically transparent forms, the opposite of which is usually observed. According to Burlak and Itkin (2009), *naṣ-äṃ* and *naṣ-äm* are used only when a sentence contains an interrogative word or a negation. This view would suggest that *naṣ-äṃ*/*naṣ-äm* and *n-äṃ*/*n-äm* are in complementary distribution. Batke (1999: 36), following Pinault (1992: 133), considers *n-äṃ* and *n-äm* to be mere allegro forms of *naṣ-äṃ* and *naṣ-äm*, respectively. But these views require an additional explanation as to the fact that, in contrast to *naṣ-äṃ* and *naṣ-äm*, which only take a third-person singular subject, both *näṃ* and *näm* may take a third-person singular or plural subject (Schulze, Sieg, and Siegling 1931: 167).

As for (2.47iv), we find no example in which a Tocharian PC shows idiosyncratic semantics. As for (2.47v), Tocharian PCs form a cluster with their host and move as a unit. For example, we find a finite verb with a PC that precedes a direct object, seemingly undergoing some kind of fronting operation (2.48).

(2.48) [TB] Fronting of a finite verb and a PC

spaitu ra waltsa= ñy ¦ āsta lykaśke po wnolmi •
dust like crush.SUBJ.ACT.3PL GEN.1PL bone.PL small all living.being.NOM.PL

kärśye-ñ *kektseñ wat ¦ kwä* – [b5] ///
cut.SUBJ.ACT.3PL-1SG body.ACC.SG or

'Even if all beings crush my bones fine like to dust, [5a] or if they **chop up my** body …'

(B220b4; verse; [5¦8]×4 + [8¦8¦5]; trans. by CEToM)

As for (2.47vi), we find no example in which a PC attaches to a base containing another clitic in TB. In TA, there is only one example where an adverb (*skam* 'always') appears to intervene between the host and the PC (2.9), but an alternative analysis is available for this example (Section 2.2.2).

As these criteria show, Tocharian PCs exhibit mixed behavior. Regarding (2.47i), one might be tempted to conclude that the PCs in TB are affixes while those in TA are clitics. However, since the degree of selection is gradient, and since there is no clear line which separates clitics from affixes, we may only conclude that PCs in TB are more affix-like than those in TA. Criteria (2.47ii),

(2.47iii), and (2.47iv) are about the characteristics of affixed words. We have two pieces of negative evidence (2.47ii and 2.47iv) favoring clitics and one piece of positive evidence (2.47iii) favoring affixes.

It should be noted, however, that the properties mentioned in (2.47ii), (2.47iii), and (2.47iv) are "more characteristic of affixed words than of clitic groups", and it is possible for a clitic-host complex to show one or more of these properties. In fact, as Spencer and Luís (2012: 110–1) emphasize, "[t]hese criteria [...] indicate tendencies and not defining characteristics that allow us to determine with absolute certainty whether a given formative is an affix or a clitic" (Spencer and Luís 2012: 110–1). Clitics may also show an allomorph conditioned by the host (cf. 2.47iii). For example, subject pronouns are conditioned by a verbal inflection in Cléire and other coastal Munster varieties of Irish (Bennett, Elfner, and McCloskey 2019: 72–3; Yuan 2021), and possessive *'s* in English has a zero allomorph (Nevins 2011b; Anderson 2008, 2013; cf. Lowe 2016). Furthermore, in contrast to (2.47iv), clitic-host complexes may show idiosyncratic semantics (e.g., French *il y a* 'there is'; Anderson 2011). Therefore, these three criteria do not allow us to conclude whether Tocharian PCs are clitics or affixes.

As for (2.47v), Tocharian PCs form a cluster with their host and move as a unit. For example, when a hosting verb undergoes fronting to the beginning of a sentence, it consistently carries the PC together with it. However, this does not suggest that the Tocharian PCs are affixes because nothing rules out the possibility that a host and a clitic form a constituent and undergo a syntactic operation, the clitic subsequently cliticizing to the host in the phonology or in the syntax-phonology interface.

It is now clear that one cannot determine whether a Tocharian PC is an affix or a clitic based solely on Zwicky and Pullum's (1983) criteria. The Tocharian PCs show mixed behavior with respect to these criteria, and the criteria themselves do not guarantee whether a given formative is an affix or a clitic.

However, based on a particular theoretical framework, one might conclude that they are in fact clitics. Section 2.2.2 showed PCs representing the argument of an infinitive climb to the finite

verb in TA and TB. If the lexicon created a finite verb-PC complex and sent it to the syntax as a single unit, it would somehow know in advance that the finite verb will combine with an infinitive that takes a pronominal argument. Therefore, with the assumption that (1) inflection takes place in morphology (THE STRONG LEXICALIST HYPOTHESIS), and (2) syntax cannot access the internal structure of a word (THE LEXICAL INTEGRITY HYPOTHESIS; Chomsky 1970), one may conclude that PCs are not affixes added in morphology but clitics manipulated in syntax.

In contrast, if one rejects these hypotheses and assumes that sentence-building processes may have access to word-building processes, the difference between clitics and affixes becomes more subtle. For example, Distributed Morphology (DM; Halle and Marantz 1993; Marantz 1997) does not distinguish between word-building and sentence-building processes but considers them identical, operating in the same grammatical module (syntax). DM is a REALIZATIONAL model of morphology in which "a word's association with a particular set of morphosyntactic properties licenses the introduction of those properties' inflectional exponents" (Stump 2001: 2).[21] In this model, both affixes and clitics realize some morphosyntactic feature bundles, and base-affix and host-clitic complexes are both created post-syntactically (see Chapter 4 on this realizational process).

Some scholars have proposed alternative criteria that distinguish between (doubling) clitics and agreement markers (e.g., Nevins 2011a; Yuan 2021). However, one should be cautious in applying them here because not all agreement markers are affixes (e.g., Sorani; Haig 2008; Jügel 2009), and not all affixes are (grammatical) agreement markers either (e.g., Chichewa; Bresnan and Mchombo 1987).

To summarize, the Tocharian PCs display mixed behavior. They show clitic climbing, suggesting that they cannot be affixes added to a base in the morphology and dispatched to the syntax as a single indivisible unit. Whether a Tocharian PC is a clitic or an affix is essentially a theory-dependent question, and this study follows a (lexical-)realizational model of morphology (DM),

21. Realizational models of morphology include Distributed Morphology (Halle and Marantz 1993, 1994; Embick 2010, 2015), Paradigm Function Morphology 1 (Stump 1993, Stump 2001), Paradigm Function Morphology 2 (Stump 2002, Stewart and Stump 2007), A-morphous morphology (Anderson 1992), and Word-and-Paradigm morphology (Blevins 2006, 2016; Blevins, Ackerman, and Malouf 2018).

in which the difference between clitics and affixes becomes blurred. Under the DM approach, Tocharian PCs are both listemes that realize morphosyntactic feature bundles post-syntactically and form a single phonological word with their host in the phonology.

2.4 Etymology of the Tocharian PCs

This section briefly reviews the etymologies of the Tocharian pronominal clitics proposed in previous literature.

The third-person singular PCs TB *-ne* and TA *-(ä)ṃ* point to Proto-Tocharian **-næ-*. It is usually compared with Lith. *anàs*, OCS *onŭ* 'that (one)', Hitt. *anedani* 'this' and *ani-* in *anišiwat* 'today', which all point to **ono-*.[22] The Proto-Tocharian form seems to continue the masculine or neuter accusative singular PIE **onom* (cf. Van Windekens 1976: 276). However, as Peyrot (2017: 641) points out, Proto-Tocharian **-næ-* "could reflect **no-* as well as **ono-*, **eno-* or **ano-*" (cf. also *LIPP* II: 55–6: **ano-* or **no-*). Van Windekens (1944: 188) connects TA *-(ä)ṃ* and TB *-ne* with Ved. *nā́nā* 'in various ways' and Arm. *na* 'that one,' and reconstructs **ne/o-*. As for Vedic *nā́nā* (RV+), however, its origin is disputed (*KeWA* II: 153: "Die weitere Herkunft ist nicht geklärt"). Recent etymological studies (*KeWA* II: 153; *EWAia* II: 35) favor Thieme's (1949: 51–4) explanation, according to which it goes back to the repetition of *nā́* 'man' (i.e., 'each for oneself', originally 'man for man'). Nevertheless, Arm. *na* unambiguously points to **no-*,[23] and it is hard to rule out the possibility that PT **-næ-* continues this stem. Alternatively, Pedersen (1941: 137–9) sees it as an old adverb meaning 'therein' (cf. the secondary locative case marker *-ne* in TB; Lat. *endo*; Hitt. *anda*), but his idea was rejected by Van Windekens (1944: 188 n. 10; 1976: 276).

The plural PC TB *-me* and TA *-m* go back to PT **-mæ-*, which has two sources: one is **smos*, a zero-grade pronominal stem **s-* with a dative plural ending **-mos*, and the other is the first- and

22. On the Hittite forms, see Neu (1991: 22 n. 31; 1997: 156) and Melchert (1994a: 74–5; 1994b: 303; 2009). Kloekhorst (2008: 767) analyzes Hitt. *anišiwat* differently, proposing to emend *a-ni-ši-u̯a-at* (KBo 3.45 obv. 12 [OH/NS]) to *e$^{!}$-ni-ši-u̯a-at*, where *eni-* corresponds to the NH form of the neuter nominative-accusative singular *ini* 'that' (but cf. Melchert 2009: 151 n. 1). Melchert (1991: 139 n. 17; 1994a: 75) adds to the list Lydian *ãn(a)-* as another possible reflex of **óno-* in Anatolian, but this analysis is abandoned in Melchert (2009).

23. See, e.g., Godel (1975: 107); Schmitt (2007: 120); Klein (2017: 1060); *LIPP* II: 56; and Olsen (2017: 1088). Martirosyan (2010: 562) reconstructs "PIE **(h$_2$e)no-*" without a comment on the parenthesis.

second-person plural pronouns *ŋ̥s-mé* and *us-wé* > *$sm^{y}ə$ with aphaeresis (Čop 1974, Katz 1998: 152–72).

We see the trace of **smos* in the third-person plural dative enclitic pronouns in Anatolian: PA **=smos* 'to them' > Hitt. *=šmaš*, CLuw. *=mmaš*, HLuw. *=ma-za* /=mmant͡s/, Lyc. *=ñne*, and Lyd. *=mś*. For the latter source, however, PT **-æ-* points to PIE **-o-* or **-ē-*, and PIE **ŋ̥s-mé* and *us-wé* (> *$s^{y}m^{y}ə$*) would not develop to **-mæ* but **-$m^{(y)}ə$* in PT. To account for the vocalism, Adams (2013: 502) starts from "PIE **-ŋ̥smó*," although independent support for the *o*-vocalism is rather limited (cf. Dor. ἄμέ, ὔμέ; Aeol. ἄμμε, ὔμμε). Klingenschmitt (1994: 362), in contrast, reconstructs **ŋ̥smēm* and **usmēm*, that is, either **ŋ̥smé + em* (cf. Pre-Ved. **asmā́m* > Ved. *asmā́n*; *AiGr* III: 467) or **ŋ̥smé + om* with a special contraction rule (for the trace of **-om* in Tocharian, cf. **tuH-om* > TB *twe*, Ved. *tvám*, *tuvám*). Alternatively, Katz (1998: 163) suggests the tonic pronouns underwent aphaeresis and monosyllabic lengthening (cf. Winter 1992: 99), giving rise to **ē* (> PT **æ*): **ŋ̥s-mé*, **us-wé* > **smé* (aphaeresis) > **smḗ* (monosyllabic lengthening) > **$m^{(y)}æ$* (loss of stress).

Some scholars favor an analogical explanation for the **æ*-vocalism in PT. Čop (1974: 34) sets up an intermediate stage **ŋ̥smos* and **usmos*, influenced by **=smos* (> **=me*) and the clitic forms **nos* and **wos*. Adams (1988: 155) follows him, stating "[m]uch more likely is Čop's (1974) proposal which would see **-me* as the more or less regular phonological development of the expected Proto-Indo-European enclitics **ŋ̥sme*, **usme*, [...]. Here again the final vowel must be analogical in origin [...]." Alternatively, one could assume that **smos*, which regularly develops into PT **-mæ*, replaced the vocalism of (**ŋ̥smé*, **uswé* >) **$sm^{y}ə$*. Pisani (1941–1942) and Van Windekens (1976: 276) connect PT **-mæ-* with Ved. *amá-* and *amú-*, but their idea has not met with wide acceptance since it does not explain the person-invariance observed in the plural PC (cf. Adams 1988: 155; 2013: 502).

The second-person singular PC TB *-c* does not align with TA *-ci*. While the former points to PT **-cə*, the latter suggests **-cəy*. The *communis opinio* is to consider TB *-c* /-cə/ as continuing a PIE atonic pronoun **te* (> PT **-cə* > TB *-c* /-cə/; Van Windekens 1976: 517, Mallory and Adams 1997: 455, Pinault 2008: 537; but cf. Kim 2009). Then, the question is how to explain the TA form. According to Pinault (2008: 537), TA *-ci* is from (PIE **te* >) PT **-cə*, which was recharacterized in pre-TA with a [+person] genitive marker **-i* (i.e., **-cə+y* > TA *-ci*). As per Van Windekens (1976:

517), TA *-ci* continues not PIE **te* but PIE **toy* (with initial **c* analogical from **te* [> **-cə* > TB *-c*]). However, Kim (2009) rightly questions this idea, as it would presuppose that Proto-Tocharian somehow retained the reflexes of both PIE **te* (> TB *-c*) and **toy* (> TA *-ci*), seemingly without any functional difference, or that Proto-Tocharian had (**te* >) **-cə* and (**toy* >) **-cəy* with some functional difference (e.g., accusative vs. genitive-dative) which is no longer observable in the daughter languages.

We see a TB-TA mismatch in the first-person singular also. TB *-ñ* points to PT **-ñə*, while TA *-ñi* suggests **-ñəy*. Pinault (2008: 536–7) reconstructs PT **-ñə* (> TB *-ñ*, recharacterized in TA as **-ñə+y* > TA *-ñi*), which continues either the genitive singular of the first-person pronoun (PIE **mene* [cf. Ved. *máma*; GAv. *mā.nā̄*; YAv. *mana*; OCS *mene*] > **$m^y n^y$ə* > **-ñə*) or the atonic pronoun **me* > **m^yə* » **ñə* with an initial consonant analogical from **m^y(ə)n^yə*.

Alternatively, Kim (2009) starts from PT **-cəyə* [2SG] and **-ñəyə* [1SG], which developed into TA *-ci* and *-ñi* with apocope (i.e., PT **-cəyə*, **-ñəyə* > pre-TA **-cəy*, **-ñəy* > TA *-ci*, *-ñi*), while the TB form has undergone the loss of *y* between two unaccented schwas and subsequent contraction (i.e., PT **-cəyə*, **-ñəyə* > pre-TB **-cə.ə*, **-ñə.ə* > **-cə*, **-ñə* > TB *-c* /-cə/, *-ñ* /-ñə/). As for the source of PT **-ñəyə* and **-cəyə*, Kim (2009: 57–8) tentatively suggests that they continue the dative of the atonic pronouns **mey*, **tey* (cf. OCS *mi*, *ti*), which analogically obtained **-m* from the third-person singular accusative pronoun **nom* (> PT **næ*) (i.e., PIE **mey*, **tey* » **-ñəy*, **-cəy* [*-ñ-* analogical from (**mene* >) **$m^y n^y$ə*] » **-ñəy-əm*, **-cəy-əm* > PT **-ñəyə*, **-cəyə*). Although this analysis derives the TA forms without appealing to the recharacterization with **i*, support for the analogical change of **-ñəy*, **-cəy* » **-ñəyəm*, **-cəyəm* is rather limited.

To summarize, this subsection briefly reviewed the etymologies proposed for the Tocharian PCs. Although the PCs form a single pronominal paradigm, its members are heterogeneous. The third-person singular PCs seem to continue a pronominal stem, either **eno-*, **ono-*, or **no-*. The plural PCs have two sources: PIE **smos* and PIE **n̥s-mé/us-wé*. Although uncertainty remains as to how to account for the *æ*-vocalism in PT, this analysis has an advantage over other proposals in that it accounts for the person-invariance effect in the plural. The first- and the second-person singular PCs show a mismatch between TA and TB. It seems that the TB outcomes are lautgesetzlich, and

Pre-TA recharacterized the PT forms with **i*. Both the TA and TB forms might be lautgesetzlich if there were independent evidence to support PT **-ñəyə* and **-cəyə*.

2.5 Interim summary

This chapter reviewed the pronominal system and the phonological, morphological, and syntactic characteristics of the pronominal clitics in Tocharian A and B.

PCs in TA and TB differ from the demonstrative and independent personal pronouns in that they lack case distinctions. They also lack person distinctions in the plural (Section 2.2.1). While PCs in TB are consistently hosted by a finite verb, those in TA may be hosted by a participle, gerundive, or a noun in a nominal clause (Section 2.2.2). There is one example in which a host-PC unit appears interrupted by an adverb, but an alternative explanation is available for this example. Section 2.2.3 showed that the TA first-person singular PC *ñi* is homophonous with the genitive-dative of the first-person singular independent personal pronoun, and that there are ambiguous cases as to whether *ñi* is an independent personal pronoun or a PC. PCs may be followed by an allative or an ablative case marker, and in such cases, TA attests *anac* and *anäṣ*, instead of the usual *-ac* and *-äṣ* (Section 2.2.4). While previous handbooks and dictionaries separate *-an-* in *anac* and *anäṣ*, it was shown that these markers are to be treated as synchronically monomorphemic (Sections 2.2.4 and 2.2.5). PCs in TB constitute a single phonological word with their host, while the host-PC connection seems to be weaker in TA when the host is not a finite verb (Section 2.2.6). The Tocharian PCs show mixed behavior with respect to the typology of clitics and affixes (Section 2.3). Even though they form a single pronominal paradigm, the origin of the PCs is heterogeneous, and several pronouns came to constitute the single PC paradigm (Section 2.4). The following chapter will review the chief usages of PCs in TB and TA.

CHAPTER 3

Descriptive data of the Tocharian pronominal clitics

3.1 Chief usages of the Tocharian pronominal clitics

This chapter reviews the representative usages of pronominal clitics in Tocharian A and B. Tocharian PCs are multifunctional: they may represent the direct object with a theme role, the indirect object with various thematic roles such as source, goal, addressee, recipient, beneficiary, experiencer, and location, the possessor, the subject of a non-finite verb, the argument of a predicate consisting of an adverb or postposition and a verb, and so on. According to the rough estimate given by Adams (2015: 148), independent personal pronouns and demonstrative pronouns occur about 80% of the time and PCs 20%. This chapter reviews all of the chief usages with examples from TB and TA.

3.1.1 Theme

Tocharian PCs may represent theme of a transitive verb. The TB third-person singular PC *-ne* serves as the theme of *palātai* '(you$_{SG}$) praised X' in (2.4), repeated here as (3.1). In (3.2), the TA first-person singular PC *-ñi* represents the theme of the transitive verb *pälkse-* '(they) torture X.'

(3.1) [TB] (= 2.4) *-ne* = Theme of *palātai*

mantaṃtā pa-si marsasta ¦
never protect-INF forget.PST.2SG

palātai-ne *ṣu* [a5] *komt-sa* ¦ *ṣeme ślok-tsa* (:)
praise.PST.MID.2SG-3SG 7 day-PERL one strophe-PERL

'You$_{SG}$ have never forgotten to protect (the moral behavior). You$_{SG}$ have **praised him** (= the Buddha) for seven days with a single strophe.' (B297a.a4; verse; [7¦7¦4]×4)

(3.2) [TA] *-ñi* = Theme of *pälkse-*

*kuc yāmwā k$_u$yal **pälkse-ñi** : 2*
what.ACC.SG do.PST.ACT.1SG why torture.NPST.ACT.3PL-1SG
'... What did I do? Why do (they) **torture me**?'

(A101b5; verse)

In these examples, the PCs represent the theme of a transitive verb.

3.1.2 Addressee

PCs may represent the addressee of communication verbs such as TB/TA √*āks-* 'announce, proclaim, say', TB √*we-ñ-* '[act] say, speak; [mid] be called', TA √*träṅk-*|*we-ñ-* 'id.', TA √*pärk-* '[act] ask for, beg; [mid] ask, bring up a question', and TB√*pärk-* 'id.' In the following examples, PCs represent the addressee of a transitive verb.

(3.3) [TB] *-me* (PL) = Addressee of *akṣā-*

*(ce śłok **a)kṣā-me** ¦ k$_u$ce tne wnolmi ¦ yamantär (:)*
this.ACC.SG strophe proclaim.PST.3SG-PL REL.ACC.SG here being.PL do.PST.SUBJ.3PL

krent yo(laiṃ yāmor) ¦ ///
good.ACC.SG bad.ACC.SG deed
'(The Buddha) **proclaimed** this strophe **to them**: "Whatever living beings do here, [51a] (whether) a good (or) bad deed ..."'.

(B21a2; verse; [5¦4¦3]×4)

(3.4) [TA] *-ci* (2SG) = Addressee of *prakäsmār-*

(kä)lp(a)-s-yo cmol-m-aṃ[1] *¦ mā kaklyuṣunt ñom ¦ klyoṣā tämyo*
Kalpa-PL-INS birth-PL-LOC NEG hear.PTCP.M.ACC.SG name hear.PST.ACT.1SG therefore
***prakäsmār-ci** ¦ kus täm män= täm pättāñkä(t [b4] :) 1 ¦¦*
ask.NPST.MID.1SG-2SG who.NOM.SG DEM how DEM Buddha.lord
[Bṛhaddyuti speaking to Ānanda:] "I have heard a name unheard in [my] [re]births over [many] *kalpa*s. Therefore I **ask you**$_{SG}$ **a question**: who is that? What does 'the Buddha' mean? [1d]"

(A20b3; trans. based on CEToM; verse; [5¦5¦8¦7]×4)

1. *cmolmaṃ* seems to be an error for *cmolwaṃ* (Sieg and Siegling 1921: 16 n. 12).

In example (3.3), the plural PC *-me* represents the addressee of *akṣā-* '(he) proclaimed X to Y.' Likewise, example (3.4) shows that the second-person singular PC *-ci* represents the addressee of *prakäsmār-* '(I) ask X a question.'

3.1.3 Recipient

PCs may represent the recipient of a verb of transaction (e.g., TA √*e-*|*wä(s)*$^{?}$- 'give' and TB √*ai-*|*wä(s)*$^{?}$- '[act] give; [mid] take').[2]

(3.5) [TB] *-ñ* (1SG) = Recipient of *wsasta-*

(*wsa*)[a1]***sta-ñ*** *onwaññe* • *lkoym-c* *kr*$_u$*i* *ynemane* ¦ *ypauna*
give.PST.ACT.2SG immortality see.OPT.ACT.1SG-2SG whenever go.PTCP land.PL
kwṣain-ne *ci* ¦ *plu*[a2]*ṣṣi-ñ* *sak-sa* *palskw ārañce* ¦
village.PL-LOC ACC.2SG float.IMPF.ACT.3SG-1SG happiness-PERL mind heart
'[...] You$_{SG}$ **(ga)ve** immortality **to me**. [79b] Every time I saw you$_{SG}$ going through lands and villages, my mind and heart leapt for joy.'

(B246a1; trans. based on CEToM; verse; [5¦5¦8¦7]×4)

(3.6) [TA] *-äṃ* (3SG) = Recipient of *eṣṣ-*

– (*p*)*uk cmol-w-aṃ* *särki yṣ-äṃ* ¦ ***eṣṣ-äṃ*** *s*$_u$*k-untu*
all birth-PL-LOC after go.NPST.ACT.3SG-3SG give.NPST.ACT.3SG-3SG fortune-PL
ñäkciyās ¦ *napeṃ-ṣinās* :
divine.F.ACC.PL human-ADJZ.F.ACC.PL
'... follows it in all incarnations, **gives him** divine and human pleasures.'

(A14b2; trans. by CEToM; verse; [7|7|4]×4)

In (3.5), the first-person singular PC *-ñ* [TB] represents the recipient of *wsasta-* '(you$_{SG}$) gave X to Y'. Likewise, the third-person singular PC *-äṃ* [TA] represents the recipient of *eṣṣ-* '(s/he) gives X to Y' in (3.6).

3.1.4 Goal

In the following examples, pronominal clitics represent the goal of motion verbs (e.g., TB √*i-*|*mä(s)*$^{?}$- 'to go' and TA √*i-*|*kälk-* 'id.'). The motion verbs may be intransitive or transitive.

2. The superscript question mark added to the end of a root indicates that it is uncertain whether the root has a so-called *a*-character or not (cf. Malzahn 2010: 24).

(3.7) [TB] *-ñä* (1SG) = Goal of *kmeñ-*

mäktoṃ okt no toṃ rakṣātsanā ***kmeñ-ñä-ścä*** ///
REFL.F.PL 8 CONJ DEM.F.PL female.demon.PL come.PST.ACT.3PL-1SG-ALL
'... In these same eight [regions], however, these rākṣasas **came to me**.'

(Or 8212.163 b5; trans. based on CEToM; verse)

(3.8) [TA] *-äṃn-anac* (3SG) = Goal of *yeṣ-*

pkāt nuṃ kos-si ṣñi mācär ¦ ***yeṣ-äṃn-anac***
intend.PST.MID.3SG again kill-INF own mother go.IMPF.ACT.3SG-3SG-ALL
'(Sunakṣatra) again intended to kill (his) mother (and) **went to her**.'

(A222b6; verse; [7|7]×4)

The first-person singular PC *-ñä* represents the goal of the change-of-location verb *kmeñ-* '(they) came' in (3.7). The third-person singular PC *-äṃn*, referring to Sunakṣatra's mother, represents the goal of *yeṣ-* '(he) went' in (3.8). Both cases contain an allative case marker, which unambiguously marks the goal of a change-of-location verb.

In the following examples, PCs represent the goal of a transitive verb.

(3.9) [TB] *-ne* (3SG) = Goal of *śilāre*

śi[a8]***lāre-ne*** *oṅkarñai* ¦ *wñār-ne purwar*
bring.PST.ACT.3PL-3SG porridge.ACC.SG speak.PST.ACT.3PL-3SG accept.IMP.MID.2SG
wesan-meṃ ¦ *pinwāt rṣāka* : 1 ||
1PL-ABL alms sage.VOC
'(Nānda and Nandābala) **brought** the rice porridge **to him** (= Indra) and spoke to him. "Receive the alms from us, o sage!" [1d]'

(B107a7–8; verse; [7¦7¦4])

(3.10) [TA] *-c*(*i*) (2SG) = Goal of *kleñc-*

anaprä pe-s-ā oram pä[a3](*ṣtam*) /// *oṅkälmāñ ñātse mā*
in.front foot-PL-PERL front(?) stand.IMP.ACT.2SG elephant.NOM.PL danger NEG
***kleñ-c*(*i*)**
bring.SUBJ.ACT.3PL-2SG
[The Ṣaḍdanta Bodhisattva speaking to the hunter:] "Stand in front of my feet! ... the elephants **should** not **bring** danger **to you**."

(A79a3; trans. based on CEToM; prose?)

Example (3.9) from TB shows that the third-person singular PC *-ne* represents the goal of the ditransitive verb *śilāre* '(they) brought X to Y.' Example (3.10) from TA contains *kleñc-* '(they) will bring X to Y,' which hosts the second-person singular PC *-ci*, representing the goal.

3.1.5 Beneficiary

In the following examples, PCs represent the beneficiary. The third-person singular PC *-ne* in (3.11). seems to represent the beneficiary of *yaṃ-* '(if) she goes.' In (3.12), we find an intransitive verb *sekaṣ-* 'X will be overflown, X will be abundant', which hosts a plural PC. This PC, referring to the king Brahmadatta and his attendants, represents the beneficiary of the hosting verb.

(3.11) [TB] *-ne* (3SG) = Benefactive of *yaṃ-*

ṣamāne ytāri mā aiśtär
monk.M.NOM.SG path NEG know.NPST.SUBJ.MID.3SG

klyiye ytāri ṣärpṣūkiññe-sa ***yaṃ-ne*** *anāpatti •*
woman.F.NOM.SG path guide-PERL go.NPST.SUBJ.ACT.3SG-3SG sinless
'If a monk does not know a route and a woman **goes for him** as a path-guide, it is without sin.'

(B330a2; trans. based on Ogihara 2009: 383; prose)

(3.12) [TA] *-äm* (PL) = Benefactive of *sekaṣ-*

[a2] /// *sne plā wlamträ was tāloṣ*
without exception(?) die.SUBJ.MID.1PL NOM.1PL miserable.NOM.PL
sekaṣ-äm *śwāl - - -*
be.overflown.SUBJ.ACT.3SG-PL flesh
"If we, the miserable ones, die without exception(?), flesh **will be overflown to you**$_{PL}$ (i.e., you$_{PL}$ will have flesh in abundance)."

(A72a2; trans. based on Peyrot 2013a: 167; prose).

In the examples above, the attested PCs represent the beneficiary of an intransitive verb. However, PCs may also represent the beneficiary of a transitive verb (e.g., 3.13 and 3.14).

(3.13) [TB] *-ne* (3SG) = Benefactive of *nemar-*

*ñakti arjuṃ ¦ stām **nemar-ne-ś** ¦ cau eṅksate :*
god.PL Arjuna.tree tree bend.PST.ACT.3PL-3SG-ALL DEM.M.ACC.SG seize.PST.MID.3SG
'The gods **bent** the Arjuna-tree **for him** (= Bodhisattva); (He) took it.'

(B107b4; verse; [4¦4¦4]×4)

(3.14) [TA] *-ṃ* (3SG) = Benefactive of *yāmwe-*

- śkaṃ kärṣte-ṃ kāruṇ-yo :
CONJ cut.off.PST.MID.1SG-3SG compassion-INS

***yāmwe-ṃ** kluṣpe tmäṣ mā - ¦ ///*
do.PST.MID.1SG-3SG rice.porridge then NEG
'... and I cut it off with compassion. I **made** rice porridge **for him**. Then, ... not ...'

(A321b6; verse; [7¦7]×4)

The third-person singular PC *-ne* functions as the beneficiary of the transitive *nemar-* '(they) bent X (for Y)' in (3.13). In example (3.14), the third-person singular PC *-ṃ* serves as the beneficiary of *yāmwe-* '(they) made X (for Y)'.

3.1.6 Source

PCs may also represent the source of verbs of requesting such as TB √*yāsk-* 'to beg' and TB √*ñäsk-* 'to demand, desire,' and verbs of possessional deprivation such as TA √*sumā-* 'to take away, deprive of'. The examples are as follows:

(3.15) [TB] (= 2.14) *-ne* (3SG) = Source of *yaṣṣāte-*

upanande ce$_u$ kampāl [b2] ***yaṣṣāte-ne-meṃ** mā*
Upananda DEM.M.ACC.SG cloak beg.PST.MID.3SG-3SG-ABL NEG
wsā-ne •
give.PST.ACT.3SG-3SG
'Upananda$_j$ **begged** this cloak **from him$_k$** (= an Ājīvika ascetic), (but he$_k$) did not give (it) to him$_j$.' (PKAS18Ab2; prose)[3]

3. Cf. B337a4–5 attests the parallel passage: *upanande **cewmeṃ** kampās yaṣāte* [a5] *sū mā wsā-ne* • 'Upananda begged the cloak **from him**, (but he) did not give (it) to him.'

(3.16) [TA] *-ñi* (1SG) = Source of *psumār-*

[a5] /// *cam* *śkaṃ lo* ***psumār-ñi*** *kᵤyal lykäly lykäly*
DEM.M.ACC.SG CONJ far take.away.IMP.MID.2SG-1SG why fine fine
tuṣt-ñi :
burn.NPST.ACT.2SG-1SG

'... and **take** that (suffering[?]) **away from me**! Why do you burn me finer (and) finer? ...'

(A92a5; trans. based on CEToM; verse)[4]

The third-person singular PC *-ne* represents the source of the transitive verb *yaṣṣāte-* '(he) begged X from Y' in (2.14), repeated here as (3.15). Example (6.14) from TA shows that the first-person singular PC *-ñi* represents the source of the ditransitive verb *psumār-* 'Take X away from Y!'.

3.1.7 Location

PCs may represent the location, and the hosting verbs may be intransitive verbs of appearance such as TB √*tsänkā-* 'to rise, arise' or transitive such as TB √*lup(ā)-* 'to rub, smear' and TA √*tā(-s)-* '[ACT] to put, set, place; [MID] place oneself.'

In example (3.17), the plural PC *-me* represents the location of an intransitive verb of appearance *tsäṅkā-* '(it) arose (in X)'.

(3.17) [TB] *-me* (PL) = Location of *tsäṅkā-*

/// *-ts tsaṅka* *śrāvasti-ne* ¦ *pāk= auntsante* *tu* *yām-tsi* :
arise.PST.ACT.3SG Śrāvastī-LOC part begin.MID.PST.3PL DEM do-INF
tsäṅkā-me *weñye* ¦ *käll(au)-ntse* *ṣarmtsa* ¦ ///
arise.PST.ACT.3SG-3PL talk profit-GEN.SG for.the.sake.of

'... rose. In Śrāvastī they began to take part in it. The discussion arose **among them**: For the sake of profit ...'

(B16b3; trans. based on CEToM and Hackstein, Habata, and Bross 2014: 77; verse; [5¦5¦8¦7]×4)

The following two examples contain a PC that represents the location of a transitive verb.

4. Hackstein (1995: 349) takes *tuṣt* to be an intransitive ("warum brennst mir immer feiner?").

(3.18) [TB] *-ne* (3SG) = Location of *laupoy-*

/// (ṣe)me ṣar-sa ceṃ pre(re[5] *– wse-cce sä)lkoy-ne* •
one hand-PERL DEM.M.ACC.SG arrow poison-ADJZ.ACC.SG pull.OPT.ACT.3SG-3SG
wace ṣar-sa (sāṃ)tke-nta ***laupoy-ne*** *āñu yamī-ne* •
second hand-PERL medicine-PL smear.OPT.ACT.3SG-3SG quiet make.OPT.ACT.3SG-3SG

'[and] with one hand [he] may draw this poisoned arrow [i.e., the *vedanāskandha*] out of it, [and] with the other (*lit.* second) hand he may **smear** medicine **on it** and make him quiet.' (IOLToch4b1; trans. based on CEToM)

(3.19) [TA] *-äṃ* (3SG) = Location of *tsānt-*

tm-äk ṣu[b2](*rmaṣ*) */// ñom* ***tsānt-äṃ*** ||
DEM-EMP reason name put.PST.MID.3PL-3SG

'Because of this very reason, (her relatives) **put** the name (Unmādayantī) **on her**.'

(A59b2; prose)[6]

The third-person singular PC *-ne* (3SG) represents the location of the ditransitive verb *laupoy* '(s/he) may smear X onto Y' in (3.18). In example (3.19) from TA, the third-person singular PC *-äṃ* represents the (metaphorical) location of the ditransitive verb *tsānt-* '(they) put X on Y'. In these examples, the PC representing the location does not indicate the place where the action the verb phrase describes is to be performed, but rather the location where the theme object (medicine in [3.18]; the name in [3.19]) is placed or given.

3.1.8 Experiencer

In the following examples, PCs represent the experiencer of an object experiencer verb (e.g., TB √*läk(ā)-* 'to see, look' ['to be seen, appear' with the middle endings] and TA √*klāwā-* 'to fall').

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5. Broomhead (1962: 60) restores *pre*(*re-sa*) with the secondary perlative ending. However, this restoration is unlikely as it is the DO (theme) of the verb (cf. Sieg and Siegling 1953: 83 n. 15).

6. This passage translates Sanskrit *ataś ca tasyā unmādayantīty eva bāndhavā nāma cakruḥ* || 'and due to this her relatives gave the name Unmādayantī to her' (Kern 1891: 81). TA √*tā(s)-* '[act] 'put, set, place; [mid] place oneself' is transitive even when it takes a middle inflectional ending. The existence of *tāṣimār* [OPT.MID.1SG] and *tāṣitär* [OPT.MID.3SG], which Malzahn (2010: 642) lists as optatives built on the Subjunctive II stem, is debated (see Peyrot 2013b: 430). The existence of *tse* [PST.MID.1SG] in A159 a4 is likewise uncertain (CEToM: "The word division of *nmitā tse* is not certain"). Other middle forms, including the preterites *tsāte* [PST.MID.3SG] (A435a2), *tsānt* [PST.MID.3PL] (A434b6), *tsānt-äṃ* [PST.MID.3PL-3SG] (A59b2) and imperatives *pätstsār* [IMP.MID.2SG] (A215b1=YQI.6b8) and *pätstsāc* [IMP.MID.2PL] (A68b5 and A57a5) are all transitive.

The second-person singular PC *-c* describes the experiencer of *lkāntar* '(they) will appear (to X)' in (3.20). In TA, example (3.21) shows the plural PC *-äm*, representing the experiencer of the intransitive verb *klāṣ-* '(it) may fall (on X); (it) may happen (to X)'.

(3.20) [TB] *-c* (2SG) = Experiencer of *lkāntar*

(*śuddha*)*vāsä-ṣṣi* ¦ *ña*(*k*)*t*(*i*) ***lkāntar-c*** *kauñī ram no* ¦
Śuddhāvāsa-ADJZ.NOM.PL god.NOM.PL see.SUBJ.MID.3PL-2SG sun as CONJ
ompalskoñe ṣme(*-mane* :) ///
meditation sit.NPST-PTCP

'The (Śuddhā)vāsa gods will **appear to you**$_{SG}$ like a sun, sit(ting) in meditation (...)'

(B76a1; trans. based on Schmidt 1974: 234; verse; [5¦5¦8¦7]×4)

(3.21) [TA] *-äm* (PL) = Experiencer of *klāṣ-*

pälskānt *kupre* *Śrāvastī riy-aṃ* *anne ymäs* *ṣakk-atsek*
think.PST.MID.3PL whether Śrāvasti city-LOC into go.NPST.ACT.1PL certainly
– – – – – – – – (*ñā*)[b2]*tse* ***klāṣ-äm*** *tämyo* *cam* *kausal-ṣiṃ*
danger fall.SUBJ.ACT.3SG-PL therefore DEM.M.ACC.SG Kosala-ADJZ.ACC.SG
wärt *āssuk mā* *katkar* ||
forest pass NEG cross.PST.ACT.3PL

'They thought to themselves: "Should we go into the city of Śrāvastī? Certainly ... danger **will fall on us**!" Therefore they did not pass through this forest of Kosala ...'

(A395b2; trans. by CEToM; prose)

The subject of *klāṣ* 'X will fall' in the last example is a metaphorical, and the PC in this example represents a metaphorical location.[7] It is often ambiguous whether a PC represents an experiencer or a location.

3.1.9 Stimulus

As the following examples show, PCs may represent the stimulus of subject experiencer verbs such as TA/TB √*pärsk(ā)-* 'be afraid', and TB √*mänt(ā)-* 'destroy' ('be destroyed, be stirred, angry' with a middle ending).

7. Compare English "befall", as in "danger will befall us."

(3.22) [TB] *-ñ* = Stimulus of *mäntantär*

(*mā* ***mäntan)tär-ñ***[8] *ptarkaso śconai mapi wase ñī käṣṣīññe*
NEG be.angry.NPST.MID.2PL-1SG let.go.IMP.ACT.2PL enmity PTCL poison GEN.1SG teacher
i ///

'[King Araṇemi speaking:] ("Don't **be ang)ry at me**! Leave off hate [so that] the venom of my teacher indeed ..."' (B79a1; trans. based on CEToM; prose)

(3.23) [TA] *-äṃ* (3SG) = Stimulus of *praskmār-*

kus ne rāme-s prask-māṃ tāc (*näṣ* [b6] *mā*)
REL.NOM COMP Rāma-GEN be.afraid-PTCP COP.SUBJ.ACT.2PL NOM.1SG NEG
praskmār-äṃ
be.afraid.NPST.MID.1SG-3SG

'[Daśagrīva speaking to his brother Vibhīṣaṇa:] "(Even) if you$_{PL}$ should fear Rāma, I **am** not **afraid of him**."'

(A10b6; prose)

Example (3.22) shows that the first-person singular PC *-ñ* represents the stimulus of the intransitive verb *(mäntan)tär* '(you$_{PL}$) are angry (at X).' Likewise, example (3.23) has a third-person singular PC *-äṃ*, representing the stimulus of a subject experiencer verb (*praskmār-* 'I am afraid [of X]').

3.1.10 Argument of a complex predicate

In some cases, PCs represent the argument of a transitive verbal predicate consisting of an intransitive verb and an adverb. In (3.24), we find the intransitive TB √*i-*|*mä(s)*[?]- 'to go', which is used with *ompostäṃ* 'after' to form a complex predicate *ompostäṃ yneṃ-* '(they) go after X; (they) follow X'. The third-person singular PC *-ne* represents an argument of this predicate.

8. This verb could be restored as (*mäntana)tär-ñ* (Present VI) or (*mäntan)tär-ñ* (Present XIIa) (Malzahn 2010: 753f.).

(3.24) [TB] *-ñ* = Argument of *ompostäṃ* + √*i-*|*mä(s)*$^{?}$-

mäkte wassi swarenäṃ ¦ *we*[b4]*r(eṃ)-mpa tattaṃ ksa walke*
as garment sweet.M.ACC.PL odor.PL-COM put.SUBJ.ACT.3SG INDF for.a.long.time
(:)

waipte ka(rts)e weren-meṃ ¦ *sū wassi ykāk swāre*
apart good odor.PL-ABL DEM.M.NOM.SG garment still sweet.NOM.SG
warṣṣäṃ :
smell.NPST.ACT.3SG

krentauna-mpa akaly(e) ¦ [b5] *maṃt rano yāmträ ce*
virtue.PL-COM learning.NOM.SG so also do.SUBJ.MID.3SG DEM.M.ACC.SG
(c)mel-ne :
birth-LOC

ce$_{u}$ *āklyi-sa cmel-a-ne* ¦ *ompostäṃ* ***yneṃ-ne*** *m=*
DEM.M.ACC.SG learning-PERL birth-PL-LOC after go.NPST.ACT.3PL-3SG NEG
ārsen-ne 80-7
give.up.NPST.ACT.3PL-3SG

'[If] someone puts a garment together with sweet odors for a long time, [87a] even [when] separated from these odors, this garment will still smell sweet. [87b] In this way also, [if] a practice with virtues is done in this birth, [87c] because of this practice, they (= the virtues) **will follow him** in (his re)births and will not abandon him. [87d]'

(PKAS6Cb3-5; trans. based on CEToM; verse; [7¦8]×4)

In (3.25) and (3.26), the PCs *-ne* (3SG) and *-me* (PL) are semantically associated with the adverb/post-position *postäṃ* 'after', which forms a transitive predicate *postäṃ msā-* '(s/he) went after X' and *postäṃ ynem-* '(we) will go after X', respectively.

(3.25) [TB] *-ne* = Argument of *postäṃ* + √*i-*|*mä(s)*$^{?}$-

nānda cāla oṅkorñai ¦ *nandābala tāy ṣerśka* ¦ *postäṃ*
Nānda carry.PST.ACT.3SG porridge Nandābala DEM.GEN little.sister after
msā-ne
go.PST.ACT.3SG-3SG

'Nānda carried the porridge. Her littler sister Nandābala **went** after **her**.'

(B107a7; verse; [7¦7¦4]×4; trans. based on CEToM)

(3.26) [TB] *-ne* = Argument of *postäṃ* + √*i-*|*mä(s)*?-

cem ce cisso upādhyāyi mahāśra(*maṇeṃ-ś*)
DEM.M.ACC.SG DEM.M.ACC.SG go.IMP.ACT.2PL master.PL great.mendicant-ALL

postäṃ wes ***ynem-me***[9] •
after NOM.1PL go.SUBJ.ACT.1PL-PL

[The disciples of Nadīkāśyapa and Gayākāśyapa speaking to their masters:] "Go to this (or) that Great Mendicant, o masters! We **will go** after **you**$_{PL}$."

(B108a8; prose)

We find a similar verbal complex in TA also. In (3.27), the third person clitic *-äṃ* is semantically associated with a transitive predicate consisting of an adverb/postposition *särki* 'after' and the intransitive verb *yṣ-* '(s/he) goes'.

(3.27) [TA] *-äṃ* (3SG) = Argument of *särki* + √*i-*|*kälk-*

– (p)uk cmol-w-aṃ särki ***yṣ-äṃ*** ¦ *eṣṣ-äṃ* *s$_u$k-untu*
all birth-PL-LOC after go.NPST.ACT.3SG-3SG give.NPST.ACT.3SG-3SG fortune-PL
ñäkciyās ¦ *napeṃ-ṣinās* :
divine.F.ACC.PL human-ADJZ.F.ACC.PL

'... **goes** after **him**? in all (re)births, (and) gives divine and human pleasures to him.'

(A14b2; trans. based on CEToM; verse; [7¦7¦4]×4)

In (3.28), we find an adverb/postposition *anapär* 'before, in front', which forms a predicate with an intransitive √*ṣäm-*|*läm(ā)-* 'to sit', meaning 'to sit in front of X'. The third-person singular PC *-ṃ* represents an argument of this predicate.

(3.28) [TA] *-äṃ* (3SG) = Argument of *anapär* + √*ṣäm-*|*läm(ā)-*

täm pälko-r-äṣ säm wäl tsmont
DEM see.PTCP-NMLZ-ABS DEM.M.NOM.SG king.M.NOM.SG grow.PTCP.M.ACC.SG
ynāñmune-yo [b6] /// *anapär* ***ly(m)ā-ṃ*** •
respect-INS in.front sit.down.PST.ACT.3SG-3SG

'Having seen it, the king ... with growing respect .... **sat** in front **of him**.'

(A147b6; verse?)

9. Restored as *mahāśra*(*maṇeṃś*) or *mahāśra*(*maṇeś*) (Thomas 1983: 129 n. 12). CEToM reads *ynem-ne* 'go.SUBJ.ACT.1PL-3SG' instead of *ynem-me* (Thomas 1983: 129 n. 12). The reading cannot be confirmed as the original manuscript is missing.

Example (3.29) attests an adverb *akarte* 'near', which construes with √*ṣäm-|läm(ā)-* 'to sit' to form a complex predicate *akarte* √*ṣäm-|läm(ā)-* 'to sit near X'. Likewise, example (3.30) shows a complex predicate *ate* √*nes-|tāk(ā)-* 'to be far from X', consisting of an adverb *ate* 'far' and the copula √*nes-|tāk(ā)-* 'to be, become'. In both cases, the first-person singular PC *-ñ* serves as the argument of the complex predicate.

(3.29) [TB] *-ñ* = Argument of *akarte* 'near' + √*ṣäm-|läm(ā)-*

*/// ·kañ ¦ **plamas-ñ** akarte :*
sit.IMP.ACT.2PL-1SG near

hā larona waipecce-nta ¦ ṣañ śamñāṣ·· ///
alas dear.F.PL possession-PL own

'... "(You$_{PL}$ dear little sons), **sit down** near **me**! Alas, the dear possessions of the kinsmen, ..."'

(B46b4; verse; [5¦5¦5¦5] + [8¦7¦7] + [5¦5] + [8¦7] or [7¦8]; trans. based on CEToM)

(3.30) [TB] *-ñ* = Argument of *ate* 'far' + √*nes-|tāk(ā)-*

*/// (ta)ñ koyna-meṃ reki klyauṣim || ate **takāsta-ñ** ///*
GEN.2SG mouth-ABL word hear.OPT.ACT.1SG far COP.PST.ACT.2SG-1SG

"May I hear a word from (you)r$_{SG}$ mouth! You$_{SG}$ **are** far away **from me** (now)."

(B86b2; trans. based on CEToM)

In example (3.31), the second-person singular PC *-ci* represents the argument of a complex predicate, consisting of *pācyās* 'to the right' and √*käly-|ṣtäm(ā)-* 'to stand, be situated'.

(3.31) [TA] *-ci* (2SG) = Argument of *pācyās* + √*käly-|ṣtäm(ā)-*

*pā«†ṃ»cyā(s **kä)lytär-ci** ¦ vajrapā·i – ¦ (śā)lyās pracar ānant ṣāmaṃ ¦*
right stand.NPST.MID.3SG-2SG Vajrapāṇi left brother Ānanda monk
wsokone-yo lkeñ=-cy akml-ac :
joy-INS see.ACT.NPST.3PL-2SG face-ALL

'Vajrapāṇi **is standing** to **your** right. (Your) brother Ānanda, the monk, is (standing to your) left. They are looking at your face with joy.'

(A358a3; verse; [5¦5¦8¦7]×4$^{(?)}$)

In this example, the PC does not represent a possessor but a reference point with respect to the relative position between the addressee and the third party.

The transitive predicates we reviewed so far consist of an adverb/postposition and an intransitive verb. But we also find a predicate consisting of an adverb and a transitive verb (3.32).

(3.32) [TA] *-ci* (2SG) = (Second) argument of *posac* + √*pās-*

posac ***pās(m)ār-ci*** ¦ *riṣakune* *wärt-äntw-aṃ* :
next.to uphold.SUBJ.MID.1SG-2SG sagehood forest-PL-LOC
'I **will uphold** sagehood (*i.e.*, practice asceticism) by **your** side in the forests. [4a]'

(A99a3; verse; [5¦7]×4)

In this example, the second-person singular PC *-ci* construes with a complex predicate consisting of a postposition *posac* 'near, next to,' which governs the genitive-dative (Schulze, Sieg, and Siegling 1931: 290), and the transitive verb *pās*(*m*)*ār-* (built on the root √*pās-* 'protect, obey [rules], beware of'), which selects *riṣakune* 'sagehood' as a direct object.

3.1.11 Experiencer of a complex predicate

PCs may represent the experiencer of a complex predicate consisting of an adjective and a copula. In the following examples, adjectives such as TB *pācar* 'clear, obvious,' TA *pākär* 'clear, visible,' and TB *lāre* 'dear' are used predicatively, and the PCs are hosted by a finite copula and represent the experiencer, meaning '(something) is/becomes { clear / dear } to X.'

In (3.33), the first-person singular PC *-ñ* may construe with the adjective *pācri* 'clear, obvious.' This adjective is used predicatively, with the finite copula *tāko-* meaning 'may X become clear to Y; may X appear to Y'.

(3.33) [TB] *-ñ* (1SG) = Experiencer of *pācri* + √*nes-*¦*tāk(ā)-*

(*ke*)[a1]*ktseñi rākoyentär-ñ* *paine-ne* *po pūdñäkteṃts* (:)
body.NOM.PL extend.OPT.MID.3PL-1SG foot.DU-LOC all Buddha.GEN.PL
arañcä-ṣṣi *uppālta* [a2] *pākri* ***tāko-ñ*** *yke* *postäṃ po*
heart-ADJZ.M.NOM.PL lotus.PL clear COP.OPT.ACT.3PL-1SG place after all
saṃṣār-ne :
Saṃsāra-LOC
"May the .... bodies of mine be extended to the feet of all Buddhas! May the lotuses of the heart **be** visible **to me** one by one in the whole Saṃsāra!"

(B271a1; verse)

TA also attests the same combination. In example (3.34), the plural PC *-äm* represents the experiencer of the predicative adjective *pākär* 'clear, visible, evident' (i.e., *pākär tākar-* '[they] were visible').

(3.34) [TA] *-äm* (PL) = Experiencer of *pākär* + √*nas-*|*tāk(ā)-*

ālās-āp klu krop-l-une-yā kalpavṛkṣ-änt(u [a5]
lazy-GEN.SG rice assemble.SUBJ-GDV-NMLZ-PERL wishing.tree-PL
na)känt-äm kappāñ pākär ***tākar-äm***
disappear.PST.MID.3PL-PL cotton.bushes(?) clear COP.PST.ACT.3PL-3PL

'[But] because of collecting rice by a listless person, the wishing trees disappeared from them. The cotton plants **were** visible **to them** [in place of the wishing trees] ...'

(A2a5; trans. based on CEToM; prose)

We find the combination of a PC, a predicative adjective, and TB √*mäskā-* 'to be/become' or TB √*nes-*|*tāk(ā)-* (copula) in (3.35), (3.36), and (3.37).

(3.35) [TB] *-ne* = Experiencer of *lāre* + √*mäskā-*

sū cpī yāmor-ntse ¦ *okosa wnolme* ¦ *ekñiññe-nta*
DEM.M.NOM.SG DEM.M.GEN.SG deed-GEN.SG fruit-PERL human.being possession-PL
(makā-yäkne ¦ *yänmāṣṣ-eñca mäsketra* :
many-manner obtain-PTCP be.NPST.MID.3SG

wa)[a4]*raṣṣä-l(ñ)e-n(ts)e* ¦ *(m)e(ṅ)kītsñe-sa no* ¦ *entse lāre* ***mäsketär-ne*** ¦ *m=*
practice-NMLZ-GEN.SG lack-PERL CONJ envy dear be.NPST.MID.3SG-3SG NEG
āyor aitsi cäñcan-ne :
gift give-INF please.NPST.ACT.3SG-PL

'This man, because of the result of his deed, becomes the obtainer of possessions of every kind. [12a] But because of [his] lack of cultivation, envy **becomes** dear **to him**, (and) he does not give gifts happily (*lit.* it does not please him to give a gift). [12b]'

(PKAS7Fa4; verse; [5¦5¦8¦7]×4)

(3.36) [TB] *-ñ* (1SG) = Experiencer of *(pe)rn(e)w* + √*nes-*|*tāk(ā)-*

(– – śa)no-ś weṣṣäṃ ṣarya kauṃ (s)ū (pe)rn(e)w
wife-ALL speak.ACT.NPST.3SG beloved day DEM.M.NOM.SG glorious
t(a)kā-ñ *ente ce śaumo(n)* ///
COP.PST.ACT.3SG-1SG when DEM.M.ACC.SG man.ACC

'... (he) speaks to (his) wife: "My dear! This day **was** glorious **to me** when ... this man."'

(B91a6)

(3.37) [TB] *-co* (2SG) = Experiencer of *alecci* + √*nes-*¦*tāk(ā)-*

mäkte lwasā-ntso ¦ *auṣuwaṃts ṣesa* ¦ *lyuketrä yṣīye*
as animal.PL-GEN dwell.PTCP.GEN.PL together light.up.NPST.MID.3SG night.NOM.SG
¦ *waiptā(yar rano* :
apart CONJ

lwasā-ntso ton-ak auṣūwaṃts) ¦ *pr(e)ntse yente käskan-me*
animal.PL-GEN DEM.F.PL-EMP dwell.PTCP.GEN.PL instant wind scatter.NPST.ACT.3SG-PL
¦ *mant ṣañ śāmna keś ptes twe* :
so own person.PL counting put.IMP.ACT.2SG NOM.2SG

kos twe yṣwar tāka(t)[10] ¦ – – – [a8] – – (:)
as.much NOM.2SG friendly COP.SUBJ.ACT.2SG

śaul ka oräñ-c tā kektseño ¦ *pw alecci*
life EMP abandon.SUBJ.ACT.SG-2SG DEM.F.ACC.SG body.ACC.SG all foreign.NOM.PL
cai ***tākañ-co*** 30-4
DEM.M.NOM.PL COP.SUBJ.ACT.PL-2SG

'(Just) as when the animals [i.e. fireflies] are living together, the night will grow light, but when these animals are living apart, wind scatters them instantly. In this way, pay attention to your relatives! [34b] As long as you$_{SG}$ are friendly ... [34c] ... (as soon as) the life leaves this body, they **will** all **be** strange[rs] **to you**$_{SG}$. [34d]'

(B46a8; verse; [5¦5¦5¦5] + [8¦7¦7] + [5¦5] + [8¦7] or [7¦8])

In example (3.38), the second-person singular PC *-cä*, is construed with *ynãñmo* 'appreciated, evaluated, judged' (with an *o*-mobile) with a copula.

10. Cf. Sieg and Siegling (1949: 69) and Adams (2012: 23). B47 b6 attests /// *·aupūwaṃts prentse ye(nte)* ///, where *aupūwaṃts* is for *auṣūwaṃts*.

(3.38) [TB] *-cä* (2SG) = Complement of *ynāñ(m)o* + √*nes-*|*tāk(ā)-*

i(me) *ce-k* *warñai* ¦ *kwr(i)* *kälpāsta* *kos* *rā*
thought DEM.M.ACC.SG-EMP beginning.with if obtain.PST.ACT.2SG as.much PTCL
tsa :
EMP

pālka *tomp* *ñake* ¦ *mäkte* *ynāñ(m)o* ***tākañ-cä*** (:)
see.IMP.ACT.2SG DEM.F.ACC.SG now how appreciated COP.SUBJ.ACT.3SG-2SG

[King Supriya, looking at the princess Kañcanaprabhā, speaking to himself:] "If you$_{SG}$ have obtained a (thou)ght, beginning with this one whatsoever, [2a] look at that one there now! How much **will** (she) **be** valuable **to you$_{SG}$**? [2b]"

(PKAS17Kb5; verse; [5¦7]×4)

When the indeclinable adjective *ynāñm* 'appreciated, evaluated, judged' co-occurs with a copula, it selects a theme in the nominative and an experiencer in the genitive-dative (e.g., 3.39).

(3.39) [TB] Agent/experiencer of *ynāñm* 'appreciated' represented in the genitive-dative case

yaltse *śaula-nma* *ra* ¦ *mā* ***ñi*** *kca* *ynā(ñmä* :)
1000 life-PL PTCL NEG GEN.1SG INDF appreciated

'Even a thousand lives$_{THEME:NOM}$ (are) not valuable **to me**$_{EXPERIENCER:GEN-DAT}$.'

(B82b6; trans. based on CEToM; verse; [6¦5] or [5¦6]×4?)

In this example, the finite copula is apparently omitted.

3.1.12 Oblique possessor

PCs may also express the possessor. One such subtype is the so-called oblique possession construction (or the *mihi est* or dative nominative construction), where the possessum is represented in the nominative case and the possessor in the genitive-dative.[11] In (3.40), for example, the possessum is in the nominative (*āñme* 'wish'), and the third-person singular PC *-ne* represents the possessor of *āñme*. In (3.41), the third-person singular PC *-äṃ* represents the oblique possessor of *kācke* 'joy,' which is in the nominative-accusative.

11. Carling (2006: 37) calls this type an inverse construction.

(3.40) [TB] *-ṃ* = Oblique possessor of *āñme*

kṣatriye-mpa larauñe yām-tsi āñme **(*tā*)*kaṃ-ne***
warrior-COM friendship make-INF wish.NOM COP.SUBJ.3SG-3SG

(*śā*)[a7]*l-ṣana arw-ā-ts koṣkīye yamaṣ-lya* •
Shorea.robusta-ADJZ.F.PL wood-PL-GEN pit.F.NOM make.NPST-GDV.F

'(If) **one has** the wish to make friendship with a warrior, (he) should make a (fire-)pit of branches of the Shorea robusta.'

(PKAS8Ca6; trans. based on CEToM; prose)[12]

(3.41) [TA] *-ṃ* = Oblique possessor of *kācke*

wät amok-«ä»ṣ tatmu kācke ***mäskatr-äṃ***
second skill-ABL be.born.PTCP.M.NOM.SG joy be.NPST.MID.3SG-3SG

trit wrass-äṣ ortune kälpnāträ :
third human.PL-ABL friendship obtain.NPST.MID.3SG

'Secondly, **he will have** pleasure born from [his] skill. Thirdly, he will attain friendship from human beings.'

(A2b6; prose)

We also find the possessum in the accusative case instead of the nominative. In (3.42), *āklyi kreṃnt yā*(*mor*) 'a good deed (as) a lesson,' which is the possessum in the oblique possession construction, is in the accusative rather than in the expected nominative (†*āklye kartse yā*(*mor*)).

(3.42) [TB] *-c* = possessor of *āklyi kreṃnt yā(mor)* 'a good deed (as) a lesson'

/// (*āklyi*) *krent* ¦ *yāmor-ne yāmtar kwri* :
learning.ACC.SG good.M.ACC.SG deed-LOC do.SUBJ.MID.2SG if

aum no ppo lau cmel-n=[13] *alyek* ¦ ***tākañ-c*** *āklyi*
then CONJ all far birth-LOC another.ACC.SG COP.SUBJ.ACT.3SG-2SG learning.ACC.SG
kreṃnt yā[b4](*mor* :) ///
good.M.ACC.SG deed

[Hastāṅkuśa speaking to the king:] "... if you learn (...) in a good action, [2a] then in every distant future birth **you will have** the good action (as) a lesson. [2b]"

(PKNS34b3; verse; [7¦7]×4)

12. For the interpretation of TB *koṣkīye*, see Bernard and Chen (2022). I'm grateful to Adam Catt for reminding me of this study.

13. *cmel-n=* for *camel-n=* with syncope of accented /ə/ *metri causa*.

3.1.13 Possessor associated with a direct object (theme)

Carling (2006) points out that PCs used as a possessor may represent both alienable and inalienable possessor. In the cases of inalienable possession, the possessum is typically a body-part term or an abstract concept.

In (2.48), repeated here as (3.43), the first-person singular PC *-ñ* represents the inalienable possessor of *kektseñ* 'body', which is the theme of *kärśye-* '(if they) chop up X'. In (3.44), the transitive verb *epsā-* '(ignorance) covered X' takes as its DO (theme) *aś-äṃ* 'two eyes'. This verb hosts a third-person singular PC, which represents the inalienable possessor of the DO.

(3.43) [TB] (= 2.48) *-ñ* = Possessor of a theme (body-part term)

spaitu ra waltsa= ñy ¦ āsta lykaśke po wnolmi •
dust like crush.SUBJ.ACT.3PL GEN.1PL bone.PL small all living.being.NOM.PL

kärśye-ñ *kektseñ wat ¦ kwä* – [b5] ///
cut.SUBJ.ACT.3PL-1SG body.ACC.SG or

'Even if all beings crush my bones fine like to dust, [5a] or if they **chop up my** body ...'

(B220b4; verse; [5¦8]×4 + [8¦8¦5]; trans. by CEToM)

(3.44) [TA] *-ñ* = Possessor of a theme (body-part term)

kle – – ñi trik pältsäk ¦ ***epsā-ñ*** *aś-äṃ*
GEN.1SG be.confused.PST.ACT.3SG mind cover.PST.ACT.3SG-1SG eye-DU
āknt̮sune :
ignorance

'... has confused my mind. Ignorance has **covered my** eyes. [67a]'

(A221a1; verse; [7¦7]×4)

PCs may also represent the inalienable possessor of an abstract concept. In the following example (3.45), we find the transitive verb *tsämsen-* '(they) grow X, (they) increase X', which takes *maiyya* 'power' as its DO (theme). This verb hosts a third-person singular PC, which represents the possessor of the theme. Example (3.46) contains the second-person singular PC *-śi*, which refers to *bodhisatvāp śäṃ* 'the wife of the Bodhisattva'. This PC represents the possessor of *tosäm krant pñintu* 'these good virtues', which is the DO (theme) of *winäsamäś* 'we praise X'.

(3.45) [TB] *-ne* = Possessor of a theme (abstract concept)

tane ksa ṣemi ¦ *onolmi nraiy-ne cme-tsi-śc* :
here INDF one.NOM.PL being.PL hell-LOC be.born-INF-ALL

yamanträ yāmor ¦ *kraup(a)ntär ṣpä po-ykne-sa* :
do.SUBJ.MID.3PL deed gather.SUBJ.MID.3PL conj all-manner-PERL

cey cew yā[b6]*(mor-sa)* ¦ *mā parskaṃ mā*
DEM.M.NOM.PL DEM.M.ACC.SG deed-PERL NEG be.afraid.NPST.ACT.3PL NEG
ykāṃṣñenträ :
feel.disgust.NPST.MID.3PL

mā kwipeññenträ ¦ *mā onmi(ṃ yamaske)n(trä)* 8
NEG be.ashamed.NPST.MID.3PL NEG remorse do.NPST.MID.3PL

kātkeṃ plontonträ ¦ *ṣpä-kka maiyya*
be.glad.NPST.ACT.3PL rejoice.NPST.MID.3PL CONJ-EMP power
tsämsen-ne :
grow.CAUS.NPST.ACT.3PL-3SG

'[If] here some beings do a deed leading to rebirth in hell, [8a] (and) accumulate [it] in every manner, [8b] they will not be afraid of this deed, [and] they will not be disgusted, [8c] they [b6] will not be ashamed, they will not show remorse. [8d] They are glad, they rejoice, [and] even more, they **increase its** power [i.e., of the bad deed]. [9a]'

(PKAS7Bb6; verse; [5¦7]×4)

(3.46) [TA] *-śi* = Possessor of a theme (abstract concept)

tu wäṣpā krant pñi yāmte paṃ ¦ *kus ne wsā-ci*
NOM.2SG truly good virtue do.PST.MID.2SG PTCL REL.NOM COMP give.PST.ACT.3SG-2SG
caṃ kāpñe :
DEM.M.ACC.SG beloved

winäsamäś-śi ¦ *tosäm krant pñi-ntu* ¦ *winäsam-śi* [b7]
praise.NPST.ACT.1PL-2SG DEM.F.ACC.PL good virtue-PL praise.NPST.ACT.1SG-2SG
(caṃ kra)nt kāpñe ¦ *can-äk tuṅk was kälpīmträ* :
DEM.M.ACC.SG good beloved DEM.M.ACC.SG-EMP love NOM.1PL obtain.OPT.MID.1PL

'"You have truly realized good merit which has given this lover to you. **We praise** these good virtues **of yours**. I praise that good lover of yours. May we obtain that love!"

(A253b6; trans. based on Thomas 1957: 188; verse; [5¦5¦8¦7]×4)

In contrast to the PCs representing the possessor of a body-part term or an abstract concept, those representing a kinship relation (e.g., 'my father', 'your brother' etc.) are very rare. In our

corpus, there is only one example (3.47), in which the third-person singular PC *-äṃ* seems to represent a kinship relation to *mācar* 'mother.'

(3.47) [TA] *-äṃ* = Kinship relation to *mācar* 'mother'

ṣñi pat «lya»lyp-äntw-= ālū pat skeys-ā tm-an-äk ///
own CONJ deed-PL-PERL other.GEN.PL CONJ effort.PL-PERL DEM-LOC-EMP

[a2] */// (śa)lp-māṃ mācr-äṣ tāṣ :*
be.released-PTCP mother-ABL COP.SUBJ.ACT.3SG

wiyoss oki cam klop-yo ¦ <u>mācar</u> nuṃ nuṃ
be.frightened.PTCP.F.NOM.SG like DEM.M.ACC.SG suffering-INS ¦ mother again again
trekaṣ-äṃ *:*
be.confused.SUBJ.ACT.3SG-3SG

'By own deeds or by the others' efforts, there ... ... will be released from the mother. <u>**His/Her** mother</u> **will be confused** by this suffering again [and] again, as if (she were) frightened.'

(A152a2; verse; [7¦7]×4)

The PCs representing the possessor of a (non-body-part) concrete object are also very limited. Example (3.48) shows that a PC represents the possessor of *wsāṣināṃ kukäl* 'golden chariot,' which is neither a body-part term nor an abstract concept.

(3.48) [TA] *-äṃ* = Possessor of a theme (concrete object)

CONTEXT: Śodhana saw the Bodhisattva Maitreya going out of the city of Ketumatī with wagons decorated with jewels and speaks to Upaśodhana:

[b1] *(kaṣ-swāñcenās-yo)* ¦ *worpu* *puk yärśār* ¦ *sumanāṃ-śäl āsān-ā*
fathom-ray.PL-INS surround.PTCP.M.NOM.SG all around flower-COM seat-PERL
lmo ¦ *rohiṇiṃ-śäl mañ̃ oki* :
be.seated.PTCP.M.NOM.SG rohiṇī-COM moon like

cindāmaṇi-ṣiṃ ¦ *wtsi lap-ā sparcwṣ-äṃ* ¦
cintāmaṇi-ADJZ.M.ACC.SG umbrella head-PERL turn.NPST.ACT.3SG-3SG
yetwe-yntw-āśśi yetwe ṣñikek ¦ *(ṣa*[b2]*ṣärku ṣñi*
decoration-PL-GEN decoration nevertheless surpass.PTCP.M.NOM.SG own
ye)twesyo :
decoration-INS

ājānay yukañ ¦ *wsā-ṣinäṃ* *kukäl* ¦ *ylaṅkann oki lyāk*
of.noble.birth horse.NOM.PL gold-ADJ.M.ACC.SG chariot in.the.air like appearing
ākeñc-äṃ ¦ *prutko* *=ki säs*
lead.NPST.ACT.3PL-3SG be.filled.PTCP.M.NOM.SG like DEM.M.NOM.SG
wsā-ṣī *ṣont* :
gold-ADJZ.M.NOM.SG street

yetuñcäs kuklas ¦ *$y_u$kass oṅkälmās-yo* ¦ [b3]
adorn.PTCP.M.ACC.PL chariot.ACC.PL horse.ACC.PL elephant.PL-INS
(bodhisatv-ā)p warts-yo pälkets ¦ *triskäṣ* *rape*
Bodhisattva-GEN companion-INS beautiful resound.CAUS.NPST.ACT.3SG music
swiñc *pyāppyāñ* : 1
rain.NPST.ACT.3PL flower.NOM.PL

'[He is] surrounded by the light of one fathom all around, [he is] sitting on the seat with Sumanā, as if the moon (were sitting with) Rohiṇī. [1a] (He) turns the umbrella of cintāmaṇi (jewels) over his head. (He) has truly surpassed the ornament of ornaments with (his) own ornament. [1b] Horses of noble breed **drive his** golden chariot as if in the air. The golden street is filled up, as it were, [1c] by adorned chariots, horses and elephants, by the companions of the bodhisattva. Beautiful music resounds (and) flowers rain. [1d]'

(A253b1-3; trans. based on CEToM; verse [5¦5¦8¦7]×4)

The referent of *-äṃ* is *metrak* 'Maitreya'. The function of the PC is to represent the alienable possessor of *wsāṣinäṃ kukäl* 'a golden chariot,' which is the DO (theme) of *ākeñc-* '(they) drive X'.

3.1.14 Possessor associated with an indirect object

PCs may represent the possessor associated with an indirect object. For example, (3.49) has an intransitive verb (*kälyi*)*tär-* 'X stood' accompanied by *kektsent-sa* 'on the body' as an IO (location). This verb hosts a third-person singular PC referring to *devadatte* 'Devadatta,' who represents the possessor.

(3.49) [TB] *-ne* = Possessor of a location

oṅkolm= eñcwa-ñña ¦ waltsanoy-n= āsta lykaśke :
she-elephant iron-ADJZ.F.NOM.SG crush.ACT.IMPF.3SG-3SG bone small.NOM.SG

[b5] *ṣale säl*(*pa*)*mo ¦ **(kälyi)tär-ne** kektsent-sa* : 70-3
mountain blazing.NOM.SG stand.MID.IMPF.3SG-3SG body-PERL

'An iron she-elephant crushed his bones [to] small [bits]. [73c] A glowing-hot mountain (**stood**) on **his** body. [73d]'

(B22b4; trans. by CEToM; verse; [5¦7]×4)

Likewise, in (3.50) from TA, we find *klwawatr-äṃ* 'X falls,' whose third-person singular PC represents the possessor of the IO (location) *pakwāśayaṃ* 'in the stomach' (cf. Skt. *pakvāśaya-* '*lit.* the receptacle of digested food; the lower part of the digestive tract').

(3.50) [TA] *-äṃ* = Possessor of a location

(*ku*)[b5]*pre-ne āmiśāy-aṃ ṣtmo tāṣ wär-yo want-yo*
if-COMP āmāśaya-LOC stand.PTCP.M.NOM.SG COP.SUBJ.ACT.3SG water-INS wind-INS
*wipo pāpey· /// *[b6] *ṣi nu mā*
be.wet.PTCP.M.NOM.SG blow.PTCP.M.NOM.SG CONJ NEG
*päknäṣtr-äṃ māmak-äk pakwāśay-aṃ **klawatr-äṃ***
ripen.NPST.MID.3SG-3SG raw-EMP pakvāśaya-LOC(?) fall.NPST.MID.3SG-3SG

'If it [= the food] is located in the *āmāśaya* [*lit.* the receptacle of raw food; the upper part of the digestive tract], moistened by water and blown by wind ... [b6] (the food?) is not digested by it [*lit.* 'cooked by it'], (but) **falls** into **his** *pakvāśaya* [the lower part of the digestive tract], still being raw.'

(A124b6; prose?)

3.1.15 Possessor associated with an argument of an adverb/postposition and a verb

The following two examples show that a PC may function as the possessor associated with an argument of a complex predicate consisting of an adverb/postposition and a verb.

(3.51) [TB] *-ne* = Possessor of the argument of *epiṅkte* + √*klayā-*

[a3]*nolma pätsilpar-ñ* *läklenta-meṃ* ///
be.free.CAUS.IMP.MID.2SG-1SG suffering-ABL

/// ***(kla)yā-ne*** *paiyn=* *epiṅkte* *carka* *wekä* ///
fall.PST.ACT.3SG-3SG foot.DU between emit.PST.ACT.3SG voice

"Make me free from suffering! ... **fell** between **his/her** feet, uttered voice ..."

In (3.51), the third-person singular PC *-ne* represents the possessor of *paiyn(e)* 'two feet,' which is the argument of the complex predicate consisting of *epiṅkte* 'between' and √*klayā-* 'to fall.'

(3.52) [TA] *-äṃ* (3SG) = Possessor of the argument of *ane* + √*i-*|*kälk-*

metrak *träṅkäṣ* *ṣokyo prākär* *sām* *mäśkit* /// [b4] /// *näk*
Maitreya speak.NPST.ACT.3SG very strong DEM.F.NOM.SG princess
puttiśpar-ṣi *āk*(*āl pä*)*lsk-a*(*ṃ*) *k*$_u$*pār* *ane* ***yiṣ-äṃ*** ||
buddhahood-ADJZ wish mind-LOC deeply inside go.NPST.ACT.3SG-3SG

'Maitreya speaks: "The princess (is) very strong ... the wish for buddhahood **goes** deep inside **his** mind.'

(A399b4; prose?)[14]

Example (3.52) contains an intransitive verb *yiṣ-* 'X goes', which accompanies an adverb *ane* 'inside', forming a transitive predicate. The argument of this predicate is (*pä*)*lska*(*ṃ*) 'mind', and the third-person singular PC *-äṃ* represents its possessor.

3.1.16 Possessor associated with a subject

PCs may represent the possessor semantically associated with a subject of an intransitive verb, as the following examples (3.53) and (3.54) show.

14. *āk*(*āl pä*)*lska*(*ṃ*) restored by Knoll (1996: 142).

(3.53) [TB] *-ne* = Possessor of an intransitive subject

katkomñai-sa *arañce* ***pluṣā-ne*** *ram wināṣṣa-me* (*takarṣkñe-sa*)
joy-PERL heart float.PST.ACT.3SG-3SG as praise.PST.ACT.3SG-PL faith-PERL
'As **his** heart **floated** with joy, [he] honored them (with faith).' (B375b4-5)

(3.54) [TA] *-ñi* = Possessor of an intransitive subject

rake *cam-äṣ* *pānäsmār* ¦ *nmäs-māṃ* *kapśñ-o* *śl=* *āñcālyi* :
word DEM-ABL ask.NPST.MID.1SG bow-PTCP body-INS with hands.put.together

mā *nu* *ākāl* ***knäṣtär-ñi*** ¦
NEG CONJ wish be.fulfilled.NPST.MID.3SG-1SG
[The king Brahmadatta speaks:] "... I ask a word from him, bowing with my body [and] with hands folded. [1c] But **my** wish **is** not **fulfilled**. ..."

(A71a2; trans. by CEToM; verse; [7¦7]×4)

In (3.53), the third-person singular PC *-ne* represents the inalienable possessor of *arañce* 'heart'. This noun is the subject of the intransitive verb *pluṣā* 'X floated'. In example (3.54), the first-person singular PC *-ñi*, referring to *brahmadatte* 'Brahmadatta (king of Jambudvīpa)', represents the inalienable possessor of *ākāl* 'wish', which is the subject of *knäṣtär* 'X is fulfilled'.

3.1.17 Possessor associated with a noun connected by a copula

When a copula connects two nominal expressions, pronominal clitics may represent the possessor of one of the nominal expressions. For example, *-me* in (3.55) represents the possessor semantically associated with *ekñi* 'possession', which is connected with *srūkalñe* 'death' by the copula *star-*.

(3.55) [TB] *-me* = Possessor of an argument of a copula

māwk *soycer* *piś-cmel-ṣana* ¦ *läkle-nta* /// /// *srūkalñe* ¦
NEG be.satisfied.NPST.ACT.2PL five-birth-ADJZ.F.PL suffering-PL death
ekñi ***star-me*** :
possession COP.NPST.3SG-PL
'Are you not saturated by the sufferings of the five births, (you monks)? ... "Death **is our** (only certain) possession".'

(B12b4; trans. based on CEToM; verse; [7¦4]×4)

Likewise, *-ñi* in (9.46) represents an inalienable relation with *se* 'son,' connected with *ārānt* by the

copula *tākiṣ-*.

(3.56) [TA] *-ñi* = Possessor of an argument of a copula

[a6] /// (*lakṣa*)*ṇäs-yo yetu* *ārānt se* ***tākiṣ-ñi*** •
mark.PL-INS decorate.PTCP.M.NOM.SG Arhat son COP.OPT.ACT.3SG-1SG

'**May my** son **be** the Arhat decorated with ... marks!'

(A118a6; prose?)

3.1.18 Subject of a non-finite verb

3.1.18.1 Subject of an infinitive

There is no example in which a PC represents the subject of a finite verb (Carling 2006). A pronominal subject of a finite verb is either omitted (e.g., 3.57) or expressed by an independent personal or demonstrative pronoun (e.g., 3.58 and 3.59, respectively).

(3.57) [TB] Pronominal subject = non-overt pronominal expression (*pro*)

teṃ epiṅkte-ne sā$_u$u oṅko«rño» päs pyautka •
DEM.N between-LOC DEM.F.NOM.SG porridge away come.into.being.PST.ACT.3SG
spharīrä-ṣṣe aise-meṃ mu[a4]*tkāre-ne*
crystal-ADJZ pot-ABL pour.out.PST.ACT.3PL-3SG
'In the meantime, the rice porridge became ready. **They** (= Nānda and Nandābala) poured it out of the crystal bowl.

(B107a3-4; prose)

(3.58) [TB] Pronominal subject = independent personal pronoun *wes*

kauś maitam lyakām ¦ *mokoṃ protär* ***wes*** ¦ *śle aklaṣlyeṃ po watesa* ¦
above go.PST.ACT.1PL see.PST.ACT.1PL old brother 1PL with disciple all again
osta[a4](*-meṃ ltuweṣ poyśiṃ-ś*)
house-ABL go.PTCP.M.ACC.SG all-knowing-ALL

"**We** went up [and] saw again [our] old brother (= Urubilvākāśyapa) with all [his] disciple(s), who had left the house for the omniscient one."

(B108a3-4; verse; [5¦5¦8¦7]×4)

(3.59) [TB] Pronominal subject = independent demonstrative pronoun *cey*

asān-meṃ tetkāk ṣ [b5]¦ *(n)ek(s)ate kälymiṃ* ¦ *läkāṣyeṃ*
seat-ABL immediately CONJ disappear.PST.MID.3SG direction see.IMPF.ACT.3PL
cey *kompirko-meṃ* ¦ *ipprer-ne ka ṣ lyakār-ne*
DEM.M.NOM.PL east-ABL sky-LOC FOC CONJ see.PST.ACT.3PL-3SG

'And (the Buddha$_j$) immediately disappeared from the seat. **They** (= 1,003 braided monks) looked [in every] direction. And they saw him$_j$ in the sky in the east.'

(B108b4-5; verse; [5¦5¦8¦7]×4)

However, if the verb is non-finite (i.e., an infinitive, gerundive, or participle), PCs may represent the subject (with obligatory clitic climbing in TB).

(3.60) [TB] *-me* = Subject of an infinitive

*amplākätte mā **rittetär-me** o*[a3](*sta-meṃ lan-tsi*)
without.permission NEG be.suitable.NPST.MID.3SG-PL house-ABL go.out-INF
'It **is** not **suitable for you**$_{PL}$ to become a monk (*lit.* go out from a house) without permission.'

(B108a2)

(3.61) [TA] *-ñi* = Subject of an infinitive

*k$_u$pre(-ne nu caṣ-äk c)m(o)l-aṃ nätswa-tsi **klintar-ñi** e(l ///*
if-COMP CONJ DEM.M.ACC.SG-EMP birth-LOC starve-INF be.obliged.SUBJ.MID.3SG gift
'... even if **it is necessary for me** to starve (to death) in this birth, a gift (?) ...'

(A343a4; trans. based on CEToM; verse?)

the plural PC *-me* represents the subject of the infinitive *lantsi* 'to go out' in (3.60). In (3.61) from TA, the first-person singular PC *-ñi*, referring to *wäl* 'the king,' represents the subject of the infinitive *nätswatsi* 'to starve'.

3.1.18.2 Agent of a gerundive

In example (3.62), the second-person singular PC *-c* represents the agent of *sportole*, which is a gerundive built on the intransitive present-stem *sportto-* (cf. √*spārtt(ā)-* 'turn; behave, be'). This PC undergoes climbing and attaches to the finite copula.

(3.62) [TB] *-c* = Agent of a gerundive

tane ñake g· - - - - - - - [a2] *eneśle pañikte käṣṣi-nta-ṃts yakne-ne*
here now like Buddha.lord teacher-PL-GEN manner-LOC
watk(ä)ṣ-älyñe-ne spo(rto-)le ***star-c***
order-NMLZ-LOC turn.NPST-GDV.M.NOM COP.NPST-2SG

'Here now, like (the sand in the river Gaṅgā), **you** should behave following the way (and) command of the Buddha-teachers.'

(THT1106a2)

A PC also represents the agent of a gerundive in example (3.63).

(3.63) [TA] *-ñi* = Agent of a gerundive

[a1] */// ṣ träṅkäṣ penäs kraś mänt*
speak.NPST.ACT.3SG speak.IMP.ACT.2PL good.NOM.PL how
*ya-l-**ñi***
do.NPST-GDV.NOM.SG-1SG

(King Brahmadatta) speaks: "Tell (me), good ones, how **I** should act."

(A71a2; trans. based on CEToM; verse; [7¦7]×4)

The first-person singular PC *-ñi* in this example refers to *brahmadatte* 'Brahmadatta (King of Jambudvīpa).' A finite copula is missing in the subordinate clause introduced by *penäs* 'Tell!', and the PC is hosted by a gerundive (*yal-* 'X is to be done; (one) should do X').

3.1.18.3 Agent of a preterite participle

PCs may represent the agent of a preterite participle. They always climb to the finite copula in TB (e.g., 5.67). The preterite participle itself may host a PC in TA when it lacks a copula. Otherwise, the PC also climbs to the finite copula in TA (e.g., 3.65).

(3.64) [TB] *-me* = Agent of a preterite participle

tane ṣemi ksa onolmi yāmor yāmoṣ
here one.M.NOM.PL INDF living.being.NOM.PL deed do.PTCP.M.NOM.PL

*nraiy-ne cmelye-sa ka(krau)pau ṣpä **tākan-me***
hell-LOC of.birth-PERL assemble.PTCP.M.NOM.SG and COP.SUBJ.3SG-PL

'[There are] some beings here who have done a deed, and by being reborn in hell it **will be** further accumulated **by them**.' (PKAS7Ca4-5; verse; [5¦7]×4)

(3.65) [TA] *-äm* = Agent of a preterite participle

ñy *ākāl* *kaknu* ***tāṣ-äm*** *pūrpāc*
GEN.1SG wish come.about.PTCP.M.NOM.SG-PL COP.SUBJ.ACT.3SG-PL receive.IMP.MID.2PL
śāsaṃ *senik – – – nervān-aṃ* : 3 ||
teaching care Nirvāṇa-LOC

'My wish **should be** fulfilled **by you**$_{PL}$. Accept the teaching (and) care ... to the Nirvāṇa!'

(A332a1; verse)[15]

Rizzi (1982) has observed that in Italian, clitic climbing is not possible when an infinitival clause undergoes fronting (Cinque 2004). It is an open question whether Tocharian PCs may climb to the matrix finite verb when an infinitive or a participle is fronted.

3.1.19 Agent of a mediopassive

Some transitive verbs, which usually take active endings, may take middle endings to show passive interpretation. We call such verbs "mediopassive". The Tocharian PCs may represent the agent in these mediopassive verbs, although such uses are rare and the examples are rather limited.

In (3.66), the first-person singular PC *-ñ* represents the agent of the mediopassive *yāmṣate-* '(X) was made (into Y) (by Z),' which has a middle inflectional ending and a passive interpretation.

15. The PC in this example seems to represent the agent of the preterite participle *kaknu* 'fulfilled, come about,' although Malzahn (2010: 569) lists *kaknu* as a preterite participle built on an intransitive root.

(3.66) [TB] *-ñ* = Agent of a mediopassive

karuṇ(ä-)ṣ(ṣe) warkṣält-sa ¦ rī pälsko-ṣṣai yū[k](āwa :)
compassion-ADJZ power-PERL city mind-ADJZ.F.ACC.SG conquer.PST.ACT.1SG

akālkä-ṣṣe retke no ¦ were [a2] *te ramt **yāmṣate-ñ*** (1)
wish-ADJZ army CONJ odor DEM.N like make.PST.MID.3SG-1SG

[King Araṇemi speaking to King Candramukha:] "By the power of compassion, I conquered the city of thought. [1c] And the army of desire **was made** into so much as odor **by me**. [1d]"

(B94a2; trans. based on Schmidt 1974: 263–4;[16] verse; [7¦7]×4; cf. PKNS 36 and 20, IOLToch 69)

The corpus does not have any example from TA in which a PC unambiguously represents the agent of a mediopassive verb. In A124 b6 (3.50), repeated here as (3.67), a PC seems to represent the agent of a mediopassive verb, though alternative interpretations are possible (Schmidt 1974: 266).

(3.67) [TA] (= 3.50) *-äṃ* = Agent of a mediopassive?

(*ku*)[b5]*pre-ne āmiśāy-aṃ ṣtmo tāṣ wär-yo want-yo*
if-COMP āmāśaya-LOC stand.PTCP.M.NOM.SG COP.SUBJ.ACT.3SG water-INS wind-INS
wipo pāpey· /// [b6] *ṣi nu mā*
be.wet.PTCP.M.NOM.SG blow.PTCP.M.NOM.SG CONJ NEG
***päknäṣtr-äṃ** māmak-äk pakwāśay-aṃ klawatr-äṃ*
ripen.NPST.MID.3SG-3SG raw-EMP pakvāśaya-LOC(?) fall.NPST.MID.3SG-3SG

'If [it = the food] is located in *āmāśaya* [*lit.* the receptacle of raw food; the upper part of the digestive tract], moistened by water and blown by wind ... [the food?] is not **digested by it** [*lit.* 'cooked by it'], [but] falls in his *pakvāśaya* [*lit.* the receptacle of digested food; the lower part of the digestive tract], still being raw.'

(A124b6; prose?)

This PC, referring to *āmāśaya* 'the upper stomach,' appears to represent either the agent of the mediopassive verb ('... is not digested by it') or, less likely, the location of the verb ('... does not mature in it'). Alternatively, one could take the PC as referring to the same individual as *-äṃ* in

16. Schmidt (1974: 263–4): "Mit der Kraft des Mitleide habe ich die Festung des Denkens bezwungen. Die Macht des Wunsches aber ist so etwa von mir zum [blossen] Geruch gemacht worden."

klawatr-äṃ, which represents the possessor of *pakwāśayaṃ* 'in the lower stomach.' In this case, one could interpret the PC to serve as the beneficiary of the verb (i.e., '... does not mature for him').

3.1.20 Causee

Tocharian has both analytic and synthetic causative constructions. The former uses the verb 'to give' (TB √*ai-*|*wä(s)*$^{?}$- and TA √*e-*|*wä(s)*$^{?}$-) and an infinitive, meaning 'X makes/lets Y do Z' (*lit.* 'X gives Y to do Z'; Adams 2015: 111). For the latter, we find suffixation in non-past stems and suffixation or ablaut in preterite (and imperative) stems. PCs may represent the causee of a synthetic causative verb built on an intransitive or a transitive base.

In example (3.68), the plural PC *-me* (PL) represents the causee of the causative verb *plyatstsar-* 'make X go out!' and *tsalpäṣṣar-* 'make X be free!', built on an intransitive √*länt-* 'go out, emerge' and √*tsälp(ā)-* 'pass away, be released, be redeemed', respectively. In example (3.69) from TA, the third-person singular PC *-äṃ* represents the causee of *lyalymāt-* 'made X sit down,' built on an intransitive root √*ṣäm-*|*läm(ā)-* 'sit'.

(3.68) [TB] *-me* = Causee

(*ost-meṃ*) ***plyatstsar-me*** ¦ ***tsalpäṣṣar-me*** (*lkle-meṃ* :)
house-ABL go.out.CAUS.IMP.MID.2SG-PL be.free.CAUS.IMP.MID.2SG-PL suffering-ABL
[Nadīkāśyapa and Gayākāśyapa with their 500 students speaking to the Buddha:] "**Make us go out** (from the house)! **Make us be free** (from suffering)! [1c]"

(B108a9; verse; [7¦7] + [5¦6]×3)

(3.69) [TA] *-äṃ* = Causee

/// (*kä*)*lpāt-äṃ* *pkäṃntäk* *āsān-ā* ***lyalymāt-äṃ*** – – – –
obtain.PST.MID.3SG-3SG separately seat-PERL be.seated.CAUS.PST.MID.3SG-3SG
'... seized him (and) **made him sit** on the seat separately.'

(A110a2; verse?)

The following examples show a PC representing the causee of a synthetic causative verb built on a transitive base.

(3.70) [TB] *-ne* = Causee

/// (*de*)*vadatte procer ṣai ñi ce*$_u$ *preke k*$_u$*se*
Devadatta brother COP.IMPF.ACT.3SG GEN.1SG DEM.M.ACC.SG time REL.NOM
su ***myārsā-ne*** *ette lyowwa* ///
DEM.M.NOM.SG forget.CAUS.PST.ACT.3SG-3SG down

'Devadatta was my brother at that time, [and] **caused him to forget** ...'

(Or8212.163b3; trans. by CEToM)

(3.71) [TA] *-ṃ* = Causee

tmäṣ säm mahā /// [a2] /// *propmahur ca*(*c*)*äl pärwatāp*
then DEM.M.NOM.SG crown lift.up.PST.ACT.3SG oldest.GEN.SG
se-yo lap-ā casäs lāntune ***kakälypā-ṃ***
son-INS head-PERL put.PST.ACT.3SG lordship obtain.CAUS.ACT.3SG-3SG

'Then, he ... picked up the crown (and) put (it) on the head of the oldest son (and) **caused him to obtain** the lordship.'

(A130a2; prose?)

Example (3.70) contains the preterite II active third-person singular *myārsā-* '(he) caused X to forget Y', which is built on a transitive root √*märsā-* 'to forget X'. The third-person singular PC *-ne* in this example represents the causee of this causative verb. In (3.71) from TA, the third-person singular PC *-ṃ* represents the causee of *kakälypā-* '(he) caused X to gain the lordship; (he) bestowed the lordship on X', built on a transitive root √*kälpā-* 'to obtain X'.

3.1.21 Doubling

Tocharian PCs sometimes appear to be redundant. For example, the first-person singular PC *-ñ* in (3.72) seems to mark the possessor of *yakt-āñm* 'feebleness', even though the possessor itself is represented by the independent personal pronoun *ñi*. Likewise, in (3.73), the plural PC *-äm* seems to represent the theme of *malkam-* 'I will join X,' although the theme of this verb is *cesmäk āyäntu* 'these bones'.

(3.72) [TB] Doubling of a nominal expression by a PC

pūdñäktä-ñňe pelai[b3](*kne* ¦ /// :)
buddha-ADJZ law

ce$_u$*-sa* *ñiś* *ñke* *meṅki-tse* ¦ *te-sa* ***pkārsa-ñ***
DEM.M.SG-PERL 1SG now lack-ADJZ.M.NOM.SG DEM.N.SG-PERL know.IMP.ACT.2SG-1SG
yakt-āñm *ñi* : 1
feebleness 1SG.GEN

"The law of the Buddha ... [1c] I lack it now. Because of this, **understand my feeble state**! [1d]"

(B99b3; verse; [7¦7]×4)

(3.73) [TA] Doubling of a nominal expression by a PC

wät *träṅkäṣ* *näṣ* *nu* ***ce(smä)***[b6]-***k*** ***āy-äntu*** *p*$_u$*k-ā-k*
second speak.NPST.ACT.3SG NOM.1SG CONJ DEM.M.ACC.PL-EMP bone-PL all-PERL-EMP
pusk-ās-yo *kaśal* ***malkam-äm***
sinew-PL-INS together put.together.SUBJ.ACT.1SG-PL

'The second artisan says: "But I **will join the bones** completely with the sinews."'

(A11b6; trans. based on CEToM; prose)

We will discuss this phenomenon in detail in Chapter 5. In (3.73), it may appear that the PC is just a marker of object-agreement (Peyrot 2017, 2019 and Adams 2015: 149). However, a pleonastic pronominal clitic may represent the possessor of a theme as in (3.72), and in such cases, it does not seem to be an object agreement marker because if it were we would expect to find a marker of the third-person singular, agreeing with the object *yakt-āñm*. Furthermore, we find doubling of a possessor associated with an intransitive subject. Again, this would be unexpected if the PC were a mere object-agreement marker.

3.2 Summary

The previous section reviewed the various uses of pronominal clitics in TA and TB. It has shown that PCs may represent the following categories (table 3.1).

	FUNCTION	SECTION
1	Theme	§3.1.1
2	Addressee	§3.1.2
3	Recipient	§3.1.3
4	Goal	§3.1.4
5	Beneficiary	§3.1.5
6	Source	§3.1.6
7	Location	§3.1.7
8	Experiencer	§3.1.8
9	Stimulus	§3.1.9
10	Argument of a postposition/adverb and a verb	§3.1.10
11	Experiencer of an adjective and a verb	§3.1.11
12	Oblique possessor	§3.1.12
13	Possessor associated with a direct object	§3.1.13
14	Possessor associated with an indirect object	§3.1.14
15	Possessor associated with an argument of an adverb/postposition and a verb	§3.1.15
16	Possessor associated with a subject	§3.1.16
17	Possessor associated with a noun phrase connected by a copula	§3.1.17
18	Subject/Agent of a non-finite verb	§3.1.18
19	Agent of a mediopassive verb	§3.1.19
20	Causee	§3.1.20
21	Doubling	§3.1.21

Table 3.1: Summary of the chief uses of the Tocharian PCs

A successful theory should be able to derive all of the uses in table 3.1 and none of the unattested

uses. In the following chapter I will proceed to build a syntactic model of the Tocharian PCs which accounts for the various uses observed and also some of the gaps.

3.3 Conclusion

This chapter summarized the phonological, morphological, and syntactic characteristics of pronominal clitics in Tocharian A and B. After reviewing the characteristics of Tocharian PCs in Chapter 2, we proceeded to briefly overview the chief uses of the Tocharian PCs with a brief comment. Section 3.2 provides a summary.

Some of the gaps will be the subject of Chapters 5, 6, and 7, where I will show that all attested possible instances in Table 3.1 share independently motivated structural properties. No examples are attested that do not share these properties. In order to address this, I will detail the theoretical framework and the (morpho)syntactic analysis of Tocharian which will allow me to investigate and test specific hypotheses on the corpus of TA and TB.

Previous treatments of the Tocharian PCs have assumed that PCs may represent whatever the genitive-dative and accusative independent forms may represent (see, e.g., Schulze, Sieg, and Siegling 1931: 166, *TEB* I: 162–3 Pinault 1992: 113; 2008: 537, Carling 2006: 44). In contrast, the model I develop in the following chapters will show that the distribution of PCs in TB and TA is more restricted. However, to do so requires some discussion of the details, and before going into the details I discuss some theoretical premises in the following chapter.

CHAPTER 4

Theoretical premises

4.1 Introduction

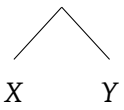
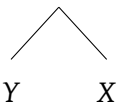
The previous chapter reviewed the representative uses of the pronominal clitics (PCs) of Tocharian A and B (TA and TB). This chapter outlines theoretical premises based on which I will develop a morphosyntactic model of the PCs in Chapter 5. The model will predict that the distribution of the PCs is more restricted than the descriptive generalizations made in previous treatments, according to which they may represent whatever the genitive-dative and accusative independent forms may describe. Specifically, the model will predict that the Tocharian PCs cannot express the possessor associated with the subject of a transitive verb or the complement of the postposition contained in a nominal expression.

The general idea is that a particular hierarchical relation must hold between the position where the PC is licensed and the position where it originates. The position is not the subject but the object domain below the external argument such as an agent or a causer. In the following, I adopt the terms and concepts widely used in current syntactic research. However, the findings and predictions I will discuss in the following chapters do not hinge on whether I adopt a more recent or traditional framework and its technical implementation. This chapter will outline the more recent syntactic framework mainly for two reasons. One is that it is less confusing to those who do not specialize in syntax if a theory is solely based on the current minimalism rather than the traditional X-bar theoretic framework with some new ideas introduced only in part. The other is that those who specialize in the syntax of contemporary languages may easily understand the contents of the chapters.

The internal organization of this chapter is as follows. The following section (§4.2) introduces the assumptions regarding syntactic computation. Section 4.3 discusses how morphosyntactic feature bundles receive a phonological exponent post-syntactically. Section 4.4 outlines the antisymmetric approach to the linearization of a syntactic object. I briefly discuss the structure of pronominal clitics, the syntactic process AGREE, and its consequences in Section 4.5. Section 4.6 shows the sample derivation of a canonical SVO structure in Tocharian B. Section 4.7 provides a summary.

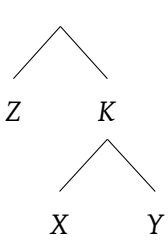
4.2 Merge and Transfer

It is widely accepted that sentences we observe have an underlying hierarchical structure built in the (core) syntax. The syntax manipulates syntactic objects (sets of morphosyntactic feature bundles) in a bottom-up fashion by the process MERGE. Merge combines two syntactic objects, *X* and *Y*, and creates a new object *K*, which is an unordered set ($K = \{X, Y\}$). In this case, *K* CONTAINS *X* and *Y*, and *X* and *Y* are MERGE-MATES or SISTERS. *K* also has a label equal to one of its members (*X* or *Y*). The set created by Merge may be represented as a tree, as shown in (4.1). As *K* is an unordered set, the ordering between *X* and *Y* in (4.1) is irrelevant.

(4.1) *K* =  or 

A newly created object may undergo Merge with another syntactic object, and as a result, we obtain a new set containing another set. For example, (4.2) shows that *Z* and *K* (4.1) have undergone Merge. Again, the ordering between *Z* and *K* and *X* and *Y* are irrelevant. We define *A* to C-COMMAND *B* if *B* is a merge-mate of *A* or if *B* is contained in the merge-mate of *A*. For example, in the hierarchical syntactic object (4.2), *Z* c-commands its merge-mate *K*. It also c-commands *X* and *Y* that *K* contains. Also, *K* c-commands its merge-mate *Z*. Likewise, *X* c-commands *Y*, and vice versa. *X* does *not* c-command *Z*, and in this case, *Z* ASYMMETRICALLY C-COMMANDS *X*. *X* does not asymmetrically c-command *Y* because the c-command relation goes in both directions.

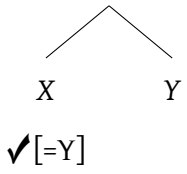
(4.2) L =



Merge has two types. Selectional features such as [=Y] drive EXTERNAL MERGE (EM), which takes two syntactic objects X and Y in the workspace and merges them to form the new set $K = \{X, Y\}$. The notation "[=Y]" means that a given syntactic object selects another syntactic object whose category is Y. This feature is satisfied (marked by "✓") when it merges with Y.[1] In contrast, formal features such as [*u*WH] drive INTERNAL MERGE (IM; previously called **movement**), which takes the syntactic object K_1 and its term Y_K that has a corresponding [*i*WH] feature, and merges them to obtain the new set $K_2 (= \{K_1, Y_K\})$. The examples include traditional *wh*-movement where the C(omplementizer) causes a *wh*-phrase to move to its specifier.[2] In a tree representation, Y_K appears as if it moved from one place to another. In this chapter, I will mark the syntactic object that has undergone IM in gray.

(4.3) External Merge

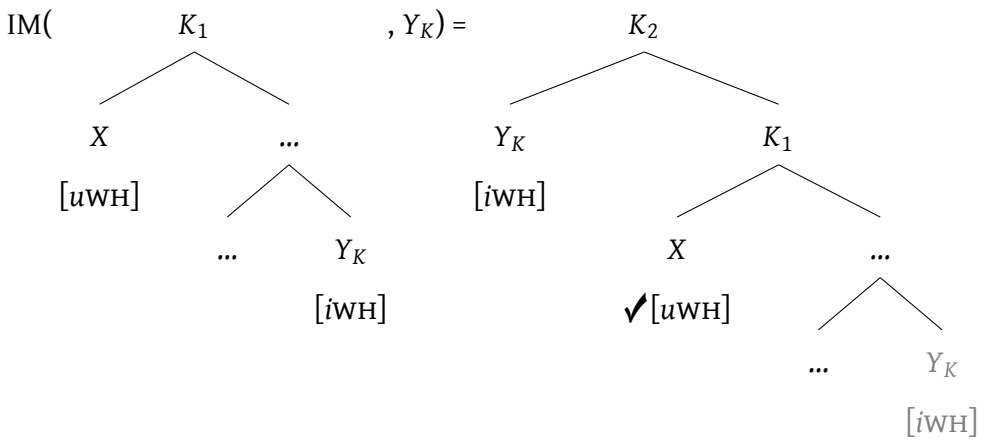
EM($X_{[=Y]}$, Y) =



(4.4) Internal Merge

1. My assumption departs from that of Chomsky, Gallego, and Ott (2019), who consider MERGE a free process and not triggered by a feature.

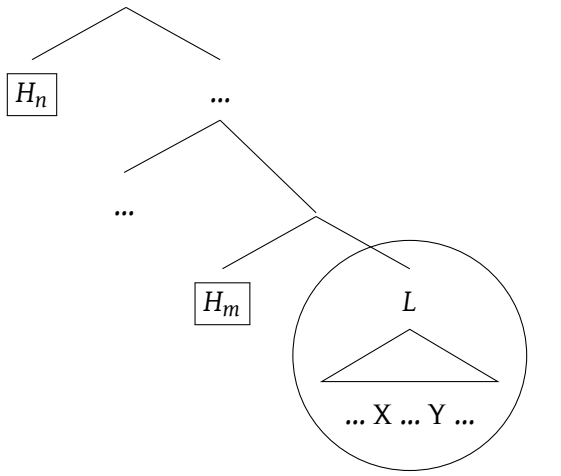
2. In this example, "*i*" and "*u*" represent interpretable and uninterpretable features, respectively. I will come back to this difference in Section 4.5.



When syntactic manipulation reaches a certain point, i.e., when a derivational PHASE is complete, the syntax maps the subpart of a syntactic object onto semantic and phonetic representations (SEM and PHON). This process is called TRANSFER (Chomsky, Gallego, and Ott 2019), and once the subpart undergoes Transfer, no further syntactic computation may modify its internal structure (PHASE IMPENETRABILITY CONDITION; Chomsky 2001b, 2007, 2008). Phases derive restrictions on the extraction traditionally explained under the hood of islands (Ross 1967) or subjacency (Chomsky 1973). We call the subpart that undergoes Transfer TRANSFER DOMAIN. The syntactic object L is a transfer domain when it merges with the phase-defining head H_m. L, the complement of H_m, undergoes Transfer when another phase-defining head H_n merges with L, and the H_m phase is complete.[3]

(4.5) L undergoes Transfer when H_n is merged (Phase-defining head: H_m and H_n)

3. Alternatively, Bošković (2016) argues that when the H_k phase is complete both the transfer domain L_k and the phase-defining head H_k undergo Transfer.



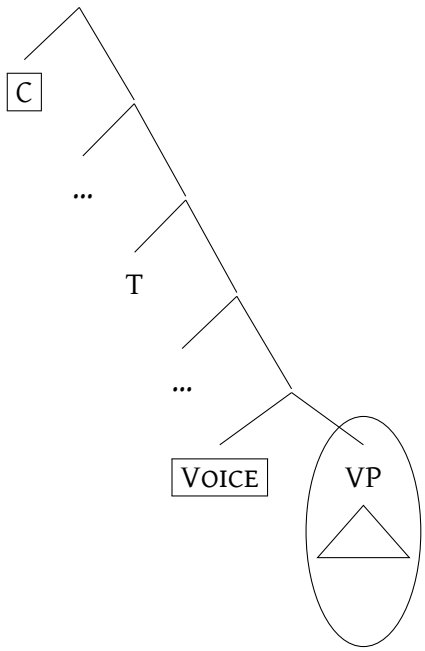
Transfer domain of H_m

$L \xRightarrow{\textbf{Transfer}}$ ... X ... Y ...

When the transfer domain L_k undergoes Transfer, it projects a prosodic unit (π) in PHON. The prosodic unit π may be smaller or larger than a phonological word, and its prosodic shape may alter when another transfer domain L_j, which contains L_k, undergoes Transfer (cf. Sande and Jenks 2018; Sande, Jenks, and Inkelas 2020).

I follow the standard assumption that phase-defining heads consist of C(omplementizer), VOICE that introduces an external argument, D(eterminer) (Chomsky 2000, 2001b), and category-defining heads that merge with a root and define its category (Marantz 2007; Embick and Marantz 2008; Embick 2010). For example, "a" and "n" merge with a root to determine the category of the root (as an adjective and a noun, respectively). The standard literature on Distributed Morphology (DM; Halle and Marantz 1993; Embick 2010, 2015) represents category-defining heads with lower case characters (e.g., "n", "v"). This chapter, however, uses upper case characters (e.g., "N" for a noun-defining head and "V" for a verb-defining head) for expository clarity. As shown in (4.6), when C merges, VP, the transfer-domain of Voice, undergoes Transfer.

(4.6) VP undergoes Transfer when C is merged (phase-defining heads: VOICE and C)



Transfer domain of VOICE

If the VP contains a nominal expression, it will undergo Transfer together with it, and the transferred nominal will be inaccessible to further syntactic operations. To be accessible to the subsequent syntactic operations, it must "move" outside the VP. In contrast, the argument introduced by VOICE is outside the transfer domain and visible to the C.

4.3 Distributed Morphology and Vocabulary Insertion

Following Distributed Morphology (DM; Halle and Marantz 1993; Embick 2010, 2015), I assume that each set of morphosyntactic feature bundles receives a phonological realization (or *exponent*) when they undergo Transfer (VOCABULARY INSERTION; VI). I follow the standard model of VI, in which vocabulary items compete for insertion, and the most specified rule applies first, blocking the less specified ones (THE ELSEWHERE PRINCIPLE [or PĀṆINI'S PRINCIPLE]; cf. Anderson 1969; Kiparsky 1973). For example, there are three exponents for the English present tense copula forms: *am*, *are*, and *is*. Among these three, *am* and *is* are more restricted, found only in the context of the first- and third-person singular. In contrast, *are* is less restricted, found in the second-person singular, and all persons in the plural. In other words, it is the elsewhere exponent that may target all person and number combinations in the present tense copula. This rule, however,

does not apply to the first- and third-person singular since the more specific vocabulary insertion rules (4.8i) take precedence over (4.8ii).

(4.7) English present tense copula

	SG	PL
1	*am*	*are*
2	*are*	*are*
3	*is*	*are*

(4.8) Vocabulary insertion rules

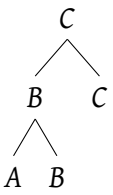
i. T[present, first-person, singular] ↔ *am*

T[present, third-person, singular] ↔ *is*

ii. T[present]↔ *are*

VI targets terminal nodes and supplies a phonological exponent to the feature bundles. The working hypothesis that I follow is that VI first targets the most embedded terminal and goes inside out (Embick 2015). For example, in (4.9), VI first applies to the most deeply embedded terminal *A*, then *B*, and finally *C*.

(4.9) Vocabulary insertion of a complex head



Step 1: A[...] ↔ ...

Step 2: B[...] ↔ ...

Step 3: C[...] ↔ ...

4.4 Linearization and antisymmetry

Syntax generates an unordered set and its members may be another unordered set of objects. When a syntactic object undergoes Transfer, it is mapped onto PHON, and its hierarchical structure is flattened into a linear string so that it may be uttered or signed. In other words, the symmetric relationship (i.e., '*X* and *Y* are members of *K*') is converted into the asymmetric precedence relationship (i.e., '*X* precedes *Y*'). How a language linearizes a hierarchical syntactic object is one of the fields that scholars actively investigate.

Traditionally, syntax directly mapped syntactic structures onto a surface word order, and the word-order variation was handled by the headedness parameter, whose value is set during acquisition. Setting this parameter on, the syntax of a target language consistently generates a hierarchical structure in which a head always follows a complement, resulting in a Japanese-type head-final language. In contrast, if this parameter is set off, the syntax generates a head-initial structure, resulting in an English-type head-initial language. Although this approach accounts for some morphosyntactic properties that frequently cluster (e.g., a verb following a direct object, postpositions rather than prepositions, a possessor preceding a possessum, and so on), it also predicts many unattested patterns in human languages (Kayne 1994). For example, it would predict the existence of a language in which a finite verb moves to the second-to-last position in a matrix clause ("reverse-German"), which is unattested (Kayne 1994: 50).

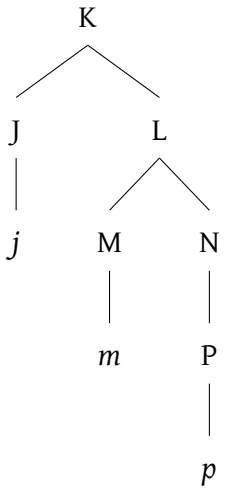
Therefore, instead of allowing the parametric variation, Kayne (1994) proposes that the asymmetric c-command relation strictly determines the linear precedence relation. His idea is that informally speaking, if *X* asymmetrically c-commands *Y*, *X*'s terminal precedes *Y*'s terminal. Kayne (1994: 6) defines the axiom that generates the linear order of a syntactic object (the Linear Correspondence Axiom; LCA) as (4.10), where T is the set of terminals, $d(A)$ is the set of terminals that A dominates, and A is all pairs of non-terminal X and Y such that X asymmetrically c-commands Y.[4]

4. His definition of c-command is different from ours in that it refers to categories: "X c-commands Y iff X and Y are categories and X excludes Y and every category that dominates X dominates Y." (Kayne 1994: 9)

(4.10) LINEAR CORRESPONDENCE AXIOM (Kayne 1994: 6)

$d(A)$ is a linear ordering of T.

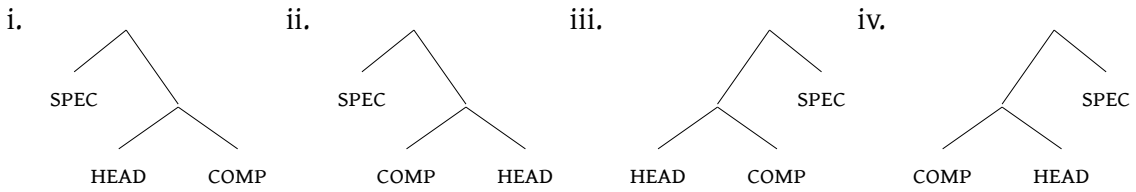
(4.11)



In example (4.11) from Kayne (1994: 7), there are three terminals: *j*, *m*, and *p* (hence $T = \{j, m, p\}$). There are also six non-terminals: K, J, L, M, N, and P. Among these non-terminals, J asymmetrically c-commands M, N, and P (Section 4.2). Also, M asymmetrically c-commands P. Therefore, in this example, A contains four ordered pairs: A = <J, M>, <J, N>, <J, P>, and <M, P>. The non-terminals J, M, N, and P all dominate just one terminal. Since J dominates *j* and M dominates *m*, from <J, M>, we obtain <*j*, *m*> meaning '*j* precedes *m*.' Likewise, we derive <*m*, *p*> from <M, P> and <*j*, *p*> from <J, N> and <J, P>. In this way, $d(A)$, the set of terminals dominated by A, contains three ordered pairs of terminals: $d(A)$ = <*j*, *m*>, <*j*, *p*>, and <*m*, *p*>. It means '*j* precedes *m*, *j* precedes *p*, and *m* precedes *p*.' that is, '*j* precedes *m*, which in turn precedes *p*.' This is the linear order of T.

This approach is advantageous as it may derive the traditional X-bar framework without stipulating it (but cf. Abels and Neeleman 2012). Also, it is restrictive and reduces the four parametric variants (4.12) to just one type: Spec(ifier)-[Head-Comp(lement)] (4.12i). Therefore, it severely limits the space of hypotheses that are considered when a child acquires a language, and it is preferable from the perspective of language acquisition.

(4.12) Parametric variation of the X-bar structure



Furthermore, it also derives some typological connections. Since (4.12i) is the only possible structure, head-final languages result from consistent Internal Merge (movement) of their complement, moving it to the specifier/adjunct position so that the complement may asymmetrically c-command the head.[5] It accounts for the typological observation that SOV languages generally lack *wh*-movement (Greenberg 1963; Bach 1971).[6] While *wh*-phrases target the specifier of some functional head, the specifier position must be occupied by the complement of the head.

In addition, Cinque (2005) shows that by positing the fixed hierarchical order of a demonstrative, numeral, adjective, and noun, one may derive all of the attested orders of the four categories and none of the unattested patterns.[7] Carstens (2002) argues for the universal antisymmetric head-initial structure by pointing out that the serial verb constructions of OV languages do not display the mirror image of those of VO languages. Also, Takano (2003) points out that the antisymmetric approach correctly predicts the ungrammaticality of the heavy NP shift constructions whose licensor in a heavy NP fails to license a negative polarity item to its left.

Although Kayne (1994) considered the Linear Correspondence Axiom to apply in all stages of derivation, the precedence relation is a pure PHON property and does not seem to contribute to any SEM property. Therefore, subsequent treatments exclude the LCA from the core syntax and assume that syntax generates a symmetric syntactic object and that the LCA applies when a syntactic object is linearized (Chomsky 1995: ch. 4; Uriagereka 1999; Richards 2008).

Furthermore, the Government and Binding theory of syntax moved from the template-based and

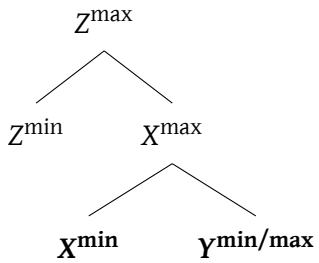
5. Technically speaking, the antisymmetric approach to syntax does not distinguish a specifier from an adjunct.

6. Greenberg's (1963) Universal 12 states "[i]f a language has dominant order VSO in declarative sentences, it always puts interrogative words or phrases first in interrogative word questions; if it has dominant order SOV in declarative sentences, there is never such an invariant rule."

7. Alternatively, Abels and Neeleman (2012) analyze the data with a less restrictive theory.

stipulative X-bar theory to Bare Phrase Structure (Chomsky 1995) which lacks the distinction between a maximal and minimal projection. Under the Bare Phrase Structure, maximal and minimal projections are determined contextually: a minimal category X (represented as X^{min}) may merge with another minimal category Y when Y no longer projects. In such cases, Y is both minimal and maximal (represented as '$Y^{min/max}$' as in [4.13]). The LCA fails to linearize these objects since X^{min} and $Y^{min/max}$ c-command each other.

(4.13) X^{min} and $Y^{min/max}$ c-command each other



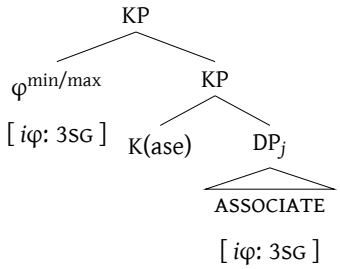
To salvage this problem, Guimarães (2000), followed bv Kayne (2008), proposes self-merge, which only takes one syntactic object and creates a singleton set. Moro (2000) suggests that the Internal Merge of $Y^{min/max}$ is triggered to break the symmetry. Richards (2008) reintroduces the headedness parameter, which this time operates in PHON and determines the linear ordering between X and Y that c-command each other. I adopt his approach here and assume that when two terminals c-command each other, the headedness parameter orders the head to follow the non-head in Tocharian.

4.5 Structure of a pronominal clitic, Agree, and defective goals

Tocharian PCs are special clitics linked to the pronominal reference of arguments. There is a dependency between a clitic and a pronominal DP in that (1) special clitics cannot occur in positions where full DPs appear (Zwicky 1977), and (2) often but not always, they cannot co-occur with full DPs. Following I. G. Roberts (2010), I consider the Tocharian PCs as realizing syntactic objects that lack an internal structure, consisting of person and number features ("φ-features") only. They correspond to Cardinaletti and Starke's (1999) clitic pronouns and Déchaine and Wiltschko's (2002) pro-φ(P)s. I represent it as $\varphi^{min/max}$, that is, it is a minimal category but at the same time

it is also maximal since it does not project its morphosyntactic or semantic features to the set in which it is contained. It also lacks a (syntactic) Case-feature, and adjoins to a K(ase)P, to which a syntactic Case is assigned (Nevins 2011a).[8] The PC's person and number features are shared with the K's sister DP, and we call this DP the PC's ASSOCIATE. PCs always refer to the same individual as their associate. The structure of the nominal expression that contains a PC is shown in (4.14). Doubling is absent when the KP lacks $\varphi^{\text{min/max}}$.

(4.14) Structure of a nominal expression containing a PC

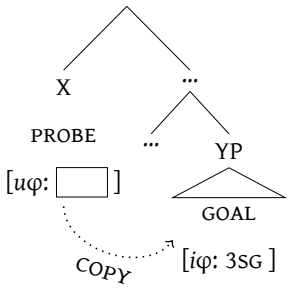


I adopt the standard Probe-Goal model of AGREE (Chomsky 2000, 2001a, 2001b). In this model, features may be *interpretable* or *uninterpretable*. In order for syntactic derivation to be successful, all uninterpretable features must be checked or removed from an object so that everything that is present at the interfaces may be interpretable to the interfaces (Principle of Full Interpretation). According to Chomsky (2001b: 5), "Prior to application of Agree, these (= uninterpretable features, TO) are distinguished from interpretable features by lack of specification of value. After application of Agree, the distinction is lost." In this model, the functional heads T(ense) and VOICE have uninterpretable (and unvalued) person and number features (φ-features; represented as *u*φ), whose values need to be filled. They serve as a PROBE that searches for valued interpretable φ-features in their c-commanding domain (i.e., in their merge-mate) in a top-down manner. If a syntactic object contains multiple nominal expressions with valued interpretable φ-features (represented as *i*φ), the one that is closest to the probe serves as a GOAL (MINIMAL LINK CONDITION; Chomsky 1995: 311), and the probe copies the values of the goal's φ-features (AGREE).[9]

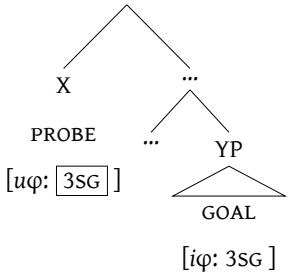
9. Chomsky (2001b) assumes that a set of interpretable φ-features may serve as a goal if it is active. In other words, a goal must have an unvalued (abstract) structural Case-feature to undergo Agree. We depart from this assumption

(4.15) Agree

i.



ii.



Agree may create a complex head *X* that consists of *X* and *Y* if a functional head *X* agrees with *Y* and if *Y* is non-distinct in features from *X* (I. G. Roberts 2010: 62). In other words, whenever a goal *Y* is "defective" in the sense defined in (4.16), it undergoes incorporation to its probe *X*.

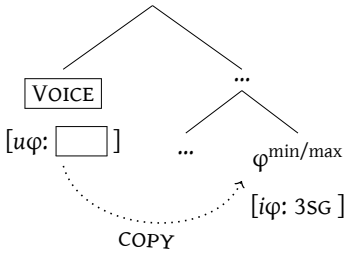
(4.16) DEFECTIVE GOAL (I. G. Roberts 2010: 62)

A goal *G* is defective iff *G*'s formal features are a proper subset of those of *G*'s Probe *P*.

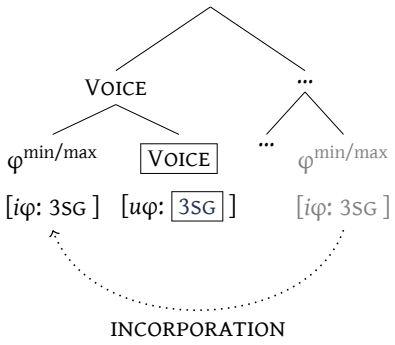
(4.17) and (4.18) illustrate this process. The unvalued φ-features of VOICE look for a goal in its c-commanding domain, find $\varphi^{min/max}$'s φ-features, and copy the values. Since $\varphi^{min/max}$'s formal features, namely φ-features, are a proper subset of those of VOICE, $\varphi^{min/max}$ is considered as the defective goal to the probe VOICE. Therefore, it undergoes incorporation to VOICE, forming a complex head consisting of VOICE and $\varphi^{min/max}$ (4.18).

(4.17) Agree

since $\varphi^{min/max}$ lacks a Case feature (Section 4.5).



(4.18) Incorporation

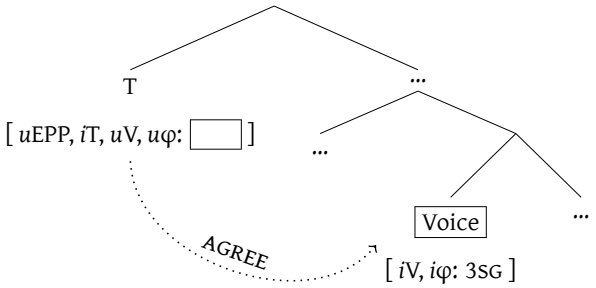


This view amounts to claim that whenever $\varphi^{min/max}$, spelled out as a PC, serves as a goal in Agree, it undergoes incorporation. This is a desirable result because Tocharian PCs are special clitics (in Zwicky's 1977 sense), and they never occur in positions where full nominal phrases usually appear. Apart from some examples that lack a finite verb in TA (discussed in Chapter 2), PCs consistently appear immediately after a finite verb. This analysis also has another welcoming aspect in that it dispenses with a morphological operation that creates a complex head post-syntactically (e.g., *m*-merger; Matushansky 2006; Harizanov 2014 among others).

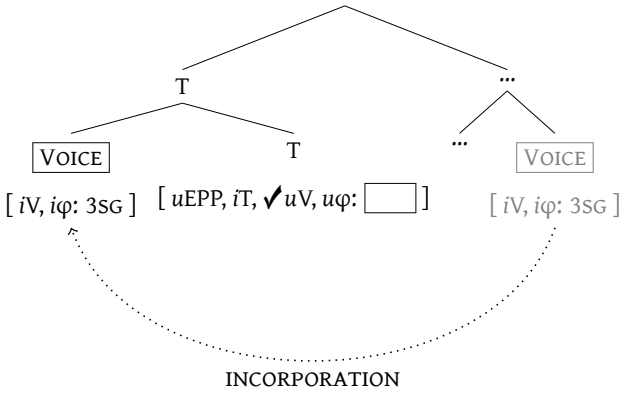
I. G. Roberts (2010) argues that head-movement happens in this mechanism: The head H_j adjoins to another head H_k forming the complex head $\{ H_k \{ H_j \; H_k \} \}$ if and only if H_j is a defective goal to H_k. For example, Roberts assigns to the tense head T following features (excluding selectional features): *u*EPP, *u*V, *i*T, and *u*φ. He also assigns *i*V, and *u*φ to VOICE.[10] T's *u*V feature is checked when it undergoes Agree with VOICE. Here, VOICE's formal features (i.e., V and φ) are a proper subset of those of T. Therefore, VOICE is a defective goal with respect to T, and VOICE undergoes incorporation to T.

10. To be precise, I. G. Roberts (2010) also assigns an uninterpretable T feature on VOICE (his *v**). This account predicts that VOICE consistently incorporates to T since it is a defective goal to T (see Chapter 5 for cases in which

(4.19) Agree



(4.20) Incorporation



4.6 Example of derivation of a canonical SOV structure

To illustrate the derivation of a canonical Tocharian B SOV structure, let us consider the passage from TB (4.21) as an example. In this example, the transitive verb *lkāṣṣäṃ* takes *toṃ läklenta* 'these sufferings' as an INTERNAL ARGUMENT. The demonstrative pronoun *sū* 'he' is the EXTERNAL ARGUMENT of this verb, and it represents the subject of the sentence.

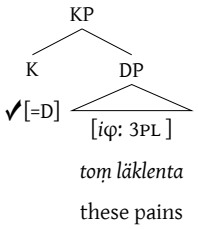
(4.21) *wesäñ no perne-sa* ***sū toṃ läkle-nta lkāṣṣäṃ.***
GEN.1PL CONJ glory-PERL DEM.M.NOM.SG DEM.F.ACC.PL suffering-PL see.NPST.ACT.3SG
'But [it is] for [all] our sakes **he endures** (*lit.* **sees**) **such suffering**.'
(B88b5; trans. by CEToM; prose)

The internal argument of this example is a K(ase)P that consists of a K(ase) head and a DP. The K

verbs are non-finite).

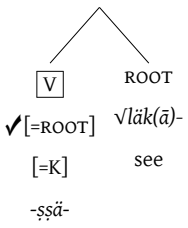
head has the selectional feature [=D] which triggers External Merge with the DP.[11] The structure of the internal argument is shown in (4.22).

(4.22) Syntactic structure of (4.21; to be continued)



This KP is selected by the category-defining head V, also called the verbalizer. This verbalizer has two selectional features: [=ROOT] and [=K]. It first undergoes External Merge with a root to satisfy the [=ROOT] feature.[12] This verbalizer is a phase-defining head that defines its merge-mate as a transfer domain. In this case, the transfer domain of the verbalizer is the root.

(4.23) Syntactic structure of (4.21; to be continued)



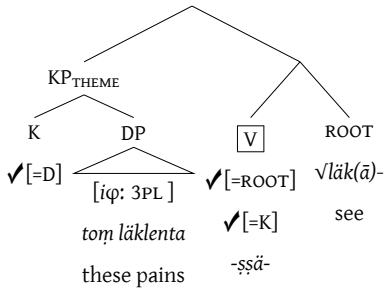
The resulting syntactic object (4.23) then undergoes External Merge with the internal argument (4.22) to satisfy the verbalizer's [=K] feature. Contra Marantz (1997) and Harley (2009, 2014), I analyze that a theme KP is selected by a category-defining head, rather than a root (Alexiadou 2014; Cuervo 2014; Lohndal 2014; Ahn 2016; Merchant 2019). Merchant (2019) points out category-defining heads may show an idiosyncratic selectional behavior (e.g., *pride*$_{\text{N}}$ [$_{\text{PP}}$ ***in*** *X*]; *proud*$_{\text{A}}$ [$_{\text{PP}}$ ***of*** *X*]; *pride*$_{\text{V}}$ *oneself* [$_{\text{PP}}$ ***on*** *X*]), which should be impossible if a root, which does not have any categorial feature, selected a PP complement. De Belder and Craenenbroeck (2015) also

11. This functional head also checks a syntactic Case and licenses its merge-mate DP. The detail is omitted here for the sake of expository simplicity.

12. De Belder and Craenenbroeck (2015) argue that roots do not have any categorial feature. In this case, a category defining head X merges with a syntactic object Y, which is an empty set (UNARY MERGE; Zwart 2009, 2011).

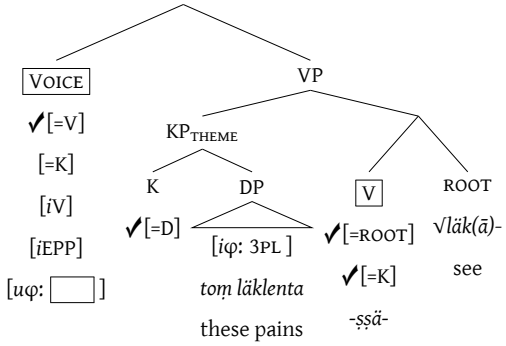
argue that roots lack not only categories but also grammatical features (cf. Borer 2005a, 2005b). The verbalizer also assigns the theme role to the KP. The resulting object is (4.24).

(4.24) Syntactic structure of (4.21; to be continued)



Subsequently, the functional head VOICE externally merges with (4.24), satisfying its [=V] feature.

(4.25) Syntactic structure of (4.21; continued)

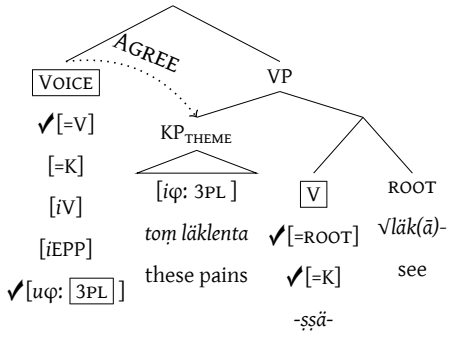


VOICE is a phase-defining head and triggers Transfer of the transfer-domain of the lower-phase defining head. Therefore, the verbalizer's transfer domain (i.e., root) undergoes Transfer, and it receives the phonological exponent /ləka-/.

(4.26) ROOT $\xrightarrow{\textbf{Transfer}}$ Root
/ləka-/

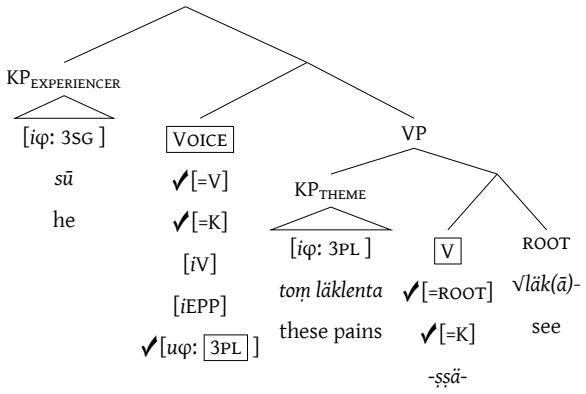
The functional head VOICE has unvalued person and number features. To fill the values, it looks for valued person and number features in its c-commanding domain (VP in [4.27]). It finds the value "third-person plural" in the theme KP, and copies the value.

(4.27) Syntactic structure of (4.21; continued)



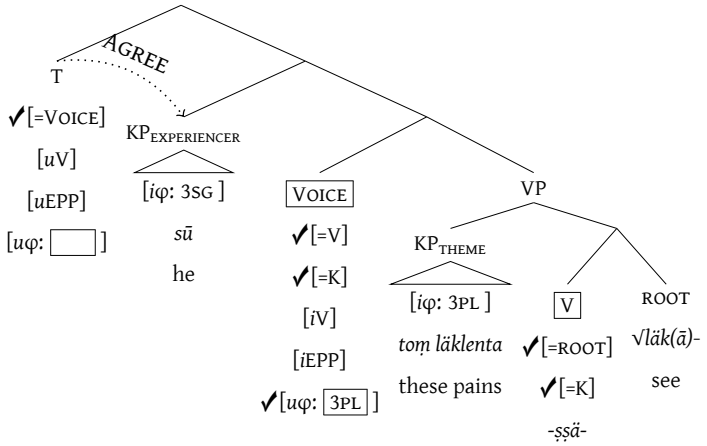
In order to satisfy the VOICE's selectional feature ([=K]), it then undergoes External Merge with the external argument KP (*sū* 'he') that functions as the subject of the sentence. VOICE assigns an experiencer role to this KP.

(4.28) Syntactic structure of (4.21; continued)



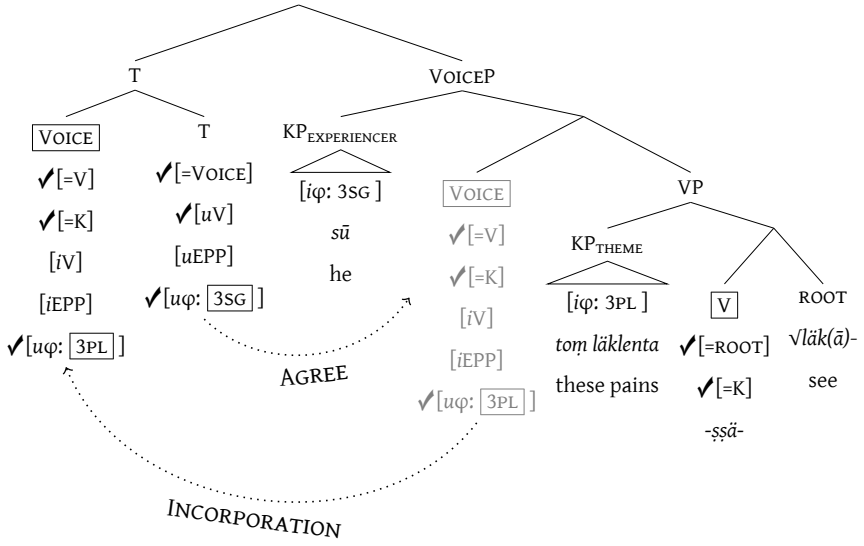
Subsequently, another functional head T merges with (4.28), satisfying its [=VOICE] feature. It also has unvalued person and number features. It therefore finds the value "third-person singular" in the external argument and copies it. When it is transferred later, it surfaces as the subject agreement marker of the third-person singular (*-ṃ*).

(4.29) Syntactic structure of (4.21; continued)



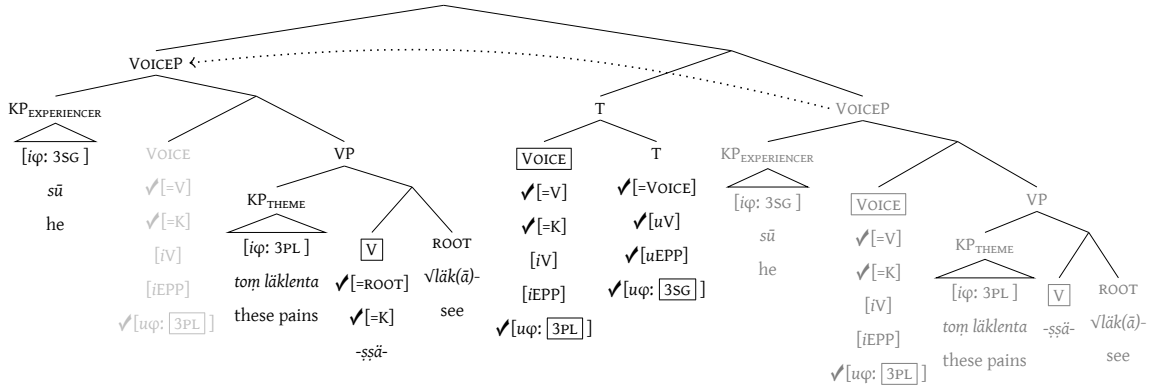
Furthermore, T agrees with VOICE to satisfy the uninterpretable V feature, and since the latter's formal features (i.e., V, EPP, φ) are a subset of those of the former, VOICE undergoes incorporation (head-movement) to T.

(4.30) Syntactic structure of (4.21; continued)



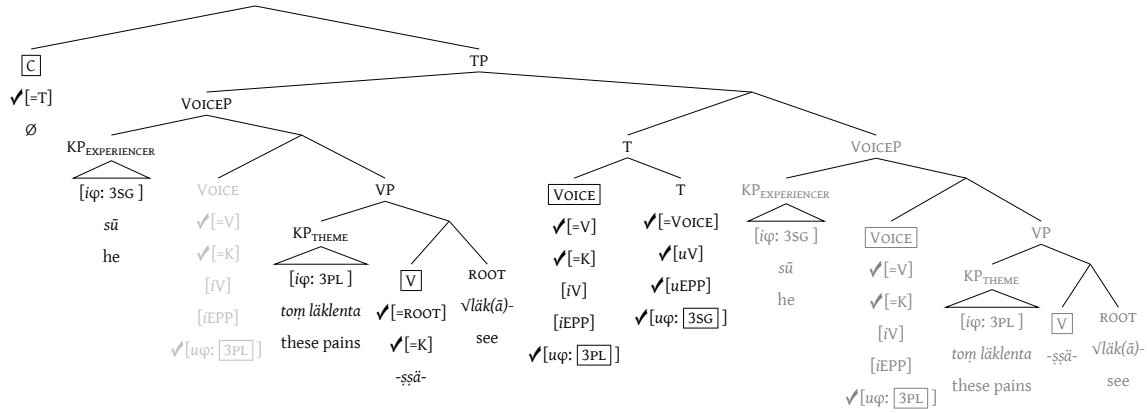
Moreover, T's uninterpretable EPP feature triggers Internal Merge of VOICEP. As a result, we obtain (4.31).

(4.31) Syntactic structure of (4.21; continued)



Subsequently, another functional head C(omplementizer) merges with (4.31). Since C is a phase-defining head, the lower phase-defining head VOICE's transfer domain undergoes Transfer. This domain (VP) contains the theme KP, the verbalizer, and the root. Since this KP asymmetrically c-commands the verbalizer and the root, it linearly precedes them. The verbalizer and the root c-command each other, so the LCA cannot linearize them. We assume that the headedness parameter handles such cases, placing a category-defining head after a root (Section 4.4).

(4.32) Syntactic structure of (4.21; continued)



		KP$_{\text{THEME}}$	Root V
VP	**Transfer** ⟹	*toṃ läklenta*	/ləka- + -ṣṣə-/
			lkāṣṣä-

When the CP phase is complete, C's transfer domain (TP) undergoes Transfer. Since the external argument (*sū* 'he') asymmetrically c-commands the VP, *sū* linearizes preceding the VP. The functional heads T and VOICE form a complex head. Vocabulary Insertion targets both terminals,

inserting /-Ø/ to T and /-n/ to VOICE. Alternatively, we could think of a post-syntactic operation that fuses two terminals (T and VOICE) into one (FUSION; Halle and Marantz 1993, 1994), and VI targeting this fused terminal. At any rate, we obtain the present stem *lkāṣṣä-*, preceding the inflectional ending of the present-stem active third-person singular *-ṃ*.

(4.33) Vocabulary insertion

i. $\text{VOICE}_{[\text{ACT}]} \leftrightarrow$ /-Ø/

ii. $\text{T}_{[3\text{SG, NPST}]} \leftrightarrow$ /-n/ /[ACT] ___

(4.34)

	$\xrightarrow{\textbf{Transfer}}$	$\text{KP}_{\text{EXPERIENCER}}$	KP_{THEME}	Root V	Voice-T
TP		*sū*	*toṃ läklenta*	/ləka- + -ṣṣə-/	/-Ø-n/
				lkāṣṣä-	*-ṃ*

A somewhat surprising consequence of this analysis is that a (root +) V and (VOICE +) T do not form a constituent by themselves. When they seemingly move as a unit, they move as a TP, out of which an agent DP and a theme DP scrambled to a higher projection. For a similar approach to ours, see Zyman and Kalivoda's (2020) analysis on Latin verbs.

4.7 Interim summary

This section outlined some theoretical premises for the subsequent analysis. Syntax generates a syntactic object (Section 4.2), whose terminal receives a phonological exponent post-syntactically (Section 4.3). A subpart of a syntactic object undergoes Transfer, converting its hierarchical symmetric structure into an asymmetric linear string (Section 4.4). The Tocharian PCs are $\varphi^{\text{min/max}}$, consisting of a set of φ-features only (Section 4.5). They start as an adjunct to a KP, and whenever they undergo φ-agreement, they incorporate to a probe (I. G. Roberts' 2010 defective goal), appearing in unique positions where full nominal phrases do not occur. Section 4.6 showed the sample derivation of a canonical SVO structure in Tocharian B. I will develop a syntactic analysis of the Tocharian PCs in the following chapter.

CHAPTER 5

Split intransitivity and clitic distribution in Tocharian

5.1 Formal Analysis

This chapter develops a syntactic analysis of the Tocharian pronominal clitics based on the theoretical premises discussed in Chapter 4. The syntactic model that I develop in this chapter accounts for the wide range of thematic roles that the Tocharian PCs may display. Chapters 2 and 3 showed that the Tocharian PCs lack case distinctions. They are compatible with the accusative and genitive-dative independent forms, representing various thematic roles including the theme, goal, source, location, experiencer, beneficiary, and possessor. I argue that this multifunctionality results from the PCs starting as part of a nominal expression to which a thematic role is assigned, and being attracted by a licensor that looks for the values of person and number features and copies the highest pronominal DP in the VP region in the clause.

5.1.1 PC representing a direct object (theme) of a transitive verb

The previous chapter showed that a PC may represent the direct object (DO) with a theme role as in (2.4) and (3.1), repeated here as (5.1).

(5.1) (= 2.4) [TB] *-ne* (3SG) = DO (theme) of *palātai* '(You$_{SG}$) praised X'

mantaṃtā pa-si *marsasta* ¦
never uphold.moral.behavior-INF forget.PST.2SG

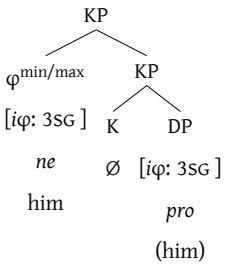
palātai-ne *ṣu* [a5] *komt-sa* ¦ *ṣeme ślok-tsa* (:)
praise.PST.MID.2SG-3SG 7 day-PERL one strophe-PERL

'You$_{SG}$ have never forgotten to uphold (moral behavior). You$_{SG}$ have **praised him** (= the Buddha) for seven days with a single strophe.' (B297a.a4; verse [7¦7¦4]×4)

The underlying syntactic object of (5.1) is created in a bottom-up fashion by the repeated application of Merge, which combines two morphosyntactic objects into one. Let us examine how each derivational step works.

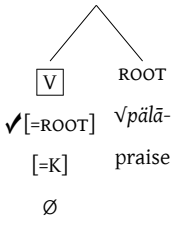
In Chapter 4, I assumed that PCs spell out $\varphi^{min/max}$, consisting of (interpretable) person and number features only. In this example, the value of $\varphi^{min/max}$ is third-person singular, represented as "[*i*φ: 3SG]". It merges with the K(ase)P that consists of K(ase) and a pronominal DP. This pronominal DP shares the person and number features with $\varphi^{min/max}$, referring to the same individual (5.2). Importantly, the clitic starts out as part of the thematic KP/DP.

(5.2) Syntactic structure of (5.1; to be continued)



This syntactic object (5.2) serves as the internal argument selected by a verbalizer. In this example, the verbalizer has two selectional features: [=ROOT] and [=K]. The verbalizer first undergoes External Merge with a root to satisfy the [=ROOT] feature. This verbalizer is a phase-defining head, which defines its merge-mate as the transfer domain (§4.2).[1] In this example, it defines the root (√*pälā*- 'praise') as its transfer domain.

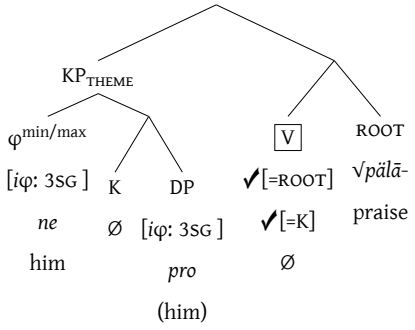
(5.3) Syntactic structure of (5.1; to be continued)



1. Squared categories represent phase-defining heads in the following tree representations.

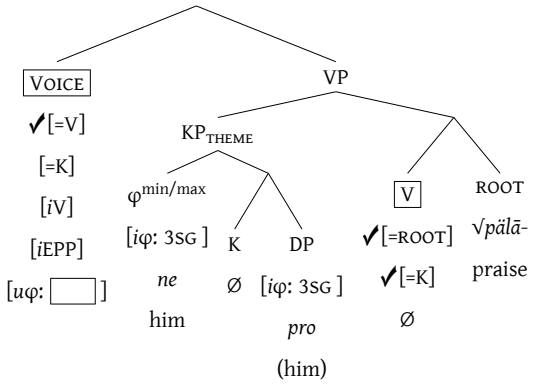
The resulting syntactic object (5.3) then undergoes External Merge with the internal argument (5.2) to satisfy the verbalizer's selectional feature [=K]. The verbalizer assigns a theme role to the internal argument KP. The resulting syntactic object is shown in (5.4).

(5.4) Syntactic structure of (5.1; continued)



Subsequently, the syntactic object (5.4) undergoes External Merge with the functional head VOICE. This functional head is a phase-defining head (§4.2), and it defines its merge-mate (i.e., 5.4) as the transfer domain. It also triggers Transfer of the root, which is the transfer domain of the lower phase-defining head (5.6). The root receives the phonological exponent (/pəla-/), though its phonological shape may be altered later when a stem-forming morpheme undergoes Transfer.

(5.5) Syntactic structure of (5.1; continued)



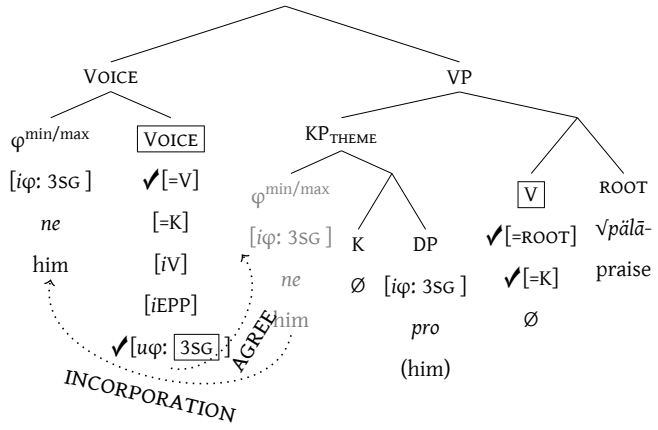
(5.6) ROOT $\xrightarrow{\textbf{Transfer}}$ Root
/pəla-/

VOICE has unvalued φ-features and looks for their value in its merge-mate in a top-down manner.

In this example, it looks for valued person and number features in VP, finds $\varphi^{min/max}$ in KP, and copies the value "3SG" (AGREE). Since $\varphi^{min/max}$ consists of φ-features only, φ's formal features are a proper subset of those of VOICE (φ, V, and EPP).

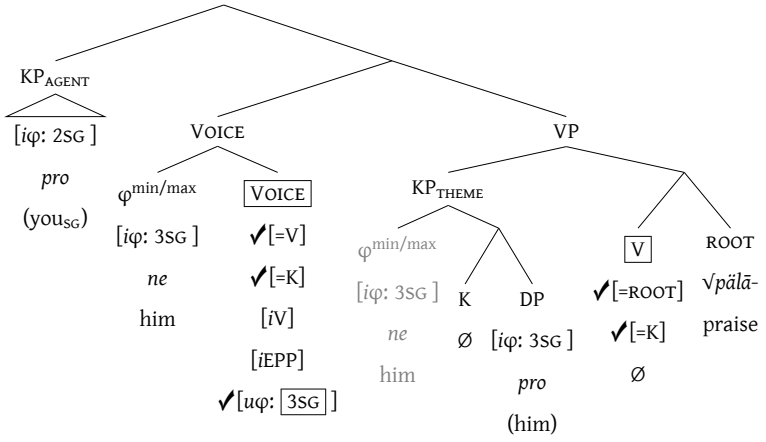
Therefore, $\varphi^{min/max}$ is a defective goal with respect to VOICE (§ 4.5), and it undergoes incorporation, forming the complex head consisting of VOICE and $\varphi^{min/max}$. As a result, we acquire the syntactic object (5.7). In other words, it is at this point the separation of the clitic and the KP/DP takes place.

(5.7) Syntactic structure of (5.1; continued)



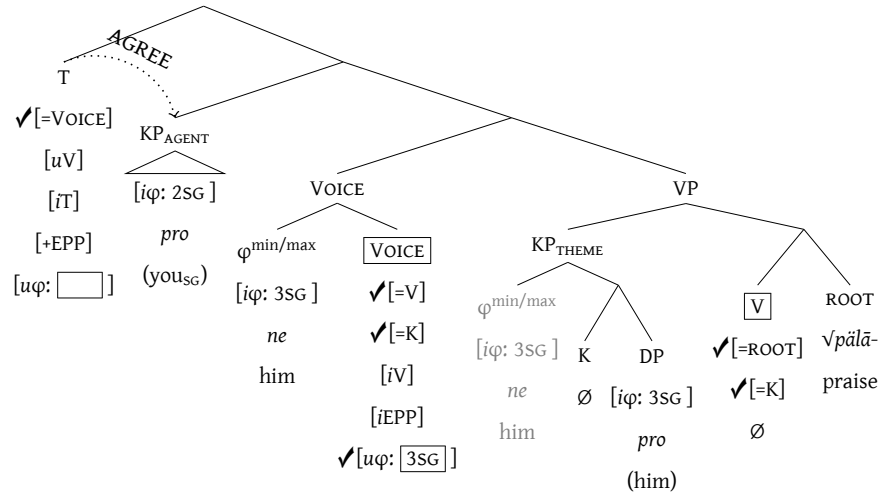
However, this is an intermediate step in the derivation. The syntactic object (5.7) undergoes External Merge with an external argument (*pro* 'you$_{SG}$') technically driven by the =K selectional feature. The VOICE head also assigns an agent role to this argument. The external argument introduced has valued φ-features (second-person singular in this example). The resulting syntactic object is shown in (5.8).

(5.8) Syntactic structure of (5.1; continued)



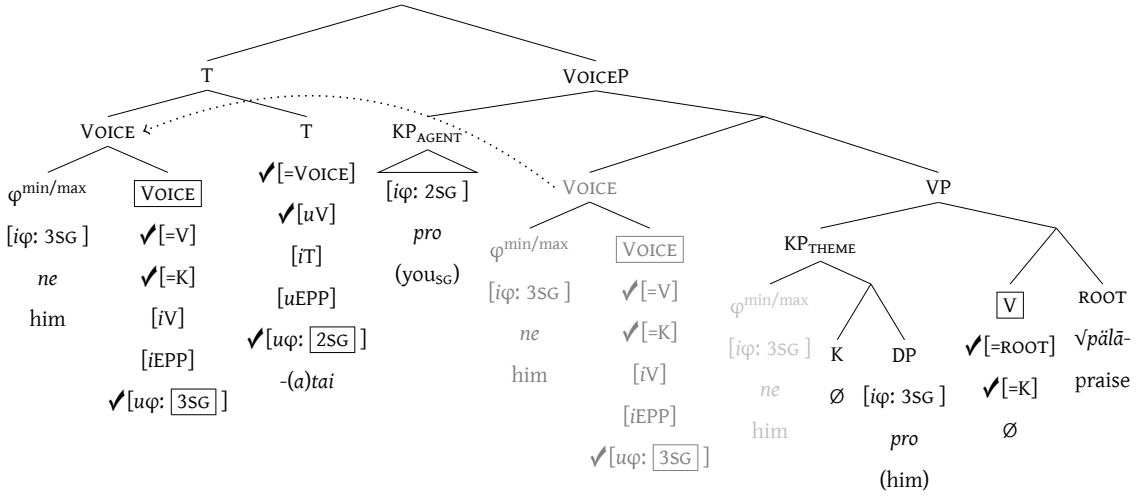
This syntactic object (5.8) undergoes External Merge with another functional head T(ense). T undergoes Agree with the external argument (*pro* 'you$_{SG}$'), and when T undergoes Transfer, it surfaces as a subject-agreement marker.

(5.9) Syntactic structure of (5.1; continued)



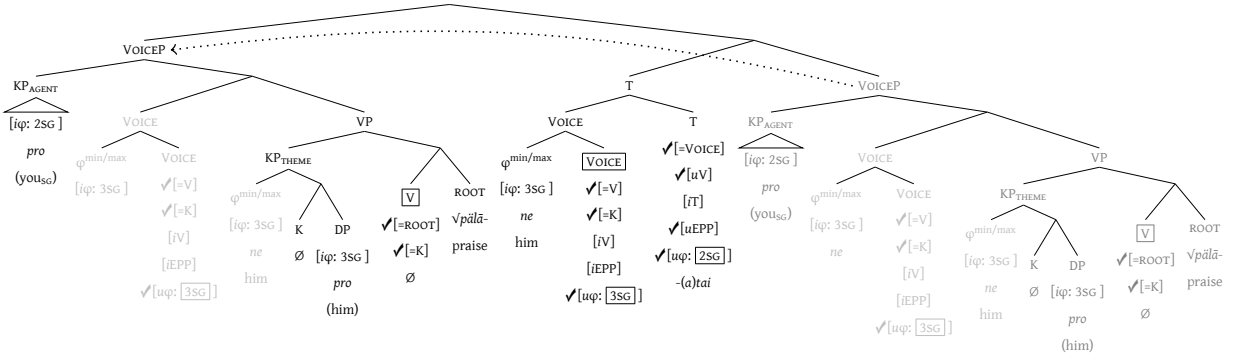
Furthermore, T undergoes Agree with Voice, triggering incorporation (head-movement) of VOICE to T, creating the complex head consisting of VOICE and T. Since VOICE is now a complex head consisting of VOICE and φ$^{min/max}$ (5.8), as the result of head-movement, we obtain the complex head that consists of T, VOICE, and φ$^{min/max}$ (5.10).

(5.10) Syntactic structure of (5.1; continued)



In addition, T has the feature [*u*EPP], which triggers Internal Merge of VoiceP. As the result of InternalMerge([5.10], VoiceP), we obtain the syntactic object (5.11).

(5.11) Syntactic structure of (5.1; continued)



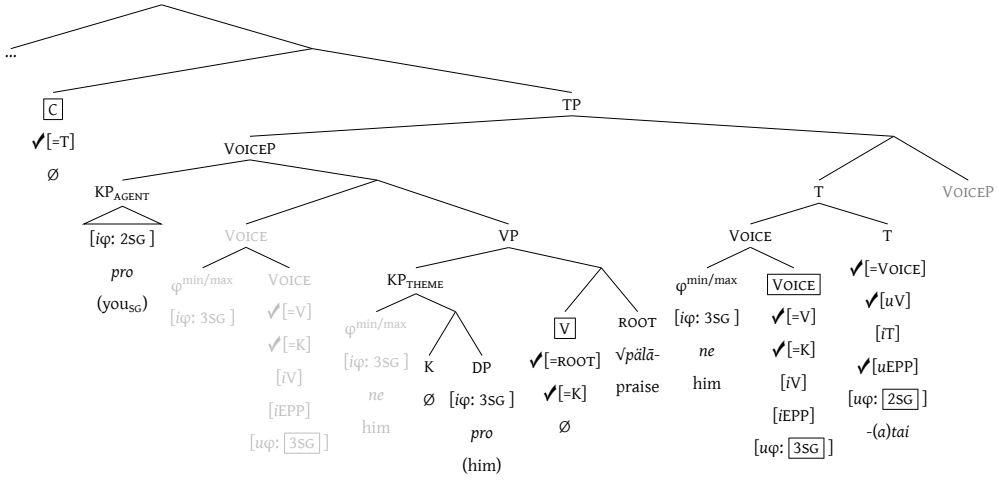
Subsequently, the syntactic object created undergoes further External Merge with C(omplementizer). Since C is another phase-defining head, the transfer domain of a lower phase-defining head undergoes Transfer. In our example, the lower phase-defining head is Voice, and its transfer domain is VP. This transfer domain contains the theme KP, V, and root. Since this KP's merge-mate also contains the verbalizer and the root, it asymmetrically c-commands them. Therefore, the theme KP linearly precedes the verbalizer and the root. The root and the verbalizer are merge-mates, which c-command each other. Although the Linear Correspondent Axiom cannot determine their linear order (Chapter 4), the headedness parameter determines the ordering,

the category-defining head V following the root. The root and the verbalizer are realized as the preterite-stem (/pəlá- + -Ø-/ →) *pälā-* in this example.

(5.12)

VP	**Transfer** ⟹	KP_{THEME}	Root V
		$Ø_{pro}$	/pəla- + -Ø-/

(5.13) Syntactic structure of (5.1; continued)



Finally, when the CP phase is complete, C's transfer domain (TP) undergoes Transfer. Since the agent KP (*pro* 'you$_{SG}$') asymmetrically c-commands the VP, the LCA places it before the theme KP (*pro* 'him'), the verbalizer, and the root. As the result of incorporation, T, Voice and φ form a complex head. There are two possible ways in which Vocabulary Insertion applies to this complex head. One is to analyze that VI targets all of these three terminals (φ, Voice, and T). In this case, vocabulary items are first inserted to φ, and then to Voice. The linear ordering of φ and Voice is Voice preceding φ: /Ø-ne/ Finally, a vocabulary item is inserted to T. T precedes Voice and φ, resulting in /-atay-Ø-ne/.

(5.14) Post-Transfer operations (1)

		[$φ^{min/max}$⁀Voice]⁀T		
(1)	VI: $φ_{[3SG]}$ ↔ /-ne/ VI: Voice ↔ /-Ø/	[/-ne/⁀/-Ø/]⁀T	→	/-Ø-ne/⁀T
(2)	VI: $T_{[PST, 2SG]}$ ↔ /-atay/ / [MID] ___	/Ø-ne/⁀/-atay/	→	/-atay-Ø-ne/

The other approach is to analyze that the complex consisting of φ, VOICE and T undergoes rebracketing, resulting in the structure [φ [VOICE T]]. After this operation, VOICE and T undergo FUSION (Halle and Marantz 1993, 1994) that fuses two sets of morphosyntactic feature bundles into a single set (VOICE-T). Subsequently, Vocabulary insertion applies, inserting the preterite-stem second-person singular middle ending /-atay/ (→ *-(a)tai*) to this newly created terminal (5.16). In both cases, the vocabulary item of a PC is specified as suffixal, and as a result it linearly follows VOICE or VOICE-T.

(5.15) Post-Transfer operations (2)

		$[\ \varphi^{min/max}\frown$VOICE$\ ]\frown$T	
(1)	Rebracketing	$\varphi^{min/max}\frown[\ $VOICE$\frown$T$\ ]$	
(2)	Fusion	$\varphi^{min/max}\frown$VOICE-T	
(3)	VI: $\varphi_{[3SG]} \leftrightarrow$ /-ne/ VI: VOICE-$T_{[PST,\ 2SG,\ MID]} \leftrightarrow$ /-atay/	/-ne/⌢/-atay/	→ /-atay-ne/

(5.16)

		KP_{AGENT}	KP_{THEME}	Root V	VOICE-T	$\varphi^{min/max}$
TP	**Transfer** ⟹	$Ø_{pro}$	$Ø_{pro}$	/pəla- + -Ø-	-atay	-ne/
				palā-	*-tai*	*-ne*

I have built the underlying syntactic object of a Tocharian sentence through the repeated application of Merge: External Merge of the root and the verbalizer (5.3), followed by another External Merge of the resulting syntactic object with an internal argument (5.4), another External Merge of the resulting object with the functional head VOICE (5.7), and so on. In addition to the repeated application of External Merge, T's formal features trigger incorporation (head-movement) of VOICE and Internal Merge of VOICEP (cf. Haegeman 2001 and Koopman and Szabolcsi 2001). The former creates the complex head, consisting of T and VOICE, spelled out as a subject-agreement marker, while the latter makes VOICEP that contains external and internal arguments, the root, and the verbalizer asymmetrically c-command T and VOICE.

(5.17) Derivational steps

Step	Operation	Consequence	Resulting structure
i	ExternalMerge(V, ROOT)		(5.3)
ii	ExternalMerge(5.3, 5.2)		(5.4)
iii	ExternalMerge(5.4, VOICE)	(1) Transfer of ROOT (2) Agree & Incorporation of φ	(5.7)
iv	ExternalMerge(5.7, KP_{AGENT})		(5.8)
v	ExternalMerge(5.8, T)	(1) Agree (2) Agree & Incorporation of VOICE	(5.10)
vi	InternalMerge(5.10, VOICEP)		(5.11)
vii	ExternalMerge(5.11, C)	Transfer of VP	(5.13)

As the result of these operations, we obtain the syntactic object that shows an SOV order when transferred.

When PCs represent the DO (theme) of a transitive verb, their licensor (VOICE) copies the values of person and number features from $\varphi^{min/max}$ in the internal argument. In contrast, when PCs represent the IO, the licensor finds the value of its φ-features in the non-core (i.e., non-internal) argument. In essence, because of Agree, the PC will correspond to the highest accessible $\varphi^{min/max}$. The underlying syntactic object of such an example and how it is built is shown in the following subsection.

5.1.2 PC representing an indirect object with various thematic roles

The previous subsection illustrated the derivation of the sentence with a PC representing a DO (theme). Let us proceed to example (3.3), repeated here as (5.18), in which a PC represents the indirect object (IO) with an addressee role.

(5.18) (= 3.3) TB *-me* (PL) = addressee of *akṣā-* '(s/he) proclaimed (this strophe) to X'

(ce śłok ***a)kṣā-me*** ¦
this.ACC.SG strophe proclaim.PST.3SG-PL

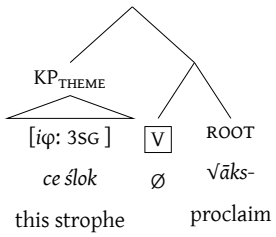
$k_u$ce tne wnolmi ¦ *yamantär* ‖ *krent yo(laiṃ yāmor)* ¦ ///
REL.ACC.SG here being.PL do.SUBJ.3PL good.ACC.SG bad.ACC.SG deed
'(The Buddha) **proclaimed** this strophe **to them**: "Whatever good or evil deed living beings do here ..."'

(B21a2; verse; [5¦4¦3]×4)

In the underlying syntactic object of (5.18), there is another functional head that introduces a non-core argument and assigns an addressee role. The PC represents an IO in this example because the licensor of a PC (VOICE) finds the value of person and number features ($\varphi^{min/max}$) in this non-core argument. The derivational step proceeds as follows. In the following tree representations, I omit selectional and formal features for the sake of expository simplicity.

Firstly, the root merges with the verbalizer. The resulting syntactic object then undergoes External Merge with an internal argument (*ce śłok* 'this strophe'), which has valued person and number features (third-person singular). The verbalizer assigns a theme role to this internal argument. As a result, we obtain the syntactic object (5.19).

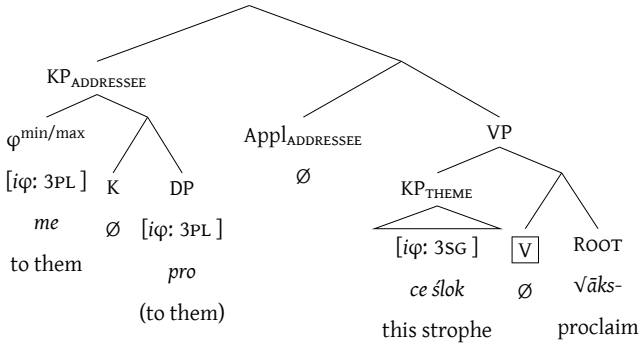
(5.19) Syntactic structure of *ce śłok akṣā-**me*** '(He) proclaimed this strophe **to them**' (to be continued)



This time, the resulting structure (5.19) merges with the functional head APPL(icative) (Pylkkänen's 2008 high applicative).[2] This APPL head introduces another argument and assigns a thematic role such as goal, source, addressee, experiencer, beneficiary, and location. In this example, $\text{APPL}_{\text{ADDRESSEE}}$, which merges with the verb of speech, assigns an addressee role, and the argument

introduced by APPL contains $\varphi^{min/max}$ whose value is third-person plural. The resulting syntactic object is shown in (5.20).

(5.20)

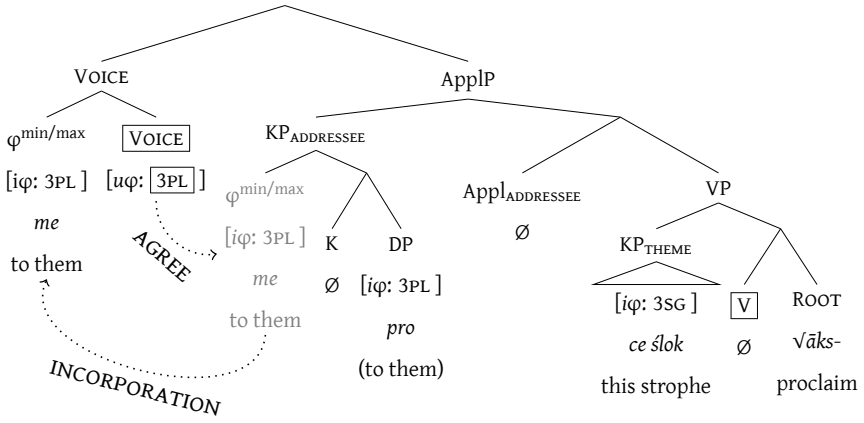


The syntactic object (5.20) then merges with the licensor of a PC (VOICE). It looks for valued φ-features in its merge-mate (i.e., 5.20) in a top-down fashion. Therefore, it first finds the value "3PL" of $\varphi^{min/max}$ in the non-core argument. Again, since $\varphi^{min/max}$ is a defective goal to VOICE, it undergoes incorporation, creating the complex head consisting of VOICE and $\varphi^{min/max}$ (5.21).

---

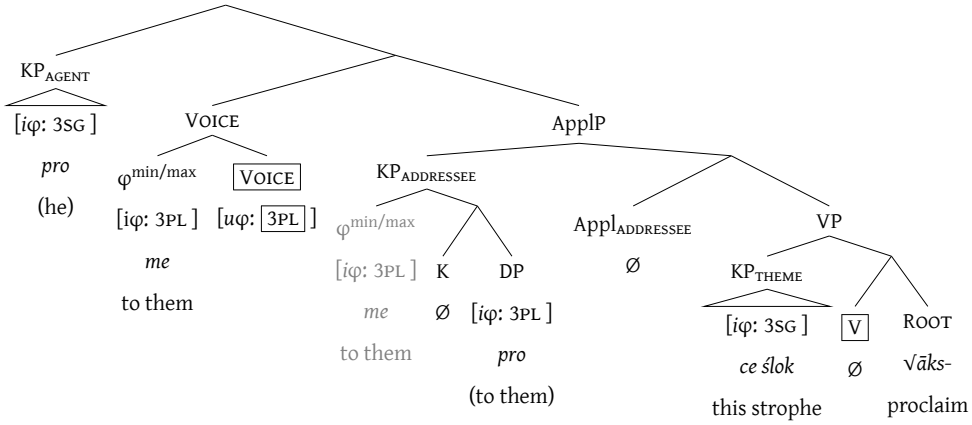
2. Pylkkänen (2008) distinguishes two types of applicative: high applicative and low applicative. The high applicative head merges with a verb phrase, introduces a non-core argument, and denotes the thematic relation between an individual and the Neo-Davidsonian event introduced by a verb (e.g., $[\![\text{HighAppl}_{\text{GOAL}}]\!] = \lambda x.\lambda e.\text{GOAL}(e, x)$). In contrast, a nominal expression introduced by the low applicative head does not relate to a neo-Davidsonian event but to the internal argument, denoting transfer of possession (e.g., $[\![\text{LowAppl}_{\text{RECIPIENT}}]\!] = \lambda y.\lambda x.\text{TO-THE-POSSESSION-OF}(x, y)$). The high applicative head may, in theory, merge recursively, introducing different thematic roles. One might be tempted to use these two applicative heads to explain the empirical fact that only ablative and allative case markers follow a PC: while the allative and ablative case markers realize the low applicative head, other secondary case markers realize the high applicative head. This approach predicts that the allative and ablative markers do not follow the IO of an intransitive verb since low applicatives are restricted to transitive verbs (Pylkkänen 2008). However, this prediction turns out to be false, as we find TA *yeṣ-äṃn-anac* '(he) went to her' [A222b6], an intransitive verb accompanying a PC and an allative marker, suggesting that the allative marker realizes a high applicative head. Since an IO c-commands a DO in both applicative constructions, whether a non-core argument is introduced by a high or low applicative head is not crucial for my analysis.

(5.21)



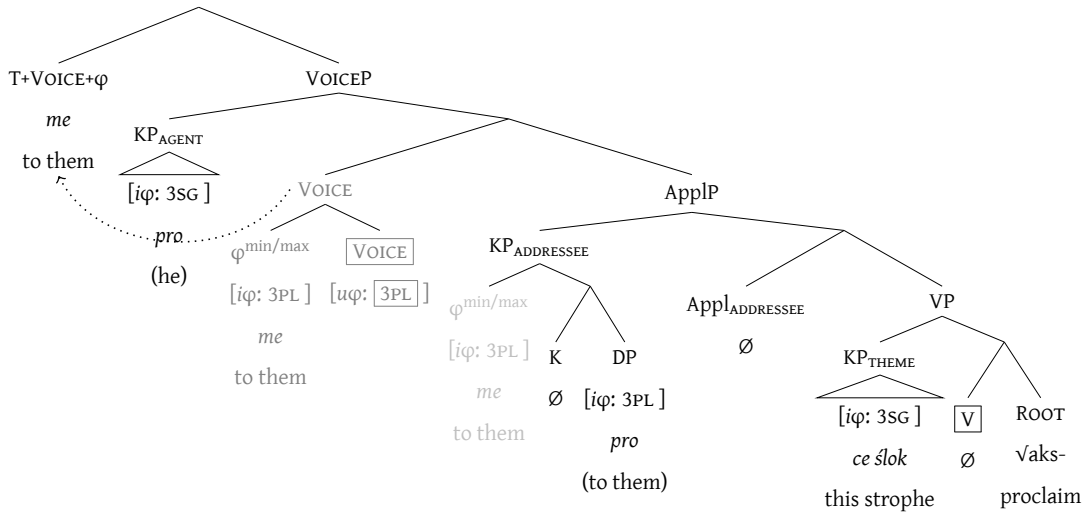
The rest of the derivation is the same as we saw in the first example. VOICE introduces an external argument (*pro*) and assigns an agent role (5.22).

(5.22)

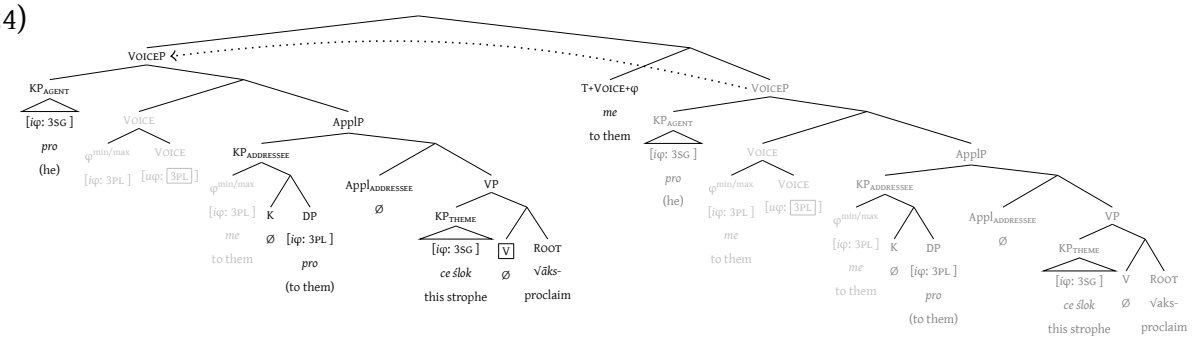


Subsequently, T merges with (5.22). T triggers head-movement of VOICE (5.23) and Internal Merge of VOICEP (5.24).

(5.23)

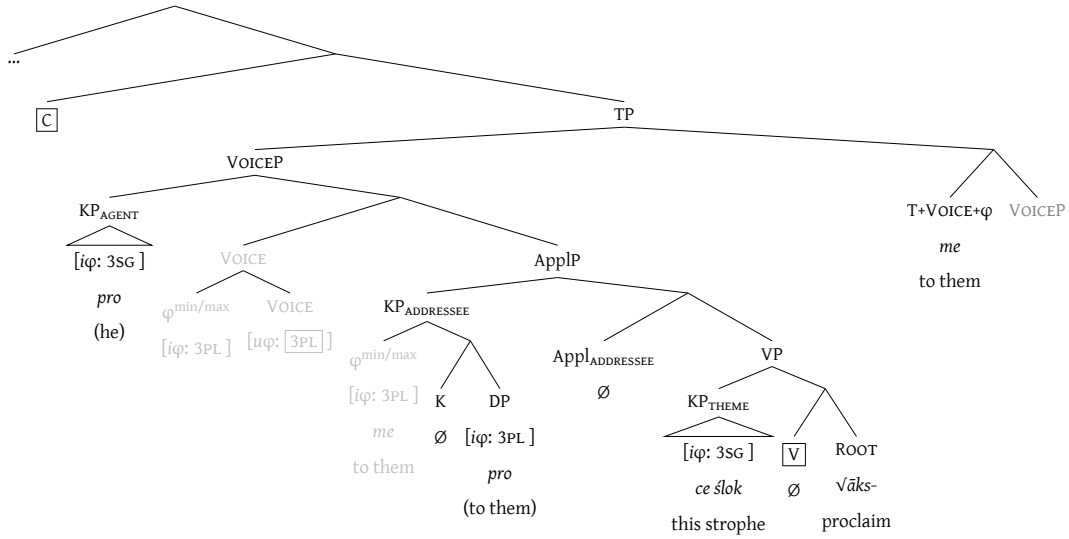


(5.24)



When C merges with a syntactic object, it defines its merge-mate (TP) as the transfer domain (5.25). Subsequently, when the CP phase is complete, this merge-mate undergoes Transfer.

(5.25)



In this way, $\varphi^{min/max}$, which originates in a non-core argument with an addressee role, clusters

with VOICE-T, and and appears as *-me* [PL], immediately following the preterite third-person singular active ending.

(5.26)

		KP_{AGENT}	$KP_{ADDRESSEE}$	Appl	KP_{THEME}	Root V	Voice-T	φ
TP	**Transfer** ⟹	$Ø_{pro}$	$Ø_{pro}$	-Ø	*ce ślok*	/aks- + -Ø-	-a	-me/
						akṣ-	*-ā*	*-me*

This model may also derive examples in which a PC, representing an IO, accompanies a secondary case marker (ablative TB *-meṃ*, TA *-anäṣ* or allative TB *-ś*, TA *-anac*). For example, the allative marker *-meṃ* follows a PC in (2.14), repeated here as (5.27). The PC in this example represents the source from which Upananda begged a cloak.

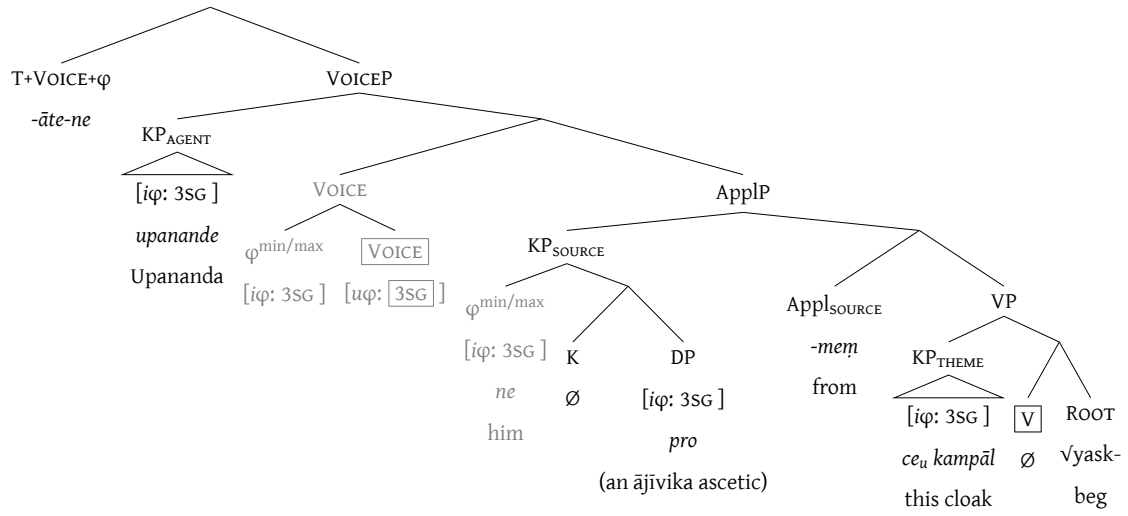
(5.27) (= 2.14) TB *-ne* (3SG) = source of *yaṣṣāte-* '(Upananda) begged (this cloak) from X'

upanande *ce*$_u$ *kampāl* [b2] ***yaṣṣāte-ne-meṃ*** *mā*
Upananda DEM.M.ACC.SG cloak beg.PST.MID.3SG-3SG-ABL NEG
wsā-ne •
give.PST.ACT.3SG-3SG

'Upananda$_i$ **begged** this cloak **from him$_j$** (= an Ājīvika ascetic), (but he$_j$) did not give (it) to him$_i$.' (PKAS18Ab2)

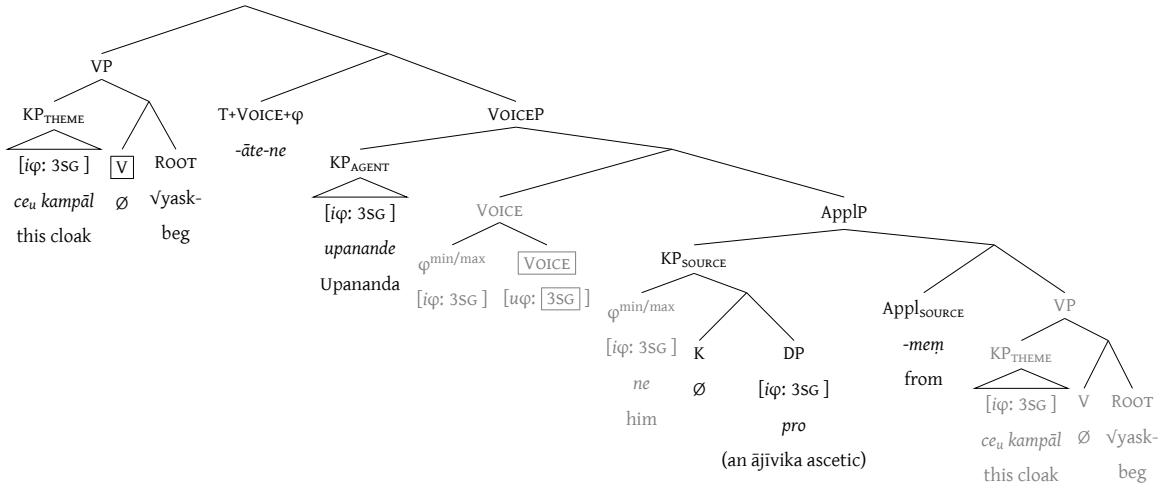
The underlying syntactic object of (5.27) is generated in the same way as (5.18) until the tense head T is merged. In the previous examples (e.g., 5.25), T's EPP feature triggers Internal Merge of VOICEP. In this case, however, I analyze it as causing Internal Merge of VP, rather than VOICEP.

(5.28) The structure of (5.27)



As the result of INTERNALMERGE(5.28, VP), we obtain (5.29).

(5.29) The structure of (5.27)



With subsequent Internal Merge of the agent KP (*upanande* 'Upananda') and the source KP (*pro* 'an ājīvika ascetic'), we obtain the syntactic object whose Appl head surfaces as *-meṃ*, immediately following a PC (5.27).

(5.30)

TP **Transfer** ⟹	KP_{AGENT}	KP_{SOURCE}	KP_{THEME}	Root V	Voice-T	φ	$Appl_{SOURCE}$
	upananda	$Ø_{pro}$	*ceu kampāl*	/yask- + -Ø-	-ate	-ne/	/-men/
				yaṣṣ-	*-āte*	*-ne*	*-meṃ*

5.1.3 PC representing a possessor

So far, I have shown that my model may derive the Tocharian examples whose PC represents a DO or an IO. However, PCs may also express the possessor semantically associated with a DO or an IO. The following subsection shows that the syntactic model developed in the previous chapter may also derive such examples. For example, let us consider (5.31), which displays a PC representing the inalienable possessor of a DO with a theme role.

(5.31) FUNCTION: inalienable possessor of a DO (theme)

ersna ***lkāskeṃñ-c*** ¦ *pä(l)l(āntär-ci* ¦) ///
form.F.PL see.NPST.ACT.3PL-2SG praise.NPST.MID.3PL-2SG
'(They) **see your** (beautiful) form [*lit.* forms]. (They) praise you. [...]'

(B213b2; verse; [4¦4¦4]×4)

Alexiadou (2003) argues that an alienable and inalienable possession have different underlying syntactic structures by pointing out three pieces of evidence. One is that inalienable possessors cannot appear after a copula in Modern Greek (5.32ii), but inalienable ones may (5.33ii).

(5.32) Inalienable possessor cannot appear after a copula in Modern Greek

i. *i miti* ***tu Jani***
the nose the John.GEN
'John's nose' (Alexiadou 2003: 172 ex. 9a)

ii. **i miti ine* ***tu Jani***
the nose is the John.GEN
(Intended) 'The nose is John's.' (Alexiadou 2003: 172 ex. 10a)

(5.33) Alienable possessor may appear after a copula in Modern Greek

i. *to vivlio* ***tu Jani***
the book the John.GEN
'John's book' (Alexiadou 2003: 172 ex. 9b)

ii. *to vivlio ine* ***tu Jani***
the book is the John.GEN

'The book is John's.' (Alexiadou 2003: 172 ex. 10b)

This parallels the difference between the internal and non-internal arguments of a nominal expression. For example, *tu ktiriu* 'of the building' is the internal argument (theme) of *i katastrofi* 'the destruction' (5.34i), and it cannot appear after a copula (5.34ii). In contrast, *ja to Chomsky* 'about Chomsky' is an adjunct of *to vivlio* 'the book' in (5.35i). This adjunct may appear after a copula as in (5.35ii). This suggests that inalienable possessors are more tightly combined with a possessum than alienable ones and behave like an internal argument (theme). In contrast, alienable possessors are more loosely associated with a possessum and behave like an external argument or an adjunct.

(5.34) The internal argument of a nominal expression cannot appear after a copula

i. *i katastrofi* ***tu ktiriu***
the destruction the building.GEN
'the destruction of the building'

ii. **i katastrofi* *itan* ***tu ktiriu***
the destruction was the building.GEN
(Intended) 'The destruction was the building's.' (Alexiadou 2003: 172 ex. 12)

(5.35) The non-internal argument of a nominal expression may appear after a copula

i. *to vivlio* ***ja to Chomsky***
the book about the Chomsky
'the book about Chomsky' (Alexiadou 2003: 172 ex. 11a)

ii. *to vivlio itan* ***ja to Chomsky***
The book was about the Chomsky
'The book was about Chomsky.' (Alexiadou 2003: 172 ex. 11b)

Based on such evidence, she concludes that alienable and inalienable possession have different syntactic structures. She proposes that a functional head (labeled Poss) selects an alienable possessor and assigns a possessor role in the former. In contrast, an inalienable possessor is either the complement of a possessum, or the complement of a functional head encoding the inalienable relation interpretation. Since I analyze a possessum (at least) to consist of an acategorical

root (representing a possessum) and a category-defining head N, I consider that the category-defining head N selects an inalienable possessor and assigns inalienable possession interpretation (e.g., part-whole relation).[3] Though it is not always the case that part-whole and kinship relations, as well as states of mind are classified as belonging to the class of inalienable possession (Dixon 2010), in the absence of counterarguments, I consider them to belong to the class of inalienable possession in Tocharian.

The underlying syntactic object of (5.31), repeated here as (5.36), is generated through the following steps.

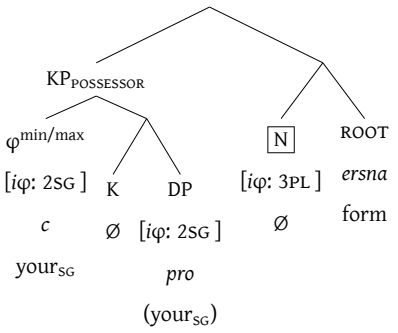
(5.36) (= 5.31) FUNCTION: inalienable possessor of a DO (theme)

ersna ***lkāskeṃñ-c*** ¦ *pä(l)l(āntär-ci* ¦) ///
form.F.PL see.NPST.ACT.3PL-2SG praise.NPST.MID.3PL-2SG
'(They) **see your** (beautiful) form [*lit.* forms]. (They) praise you. [...]'

(B213b2; verse; [4¦4¦4]×4)

Firstly, the noun-defining head N merges with the root (*ersna*). The resulting structure undergoes External Merge with a possessor, and N assigns a part-whole interpretation to it (5.37). The possessor contains $\varphi^{min/max}$ whose value is second-person singular.

(5.37) Syntactic structure of (5.31) (to be continued)

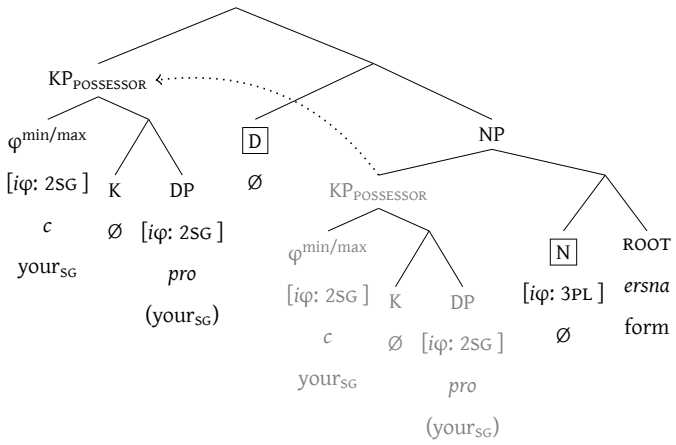


3. I assume that alienable possessors also move to the edge of K. However, examples of a single PC representing either kinship or alienable possession are very rare. Why this is so is an open question.

One might reasonably wonder whether the root first undergoes External Merge with the inalienable possessor, and the resulting structure then merges with the noun-defining head N. We do not adopt this view since it would need an additional stipulation. If the root first merged with the inalienable possessor, the possessor would be c-commanded by the noun-defining head N. Since N is a category-defining head, it defines its merge-mate as the transfer domain (§4.2). When another phase-defining head (D) merges in the course of derivation, the possessor, contained in the transfer domain of N, would undergo Transfer and further syntactic computation may no longer manipulate it. Therefore, the possessor would need to undergo Internal Merge to be outside of the transfer domain so that it may be available for further syntactic operation. This additional operation is dispensable if we assume that an inalienable possessor starts outside of the transfer domain of N. Moreover, if we consider the selectional feature [=K] to be in the noun-defining head, then the root is consistent with the other examples we have seen so far in that it does not have any selectional feature.

Secondly, the functional head D merges with the syntactic object (5.37). This functional head also triggers Internal Merge of the possessor KP. Since D is a phase-defining head, the transfer domain of the lower phase-defining head undergoes Transfer (5.39).

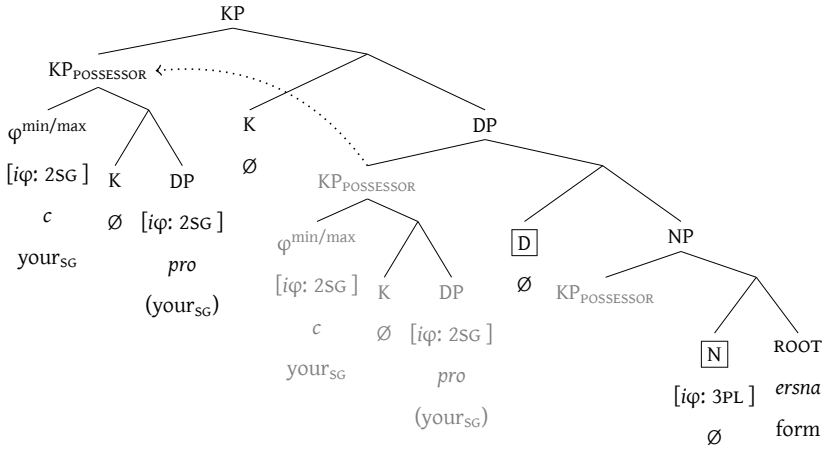
(5.38) Syntactic structure of (5.31) (continued)



(5.39) ROOT $\xrightarrow{\textbf{Transfer}}$ root
ersna

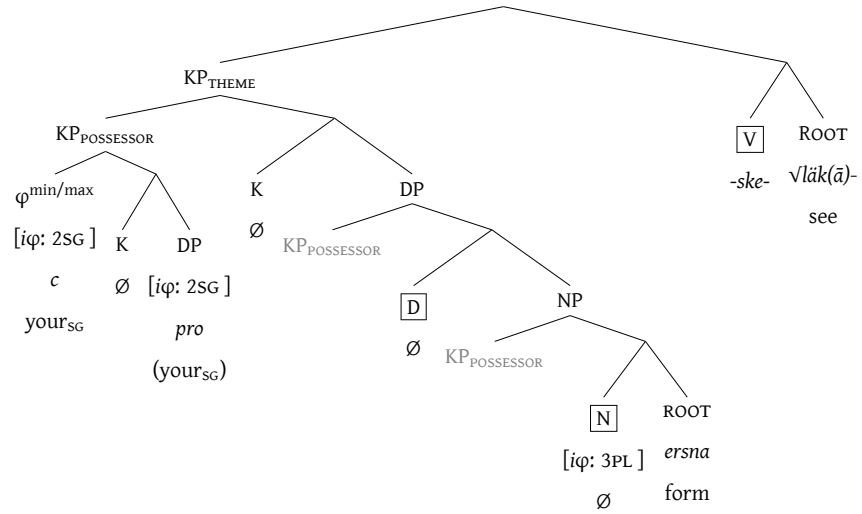
Thirdly, another functional head K merges with (5.38). Again, it triggers Internal Merge of the possessor KP. The resulting structure (5.38) later serves as an internal argument in the derivation.

(5.40) Syntactic structure of (5.31) (continued)



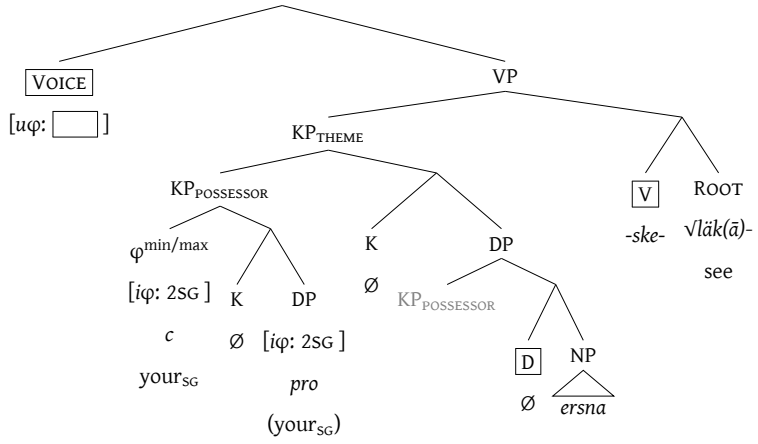
Fourthly, the verbalizer merges with the root. The resulting syntactic object then undergoes External Merge with the internal argument (5.38). The verbalizer assigns a theme role to the internal argument. The resulting syntactic object is shown in (5.41).

(5.41)



The licensor of a PC (VOICE) then merges with the structure (5.41). It has unvalued φ-features that look for values in its merge-mate (i.e., 5.41) in a top-down manner.

(5.42)

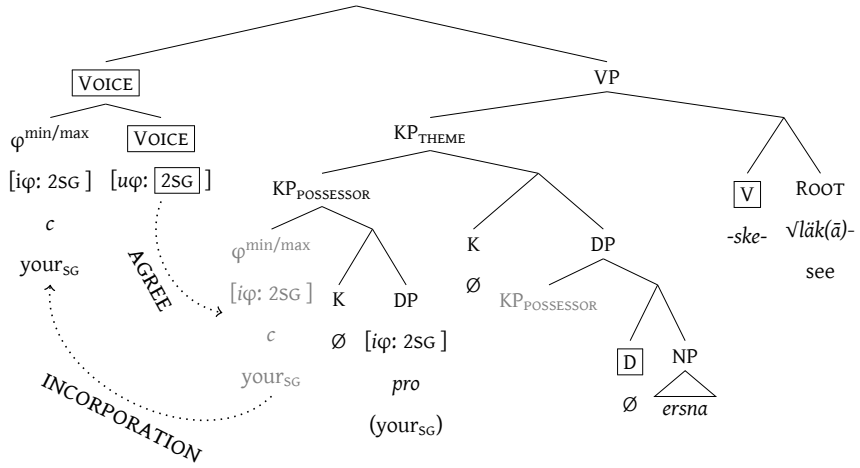


(5.43) NP, ROOT **Transfer** ⟹ NP Root

ersna /ləka-/

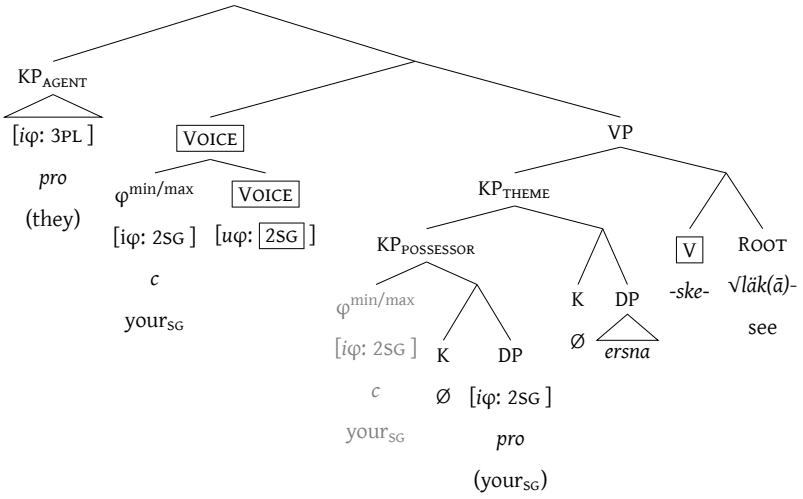
The unvalued φ-features on VOICE first find $\varphi^{min/max}$ and copy the value "2SG". Furthermore, since $\varphi^{min/max}$ is a defective goal to VOICE, it adjoins to VOICE and creates a complex head.

(5.44)



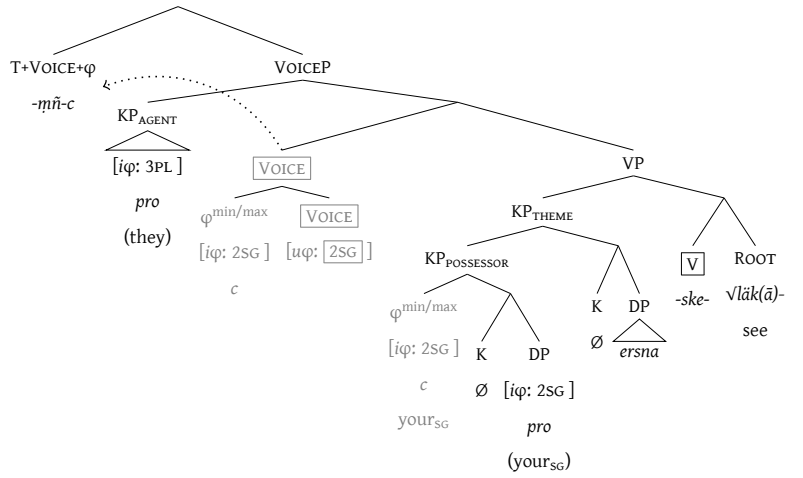
The rest of the derivation is the same as we saw in the first and second examples. VOICE triggers External Merge of an external argument (5.45), and assigns an agent role to it.

(5.45)

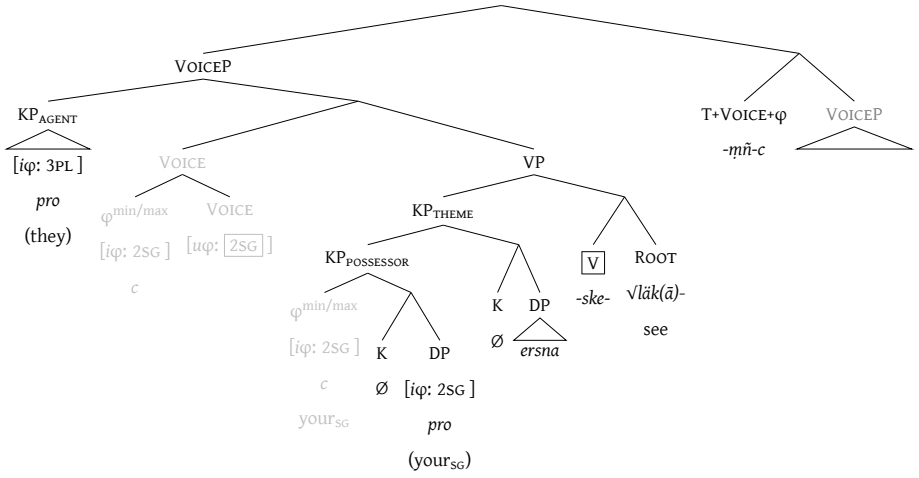


The syntactic object (5.45) undergoes External Merge with the tense head T. T undergoes φ-agreement with the external argument (*pro* 'they'). T triggers head-movement of VOICE (5.46) and Internal Merge of VOICEP. The resulting structure is (5.47).

(5.46)

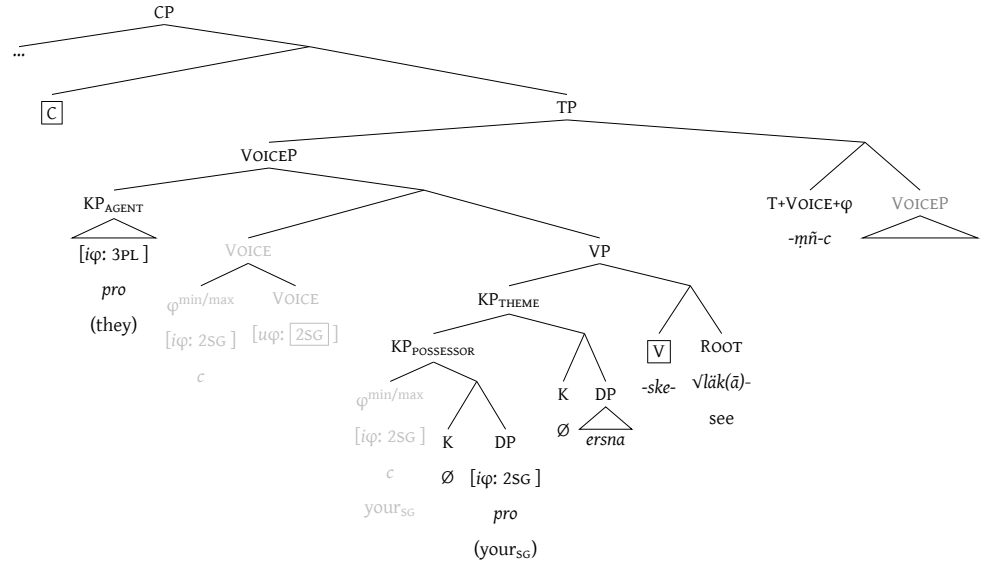


(5.47)



When the CP phase is complete (5.48), TP, the transfer domain of C, undergoes Transfer. In this way, the second-person singular PC *-c*, representing the inalienable possessor of *ersna*, appears not before the possessum, but after the present third-person plural active ending (/-n/ →) *ṃñ*.

(5.48)



(5.49)

		KP AGENT	[KP THEME	KP POSSESSOR	DP	]	Root V	Voice-T	φ
TP	**Transfer** ⟹	$Ø_{pro}$		$Ø_{pro}$	*ersna*		/ləka- + -ske-	-n	-cə/
							lkāske-	*-ṃñ*	*-c*

PCs may also represent the possessor of an IO (3.49, repeated here as 5.50) and a subject. I will come back to the latter case in the following subsection. In the former case, an underlying syn-

tactic object has a structure similar to (5.48).

(5.50) [TB] (= 3.49) *-ne* = Possessor of a location

oṅkolm= *eñcwa-ñña* ¦ *waltsanoy-n=* *āsta* *lykaśke* :
she-elephant iron-ADJZ.F.NOM.SG crush.ACT.IMPF.3SG-3SG bone small.NOM.SG

[b5] *ṣale* *säl(pa)mo* ¦ ***(kälyi)tär-ne*** *kektsent-sa* : 70-3
mountain blazing.NOM.SG stand.MID.IMPF.3SG-3SG body-PERL

'An iron she-elephant crushed his bones [to] small [bits]. [73c] A glowing-hot mountain **(sto)od** on **his** body. [73d]'

(B22b4; trans. by CEToM; verse; [5¦7]×4)

The possessor KP that contains $\varphi^{min/max}$ is selected either by N with an inalienable relation or by Poss with an alienable possession role, and VOICE, the licensor of a PC, copies the person and number feature of $\varphi^{min/max}$. This defective goal ($\varphi^{min/max}$) undergoes incorporation to VOICE, and as a result, a PC appears not before an IO but immediately after a finite verb, semantically representing the possessor of an IO.

5.1.4 Interim summary and predictions

I have built a model which accounts for the multifunctionality of the Tocharian PCs. They spell out person and number features ($\varphi^{min/max}$) introduced at various positions to which a thematic role is assigned. They are licensed by VOICE, and when VOICE copies the value of $\varphi^{min/max}$, the former incorporates the latter, forming a complex head. Subsequently, the tense head triggers head-movement of this complex head. As the Voice + T complex is realized as an inflectional ending, PCs always follow a finite verb. I have also shown that my model may derive examples in which a secondary case marker follows a PC just by stipulating that VP, rather than VOICEP, is the target of the Internal Merge that T triggers.

If this analysis is on the right track, we may impose a strict restriction on the distribution of the Tocharian PCs. Suppose we follow the standard assumption that a probe searches a goal in its c-commanding domain (i.e., in its merge-mate). In that case, it is inevitable to conclude that a probe cannot undergo Agree with an external argument because the former does not c-command

the latter.[4] Therefore, this analysis predicts that Tocharian PCs cannot semantically represent the possessor associated with an external argument.

(5.51) Prediction:

Pronominal clitics cannot semantically represent the possessor associated with an external argument in Tocharian A and B.

I have examined 608 examples of TB and 551 examples of TA that contained a PC. It turned out that there is no example in which a PC spells out the possessor associated with the subject of a transitive verb. It is worth highlighting that an independent personal pronoun consistently represents the pronominal possessor associated with a transitive subject. For example, *procer* 'brother' is the subject of the transitive verb *tsāka* '(s/he) pulled out X' in (5.52). This transitive subject carries the independent form of the first-person pronoun *ñi* 'my' as its inalienable possessor. Likewise, the independent personal pronoun *nāñi* 'my' represents the possessor of *klośäṃ* 'two ears,' which is the subject of the transitive verb *klyosnseñc* '(they) hear X.'

(5.52) [TB] Independent personal pronoun *ñi* 'my' [GEN.1SG] represents the (inalienable) possessor associated with a transitive subject

*ente procer **ñi** tsāka eś-ne wärkṣä(lt-sa) ///*
when brother my put.out.PST.3SG eye-DU violence-PERL
'When **my** brother pulled out (my) eyes with violence...' (Or 8212.163 b1)

(5.53) [TA] Independent personal pronoun *nāñi* 'my' [GEN.1SG.F] represents the (inalienable) possessor associated with a transitive subject

(lke)ñc pe aśäṃ krant wramäṃ ¦ swāräṃ rake
see.NPST.ACT.3PL also eye.DU good.PL thing.PL sweet.ACC.SG word.SG
*klyosnseñc pe ¦ klośäṃ **nāñi** :*
hear.NPST.ACT.3PL also ear.DU GEN.1SG.F
'[My] eyes also (se)e the good things, **my** ears also hear the sweet word.'

(A58b3; trans. by CEToM; verse; [7¦7¦4]×4)

4. Some alternative models enable a probe to undergo φ-agreement with a goal outside the c-commanding domain (see, e.g., Bejár and Rezac 2009).

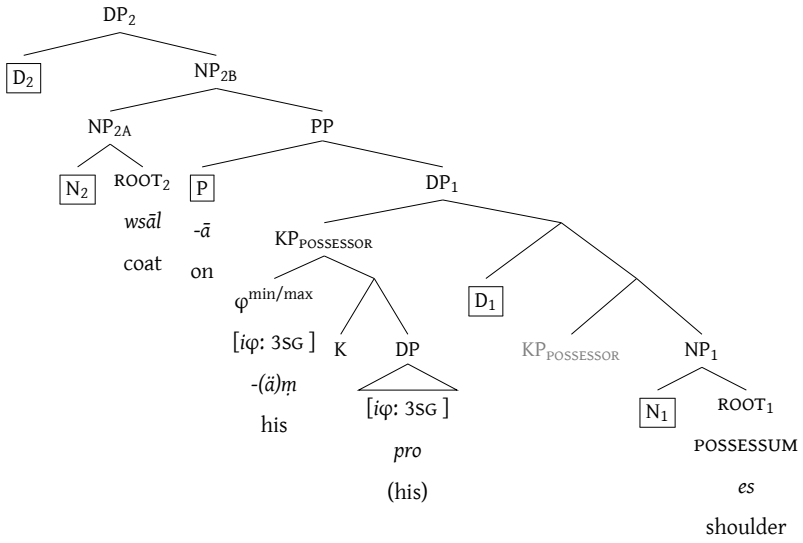
Furthermore, my analysis predicts that when the licensor of a PC is looking for valued φ-features, if $\varphi^{min/max}$ is contained in the domain that has already undergone Transfer, the licensor should not be able to find $\varphi^{min/max}$. Therefore, $\varphi^{min/max}$ should never be realized as a PC. More specifically, VOICE may see an internal argument and the non-core argument introduced by Appl, but not another nominal expression contained within the argument as an adjunct. If this another nominal expression has a possessor, it must be invisible to the licensor also. Therefore, my analysis predicts that PCs cannot represent the possessor of the nominal expression contained in another nominal expression. The possessor would undergo Transfer before the licensor of a PC (VOICE) merges with a syntactic object. The following syntactic structure (5.55) illustrates the unattested hypothetical nominal expression that contains another nominal expression as an adjunct (TA †*esā wsālyo ... -(ä)ṃ* 'with the coat on his shoulder' where *-(ä)ṃ* represents the possessor of *esā* 'on the shoulder'; cf. A184b3 *esā wsālyo* 'with the coat on the shoulder' [5.54]).

(5.54) [TA] Nominal expression *esā* 'on the shoulder' contained in *wsālyo* 'with the coat' as an adjunct

/// *·k· su oki* : *es-ā* *wsāl-yo* *yä*[b4] ///
as shoulder-PERL coat-INS
'... With the coat on the shoulder ...'

(A184b3; verse)

(5.55) [TA] Unattested hypothetical example (†*esā wsāl ... -**(ä)ṃ*** 'the coat on **his** shoulder')



In this example, DP_1 (representing 'his shoulder') is contained in DP_2 (representing 'the coat on his shoulder'), and DP_1 contains a possessor KP. Squared categories represent phase-defining heads that trigger Transfer of the transfer domain of a lower phase-defining head. When D_2 merges with NP_{2B}, N_2's transfer domain ($Root_2$) and P's transfer domain (DP_1) undergo Transfer. Therefore, subsequent syntactic operations may no longer manipulate DP_1's internal structure. Since $\varphi^{min/max}$ is contained in DP_1, it is invisible to the licensor (VOICE) that merges with the structure later. In this way, my analysis predicts that PCs cannot represent the possessor associated with the nominal expression contained in another nominal expression as an adjunct.

(5.56) Prediction:

In Tocharian A and B, pronominal clitics cannot semantically represent the possessor associated with the nominal expression contained in another nominal expression as an adjunct.

This prediction is also borne out from our corpus study. It is also consistent with the observation made by Meunier (2015), who examined the attestations of the first-person singular PC and noted that there is no example in which a PC is used adnominally. My analysis predicts that PCs cannot be used adnominally unless they are visible to the licensor (VOICE).

Moreover, my analysis predicts that if there is a licensor that c-commands an external argument,

the c-commanded external argument may undergo φ-agreement with the licensor and may thus surface as a PC.

(5.57) Prediction:

If there is a functional head with unvalued φ-features c-commanding an external argument, the c-commanded external argument may surface as a PC.

This prediction is also borne out as the following three observations show.

(5.58) Observations:

i. Tocharian PCs may represent the causee of a morphological causative (5.59).

ii. Tocharian PCs may represent the agent of a (transitive) preterite participle (5.67).

iii. Tocharian PCs may represent the agent of a (transitive) infinitive (5.75).

As example (5.59) shows, PCs may represent the causee of a causative verb. In this example, the plural PC *-me* serves as the causee of *lyāmate* '(s/he) made X be seated,' which is the morphological causative based on the TB root √*läm(ā)-* 'to sit.'

(5.59) [TB] *-me* = causee of *lyāmate* '(he) made X be seated'

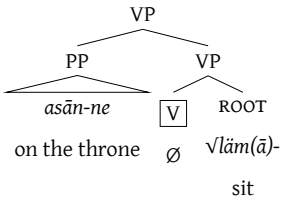
tane araṇemi walo brāhmaṇe-ṃ wratsai tsäṅkormeṃ
then Aranemi king brahmins-ACC in.front.of rise.ABS

*käṣṣī-ñ̈ñe yäkne-sa asān-ne lyāmate-**me***
teacher-ADJZ way-PERL seat-LOC be.seated.CAUS.PST.ACT.3SG-PL

'Then, King Araṇemi, having stood up in front of the brahmins, made **them** sit down on the throne in the manner of a teacher.' (B81b6; prose)

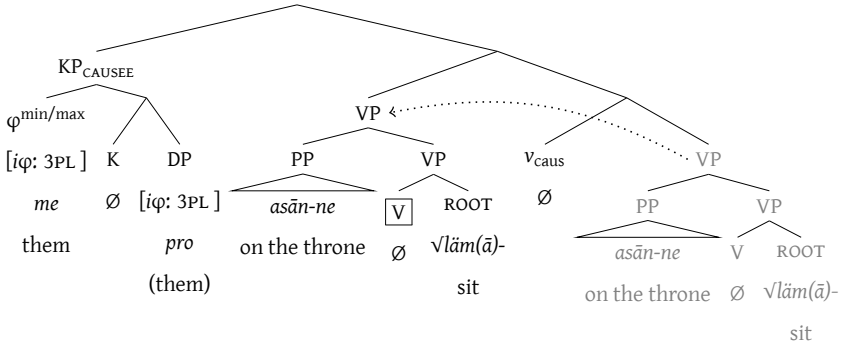
Let us look at the derivation of the syntactic object linearized as (5.59). Firstly, the verb-defining head V merges with the root. The resulting syntactic object then undergoes External Merge with the locative-marked phrase *asān-ne* 'on the throne.' As a result, we obtain (5.60).

(5.60)



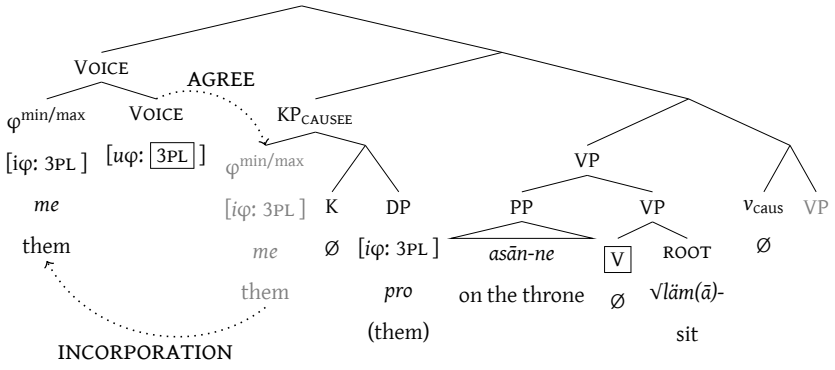
Secondly, the causative head (represented as v_{CAUS}) merges with the structure, triggering the Internal Merge of the VP. This functional head also introduces an external argument and assigns a causee role (5.61).[5] The external argument introduced is a KP, containing $\varphi^{\text{min/max}}$ whose value is third-person plural.

(5.61)



Thirdly, another functional head (VOICE) merges with (5.61). It has unvalued φ-features, and agrees with $\varphi^{\text{min/max}}$ in the causee KP, and incorporates it (5.62).

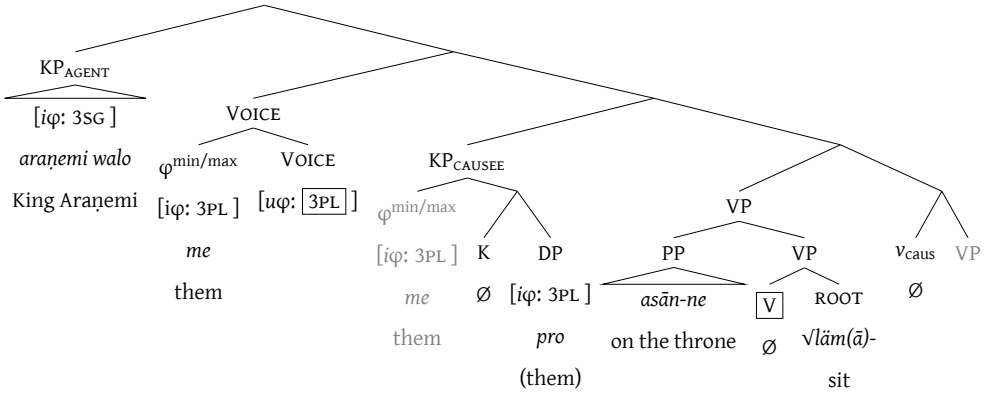
(5.62)



The VOICE head also introduces another external argument (*araṇemi walo* 'King Araṇemi'), and assigns an agent role (5.63).

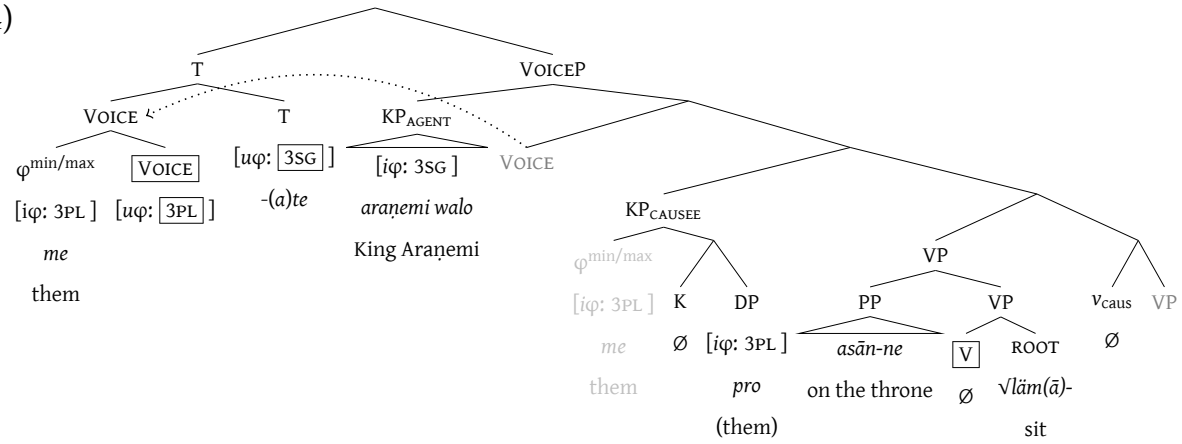
5. Strictly speaking, the external argument is introduced by a different functional head since the antisymmetric approach dissolves the distinction between a specifier and an adjunct, and bans multiple specifiers/adjuncts (Kayne 1994).

(5.63)



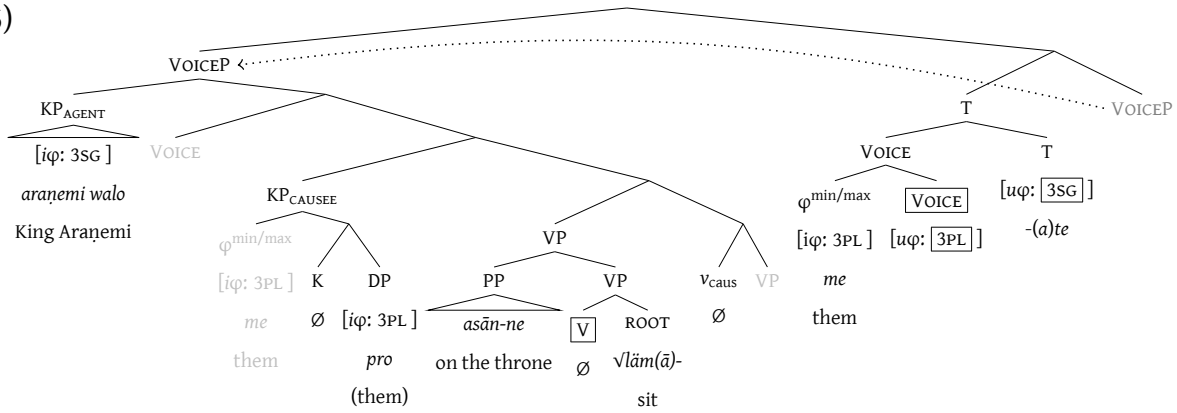
The rest of the derivation is the same as we have seen earlier. The tense head T merges with (5.63). It undergoes φ-agreement with the agent KP, surfacing as the subject-agreement marker *-(a)te*. It also triggers the head-movement of the VOICE + φ complex to T (5.64).

(5.64)



The tense head also triggers Internal Merge of VOICEP. As a result, we acquire (5.65).

(5.65)



When this syntactic object undergoes Transfer, V, Root and v_{caus} surface as the causativized

preterite stem (/lyáma-/ →) *lyāma-* 'to make X sit down', and $\varphi^{min/max}$, representing the causee of *lyāmate-*, appears immediately after the Voice+T complex as the plural PC *-me*.

(5.66) Syntactic structure of (5.59)

TP	**Transfer** ⟹	KP_{AGENT}	…	$PP_{LOCATION}$	Root V v_{caus}	Voice-T	φ
		araṇemi walo		*asān-ne*	*lyāma-*	*-(a)te*	*-me*

In the following example (5.67), the plural PC *-me* undergoes clitic climbing to the finite auxiliary *tākan* '(it) will be' and serves as the agent of the preterite participle *kakraupau* 'assembled.'

(5.67) [TB] *-me* = agent of a preterite participle, hosted by *tākan* '(it) will be'

tane ṣemi ksa onolmi yāmor yāmoṣ
here one.M.NOM.PL some living.being.NOM.PL deed do.PTCP.M.NOM.PL

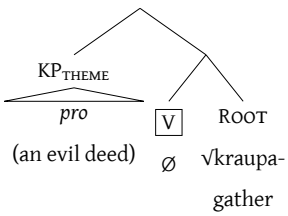
*nraiy-ne cmelye-sa ka(krau)pau ṣpä tākan-**me***
hell-LOC of.birth-PERL assemble.PTCP.M.NOM.SG CONJ COP.SUBJ.3SG-PL

'[There are] some beings who have done a deed, and by being reborn in hell (an evil deed) will be accumulated **by them**.' (PKAS7Ca5; verse [5¦7]×4)

This example suggests the existence of a licensor that surfaces as a finite auxiliary. It starts above VOICE and finds valued person and number features in the external argument. It also triggers incorporation, resulting in clitic climbing.

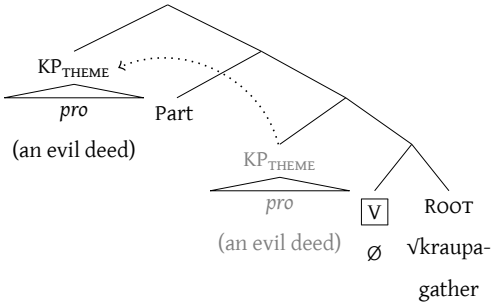
The following sequence of processes create the underlying syntactic object of (5.67), where a PC represents the agent of a preterite participle. Firstly, the verb-defining head merges with the root, introducing an internal argument and assigning a theme role (5.68).

(5.68) Syntactic structure of (5.67)



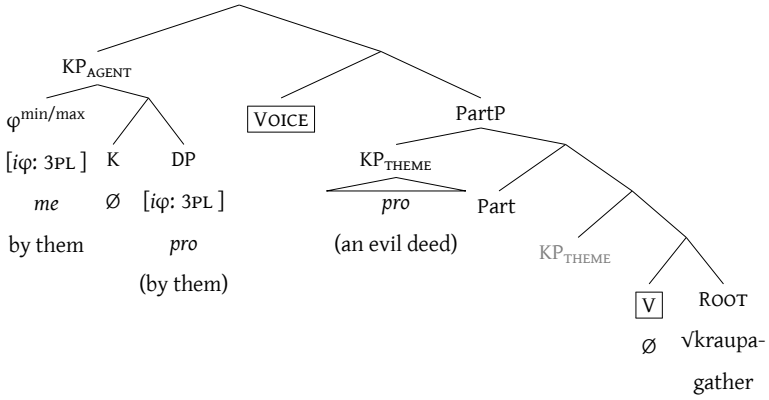
Secondly, the resulting syntactic object merges with the functional head Part(iciple) that later surfaces as a preterite participle *kakraupau* with the verbalizer and the root. The internal argument then undergoes Internal Merge. The resulting syntactic object is shown in (5.69).

(5.69) Syntactic structure of (5.67)



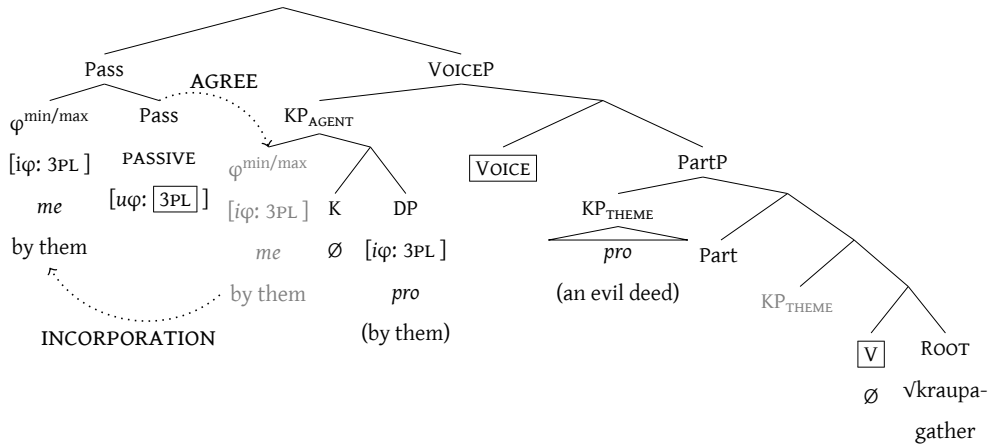
Thirdly, VOICE merges with (5.69), introducing an external argument and assigning an agent role (5.70). The external argument is a KP, containing $\varphi^{min/max}$ whose value is third-person plural.

(5.70)



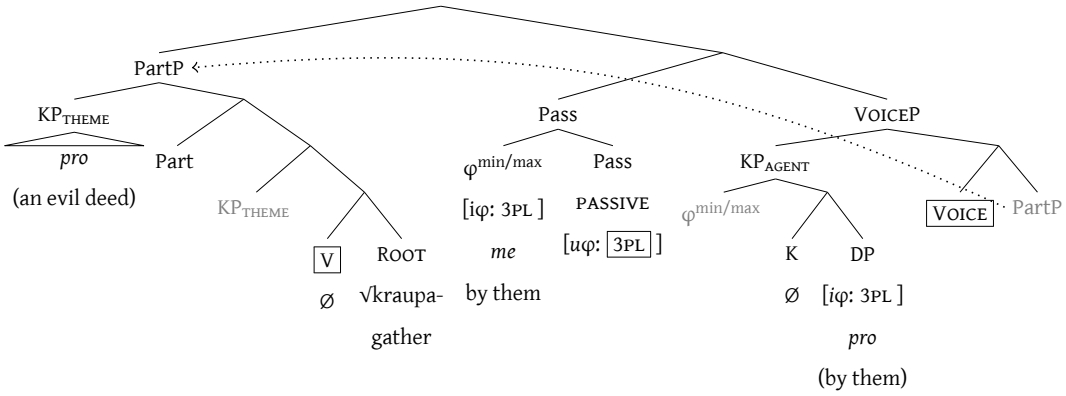
Fourthly, the resulting syntactic object (5.70) undergoes External Merge with another functional head Pass(ive). This functional head has unvalued φ-features, and copies the value of $\varphi^{min/max}$ in the agent KP. As the result of Agree, $\varphi^{min/max}$ undergoes incorporation to Pass (5.71).

(5.71)



The functional head Pass also triggers Internal Merge of PartP, "smuggling" (Collins 2005) the internal argument above the external argument (5.72).

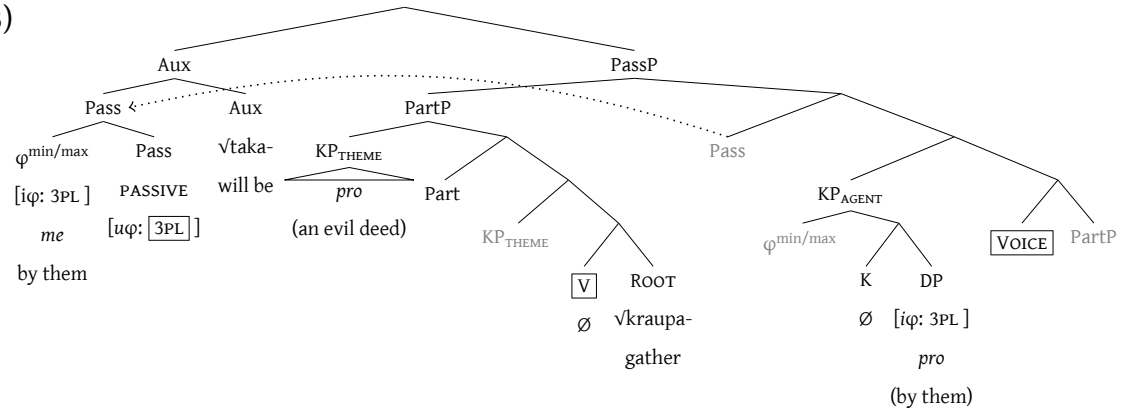
(5.72)



Fifthly, Aux(iliary) merges with (5.72). It triggers the head-movement of Pass and creating the complex head consisting of Aux, Pass, and $\varphi^{min/max}$.[6]

6. In the derivation in (5.73), one has to stipulate that Pass does not have φ-features and that AUX does not attract PartP but Pass.

(5.73)



Subsequently, the tense head T then merges with the structure. This time, it triggers head-movement of the Aux-Pass-φ complex and creates a complex head. When the resulting syntactic object undergoes Transfer, the plural PC *-me*, representing the agent of the preterite participle, clusters with the Pass-Aux-T complex, that surfaces as the finite auxiliary *tākan-* '(it) will be.'

(5.74) Syntactic structure of (5.67)

TP	**Transfer** ⟹	…	KP_{THEME}	…	KP_{AGENT}	…	Root V Part	Pass+Aux+T	φ
		…	$Ø_{pro}$	…	$Ø_{pro}$	…	*kakraupau*	*tākan*	*-me*

PCs may also spell out the agent of an infinitive when they may undergo clitic climbing. In (5.75), the third-person singular PC *-ne* has the agent role to the (transitive) infinitive *wentsi* 'to speak,' which takes *waike waṣe käskor wat* 'lie, untruth, or gossip' as the internal argument.

(5.75) [TB] *-ne* = agent of the infinitive *wentsi* 'to say X'

*waike waṣe ṣpä käskor wat <u>wen-tsi</u> klyin-**ne***
lie gossip CONJ gossip CONJ say-INF be.neccesary.SUBJ.3SG-3SG

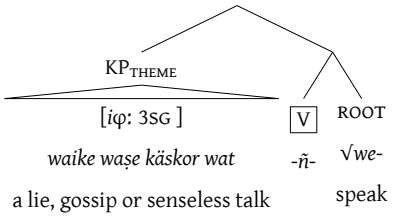
po weṣṣäṃ śwātsi-ntse pernesa :
all say.NPST.3SG food-GEN for.the.sake.of

'And if it is necessary **for him** (= the ignorant one) <u>to utter</u> a lie, gossip or senseless talk, he says everything for the sake of food.' (B31b4; verse [8¦7¦6]×2 + [9¦9] +[7¦6])

This example suggests that there is a functional head that serves as the licensor of a PC and that the licensor is merged above VOICE. Let us look at each of the steps that derive the underlying

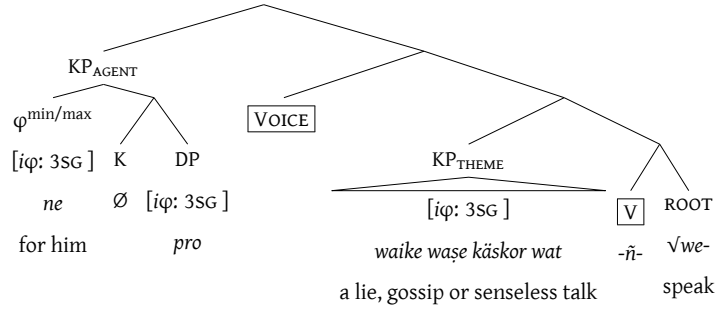
syntactic object of (5.75). Firstly, the verbalizer merges with the root. It also triggers External Merge of an internal argument and assigns a theme role. The resulting syntactic object is (5.76).

(5.76)



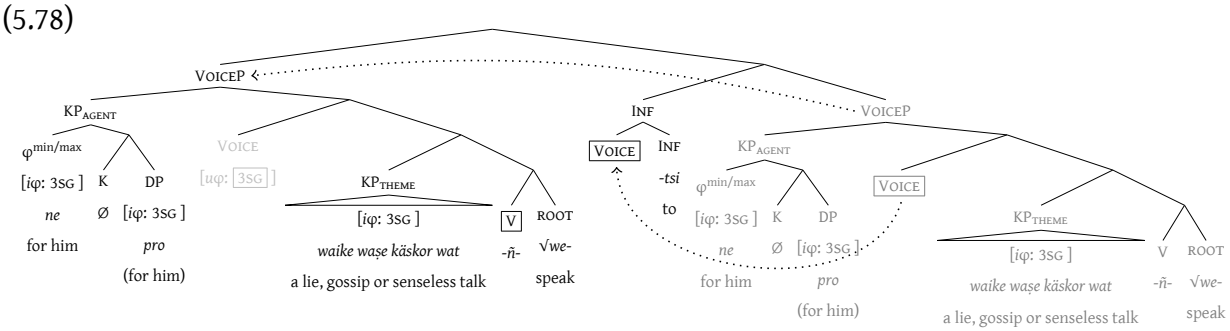
Secondly, the functional head VOICE merges with (5.76). It introduces an external argument containing $\varphi^{min/max}$ and assigns an agent role to it (5.77).

(5.77)



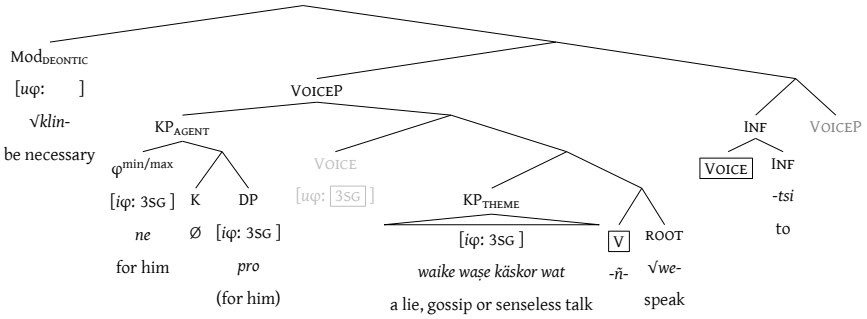
Thirdly, another functional head INF(initive) undergoes External Merge with (5.77). It triggers head-movement of VOICE to INF, creating the complex head consisting of VOICE and INF (realized as the infinitive marker /-tsi/). It also triggers Internal Merge of VOICEP (5.78).

(5.78)



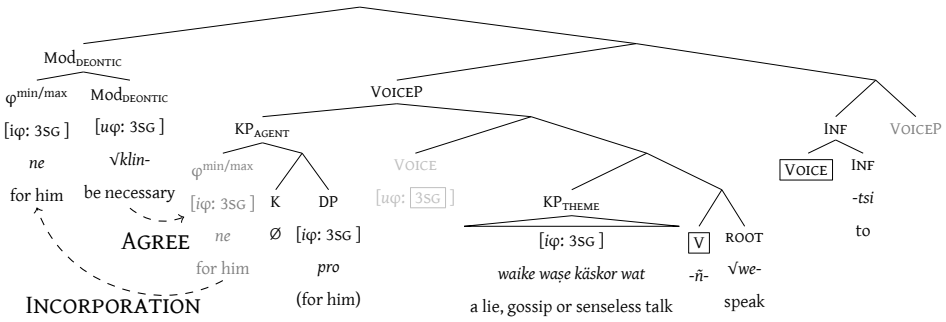
This infinitival phrase then undergoes External Merge with the functional head Mod(al), specified as [DEONTIC] (5.79). It has unvalued φ-features, and looks for valued φ-features in its mergemate.

(5.79)



As a result, it copies the person and number features of $\varphi^{min/max}$ in the agent KP, and incorporates it, forming the complex head consisting of $Mod_{DEONTIC}$ and $\varphi^{min/max}$ (5.80).

(5.80)



Subsequently, another modal head specified as [IRREALIS] and the tense head T merge with the structure.[7] When the resulting syntactic object undergoes Transfer, the third-person singular PC *-ne*, representing the agent of the infinitive, clusters with the finite modal verb *klyin-* 'it is necessary,' appearing immediately after it.

(5.81)

		KP$_{AGENT}$	KP$_{THEME}$	Root V	Voice-Inf	Mod+T	φ
TP	**Transfer** ⟹	$Ø_{pro}$	*waike waṣe ... käskor wat*	/ we- + -ñ-	-tsi /	/ klin- + -n	-ne /
				wen-	*-tsi*	*klyin-*	*-ne*

To summarize, the model I developed for the Tocharian PCs showed that the distribution of the PCs is more restricted than previously thought. It predicted that they could not spell out the

7. This analysis predicts that if $\varphi^{min/max}$ starts as the internal argument of an infinitive, it will undergo φ-agreement with VOICE and, with VOICE-to-INF movement, form a complex head with INF. However, this prediction turns out to be false since only a finite verb may host a PC in TB. We assume that when a probe above INF finds this $\varphi^{min/max}$, it undergoes φ-agreement with the $\varphi^{min/max}$, and as a result, $\varphi^{min/max}$ excorporates from VOICE and incorporates to the probe (see I. G. Roberts 2010 for technical details).

possessor of an external argument unless there is a licensor that c-commands the external argument. PCs cannot semantically represent the possessor of the nominal expression contained in another nominal expression as an adjunct, either. Examples such as (5.59), (5.67), and (5.75) support our prediction since the licensor of a PC (VOICE) should c-command a causee KP and be able to find person and number features there, and since there is another licensor of a PC in the context of clitic climbing, which c-commands an external argument, and the person and number features contained in the external argument should be visible to the licensor.

5.2 Implications for split intransitivity

The analysis we developed in the previous section has further implications for our understanding of intransitive verbs in Tocharian. The model predicted that pronominal clitics could not represent the possessor associated with the external argument of a hosting verb. This analysis implies that when PCs represent the possessor of an intransitive subject, the subject should not be an external argument introduced by Voice, but an internal one.

As observed in Chapter 4, PCs may represent the possessor associated with the subject of an intransitive verb. For example, the first-person singular PC *-ñ* represents the possessor of *prosko* 'fear' in (5.82). My analysis suggests that the subject *prosko* is the internal argument of the verb, c-commanded by the licensor of the PC.

(5.82) [TB] PC representing the possessor of *prosko* 'fear,' which is the subject of the intransitive verb *lāma-*

tune *taukau-c* *saim* *pācer* ¦ *lāma-**ñ*** *prosko*
therein hide.SUBJ.ACT.1SG-2SG protection father ¦ rest.SUBJ.ACT.3SG-1SG fear.NOM.SG
10-3

'Therein I will hide in your protection, father, so that **my** fear may rest. [13d]'

(IOLToch5b2; verse [7¦7¦4]×4)

It is commonly held that there are two subclasses of intransitive verbs: unergative and unac-

cusative verbs (Perlmutter 1978; Burzio 1986). Unergative verbs take an argument that shows the same distribution as the external argument of a transitive verb. In contrast, unaccusative verbs select an argument patterning with the internal argument of a transitive verb. For example, in German, the so-called split NP construction (or split NP topicalization; Fanselow 1988; van Riemsdijk 1989; van Hoof 2006), which separates a head noun from its satellite, is possible for transitive objects and unaccusative subjects but not for transitive subjects and unergative subjects (Grewendorf 1989, Alexiadou, Anagnostopoulou, and Everaert 2004: 7).

(5.83) German (examples based on Schäfer 2008: 191)

i. ***Kleider**, hat er immer **dreckige** an.*
clothes has he always dirty on
'As for clothes, he always wears dirty ones.' (TRANSITIVE, object)

ii. ***Fehler**, sind dem Hans **vermeidbare** unterlaufen.*
mistakes are the Hans avoidable occurred
'With respect to mistakes, only those which were avoidable occurred to Hans.'
(UNACCUSATIVE, subject)

iii. **Studenten**, haben **fleißige** das Seminar besucht.*
students have hard-working the class visited
'Concerning students, hard working ones visited the class.' (TRANSITIVE, subject)

iv. **Studenten**, haben **fleißige** telefoniert.*
students have hard-working called
'Concerning students, hard working ones called.' (UNERGATIVE, subject)

In Georgian, the so-called Series II forms (one of the TAM categories) mark both transitive subject and unergative subject by *-ma* (*-m* after a vowel). In contrast, transitive objects and unaccusative subjects are both marked by *-i* (*-Ø* after a vowel).

(5.84) Georgian (Harris 1982: 293)

i. ***vano-m** gamozarda zma-Ø*
Vano-ACT 3S.3DO.grow.II brother-NOM
'**Vano** raised his brother.' (TRANSITIVE)

ii. ***bavšv-ma*** *it'ira*
child-ACT 3S.cry.II
'**The child** cried.' (Active intransitive [= UNERGATIVE])

iii. *rezo-Ø* *gamoizarda*
Rezo-NOM 3S.grow.II
'Rezo grew up.' (Inactive intransitive [= UNACCUSATIVE])

In Italian, cliticization of a partitive phrase by the clitic pronoun *ne* is possible for direct objects and unaccusative subjects (5.85i and 5.85ii, respectively) but not for unergative subjects (5.85iii) (Belletti and Rizzi 1981).

(5.85) *ne* cliticization in Italian (examples from Alexiadou, Anagnostopoulou, and Everaert 2004: 6)

i. *Giovanni ne ha insulati due.*
John of.them has insulted two
'John has insulted two of them.' (TRANSITIVE)

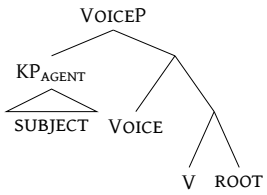
ii. *Ne arrivano molti.*
of.them arrive many
'Many of them arrive.' (UNACCUSATIVE)

iii. **Ne telefonano molti.*
of.them telephone many
'Many of them telephone.' (UNERGATIVE)

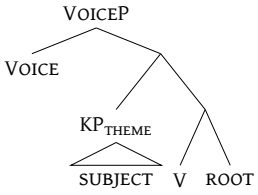
I adopt, with many others, the idea that unaccusative and unergative verbs have different syntactic structures. Specifically, the argument of unergatives is an external argument introduced by VOICE (5.86), while that of unaccusatives is an internal argument introduced by the category-defining head V (5.87).[8]

8. I assume that the difference between unergatives and unaccusatives is semantically determined and syntactically encoded (Levin and Rappaport Hovav 1995; Sorace 2000, among others).

(5.86) Unergatives

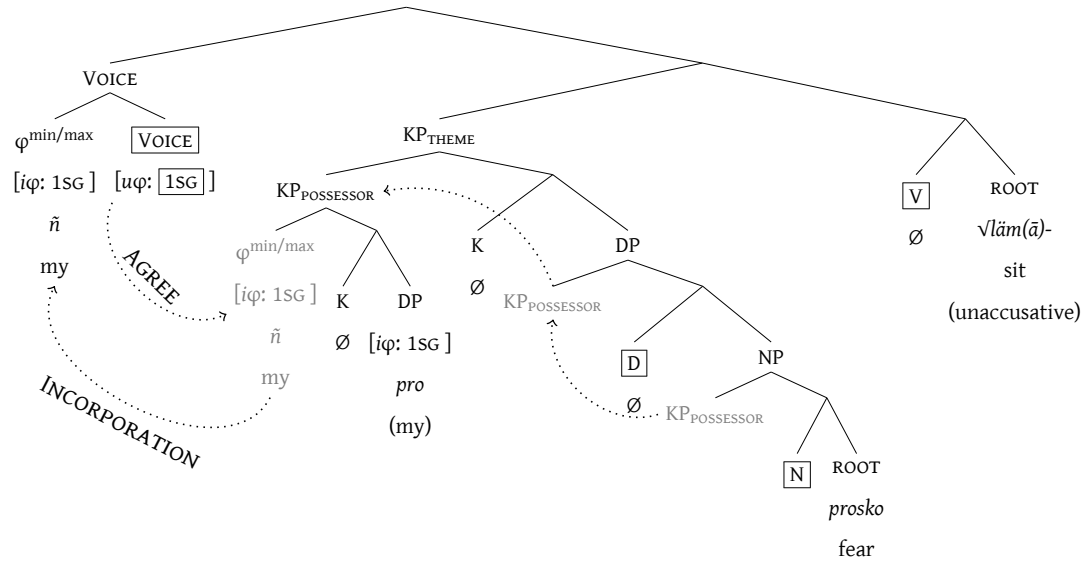


(5.87) Unaccusatives



My analysis suggests that the first-person singular PC *-ñ* in example (5.82) is a part of not the external but the internal argument of *lāma-*, and the verb is therefore unaccusative. The intermediate syntactic structure of (5.82) is illustrated in (5.88). In this structure, $\varphi^{min/max}$, which surfaces as a PC, starts as a part of the internal argument (5.88). The licensor of a PC (Voice), which c-commands the internal argument, copies the value of $\varphi^{min/max}$ and incorporates it.

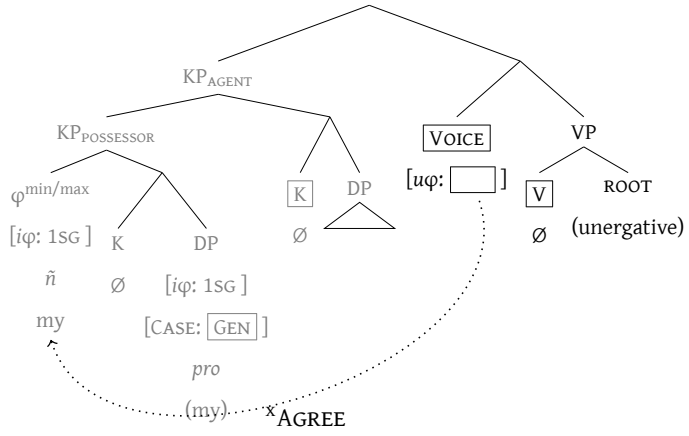
(5.88) Structure of unaccusatives (*lāma-ñ prosko* 'my fear may rest')



In contrast, PCs cannot represent the possessor associated with the external argument of an

unergative verb. I assumed that the unvalued person and number features on VOICE look for valued φ-features in its c-commanding domain (§4.5). The structure of an unergative verb is shown in (5.89). VOICE's c-commanding domain is VP, which consists of V and Root. The external argument is simply outside the domain.

(5.89) Structure of unergatives



Therefore, the analysis I developed enables us to single out unaccusatives in Tocharian.

(5.90) If a pronominal clitic represents the possessor associated with the subject of an intransitive verb, the verb is unaccusative.

If this analysis is on the right track, we should find a PC associated with the subject of an intransitive verb whose unaccusative behavior receives independent support. In this respect, Levin and Rappaport Hovav's (1995: 98) study is of importance because it provides us with independently motivated unaccusative verbs. They classify verbs that participate in causative-inchoative alternation (labile verbs) as externally caused verbs. Externally caused verbs describe eventualities brought about by an external force.

(5.91) Externally caused verbs (Levin and Rappaport Hovav 1995: 93)

a. Change of state:

bake, *blacken*, *break*, *close*, *cook*, *cool*, *dry*, *freeze*, *melt*, *open*, *shatter*, *thaw*, *thicken*, *whiten*, *widen*, ...

b. Verbs of motion:

bounce, *move*, *roll*, *rotate*, *spin*, ...

They argue that *all* externally caused verbs are unaccusatives, whereas internally caused verbs are mostly unergatives. Alexiadou and Anagnostopoulou's (2004) study also points in the same direction. They divide Modern Greek labile verbs into several subclasses. Interestingly, all subclasses agree that they do not have any functional head introducing an external argument.[9] In other words, they are all unaccusatives.

TA and TB also have a set of labile verbs that show both middle and active inflections (Table 5.1; cf. Malzahn 2010: 87–9). They retain the same stem shape, and they surface as an intransitive verb with a middle ending and a transitive verb with an active ending.[10] The internal argument of an active labile verb corresponds to the sole argument of the middle counterpart.[11] In other words, the sole argument of a middle labile verb is an internal argument c-commanded by VOICE. Therefore, I predict that I should find a PC that represents a possessor associated with the subject of a middle labile verb but not with the subject of an active labile verb.

(5.92) Prediction:

Pronominal clitics may represent the possessor associated with the subject of a middle labile verb.

This prediction is borne out: the following example (5.93) attests *siṃsantär-* 'X are satiated,' which is a labile verb, functioning as an intransitive verb with a middle inflection. In this example, the

9. Modern Greek uses the same non-active voice morphology for representing passive also. Angelopoulos, Collins, and Terzi (2020) argue that the *by*-phrase of a passive verb is an argument introduced by the verb, rather than an adjunct adjoined to a verb phrase.

10. The only exception is TA/TB √*pyutk-* '[MID] establish, create, accomplish; [ACT] come into being,' which functions as a transitive verb with a *middle* ending and an intransitive with an *active* ending (table 5.1). Why this mismatch occurred is a topic for future research.

11. The intransitive forms denote both a process and a state, which is also found in languages other than Indo-European, such as Austronesian and Wolof (Niger–Congo) (Hilda Koopman p.c.).

	LG	ROOT	MIDDLE (intransitive)	ACTIVE (transitive)
1	TB	√*käs-*	come to extinction	extinguish
2	TB	√*krās(ā)-*	be angry	annoy, vex
3	TA	√*täm-*	be born, come into being	beget, generate
4	TB	√*näk-*	fall into ruin	destroy
5	TB	√*näm-*	bow (bend oneself)	bend (something)
6	TB	√*päk-*	cook, ripen	cook (something), let ripen
7	TA/TB	√*mänt(ā)-*	destroy/be destroyed; be stirred, angry	stir; destroy
8	TB	√*ru-*	be open	open (something)
9	TA/TB	√*läk(ā)-*	be seen, appear	see
10	TA	√*we-*	sprout	let sprout
11	TA	√*si-n-*	satiate oneself, be depressed	satiate
12	TB	√*tsäk-*	burn	burn (something)
	LG	ROOT	MIDDLE (transitive)	ACTIVE (intransitive)
13	TA/TB	√*pyutk-*	establish, create, accomplish	come into being

Table 5.1: Labile verbs in TA and TB

first-person singular PC *-ñi* represents the inalienable possessor associated with *puk marmañ* 'all of the veins,' which is the subject of this middle labile verb.

(5.93) [TA] PC represents the possessor associated with the subject of a middle labile verb

[a1] /// *klāmār* ***siṃsantär-ñi*** *oki cam*
bring.SUBJ.MID.1SG be.satiated.NPST.MID.3PL-1SG like DEM.M.ACC.SG
klop-yo *pu-k* *marmañ* : ||
suffering-INS all-EMP vein.NOM.PL
'(If) I bring [...], all **my** veins **will be satiated** by this pain, as it were.'

(A116a1; trans. based on CEToM; verse)

In the following example, it seems that the third-person singular PC *-ne*, referring to the same individual as *cpi* 'his,' represents the (inalienable) possessor of *pilko* 'insight, view; look, glance,' which is the subject of the middle labile verb *mäntäṃtär-ne* 'X is destroyed.' If this interpretation is correct, then this example also supports my analysis.

(5.94) [TB] PC represents the possessor associated with the subject of a middle labile verb (?)

• *sruka-*(*l*)*ñ*(e-ṣ)*ṣ*(*a*)*na cpi* *nmittä-nta* ///
die-NMLZ-ADJZ.F.PL DEM.M.GEN.SG mark-PL

/// [b6] *ānts-ne* *cpi* *lkānträ* 10 *pilko*
shoulder-DU DEM.M.GEN.SG appear.NPST.MID.3PL view
mäntäṃtär-ne *tucya-ne* *e(śa-ne)* ///
be.destroyed.NPST.MID.3SG-3SG yellow-DU eye-DU

'.. his signs of death ... (his) two shoulders will appear to this one as .... [10] **His view is destroyed**. (His) two yellow eyes ...'

(B118b6; verse)

To summarize, this section showed that the analysis developed in Section 5.1 allows us to single out unaccusative verbs in TA and TB. If a PC represents the possessor semantically associated with the subject of an intransitive verb, we may consider the verb as belonging to unaccusatives. We can now collect unaccusative verbs in TA and TB, based on the distribution of the pronominal clitics. Appendix I lists representative unaccusative verbs in TA and TB collected using this method, further supported by comparative syntax.

5.3 Antigrundverbs and unaccusatives

The previous section showed that one may collect unaccusative verbs in Tocharian based on the distribution of the pronominal clitics. However, this is only one possible approach, and one might also think of collecting unaccusative verbs in Tocharian using different approaches. Several verbs in TA and TB show causative-inchoative alternation (e.g., '[somebody] *breaks* X' ~ 'X *breaks*') by alternating their stem shape. They form the class VIII present stem that functions as a transitive verb, next to the class I, III or IV present stem that functions as an intransitive verb ("anticausative"). They have the transitive class I or II (or VII in TA) subjunctive stem and the intransitive class V subjunctive stem. They also have the transitive class III preterite stem besides the intransitive class I preterite stem. Malzahn (2010: 64) called such transitive verbs "antigrundverbs," which in general provide "oppositional transitives" to unaccusative verbs. Therefore, one might be tempted to conclude that if one finds an antigrundverb, then its corresponding intransitive verb is unaccusative. However, this conclusion is not warranted as there is a non-anticausative that builds an antigrundverb. According to Malzahn (2010: 65), there is at least one antigrundverb, which appears to serve as a causative to an *unergative* intransitive. Example (5.95)

attests the infinitive *śaccätsī* 'to make X cross,' which is a transitive built on √*kätk(ā)*- 'cross, pass.' This root does not participate in causative-inchoative alternation.[12]

(5.95) Antigrundverb next to a non-anticausative intransitive verb?

krent *yamor mā* *yāmoṣäṃ* ¦ *cen* (*n*)*o* ***śäccä-tsī***
good.ACC.SG deed NEG do.PTCP.M.ACC.PL DEM.M.ACC.PL CONJ proceed.CAUS-INF
pkate 10-4
intend.PST.MID.3SG
'But those$_j$ who had not done a good deed, he intended **to make** them$_j$ **proceed**. [14b]'
(B133a4; verse; [7¦7]×2)

Also, not all anticausatives form an antigrundverb. Some anticausatives have a transitive counterpart with voice alternation (e.g., √*si-n*- in TA) or with a productive derivational suffix and a fixed initial accent (e.g., √*si-n*- with *-äṣṣä-*/*-äske*- in TB). To summarize, the existence of an antigrundverb does not imply the existence of a corresponding anticausative, and vice versa (5.96).

(5.96) Two false propositions

i. (False:) If there is a (transitive) antigrundverb, its corresponding intransitive is anticausative.

ii. (False:) If there is an anticausative, there is a corresponding (transitive) antigrundverb.

By focusing on the antigrundverbs, we may still collect intransitive verbs. However, there is no independent support that suggests the intransitive verbs collected are unaccusative in TA and TB.

5.4 External possession as a diagnostic for unaccusativity

When a PC represents a possessor, it undergoes Transfer outside the nominal phrase containing its possessum. In this sense, one may consider it to show an external possession construction,

12. One might be inclined to take a verb built on √*kätk(ā)*- as unaccusative, rather than unergative (cf. the verb for 'pass' is unaccusative in Dutch; Hilda Koopman p.c.).

where a nominal phrase is morphologically associated with a verb despite being semantically associated with the verb's argument. In Hebrew, scholars have used external possession as a diagnostic for unaccusativity (Borer and Grodzinsky 1986, Landau 1999): a verb is unaccusative if one may associate an external possessor with the verb's subject semantically.[13] However, this view has recently faced challenges by a couple of studies (Linzen 2014, Gafter 2014). They argue that in Hebrew, (1) some unaccusative verbs do *not* allow an external possession construction and (2) some unergative verbs do allow an external possession construction. For our purpose, (2) is of interest. Linzen (2014) and Gafter (2014) report that verbs of emission of sounds/lights (e.g., 'shine,' 'crack') allow an external possession construction as in (5.97). In this example, *le-xaim* 'to Chayim' is the possessor of *ha-pelefon* 'the cell phone,' which is the subject of the intransitive verb *cilcel* 'X rang.'

(5.97) External possession construction of an (alleged) unergative subject in Hebrew

ba- pgiša ha- reviit cilcel ***le- xaim*** *ha- pelefon, ...*
in.the date the fourth rang **to Chayim** the cell.phone
'On the fourth date, **Chayim's** cell phone rang.' (Gafter 2014: 486)

However, their observation does not undermine my analysis since it is not the case that verbs of emission are always unergative. Levin and Rappaport Hovav (1995) point out that some verbs of emission may describe both externally and internally caused eventualities (Levin and Rappaport Hovav 1995: 115–9).

(5.98) Internally/Externally caused eventualities

a. The doorbell rang. (Internally caused eventuality)

b. The postman rang the doorbell. (Externally caused eventuality)

Auxiliary selection in Italian also points in the same direction. In most Germanic and Romance

13. External possession is "a phenomenon where a nominal is syntactically encoded as a verbal dependent but semantically understood as the possessor of one of its co-arguments" (Deal 2017: 391–2). Some Tocharian examples are indeed interpretable as containing the possessor raising construction. However, one should keep in mind that not all PCs represent a possessor.

languages, past participles of unaccusative verbs select an auxiliary BE, while those of unergatives select HAVE, when they form a periphrastic construction (Perlmutter 1989).

However, while some verbs constantly choose one particular auxiliary across languages, some verbs show gradient behavior, selecting BE in one language but HAVE in another. For example, Sorace (2000: 875) points out that Italian *correre* 'run' selects HAVE (5.99), while German *rennen* 'run' takes BE (5.100).

(5.99) Italian (Sorace 2000: 875)

Gli atleti svedesi {hanno corso / ?sono corsi} alle Olimpiadi.
the athletes Swedish have run are run at.the Olympics
'The Swedish athletes ran at the Olympic Games.' (selects HAVE)

(5.100) German (Sorace 2000: 875)

*Uschi {*hat / ist} den ganzen Tag gerannt.*
Uschi has is the whole day run
'Uschi ran the whole afternoon.' (selects BE)

Moreover, for some verbs, the agentivity of a subject and the telicity of an eventuality play a role (cf. Dowty 1991). Regarding the former, for example, Italian *durare* 'to last' prefers BE, but when it takes an animate (agentive) subject, HAVE is also acceptable (5.101). As for the latter, Dutch *springen* 'to jump,' which usually selects HAVE, selects BE when it accompanies a PP indicating an endpoint of a motion (5.102).

(5.101) Italian (examples based on Sorace 2000: 867–8)

i. *La guerra {e / ?ha} durato a lungo.*
the war is has lasted for long
'The war lasted a long time.' (Inanimate subject)

ii. *Il presidente {e / ha} durato in carica due anni.*
the president is has lasted in post two years
'The president held office for two years.' (Animate subject)

(5.102) Dutch (examples based on Borer 2005b: 32)[14]

i. *Jan heeft gesprongen.*
Jan has jumped
'Jan jumped.' (Atelic eventuality)

ii. *Jan is in de sloot gesprongen.*
Jan is in the ditch jumped
'Jan jumped into the ditch.' (Telic eventuality)

Sorace (2000, 2004) proposed the following auxiliary selection hierarchy to account for this gradient behavior (Table 5.2). This hierarchy contains two core classes: verbs denoting a change of location and verbs denoting a controlled non-motional process. These classes prototypically denote telic and atelic eventualities, respectively, and the former constantly choose BE, while the latter HAVE, irrespective of agentivity or telicity. Between these core classes, there are non-core classes of verbs that show gradient behavior. They are sensitive to agentivity and telicity, and the line that separates unaccusative verbs from unergative verbs varies from one language to another. For example, verbs denoting existence of state (e.g., *semblare* 'seem') prefer BE in Italian, while they select HAVE in French.

selects BE (least variation)	Change of location
	Change of state
	Continuation of a pre-existing state
	Existence of state
	Uncontrolled process
	Controlled process (motional)
selects HAVE (least variation)	Controlled process (non-motional)

Table 5.2: The Auxiliary Selection Hierarchy (Sorace 2000)

(5.103) Italian

i. Verbs denoting existence of state

La commedia { *è sembrata* / *??ha sembrato* } *interessante a tutti.*
the play is seemed has seemed interesting to all
'The play seemed interesting to everyone.' (Sorace 2000: 869)

14. Koopman (2010) argues that directional PPs (such as example 5.102ii), unlike locative PPs, are complements in Dutch.

(5.104) French

i. Verbs denoting existence of state

Le dinosaures { *?*sont / ont* } *existé il y a 65 millions d' ans.*
the dinosaurus are have existed there.are 65 millions of years
'The dinosaurs existed 65 million years ago.' (Sorace 2000: 869)

Sorace (2000, 2004) observed that verbs of emission (e.g., 'rumble'), which belong to uncontrolled process verbs, are less "agentive" than motional controlled process verbs (e.g., 'swim,' 'run') and non-motional controlled process verbs (e.g., 'talk,' 'work'). They may take both BE and HAVE auxiliaries, while motional controlled process verbs strongly prefer HAVE and non-motional controlled process verbs may only take HAVE in Italian.

(5.105) Italian

i. Verbs of emission

Il tuono { *hanno / e* } *rimbombato.*
the thunder has is rumbled
'The thunder rumbled.' (Sorace 2004: 262)

ii. Motional controlled process verbs

Gli atleti cinesi non { *hanno corso / ?*sono corsi* } *alle Olimpiadi.*
the athletes Chinese not have run are run at.the Olympic.Games
'The Chinese athletes did not run at the Olympic Games.' (Sorace 2004: 260)

iii. Non-motional controlled process verbs

I delegati { *hanno parlato / *sono parlati* } *tutto il giorno.*
the delegates have talked are talked whole the day
'The delegates spoke all day. ' (Sorace 2004: 256)

To summarize, the observation that some verbs of emission allow an external possession construction in Hebrew does not argue against the analysis we developed. Some verbs of emission, which belong to uncontrolled process verbs, may describe externally caused eventuality that is syntactically represented as unaccusative.

5.5 Conclusion

This chapter developed a syntactic analysis that accounts for the multifunctionality of the pronominal clitics in Tocharian A and B. Tocharian PCs appear immediately after a finite verb, outside the nominal expression that they are semantically associated with. This is because when a PC's licensor finds it, it undergoes incorporation to the licensor. My analysis restricts the distribution of the PCs in TA and TB in a falsifiable way.

(5.106) Pronominal clitics in TA and TB cannot be semantically associated with the subject of a transitive/unergative verb unless there is an eligible host c-commanding them.

(5.107) Pronominal clitics in TA and TB cannot be semantically associated with the nominal expression contained in another nominal expression as an adjunct.

My analysis is supported by the fact that a PC may represent the causee of a morphological causative, and that when a PC undergoes clitic climbing, it may represent the external argument of a non-finite verb. Furthermore, we have shown that we may single out unaccusative verbs based on the distribution of PCs.

(5.108) If a pronominal clitic is semantically associated with the subject of an intransitive verb, the verb is unaccusative.

We list representative roots that form unaccusative verbs in TA and TB in Appendix I. They include middle labile verbs whose unaccusative behavior is independently supported (e.g., TA √*si-n-* '[ACT] satiate; [MID] satiate oneself; be depressed'). The representative roots we identified as forming unaccusatives include verbs denoting a change of location (e.g., TA √*i-*|*kälkā-* 'go' [used metaphorically]), a change of state (e.g., TA/TB √*ār*(*ā*)- 'cease, come to an end,' TA/TB √*kän-* 'come about, occur, be fulfilled'), the continuation of a pre-existing state (e.g., TA √*trik(ā)-* 'be confused; faint'), the existence of a state (e.g., TA/TB √*nas-*|*tāk(ā)-* 'be, become'), and uncontrolled processes (e.g., TA √*prutk(ā)-* 'be shut, be filled,' TB √*plätk-* 'overflow, develop, arise,' TB √*plu-* 'float, fly, soar,' and TB √*spalkā-* 'be agitated, tremble'). Notably, I did not find any controlled process verb such

as ‘work,’ ‘play,’ ‘talk,’ or ‘swim,’ which we expect to surface as unergatives (table 5.2).

Unaccusativity in the ancient Indo-European languages has been a challenging topic. Since no grammaticality judgement is available, we need to build a morphosyntactic criterion that determines unaccusativity of a verb without relying on semantics. There is a risk of circularity if one solely relies on semantics of a word to determine whether a given verb is unergative or unaccusative. My analysis provides a non-circular criterion which enables us to single out unaccusatives in Tocharian.

Research on unaccusativity in the ancient Indo-European languages has been advanced in Hittite since Garrett (1996, 1990), who built on the observation of Watkins (1968–1969) and provided criteria for determining unaccusativity of Hittite verbs: (1) If a verb is intransitive and accompanies a subject clitic, it is unaccusative. (2) Unergatives use HAVE while unaccusatives use BE to form a periphrastic past tense in Hittite. Recently, Yates and Gluckman (2020) pointed out that only unaccusatives switch from active inflection to middle inflection in Hittite imperfectives. The morphosyntactic analysis I developed in this chapter also provides a basis based on which one may identify whether there is any subtype of roots that continuously displays unaccusative/unergative behavior over course of time or unaccusativity may easily fluctuate from one branch to another.

CHAPTER 6

Pronominal clitics and multiple pronominal arguments

6.1 Introduction

The previous chapter showed that the distribution of the Tocharian pronominal clitics (PCs) is more restricted than previously thought: they never represent the possessor associated with a transitive or unergative subject. Nor do they represent the possessor of the noun contained in another nominal expression. However, there was only one pronominal argument in most of the cases we examined, and we have not reviewed cases in which multiple arguments are pronominal. Tocharian A and B (TA and TB) seem to have only one slot for a PC—there is no example in which a single finite verb hosts multiple PCs. Therefore, one might wonder what happens if more than one argument is pronominal. For example, if the indirect and direct object (henceforth IO and DO) of a verb are pronominal, which of them is represented by a PC? Regarding this question, we could think of two hypotheses that offer us two different predictions (table 6.1).

	Hypothesis	Prediction
1	PCs arbitrarily choose the argument they represent.	It is not possible to predict which argument PCs represent.
2	A syntactic structure determines which argument PCs represent.	We may predict which argument PCs represent based on the structure.

Table 6.1: Hypotheses and predictions

This chapter shows that a syntactic structure determines which argument PCs represent in Tocharian. In other words, when the IO and the DO of a ditransitive predicate are both pronominal, PCs hosted by the ditransitive predicate always represent the IO (with various thematic roles such as goal, source, recipient, beneficiary, or addressee). My analysis further restricts the PCs' distribu-

tion by predicting that there will be certain gaps in the data.

The structure of this chapter is as follows. Section 6.2 examines the examples where multiple arguments are pronominal. In Section 6.3, I turn to the analysis, which accounts for the distribution of the Tocharian PCs and predicts some absence of the data. Section 6.4 discusses further implications for our understanding of the Tocharian syntax and addresses the remaining questions. Section 6.5 concludes the chapter.

6.2 Data

I have examined 551 attestations of the pronominal clitics in Tocharian A and 608 attestations in Tocharian B. Figure 6.1 shows that more than 70% of the examples contained either an intransitive or monotransitive predicate. 103x (18.7%) and 129x (23.4%) of the examples had a ditransitive predicate in TA and TB, respectively.

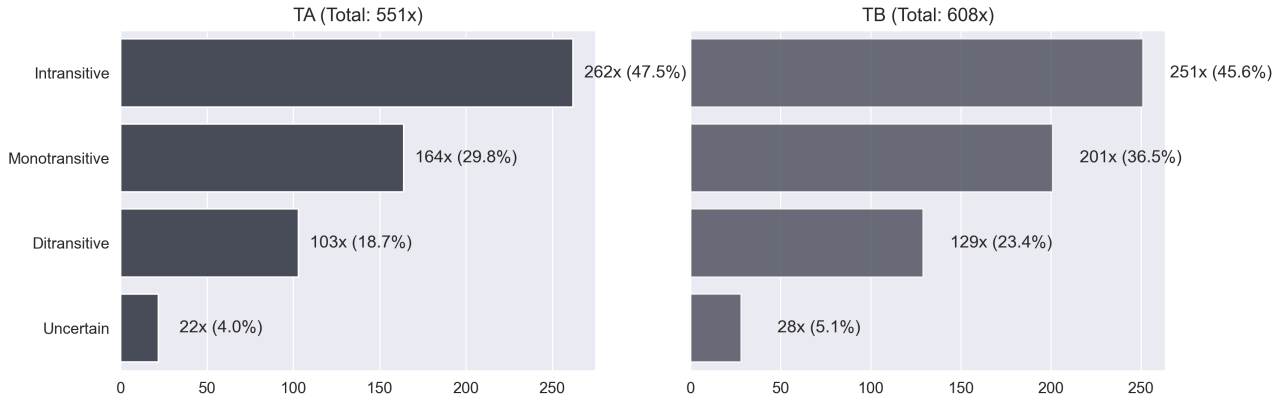


Figure 6.1: Valency of host predicates in TA and TB

The eight most frequently attested roots in TA and the nine most frequent roots in TB account for 69.1 % and 72.8 % of the entire attestation of the ditransitive predicates in TA and TB, respectively (Figures 6.2 and 6.3).

We may group the frequently attested ditransitive predicates into the following three types in Table 6.2.

The first type selects an addressee as the IO and a theme as the DO. It is the most frequently

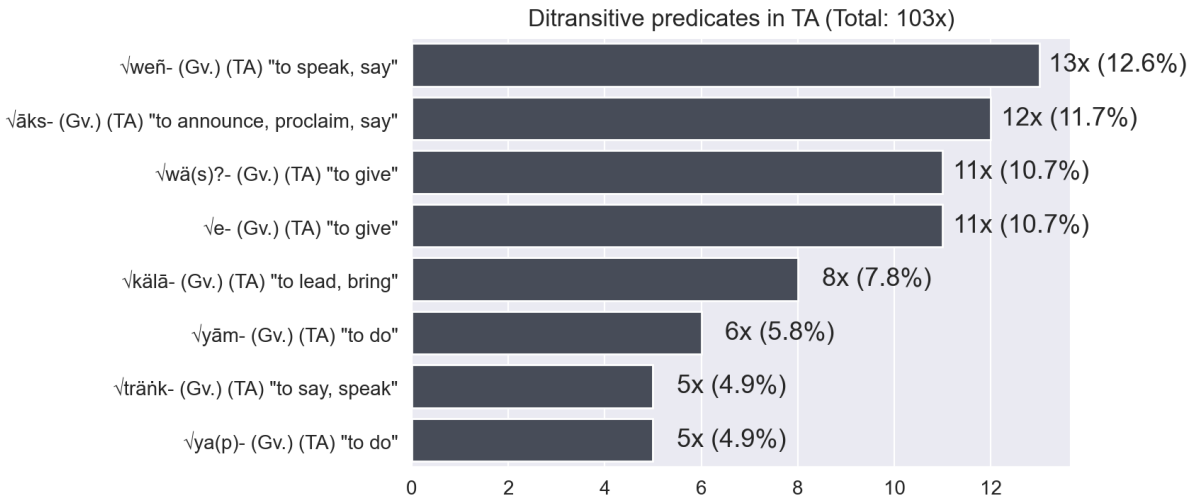


Figure 6.2: Frequently attested ditransitive predicates in TA

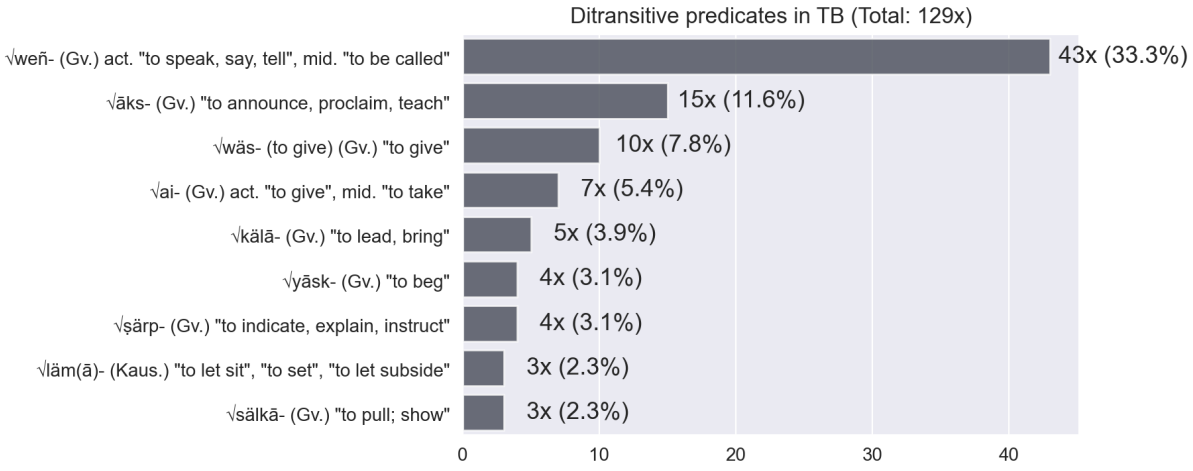


Figure 6.3: Frequently attested ditransitive predicates in TB

attested type of the ditransitive predicates in TA and TB. The second type prototypically selects a theme as the DO and either a recipient, source, or beneficiary as the animate (human) IO. The last type also selects the theme DO. It also has an animate source or beneficiary as the IO, but some verbs in this class may also have an inanimate goal as the IO (e.g., TB√*āk-*|*wāyā-* 'lead, guide, drive $X^{\text{ANIMATE}}_{\text{THEME}}$ to $Y^{\text{INANIMATE}}_{\text{GOAL}}$').

Many examples show ambiguity regarding whether PCs represent the IO or DO when both are pronominal. For example, the third-person singular PC *-ne* in (6.1) may, in principle, refer to *kampāl* 'cloak' (DO; theme) or *ājivike* 'an Ājīvika ascetic' (IO; recipient) since both are third-person

	Lgs	Root	Gloss
Verbs of communication	TB/TA	√*āks-*	'announce, proclaim, say'
	TB	√*we-ñ-*	'[ACT] say, speak; [MID] be called'
	TA	√*träṅk-*|*we-ñ-*	'speak, say'
	TB	√*pärk-*	'ask, bring up a question, ask for, beg'
	TA	√*pärk-*	'[ACT] ask for, beg; [MID] ask, bring up a question'
	TB	√*yāsk-*	'beg'
Verbs of transaction	TB	√*ai-*|*wä(s)-*	'[ACT] give; [MID] take'
	TA	√*e-*|*wä(s)*$^{?}$*-*	'give'
	TB	√*mäsk-*	'exchange, change'
Verbs of motion	TB/TA	√*kälā-*	'lead, bring'
	TB	√*āk-*|*wāyā-*	'lead, guide, drive'
	TA	√*āk-*|*wā-*	'lead, guide, drive'
	TA	√*pär-*|*kāmā-*	'carry, take'
	TA	√*ya(p)-*|*yām-*	'do'
	TA	√*tsäk(ā)-*	'pull, take (out, away)'

Table 6.2: Major ditransitive predicates in TB and TA

singular.

(6.1) [TB] *-ne* = IO or DO of *wsā-* 'gave'?

CONTEXT: An Ājīvika ascetic tries to retrieve his cloak from Upananda.

upananden-meṃ kampāl päst ñaṣṣi
Upananda-ABL cloak away demand.IMPF.ACT.3SG

sū mā ***wsā-ne***
DEM.M.NOM.SG NEG give.PST.ACT.3SG-3SG

'(The Ājīvika ascetic) begged the cloak from Upananda, (but) he did not **give** ***-ne***.'

(PKAS18Ab3; prose)

Therefore, to avoid this type of ambiguity, I must focus on the examples in which two pronominal arguments differ in person or number (e.g., *I give* [$_{\text{DO:3SG}}$ *it*] [$_{\text{IO:2SG}}$ *to you*]). I have collected 20 such examples (9 TB and 11 TA), and I will review them in Sections 6.2.1 (TB) and 6.2.2 (TA). I will show that PCs always represent the IO of a ditransitive predicate in such cases.

6.2.1 Examples (TB)

This subsection considers the nine TB examples where two pronominal arguments differ in person or number. In the first example (6.2), there is a ditransitive verb that hosts a PC (*aksau* 'I will tell [X to Y]' + *-mme*). The IO and DO of this verb are both pronominal. The PC unambiguously represents the IO (addressee). The DO is third-person singular, represented by the neuter demonstrative (anaphoric) pronoun *tu*.

(6.2) [TB] *-me* = IO (addressee) of *aksau* 'I will tell'

///¦ *mā* *tu*$_{DO}$ *ñiś* *ñake* ***aksau-mme*** •
NEG DEM.N 1SG now speak.SUBJ.ACT.1SG-PL
'I **will** not **tell** it **to you**$_{PL}$ now.'

(B108b10; verse; [7¦8]×4)

Likewise, the root √*āks-* 'to announce, proclaim, say' takes two pronominal arguments in examples (6.3), (6.4), and (6.5): content of which a speaker speaks (DO; theme) and a person/people to whom (s/he) speaks (IO; addressee). PCs represent the IO (addressee) of the verb, while overt demonstrative pronouns (*tu*, *tu pw*, and *ce*, respectively) represent the DO (theme).

(6.3) [TB] *-me* = IO (addressee) of *ākṣāwa* 'I told'

k$_u$*se* *ñi* *yesñ=* *āksaṣle* ¦ *k*$_u$*se* *wat* *no*
REL.NOM GEN.1SG GEN.2PL announce.GDV.NOM.SG REL.NOM CONJ PTCL
enäṣlyi ¦ *tu* *pw*$_{DO}$ ***ākṣā***[b8](***wa-me*** :)
teach.GDV.NOM.PL DEM.N all speak.PST.ACT.3SG-PL
'What I had to proclaim to you$_{PL}$, or what had to be taught, I **have told** all (of) it **to you**$_{PL}$. [70a]'

(B27b7-8; verse; [6¦6¦5]×4)

(6.4) [TB] *-me* = IO (addressee) of *akṣā-* '(he) told'

aiśaumyi *ce*$_u$ *pä*[a5]*llāntär* *krento* ¦ *āstreṃ* *śaul*
wise.NOM.PL DEM.M.ACC.SG praise.NPST.MID.3PL good.ACC.SG pure.ACC.SG life

śay-eñcai *wnolme* :
live-PTCP.ACC.SG living.being

snai *laiwo* *ṣpane* *ce*$_{DO}$ *tne* ¦ *ṣeme* *ślok* ***akṣā-me*** 30-8
without lassitude sleep DEM.M.ACC.SG here single strophe speak.PST.ACT.3SG-PL

'The sages praise him as a being (who) lives a good (and) pure life [38c], without lassitude (or) sleep. As the first strophe, he **told** this **to them** here. [38d]'

(B31a5; trans. based on CEToM; verse; [8¦7¦6]×2 + [9¦9] + [7¦6])

(6.5) [TB] *-ñ* = IO (addressee) of *pokse-* 'tell!'

m(*ā*) *alyaik* *nano* *tu-k* *yäkne*[a4](*-sa*) /// /// *mäskentär* *tū*$_{DO}$
NEG other.NOM.PL again DEM.N-EMP way-PERL be.NPST.MID.3PL DEM.N
pokse-ñ ||
announce.IMP.ACT.2SG-1SG

(The king speaking to Hastāṅkuśa): "And again, are the other ones not (seekers of good) precisely in this way? **Tell** this **to me**!"

(PKNS34a4; trans. based on CEToM)

The following example (6.6) contains a ditransitive verb (*preku* 'I will ask'), which takes two pronominal arguments: the question asked (DO; theme) and the individual to whom the speaker asks a question (IO; addressee). The second-person singular PC *-c* of this example unambiguously represents the IO of the verb. The DO of this verb is the neuter independent demonstrative pronoun *tu*.

(6.6) [TB] *-c* = IO (addressee) of *preku* 'I will ask'

ce$_{u}$ *pañäkte* *yātka* *wasatpāt* *yām-tsi* •
DEM.M.ACC.SG Buddha.lord order.PST.ACT.3SG ordination make-INF

tu$_{DO}$ *ñake* *tane* ***preku-c*** *mäkte* *wänta*[b4]*re* *tākaṃ* *tu*
DEM.N now here ask.SUBJ.ACT.1SG-2SG how matter COP.SUBJ.ACT.3SG DEM.N
yäkne-sa *poñ* ||
way-PERL say.IMP.ACT.2SG

klyauṣi *aṣ*(*an*)*ī*(*k*)*e* *sā*(*ṅk*)
hear.OPT.ACT.3SG venerable community

‘Such a being the Buddha has commanded to be ordained. Now I **will ask you** about it here. Say how the matter is, (precisely) in that way! May the venerable community hear (it)!’

(THT1114b3; trans. based on CEToM; prose[?])

In the following example (6.7), there are two PCs: *-ñ* [1SG] and *-cä* [2SG]. Both represent the IO (beneficiary and recipient, respectively) of the verbs of transaction. This example contains a referential null object (*pro*) as the DO, which is third-person singular, referring to the cloak.

(6.7) [TB] *-ñ* = IO (beneficiary) of *myāskasta-* ‘you exchanged’
-cä = IO (recipient) of *aiskau* ‘I give’

tumeṃ su *upanandeṃnmeṃ kampāl päst«†ä» ññaṣṣi* •
then DEM.M.NOM.SG Upananda-ABL cloak away demand.IMPF.ACT.3SG

upanande mā wsā-ne *te* [b2] *weñā-ne*
PN NEG give.PST.ACT.3SG-3SG DEM.N speak.PST.ACT.3SG-3SG

myāskasta-ñ *mā* ***aiskau-cä***
exchange.PST.ACT.2SG-1SG NEG give.NPST.ACT.1SG-2SG
‘Then he demanded the cloak back from Upananda. (But) Upananda didn’t give [it] back to him. He said this to him: “You **traded** [it] **with me**. I’m not **giving** [it] **to you**.”’

(B337b2; trans. based on CEToM; prose)

Examples (6.8) and (6.9) attest a ditransitive verb hosting a third-person singular PC. The verb also takes an overt pronominal DO in third-person singular (*po tw* and ce_u, respectively). Although we cannot exclude the possibility that the PC *-ne* doubles the DO in these examples, it is more likely that the PC represents the IO (addressee) of the verb as there is no secure example in which a PC doubles an inanimate nominal expression in TB.[1]

(6.8) [TB] *-ne* = IO (addressee) of *akṣā-* ‘(he) announced’

1. I will examine cases in which a PC doubles a nominal expression in Chapter 7.

klyauṣa *sū* *śaumo* ¦ *mas=* *āmāciṃ-śco* ¦ *po* *tw*$_{\text{DO}}$
hear.PST.ACT.3SG DEM.M.NOM.SG man go.PST.ACT.3SG minister-ALL all DEM.N
akṣā-ne *amāc* *masa* ¦ *lānte* *tw* *ākṣa*
speak.PST.ACT.3SG-3SG minister go.PST.ACT.3SG king.GEN.SG DEM say.PST.ACT.3SG
aurtsesa :
in.detail

'This man heard (it) (and) went to the minister [and] **reported** it all **to him**. The minister (then) went to the king and announced this in detail.'

(B18a1; trans. based on CEToM; verse; [5¦5¦8¦7]×4)

(6.9) [TB] *-me* = IO (addressee) of *weñā-* 'said'

ce$_{u\text{DO}}$ *mänt wälo* ***weñā-ne*** ¦ ///
DEM.M.ACC.SG thus king.NOM speak.PST.ACT.3SG-3SG

'In this way, the king **told** that **to him**.'

(B133a7; verse; [7¦7]×2)

Table 6.3 summarizes the examples discussed. All of the examples contained an animate human IO and an inanimate DO. Furthermore, the DOs were all third-person singular. In all of these examples, PCs unambiguously represented the IO.[2]

6.2.2 Examples (TA)

This subsection reviews eleven TA examples and shows that when the IO and DO of a verb are pronominal, PCs also consistently represent the IO in TA.

In the first example (6.10), the IO (recipient) of the verb is the pretas (hungry demons), which is third-person plural. The DO of the verb, not overtly expressed, is third-person singular, referring to *śwātsi* 'food.' The ditransitive verb *paṣ-* attests together with the plural PC *-äm*, unambiguously representing the IO.

2. In the examples discussed, the subject is non-third-person when an IO is first- or second-person. It is an open question whether the person of the subject is also relevant.

	PC	IO	ani-mate?	hu-man?	DO		ani-mate?	hu-man?
TB√*āks-* 'announce, proclaim, say'								
(6.2) *aksau-mme*	PL	PL	+	+	3SG	*tu*	-	-
(6.3) *ākṣā(wa-me)*	PL	PL	+	+	3SG	*tu pw*	-	-
(6.4) *akṣā-me*	PL	PL	+	+	3SG	*ce*	-	-
(6.5) *pokse-ñ*	1SG	1SG	+	+	3SG	*tū*	-	-
TB√*pärk-* 'ask, bring up a question, ask for, beg'								
(6.6) *preku-c*	2SG	2SG	+	+	3SG	*tu*	-	-
TB√*mäsk* 'exchange, change'								
(6.7) *myāskasta-ñ*	1SG	1SG	+	+	3SG	(*pro*)	-	-
TB√*ai-* '[ACT] give; [MID] take'								
(6.7) *aiskau-cä*	2SG	2SG	+	+	3SG	(*pro*)	-	-
TB√*āks-* 'announce, proclaim, say'								
(6.8) *akṣā-ne*	3SG	3SG	+	+	3SG	*po tw*	-	-
TB√*we-ñ-* '[ACT] say, speak; [MID] be called'								
(6.9) *weñā-ne*	3SG	3SG	+	+	3SG	ce_u	-	-

Table 6.3: Summary of the examples in TB

(6.10) [TA] *-äm* = IO (recipient) of *paṣ-* 'Give (something) (to X)!'

paṣ-äm śwā-tsi ***paṣ-äm***$_{IO}$ *nätäk ¦ pwikā-m*
give.IMP.ACT.2SG-PL eat-INF give.IMP.ACT.2SG-PL lord disappear.CAUS.IMP.ACT.2SG-PL
klop caṣ k(aśśiñ was 70-8)
suffering DEM.M.ACC.SG hungry.NOM.PL NOM.1PL
'[The Pretas speaking to Koṭikarṇa:] "... [78c] Give us food, **give us**, oh lord, remove this suffering from us! (We [are] hungr)y." [78d]'

(A340a4; trans. based on CEToM; verse; [5¦5¦5¦5] + [8¦7¦7] + [5¦5] + [8¦7])

The following example (6.11) contains two occurrences of *et-* '(if) he gives' followed by the first-person singular PC *-ñi*. The DO of this ditransitive verb is a referential null object (*pro*), referring to *päñ känt tināräs* '500 denars (of money)' [PL]. The PC represents not the DO (theme) but the IO (recipient), referring to the brahmin Nirdhana.

(6.11) [TA] *-ñi* = IO (recipient) of *et-* '(if he) gives (money) (to X)'

räskrä arū nirdhane trä(ṅkäṣ) /// [a6] /// *(ku)pre-ne*
bitterness evoke.PTCP.M.NOM.SG Nirdhana speak.NPST.ACT.3SG if-COMP
et-ñi$_{IO}$ *kāsu śāwaṃ ākäläntu*
give.SUBJ.ACT.2SG-1SG good great.ACC.PL wish.ACC.PL
knāsam-ci • ku(pre-ne) nu mā ***et-ñi***$_{IO}$ ||
be.fulfilled.CAUS.SUBJ.ACT.1SG-2SG if-COMP CONJ NEG give.SUBJ.ACT.2SG-1SG
samakkorren-aṃ || ṣpät koṃ-s-aṃ ywārckā ///
S-LOC 7 day-PL-LOC in.the.middle

'Nirdhana, greatly angered, says: "... If you$_{SG}$ **give me** (the money), I will make your$_{SG}$ great wishes come true. If, however, you$_{SG}$ do not **give** it **to me**, [In the S-tune:], in seven days ..."'

(A215a7; trans. based on Ji, Winter, and Pinault 1998: 45; prose)

YQ I.6 b6 (6.12) shows the same passage.

(6.12) [TA] *-ñi* = IO (recipient) of the transitive verb *et-* '(if you$_{SG}$) give (money) to X'

/// *(ā)k(na)ts kuro mok kupre-ne* ***et-ñi***$_{IO}$ *kāsu śāwaṃ ākā*[b7]*(läntu*
ignorant aged old if-COMP give.SUBJ.ACT.2SG-1SG good great.ACC.PL wish.PL
knāsam-ci •)
be.fulfilled.CAUS.SUBJ.ACT.1SG-2SG

[Nirdhana speaking to Bādhari:] "You$_{SG}$ ignorant, feeble old man! If you$_{SG}$ **give me** (the money, I will make your$_{SG}$) great wishes (come true)."

(YQ I.6b6; trans. based on Ji, Winter, and Pinault 1998: 45; prose)

YQ I.6 b4 (6.13) also attests *et-*, whose IO (recipient) and DO (theme) are both pronominal (IO: 1SG, DO: PL, respectively). Again, this verb hosts the first-person singular PC, which unambiguously represents the IO.

(6.13) [TA] *-ñi* = IO (recipient) of the transitive verb *paṣ-* '(if you$_{SG}$) give (500 gold coins) to X'

k$_u$pre-ne mā ***et-ñi***$_{IO}$ *wtāk ṣakkats dhanīke protk-aṃ*
if-COMP NEG give.SUBJ.ACT.2SG-SG later certainly rich.man.NOM.SG prison-LOC
prutkāṣ-ñi • ||
be.shut.CAUS.SUBJ.ACT.3SG-1SG

[Nirdhana speaking to Bādhari:] "If you$_{SG}$ do not **give me** (the money), the rich man will surely lock me up in prison."

(YQ I.6b4; trans. based on Ji, Winter, and Pinault 1998: 45; prose)[3]

In the following example (6.14), Nanda laments his separation from his wife, Sundarī. This passage contains the second-person singular imperative *psumār-* 'Take X away!', whose IO (source) and DO (theme) are pronominal. The IO refers to the speaker Nanda, while the DO's referent is unclear (perhaps *klop* 'suffering'?). This ditransitive verb accompanies the first-person singular PC, unambiguously indexing the IO.

(6.14) [TA] *-ñi* = IO (source) of *psumār-* 'Take (this) away from X!'

[a5] /// *cam*$_{DO}$ *śkaṃ lo* ***psumār-ñi***$_{IO}$ *ku yal lykäly lykäly*
DEM.M.ACC.SG CONJ far take.away.IMP.MID.2SG-1SG why fine fine
tuṣt-ñi :
burn.ACT.2SG-1SG
'[a5] ... and **take** that away **from me**! Why do you$_{SG}$ burn me finer and finer? ...'

(A92a5; trans. based on CEToM; verse)

We could probably include the following example (6.15). In this passage, King Prasenajit requests water from Mālikā (Schmidt 1974: 376). If the DO is not in the lacuna but a referential null object (*pro*) referring to water, the first-person singular PC *-ñ* represents the IO (goal) rather than the DO (theme) of the ditransitive verb.

(6.15) [TA] *-ci* = IO (goal) of *klāte-* '(you$_{SG}$) brought (water) to X' (?)

[b6] /// *lyīk-tsi* *wär* *prakwā-ci* *nu nak* ***klāte-ñ(i)***$_{IO}$ ///
wash.NPST-INF water beg.PST.ACT.1SG-2SG again bring.PST.MID.2SG-1SG
'I asked water from you$_{SG}$ to wash .... Again, you$_{SG}$ **brought** (it) **to me** ...'

(A431b6; prose?)

3. Cf. A215a5: /// (*ku pre*)*ne tu mā – – – wtāk ṣakkats dhani*(*ke*) *protkaṃ prutkāṣ-ñi* • || "(If) you$_{SG}$ (do) not (give me the money), the rich man will surely lock me up in prison." For a parallel in Turkish, see Geng and Klimkeit (1988: 282–3) and Tekin (1980: 48) (Peyrot 2013b: 246)

In the following example (6.16), *träṅkäm-* '(I) say X' hosts a PC, referring to the second-person singular. This verb's IO (addressee) and DO (theme) are both pronominal (2SG and 3SG, respectively). The PC unambiguously indexes the IO of the verb.

(6.16) [TA] *-ci* = IO (addressee) of the transitive verb *träṅkäm-* '(I) say (that) to X'

(*smi-māṃ akma*)*l-yo wāskāñc träṅkäṣ hai paṭṭinī kuc-ne täm*
smile-PTCP face-INS lay.woman speak.NPST.ACT.3SG oh Paṭṭinī what.ACC-COMP DEM
weñāṣt gautami lāṃts ṣñi [a7] /// *can-äkk ats taṃ*$_{DO}$
speak.PST.ACT.2SG Gautami queen own DEM.ACC.SG-EMP PTCL DEM
träṅkäm-ci$_{IO}$ || *capiccen-aṃ* ||
say.PST.ACT.3SG-2SG C.tune-LOC

'with a (smiling face), the lay woman says: "Oh, Paṭṭinī, what did you$_{SG}$ say? Queen Gautamī, (with her) own (hands) ..." [Paṭṭinī speaking to the lay woman:] "... precisely this indeed. I **am telling** this **to you**$_{SG}$. [In the C-tune] ...'

(YQ III.4a7; trans. based on Ji, Winter, and Pinault 1998: 161; prose)

In the following examples (6.17), (6.18), and (6.19), the function of the PCs is unambiguous as they accompany the secondary case marker *-ac*, marking allative. In these examples, the cataphoric pronominal DOs, representing a theme, are not overtly expressed. The PCs all index the addressee IOs rather than the theme DOs.

(6.17) [TA] *-änn-anac* = IO (addressee) of the transitive verb *träṅkṣ-* '(s/he) speaks (to X)'

s· [b4] /// *m· mrāc tsito-r-äṣ* ***träṅkṣ-ännan-ac*** *pracar n· – – te*
top touch.PTCP-NMLZ-ABS speak.NPST.ACT.3SG-3SG-ALL brother
yatār himavant ṣul – – ||
do.NPST.MID.2SG Himavant mountain

'Having touched (his$_i$) head, (he$_j$) **said** (this) **to him$_i$**: "Oh brother, you$_{SG}$ do ... the mount Himavant ..."

(A144b4; prose?)

(6.18) [TA] *-nn-anac* = IO (addressee) of the transitive verb *weñṣ-* '(s/he) will speak (to X)'.

|| *tm-äṣ* *nārade* *riṣak* ***weñā-nnan-ac*** [b5] ///
DEM.ABL Nārada sage say.PST.ACT.3SG-3SG-ALL
'Then, the sage Nārada **said** (this) **to him**: "..."'

(A95b4; trans. based on CEToM; prose)

(6.19) [TA] *-äṃn-anac* = IO (addressee) of the transitive verb *(we)ñār-* '(they) spoke (to X)'.

śemäl-yo nu *ya*(*-tsi*) *wätkäś* *täm-yo* *puk yas* *ña*[a5](*rey-aṃ* ///
goat-INS CONJ do-INF command.NPST.ACT.2PL DEM-INS all 2PL hell-LOC
we)ñār-äṃn-atac || *ānä*(*nda*)*rśn-aṃ* ||
speak.PST.ACT.3PL-3SG-ALL A-meter-LOC
'But you$_{PL}$ order to make (a sacrifice) with a goat. Therefore, you$_{PL}$ all ... in the hell. (They) **said** (this) **to him/her**. [In the A-tune:] "..."'

(A95a5; trans. based on CEToM; prose)[4]

Finally, in the following example (6.20), TA√*āks-* 'announce, proclaim' carries the second-person singular PC *-ci*, representing the IO (addressee). This example does not contain any overt DO.

(6.20) [TA] *-äṃ* = uncertain
FUNCTION: IO (addressee) of a ditransitive

[a2] /// *k waltsu*(*rā* ***ā)kṣ(i)ñam-ci*** || *taruṇadivāk*(*ar-aṃ* ||) ///
briefly instruct.SUBJ.ACT.1SG-2SG T.meter-LOC
'... I **will** briefly **tell** (this) **to you$_{SG}$**. [In the T-tune:] ...'

(A400a2; prose)

As summarized in table (6.4), when the IO and DO of a ditransitive verb are both pronominal, PCs consistently index the IO. The examples contained an animate human IO (goal, source, recipient,

4. Cf. A96b3 *śemälyo talke yatsi wätkseñc* 'They order to make a sacrifice with a goat.' *(we)ñār-äṃn-atac* is to be read as *(we)ñār-äṃn-anac* (Sieg and Siegling 1921: 55 n. 2).

or addressee) and an inanimate DO (theme). The DOs were all third-person. Some verbs of communication accompanied the secondary case marker of allative, unambiguously representing the addressee IO.

	PC	IO		DO	
TA√*e*|*wä*(*s*)$^{?}$- 'give'					
(6.10) *paṣ-äm*	PL	PL	'the Pretas'	3SG	(*pro*) 'food'
(6.11), (6.12), (6.13) *et-ñi*	1SG	1SG	'Nirdhana'	PL	(*pro*) '500 denars of money'
TA√*sumā*- 'take away, deprive of'					
(6.14) *psumār-ñi*	1SG	1SG	'Nanda'	3SG	*cam* ?
TA√*kälā*- 'lead, bring'					
(6.15) *klāte-ñi*	1SG	1SG	'King Prasenajit'	3SG	(*pro*) 'water'
TA√*träṅk*|*we-ñ*- 'say, speak'					
(6.16) *träṅkäm-ci*	2SG	2SG	'Paṭṭinī'	3SG	*taṃ* 'that' [N.SG]
(6.17) *träṅkṣ-änn-anac*	3SG-ALL	3SG	...	3SG	(*pro*) '(the following sentence)'
(6.18) *weñā-nn-anac*	3SG-ALL	3SG	...	3SG	(*pro*) '(the following sentence)'
(6.19) *weñār-äṃn-anac*	3SG-ALL	3SG	...	3SG	(*pro*) '(the following sentence)'
TA√*āks*- 'announce, proclaim'					
(6.20) *āksiñam-ci*	2SG	2SG	...	3SG	(*pro*) '(the following sentence)'

Table 6.4: Summary of the examples in TA

6.2.3 Interim summary

The examples in the two previous subsections showed that when the IO and DO of a ditransitive verb are both pronominal, PCs consistently represent the IO in TA and TB. There was no example such as (6.21), in which a finite verb accompanies a PC and an independent pronoun in the genitive-dative case (TA *cami*, TB *cwi*) represents the IO.

(6.21) Unattested hypothetical examples of TA and TB

i. [TA] †... *cami*$_{\text{IO}}$ ... *träṅkäm-**äṃ***$_{\text{DO}}$ 'I will tell **it** to him'.

ii. [TB] †... *cwi*$_{\text{IO}}$ ... *aksau-**ne***$_{\text{DO}}$ 'I will tell **it** to him'

Adams (2015: 21) made an important observation in his handbook regarding the distribution of the Tocharian PCs. He noticed this asymmetric distribution of the PCs. He described that if both IO and DO are pronominal, "it seems that the IO is favored" to surface as a PC in TB (Adams 2015: 21). Unfortunately, he did not elaborate on his observation or provide any supporting example. As I have shown in the previous subsections, the distribution of the PCs in TA and TB is more restricted. If ditransitive verbs carry a PC, and if the verbs' IO and DO are both pronominal, the PC consistently indexes the IO.

Indeed, PCs may represent the DO (theme) of a transitive verb, as observed in Chapter 3. In such a case, however, the host of the PC is either a monotransitive (6.22) or a ditransitive verb, whose IO is non-pronominal (6.23 and 6.24 in TB, and 6.25 and 6.26 in TA).

(6.22) [TB] *-me* = DO (theme) of a monotransitive

k$_u$se tänmästrä sässuwa ¦ piśaka wī wakicceṃ (:)
REL.M.NOM.SG be.born.NPST.MID.3SG son.PL 50 2 distinguished.ACC.PL

mā ***aiśtär-me***$_{DO}$ *mā* ***lkān-me***$_{DO}$ ¦
NEG know.NPST.MID.3SG-PL NEG see.SUBJ.ACT.3SG-PL

'Whoever begets 52 distinguished children [14a] does not **know them** (if) he does not **see them**.'

(B255b5; verse; [7¦7]×4)

(6.23) [TB] *-ñ* = DO (theme) of a ditransitive with a non-pronominal IO (inanimate goal)

arai srukalyñe ¦ ci-sa nta kca mā prāskau :
oh death 2SG-PERL INDF any NEG be.afraid.NPST.ACT.1SG

pontas sruke-lle ¦ kā ñiś ṣeske tañ prāskau :
all.GEN.PL die-GDV why 1SG alone GEN.2SG be.afraid.NPST.ACT.1SG

s= ārai ñi palsko ¦ cisa prāskau pon preken-ne :
DEM.M.NOM.SG oh GEN.1SG thought 2SG-PERL be.afraid.NPST.ACT.1SG all time-LOC

twe ṅke ***kalatar-ñ***$_{DO}$ ¦ *apiś wärñai nrey-enta-ne*$_{IO}$:
NOM.2SG then lead.SUBJ.MID.2SG-1SG Avīci beginning.with hell-PL-LOC

'O death, I do not fear anything but you: [1a] all have to die, why would I alone fear you? [1b] Oh, this is my thought: Because of you, I am fearing at all times, [1c] since you **will bring me** to the hells, including the Avīci. [1d]'

(B298a1; verse; [5¦7]×2 + [5¦8]×2)

(6.24) [TB] *-me* = DO (theme) of a ditransitive with a non-pronominal IO (animate goal)

ylaiñikte *bramñikte-śIO* *mant* ***ṣerpsa-me***DO *weñā-me-ś*
Indra.god Brahma.god-ALL then lead.PST.ACT.3SG-PL speak.PST.ACT.3SG-PL-ALL
'Then, the god Indra **guided them** (= Nānda and Nandābala) to the god Brahma, [and] said to them:'

(B107a9; prose)

(6.25) [TA] *-äṃ* = DO (theme) of a ditransitive with a non-pronominal IO (inanimate goal)

tsopatsäṃ *ske* *spaltäk-yo* ¦ *tskāt* *cam* *(wa)ṣ(t-äṣ* *pättāṃñkät*
great.ACC.SG zeal effort-INS take.out.PST.MID.3SG DEM.ACC.SG house-ABL Buddha.lord
[a7] :)

ku(e)yaṃ *pältsäk cacräṅku* ¦ *mrosäṅkā-tsi* *mā*
woman-LOC spirit be.attached.CAUS.PTCP.M.NOM.SG feel.disgust.NPST-INF NEG
nwiññāt :
bear.IMPF.MID.3SG.(?)

wāt-äṃ *käṣṣī* – – – ¦ *(antuṣ* *wāt-äṃ* *ñaktas-ac* :)
lead.PST.MID.3SG-3SG teacher thereupon lead.PST.MID.3SG-3SG god.ACC.PL-ALL

wāt-äṃDO *antuṣ* *ñarey-aṃ*IO ¦ *kuppre ontaṃ mroskat*
lead.PST.MID.3SG-3SG thereupon hell-LOC if ever feel.disgust.PST.MID.3SG
säm : (100-00-7)
DEM.M.NOM.SG
'With great zeal (and) effort, the Buddha-lord took him (= Nanda) out of the house (i.e., converted him into a monk). [107a] (He who has) attached (his) spirit to a woman did not bear renouncing. [107b] The teacher led him ... then, he led him to the gods. [107c] (But) only when he **led him** into hell did he renounce. [107d]'

(A222a7[5]; verse; [7¦7]×4)

(6.26) [TA] *-äṃ* = DO (theme) of a ditransitive with a non-pronominal IO (animate recipient)

5. A239 a5–6 attests a parallel passage: [a5] *tso(patsäṃ ske spa)ltäkyo ¦ tskāt cam waṣtäṣ pättāṃñkät «:» ku(leyaṃ päl(tsäk) /// [a6] (¦ a)ntuṣ w(ā)t-ä(ṃ ñaktas-ac : wāt-äṃ antuṣ ña)reyaṃ ¦ k(u)pre o(ntaṃ mroskat säm :) ///*

putti(śpar-ṣiṃ ā)kāl-yo kāpñe āriñc-ṣinäs sewās
Buddha's.dignity-ADJZ.ACC wish-INS love heart-ADJZ.M.ACC.PL son.ACC.PL
pr(a)mn(e el) [b2] *wäs* •
brāhmaṇa.GEN gift give.PST.ACT.3SG

cem śkaṃ l(ālaṃṣk) · ñ s_uk(-aṃ) śāśoṣ – – – lko – – –
DEM.M.NOM.PL CONJ tender pleasure-LOC live.PTCP.M.NOM.PL
(ko)ṣt-l-une-yā ṣkārā luksa-māṃ triśkās käntwās-yo
strike-GDV-NMLZ-PERL backwards be.illuminated.CAUS-PTCP ? tongue.PL-INS
pācar [b3] *(tä)kwāṣānt nā – – (kāp)ñ(e) āriñc pācar $k_u$yal (täm ya)kṣe*$_{IO}$ *śwā-(ts)i*
father ?-PTCP$^{(?)}$ love heart father why DEM Yakṣa.GEN eat-INF
eṣṣ-äm$_{DO}$
give.NPST.ACT.3SG-PL

'With the desire of (attaining) the Buddha's dignity, (he) gave (his) dear (and) beloved sons to the Brahmin as a gift. And they (who) lived in pleasure ... tender ... with striking back ... with glowing *triśkās* tongues, the father .... *täkwāṣānt* ... (our) father (who is) dear (to our) heart, why does (he) **give us** to the Yakṣa as a food?

(A356b3; prose?)[6]

Example (2.14), repeated here as (6.27), also contains a ditransitive predicate whose IO is non-pronominal. This example is illustrative if one compares it with (6.7), repeated here as (6.28).

(6.27) (= 2.14) [TB] *-ne* = DO (theme) of *myāskawa-* 'I exchanged X with somebody$_{GENITIVE\text{-}DATIVE}$'

sū weña upanandi «†·e»$_{IO}$ ***myāskawa-ne***$_{DO}$ *tum(eṃ)*
DEM.M.NOM.SG say.PST.ACT.3SG PN.GEN exchange.PST.ACT.1SG-3SG then
cai ostaññi nāksa[b3]*nte-ne skarāre-ne*
DEM.M.NOM.PL housemate.PL blame.PST.MID.3PL-3SG threaten.PST.ACT.3PL-3SG
'He$_j$ said: "I **traded it** with Upananda." Thereupon, these housemates blamed him$_j$ [and] threatened him$_j$.'

(PKAS18Ab2; prose)

(6.28) (= 6.7) [TB] *-ñ* = IO (beneficiary) of *myāskasta-* 'you$_{SG}$ exchanged'

6. For *(täm ya)kṣe*, see Thomas (1954: 726).

tumeṃ su *upanandeṃn-meṃ kampāl päst«†ä» ñ̃ñaṣṣi* •
then DEM.M.NOM.SG Upananda-ABL cloak away demand.IMPF.ACT.3SG

upanande mā wsā-ne *te* [b2] *weñ̃ā-ne*
PN NEG give.PST.ACT.3SG-3SG DEM speak.PST.ACT.3SG-3SG

myāskasta-ñ̃$_{IO}$ *mā aiskau-cä*
exchange.PST.ACT.2SG-1SG NEG give.NPST.ACT.1SG-2SG

'Then he demanded the cloak back from Upananda. (But) Upananda didn't give [the cloak] back to him. He said this to him: "You$_{SG}$ **traded** [it] **with me**. I'm not giving [it] to you$_{SG}$."'

(B337b2; trans. based on CEToM; prose)

Both examples contain the same preterite stem *myāska-* of the root √*mäsk-* '(ex)change,' carrying a PC. While the PC in (6.27) represents the DO, the PC in (6.28) does not index the DO but the IO. The IO of the latter is pronominal, while that of the former is not. Table 6.5 summarizes these examples.

	IO (beneficiary)	DO (theme)	PC
(6.27)	*upanandi*	pronominal; 3SG	*-ne* [3SG] = **DO**
(6.28)	pronominal; 1SG	pronominal; 3SG	*-ñ̃* [1SG] = **IO**

Table 6.5: Summary of (6.27) and (6.28)

Likewise, the ditransitive verb *aiskau-c* in (6.29) contrasts with (6.7), repeated here as (6.30). The PC in (6.30) represents the IO. In contrast, the PC in (6.29) does not index the IO but the DO.[7] Table 6.6 summarizes these examples.

(6.29) *-cä* = DO (theme) of *aiskau-* 'I give X to somebody$_{GENITIVE\text{-}DATIVE}$'

walo weṣṣäṃ *larekka* *brāhmaṇets*$_{IO}$ *āyor* ***aiskau-c***$_{DO}$ ||
king speak.NPST.ACT.3SG dear.VOC brahmin.GEN.PL gift give.NPST.ACT.1SG-2SG

'The king speaks: "My darling! I **give you**$_{SG}$ to the brahmins as a gift."'

(B83a5; trans. based on CEToM; prose)

7. Peyrot (2017: 634) writes, "*aiskau-c* would normally mean 'I give [it] to you', but theoretically possible 'I give you [to him]' is also attested". However, I could not find any example of *aiskau-c* accompanying a pronominal (overt or covert) DO (cf. 6.29 where a DO is non-pronominal).

(6.30) (= 6.7) *-cä* = IO (recipient) of *aiskau-* 'I give'

tumeṃ su upanandeṃn-meṃ kampāl päst«ŧä» ñ̃ñaṣṣi •
then DEM.M.NOM.SG Upananda-ABL cloak away demand.IMPF.ACT.3SG

upanande mā wsā-ne te [b2] *weñā-ne*
PN NEG give.PST.ACT.3SG-3SG DEM speak.PST.ACT.3SG-3SG

myāskasta-ñ mā ***aiskau-cä***$_{IO}$
exchange.PST.ACT.2SG-1SG NEG give.NPST.ACT.1SG-2SG

'Then he demanded the cloak back from Upananda. (But) Upananda didn't give [the cloak] back to him. He said this to him: "You$_{SG}$ traded [it] with me. I'm not **giving** [it] **to you**$_{SG}$."'

(B337b2; trans. based on CEToM; prose)

	IO (recipient)	DO (theme)	PC
(6.29)	*brāhmaṇets*	pronominal; 2SG	*-c* [2SG] = **DO**
(6.30)	pronominal; 2SG	pronominal; 3SG	*-cä* [2SG] = **IO**

Table 6.6: Summary of (6.29) and (6.30)

We have observed that PCs may index the DO when the verb is monotransitive or ditransitive with a non-pronominal IO. In contrast, when the IO and DO are both pronominal, PCs never represent the DO; they consistently index the IO in TA and TB.

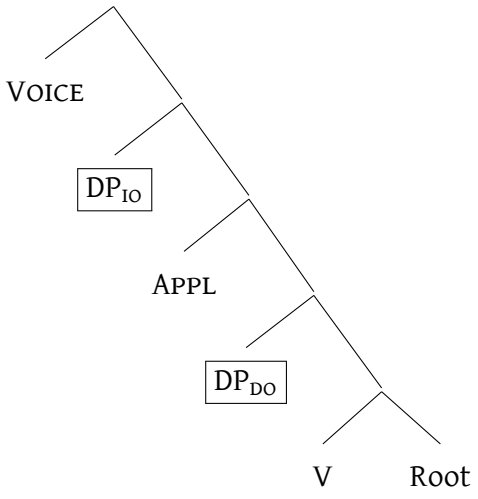
6.3 Analysis

The previous subsections showed that when the IO and DO of a verb are both pronominal, PCs consistently index the IO. This observation is unexpected if I follow the view that PCs arbitrarily choose an argument it represents (hypothesis 1 of Table 6.1). Therefore, I follow hypothesis 2 and think that there is an underlying cause that produces this asymmetric pattern. There are several ways to formalize such machinery, but I use the one developed in Chapter 5 as it finds independent motivation.

In Chapter 5, I built a Tocharian syntactic structure in a bottom-up fashion (6.31). The root first merges with the verbalizer and introduces a nominal expression that serves as the DO with a theme role. The resulting structure may merge with another functional head (high-)APPL(icative),

introducing another nominal expression as the IO with various thematic roles such as goal, source, recipient, beneficiary, or addressee (Marantz 1993; Harley 1995; Alexiadou 2003; Miyagawa and Tsujioka 2004; Pylkkänen 2008; Lochbihler 2012; Hamilton 2017; Despić, Hamilton, and Murray 2019, among others). The resulting structure then merges with another functional head VOICE, which looks for the value of person and number features in the c-commanding domain, and copies the closest one (Minimal Link Condition; Chomsky 1995). When the IO and DO of a di-transitive verb are pronominal, VOICE always agrees with the IO since it searches the features in a top-down fashion and finds the IO before the DO. This analysis accounts for the empirical distribution of the PCs observed in the previous section.

(6.31) Hierarchical structure



This analysis also yields a firm prediction. Since VOICE, which looks for a pronoun, always finds the IO before the DO, PCs cannot represent or double the possessor of the DO when the IO is pronominal.

(6.32) Prediction 1

PCs never represent the possessor of the DO when the IO is pronominal. Examples such as (6.32i) should be absent.

i. [TB] Hypothetical example that should be absent:
†*upanande tñi*$_{IO}$ *kampāl*$_{DO}$ ***aiṣṣäṃ-ne***$_{POSS\text{-}OF\text{-}DO}$ 'Upananda **gives his** garment to you$_{SG}$.'

(6.33) Prediction 2

PCs never double the DO when the IO is pronominal. Examples such as (6.33i) should be absent. In contrast, we should be able to find a PC doubling the pronominal IO (6.33ii).

i. [TB] Hypothetical example that should be absent:
†*upanande tñi*$_{IO}$ *cwi kampāl*$_{DO}$ ***aiṣṣäṃ-ne***$_{POSS\text{-}OF\text{-}DO}$ 'Upananda **gives his** garment to you$_{SG}$.'

ii. [TB] Hypothetical example that should be found:
†*upanande tñi*$_{IO}$ *cwi kampāl*$_{DO}$ ***aiṣṣäṃ-c***$_{IO}$ 'Upananda **gives** his garment **to you**$_{SG}$.')

The examples that predictions (6.32i) and (6.33i) predicted not to exist were absent in our corpus. However, since these predictions are about negative evidence, the lack of examples might be due to mere chance. Therefore, what is important to us is the examples that prediction (6.33ii) predicts to exist. I show below that this prediction is borne out.[8] When we find doubling of a nominal expression by a PC, if the IO of a ditransitive verb is pronominal, the doubling PC indexes the IO. In A213 b3 (6.34), the plural PC *-äm* does not double the demonstrative pronoun *caṣ* 'this,' nor the DO *pärklune* 'question' (theme), but the IO *yasäṃ* 'to you$_{PL}$' (addressee).[9]

8. Chapter 7 will discuss the precise function of clitic doubling in TA and TB and semantic-pragmatic conditions that restrict doubling.

9. We find examples in which a PC represents the IO, and a demonstrative pronoun attributively modifies the DO (6.d, 6.e). One might argue that the PC choosing the IO in such examples reflects an underlying syntactic structure. However, PCs never represent a demonstrative pronoun that attributively modifies a noun (cf. Meunier 2015: 136–9), and therefore, we cannot use such examples to argue for an underlying hierarchical structure.

(6.d) [TB] PC = IO (source); Demonstrative pronoun *ce*$_u$ attributively modifies the DO *kampāl* 'cloak'

upanande	*ce*$_u$	*kampāl*$_{DO}$ [b2]	***yaṣṣāte-ne-meṃ***$_{IO}$	*mā*	*wsā-ne*	•
PN	DEM.M.ACC.SG	cloak	beg.PST.MID.3SG-3SG-ABL	NEG	give.PST.MID.3SG-3SG	

'Upananda **begged** that cloak **from him**, [but] he did not give [it] to him.'

(PKAS18Ab1-2)

(6.e) [TA] PC = IO (source); Demonstrative pronoun *caṣ* attributively modifies the DO *klop* 'suffering'

paṣ-äm	*śwā-tsi*	*paṣ-äm*	*nätäk* ¦	***pwikā-m***	*klop*
give.IMP.ACT.2SG-PL	eat-INF	give.IMP.ACT.2SG-PL	lord	disappear.CAUS.IMP.ACT.2SG-PL	suffering

caṣ	*k(aśśiñ*	*was*	70-8)
DEM.M.ACC.SG	hungry.NOM.PL	NOM.1PL	

'[The Pretas speaking to Koṭikarṇa]: "Give us food, give us, oh lord, **remove** this suffering **from us**; (we [are] hungry". [78d]'

(A340a4; trans. based on CEToM; verse; [5¦5¦5¦5] + [8¦7¦7] + [5¦5] + [8¦7])

(6.34) [TA] PC = Doubling of the IO (of a ditransitive predicate with a pronominal IO)

/// (*kupre*)-*n*(*e*) *säm* ***ya(s-ä)ṃ***$_{IO}$ (*caṣ* *pe*)*nu* *pärklune*$_{DO}$ • *sne*
if-COMP DEM.M.NOM.SG 2PL-GEN DEM.ACC.SG also question without
(*tä*)*ṅk-l-une* *atäṅkät* ***wätkāṣṣ-äm***$_{IO}$ *cam* *yas* *wäṣpā waṃ*
hinder-GDV-NMLZ unhindered answer.SUBJ.ACT.3SG-PL DEM.ACC.SG NOM.2PL truly
///

'(Bādhari speaking to his disciples:) "If he also **answers** this question **to you**$_{PL}$ without hindrance and without hesitation, you$_{PL}$ indeed ... him."'

(A213b3;[10] prose)

In (6.35), the second-person singular clitic *-c* doubles the pronominal IO *cī* 'you$_{SG}$,' which is the beneficiary of *lakle* + √*yām-* 'to make suffering for X; torture X.' This PC does not double the DO, which is third-person singular.

(6.35) [TB] PC = Doubling of the IO (of a ditransitive predicate with a pronominal IO)

snai *kkarūṃ* *cai* *onolmi* ¦ *amaukacci* *yolo-sa* •
without compassion DEM.M.NOM.PL living.being.NOM.PL unceasing.NOM.PL evil-PERL

saim ***pärmaṅk cī*** ***śaiṣṣe-ntse***$_{IO}$ ¦ *lakle* *räskre*$_{DO}$ [a4]
protection hope ACC.2SG world-GEN suffering bitter
yāmṣiyeñ-c$_{IO}$ •
make.IMPF.ACT.3PL-2SG

'Without compassion, these living beings, (who are) unceasing with an evil (thought), [3a] harshly **tortured you** (*lit.* 'made bitter suffering [for] you'),[11] **the protection (and) hope of the world.** [3b]'

(B231a4; trans. based on Thomas 1957: 65; verse; [7¦7] × 4;

10. This passage corresponds to YQ II.5 a7-8: *kupre-ne säm yasäṃ caṣ penu pärklune* [a8] (• *sne täṅklune atäṅkät* ***wätkāṣṣ-äm*** *cam yas wäṣpā wätkālts tämne*) *w*(*ä*)*knā kakmunt puk knānmānänt ptāñkät pkärsäs* 'If he also (**answers**) this question **to you**$_{PL}$ (immediately and without hesitation, then you$_{PL}$ are indeed) to recognize him surely as the Tathāgata and the all-knowing Buddha-god' (trans. based on CEToM).

11. When TB √*yām* 'to do, make' takes *lakle* 'suffering' as the DO, the resulting predicate means 'to do suffering to X$_{ACC}$; torture X$_{ACC}$'. Cf. *kṣānti* 'forgiveness' with √*yām* 'to do, make', meaning 'to do forgiveness to X$_{ACC}$; forgive X$_{ACC}$' (e.g., B34 a5 *yāmṣa cau*$_{ACC}$ *kṣānti* '[S/he] did forgiveness [to] him; [S/he] forgave him').

The following example contains a pronominal possessor, semantically associated with the IO. In (6.36), the third-person singular PC *-äṃ* seems to double either *ka*(*pśi*)*ññaṃ* 'in the body,' which is the IO (location) of the verb, or, more likely, *cami* 'his,' which refers to an embryo and represents the possessor of the IO. The PC in this example cannot double the DO as the DO is third-person plural (*wu lotas* 'two holes').

(6.36) [TA] PC = Doubling of the possessor of the IO (of a ditransitive predicate with a pronominal possessor of an IO)

kus-ne ***cam-i*** *āñc* *ka(pśi)ññ-aṃ*$_{\text{IO}}$ *wu* *lotas*$_{\text{DO}}$ ***ruseñc-äṃ***$_{\text{POSS-OF-IO}}$
REL-COMP DEM.M-GEN down body-LOC two hole.ACC.PL open.NPST.ACT.3PL-3SG
ṣom *āsu* *wesis* *wcaṃ* *lyī* *wesi* ///
one.ACC dry.PTCP.M.NOM.SG excrement.GEN second.ACC wet excrement
'(Those) who **open** two holes in the lower (part of) **his** body, one for dry excrement (and) the other for wet excrement ...'

(A150b6; prose[?])

As I predict, PCs doubling the DO are absent when the IO is pronominal (6.33i). I find doubling of the DO and the possessor of the DO when the verb is (1) monotransitive or (2) ditransitive with a non-pronominal IO. In examples (6.37) and (6.38), monotransitive verbs accompany a PC and show the doubling of the DO and the possessor of the DO, respectively.

(6.37) [TA] PC = Doubling the DO (of a monotransitive verb)

kaśśi *yokañi* *pälkāt* *cesäm* *amoktses* *kātse käly-māṃ*
hungry thirsty see.PST.MID.3SG DEM.M.ACC.PL artisan.ACC.PL near stand-PTCP
cesm-äk *puk śtwar śälkās* *poke-yo* *wa*(*ltsu-r-ä*)[a2]*ṣ* ***poñcäs***
DEM.M.ACC.PL-EMP all four altogether[?] paw-INS crush.PTCP-NMLZ-ABS all.ACC.PL
kosā-m ***tāpa-m*** *śkaṃ lo*
kill.PST.ACT.3SG-PL eat.PST.ACT.3SG-PL CONJ PTCL
'being hungry and thirsty, (the lion) saw these artisans standing nearby. Crushing those very four altogether[?] with (his) paw, (he) **killed them** and **ate them** all up.'

(A13a2; trans. based on CEToM; prose)

(6.38) [TB] PC = Doubling the possessor of the DO (of a monotransitive verb)

— — — — — ¦ — — —)[a2]-*mpa tsälpāre* :
...-COM be.free.PST.ACT.3PL

pelaikne-ṣṣai ***tañ*** ¦ *kektseñ* *wato* ***wināskau-c*** 40-7 ||
law-ADJZ.F.ACC.SG GEN.2SG body.ACC.SG again? honor.NPST.ACT.1SG-2SG

'... were free with ... [47c] I again? **praise your** body of the law. [47d]'

(B244a2; trans. based on CEToM; verse; [5¦7]×4)

In examples (6.39), (6.40), and (6.41), there is a ditransitive predicate accompanying the non-pronominal IO and a PC. These examples show the doubling of the IO, the DO, and the possessor of the DO, respectively.[12]

(6.39) [TB] PC = Doubling of the IO (of a ditransitive predicate with the non-pronominal IO)?[13]

(*tu-meṃ* *pūdñäkte*)*-ś*$_{IO}$ ***śārsare-ne*** *ce*$_{u}$ *wäntre*$_{DO}$:
DEM-ABL Buddha.lord-ALL know.CAUS.PST.ACT.3PL-3SG DEM.M.ACC.3SG matter

'(Thereupon) they **announced** this matter **to (the Buddha lord)**.'

(PKNS22b5; verse; [5¦7]×4)

(6.40) [TB] PC = Doubling of a DO (of a ditransitive predicate with a non-pronominal IO)

– – – – – **(*ṣa*)*ñ* *k*(*e*)*wän***$_{DO}$ ¦ *śakātai-sa*$_{IO}$ ***kalṣtär-me***$_{DO}$ ¦ *ṣñār* *wepeṃ-ś*
own cow.PL stick-PERL goad.NPST.MID.3SG-PL respective corral.PL-ALL
aśan-me :
lead.NPST.ACT.3SG-PL

tu-yknesa ktsaitsñe srūka[a4](*lñe*) ¦ *śaul kältsenträ* *wnolmen-tso* ¦ *ṣañ*
thus old.age death life goad.NPST.MID.3PL being.ACC.PL-GEN own
kalymi-ś *aken-ne* :
direction-ALL lead.NPST.ACT.3PL-3SG

"(Just as a herdsman) **goads** (his) **own cows** with a stick, and leads them to their corrals, [89a] in this way old age and death goad the life of the beings, and lead it to its destination.

12. The IO in (6.40) and (6.41) has an instrument role, and seems to be an adjunct of a monotransitive verb.

13. In view of (6.34), the third-person singular PC *-ne* in (6.39) is more likely to double the IO than the DO.

[89b]”

(B3a3; trans. based on CEToM; verse; [8¦7¦6]×2 + [4/5¦4/5] + [7¦6])

(6.41) [TB] PC = Doubling of the possessor of the DO (of a ditransitive predicate with a non-pronominal IO)

lyam= *ānande* *keni-sa* ¦ *(a)*[b5]*lyine-sa* *antapi*$_{IO}$:
sit.PST.ACT.3SG Ānanda knee.DU-PERL palm.DU-PERL both

pudñäkte-ntse *kektseño*$_{DO}$ ¦ ***klawāte-ne*** *lyawā-ne* :
Buddha-GEN body touch.PST.MID.3SG-3SG rub.PST.ACT.3SG-3SG

‘Ānanda sat on the knees. With both palms he **massaged** the body of **the Buddha** and rubbed it.’

(B5b5; trans. based on CEToM; verse; [7¦7]×4)

	Doubling of the IO	Doubling of the DO	Doubling of the possessor of the DO
Monotransitive	—	Yes (6.37)	Yes (6.38)
Ditransitive predicate with the non-pronominal IO	Yes? (6.39)	Yes (6.40)	Yes (6.41)
Ditransitive predicate with the pronominal IO	**Yes** (6.34, 7.88)	**No**	**No**

Table 6.7: Summary of Prediction 2

Table 6.7 summarizes the examples discussed. Clitic doubling of the DO and the possessor of the DO are limited to monotransitives and ditransitive verbs with the non-pronominal IO.

Furthermore, the following example (6.42) from the Ṣaḍdanta-jātaka nicely conforms to my analysis. If *wotka-ñi*, restored by Sieg (1952: 15 n. 11) to fill the gap of three akṣaras, is correct, the first-person singular PC in this example indexes the agent of an infinitive, while the infinitive’s IO is also pronominal.

(6.42) [TA] PC = Agent of an infinitive

tmäṣ cesäm āṅkaräs lāntse suknā-māṃ träṅkäṣ
then DEM.M.ACC.PL tusk.PL queen.GEN present-PTCP speak.NPST.ACT.3SG

cesäs śkaṃ āṅkaräs t̲ñi$_{IO}$ *es-si* (***wotka-ñi*** ||)
DEM.M.ACC.PL CONJ tusk.PL GEN.2SG give-INF order.PST.ACT.3SG-1SG
'Then, presenting the tusks to the queen, (the hunter) says: "And these tusks (he [= the elephant] **ordered me**) to give to you."'

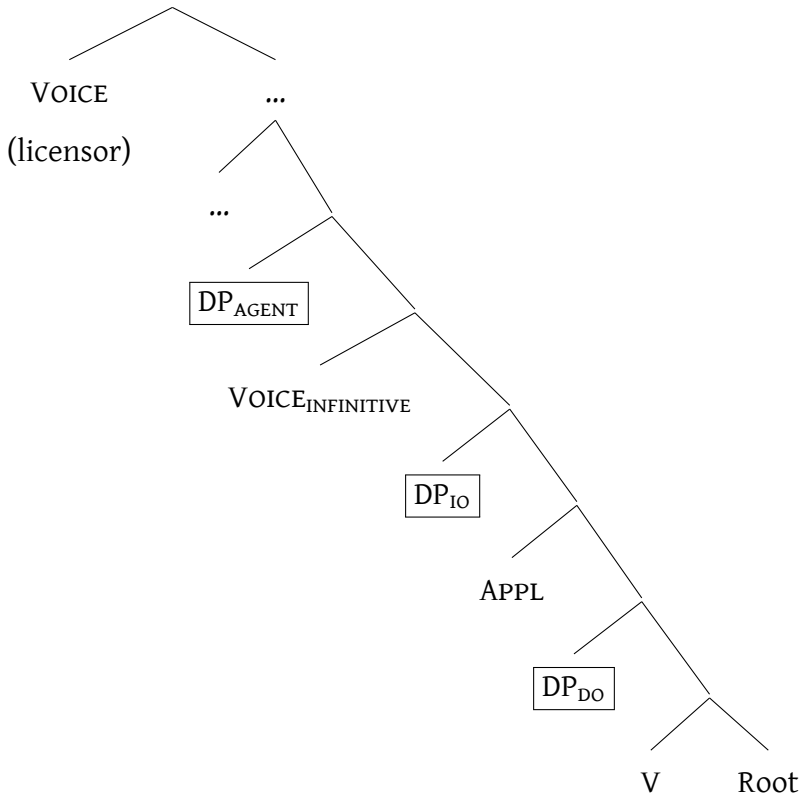
(A77a4; prose?)

PCs may undergo clitic climbing to represent the IO or DO of an infinitive. However, I found no examples where a PC serves as the IO or DO of the infinitive while an independent pronoun represents the agent of the infinitive (6.43).

(6.43) [TA] Hypothetical unattested example:
†*cesäs śkaṃ āṅkaräs ñi es-si* ***wotka-ci***
'And these tusks, (he) **ordered** me to give **to you**'.

My analysis predicts this asymmetry since the licensor of a PC (VOICE in the matrix clause) finds the agent of an infinitive (introduced by another VOICE) before the IO and DO of the infinitive, as shown in (6.44).

(6.44) Hierarchical structure



Likewise, the first-person singular PC in the following example does not represent the IO (addressee) (not 'orders (someone) to ask a question to me') but the agent of the infinitive ('orders me to ask a question').

(6.45) [TA] PC = Agent of an infinitive

/// *tmäṣ ṣu skamat prakäs-si* ***wätkäṣ-ñi*** •
then hither always ask.a.question-INF order.NPST.ACT.3SG-1SG
'Then, she **orders me** to ask a question here repeatedly.'

(YQ III.4b7; trans. based on Ji, Winter, and Pinault 1998: 161; prose)

To summarize, I have shown that the analysis developed in the previous chapter accounts for the asymmetry in the distribution of the Tocharian PCs. In my syntactic model, the licensor of a PC looks for a pronoun in a top-down fashion and licenses the closest one as the PC. It accounts for the empirical distribution of the Tocharian PCs, which always represent the IO when the IO and the DO are both pronominal. Furthermore, my analysis predicts there is a gap in the data (6.46).

(6.46) Predictions

i. PCs cannot represent the possessor associated with the DO when the IO is pronominal.

ii. PCs cannot double the DO or the possessor associated with the DO when the IO is pronominal.

iii. PCs may double an IO when the IO is pronominal.

I have found that a PC doubling the DO or the possessor of the DO is limited to the cases where the IO of a verb is non-pronominal (Table 6.7). However, there is one potential counterexample to (6.46i): PKAS 8C a5 (6.47) contains *weñau-ne*, whose third-person singular PC seems to represent the possessor of the DO *upacar* 'practice, method' (cf. Skt. *upacāra-*), while the verb's IO ('you'?) is not overtly expressed.

(6.47) PC = Possessor of the DO (theme) of a ditransitive verb with the pronominal IO(addressee)?

se *vi(j w)eṣ-le* •
DEM.M.NOM.SG spell speak.NPST-GDV.M.NOM.SG

arañc empreṃ aunaṣ-le
heart true begin.NPST-GDV.M.NOM.SG

warke-sa *po ekaññe-sa* *kekenu* *maṇḍāl*
garland-PERL all possession-PERL be.filled.PTCP.M.NOM.SG maṇḍala
yamaṣ-le •
make.NPST-GDV.M.NOM.SG

kurkalä tuñe • *viciträ* *pyāpyai* *maṇḍāl-ne*
bdellium perfume Citrullus.colocynthis flower.ACC.SG maṇḍala-LOC
taṣa-le •
put.NPST-GDV.M.NOM.SG

te-yäkne-sa *se* *sātäṃ* *star-ne*[14] ||
DEM.N-manner-PERL DEM.M.NOM.SG success COP.NPST.3SG-3SG

ñake upacar ***weñau-ne*** ||
now method speak.SUBJ.ACT.1SG-3SG

'This charm [has] to be spoken. It [has] to be started with determination [*lit.* (One's) heart (has) to be started (as) true]. (One) should make a maṇḍala provided with a garland [and] all (sorts of) wealth. (One) should put perfume of bdellium [and] a flower of citrullus

colocynthis [cf. Skt. *vicitra-*] in the maṇḍala. In this way, this (spell) is complete [*lit.* this is the accomplishment (cf. Skt. *sādhana-*) of it]. Now, I will **speak about its** use.'

(PKAS8Ca5; trans. based on CEToM; prose)

The third-person singular PC *-ne* in *weñau-ne* refers to *vij* 'the charm.' The function of the PC is to represent an (objective) genitive associated with *upacar* 'practice, method, usage' (i.e., *upacar weñau-ne* 'I will speak its [= the charm's] usage'). PKAS 8C is a medical/magical text, and although the verb is in the first-person singular, no overt addressee is mentioned in the text. Therefore, *weñau-* in this example may be a simple monotransitive verb rather than a ditransitive accompanying a referential null object as the IO.

6.4 Implications and further questions

My analysis has some implications for our understanding of the Tocharian syntax: it enables us to identify when TA and TB have a referential null object as the DO. In (6.48), where the IO and DO of the verb are both pronominal, the third-person singular PC *-ne* represents the IO, and the pronominal DO lacks overt phonetic realization.

(6.48) [TB] PKAS18Ab3

sū *mā* ***wsā-ne***
DEM.M.NOM.SG NEG give.PST.ACT.3SG-3SG

✓ 'He did not **give** it$_{\text{NULL OBJECT}}$ **to him**.'

× 'He did not **give it** to him$_{\text{NULL OBJECT}}$.'

It allows us to identify the condition under which TA and TB license a referential null object. It is a topic recently studied for some ancient Indo-European languages (cf. Keydana and Luraghi 2012 on Vedic and Greek, Inglese, Rizzo, and Pflugmacher 2019 on Hittite), but not for Tocharian. Based on the observation made in this chapter, we may now collect the TA and TB examples in which the DO of a verb is a null object.

14. This copula carries a third-person singular PC. However, its function is not clear to us (Cf. CEToM: "this [process] **of it** is a success").

Finally, there is one point characteristic of this analysis. Our analysis disregards the animacy or humanness of an argument. In other words, no matter whether the IO is animate or not, or whether the DO is animate or not, in our analysis, PCs always represent the IO when the IO is pronominal.

Ditransitive predicates of TA and TB usually organize their argument structure following Silverstein's (1976) animacy hierarchy (6.49). All the examples we observed represent arguments at the higher levels of the hierarchy as IOs and those at the lower levels as DOs (Tables 6.3 and 6.4).

(6.49) Silverstein's (1976) animacy hierarchy

1st/2nd person » 3rd person pronoun » proper noun » human » animate » inanimate

One might wonder whether PCs still represent the IO when the DO of a ditransitive is at a higher level of the hierarchy than the IO. My analysis predicts that PCs represent the IO even if a ditransitive verb has, for example, an inanimate IO and an animate DO (6.50). In contrast, examples such as (6.51) should be absent.

(6.50) [TB] Hypothetical example that should be found (DO = animate; IO = inanimate)

†*brāhmaṇi* *ci*$_{\text{DO}}$ ***aken-ne***$_{\text{IO}}$
brahmin.NOM.PL ACC.2SG lead.NPST.ACT.3PL-3SG
'The brahmins **guide** you$_{\text{SG}}$ **to it**$_{\text{INANIMATE}}$.'

(6.51) [TB] Hypothetical example that should be absent (DO = animate; IO = inanimate)

†*brāhmaṇi* *cewä-ś*$_{\text{IO}}$ ***aken-c***$_{\text{DO}}$
brahmin.NOM.PL DEM.M.SG-ALL lead.NPST.ACT.3PL-2SG
'The brahmins **guide you**$_{\text{SG}}$ to it$_{\text{INANIMATE}}$.'

Unfortunately, my corpus did not contain any example of a ditransitive predicate where the DO is at a higher level of the hierarchy than the IO. If PCs represent the DO in such cases, I will need to make our model more complex by stipulating that the licensor of a PC is sensitive to the animacy or humanness of a pronominal argument.

Also, some languages have a restriction against a particular combination of phonologically weak

arguments of verbs (PERSON CASE CONSTRAINT; PCC).

(6.52) Person Case Constraint (Bonet 1991; Anagnostopoulou 2005)

i. STRONG PCC: the direct object has to be third person.

ii. WEAK PCC: if there is a third person it has to be the direct object.

In addition to the strong and weak versions of the PCC, scholars added the following subtypes to the typology of the PCC.[15]

(6.53) Further subtypes of the PCC (Nevins 2007; Anagnostopoulou 2017; Pancheva and Zubizarreta 2018)

i. *Me*-FIRST PCC: the direct object has to be second or third person.

ii. ULTRA-STRONG PCC: the direct object has to be second or third person, and if there is a third-person argument, it has to be the direct object.[16]

iii. SUPER-STRONG PCC: the indirect object has to be first or second person and the direct object has to be third person.

	PCC VARIETIES	1>2[17]	1>3	2>1	2>3	3>1	3>2	3>3	EXAMPLE
1.	SUPER-STRONG	*	✓	*	✓	*	*	*	Kambera (Klamer 1997)
2.	STRONG	*	✓	*	✓	*	*	✓	Modern Greek (Bonet 1991)
3.	ULTRA-STRONG	✓	✓	*	✓	*	*	✓	Classical Arabic (Nevins 2007)
4.	*Me*-FIRST	✓	✓	*	✓	*	✓	✓	Romanian (Nevins 2007; Ciucivara 2009)
5.	WEAK	✓	✓	✓	✓	*	*	✓	Catalan (Bonet 1991)
	TB	?	✓	?	✓	?	?	✓	(Table 6.3)
	TA	?	✓	?	✓	?	?	✓	(Table 6.4)

Table 6.8: Varieties of the Person Case Constraint (based on table 1 of Compton 2019: 595)

In my examples, the DOs were all third-person (Tables 6.3 and 6.4). One might wonder whether Tocharian ditransitive predicates may have a third-person singular PC (*-ne*) with the first- or

15. I set aside the number of an argument since, as Nevins (2007) observed, there seems to be no Number Case Constraint.

16. The combinations allowed by the Ultra-strong PCC are the intersection of the set of combinations allowed by the *Me*-first PCC and that allowed by the Weak PCC. The Ultra-strong PCC is a misnomer since it is actually less restrictive than the Strong PCC in that the former allows the combination of the first-person IO and the second-person DO (Table 6.8).

17. "1>2" represents the combination of the first-person IO and the second-person DO.

second-person DO represented by an independent personal pronoun (6.54). Unfortunately, my corpus did not contain any such example either.

(6.54) [TB] Hypothetical example (DO = 1st/2nd; IO = 3rd)

†*upananande ñäś/ci*$_{\text{DO}}$ ***aiṣṣäṃ-ne***$_{\text{IO}}$
Upananda 1SG/2SG give.NPST.ACT.3SG-3SG
'Upananda **gives** me/you$_{\text{SG}}$ **to him**.'

However, I have found a case where a PC indexes the first-person over the second-person. Example (6.55) is a copular sentence in which *tāk(ar)-* '(they) were X, (they) became X' connects two nominal expressions *tñi kāswoney(ä)ntu* 'your$_{\text{SG}}$ virtues' and *ṣrum* 'cause.'

(6.55) [TA] *-ñi* = Possessor of *ṣrum* 'reason' connected by a copula

|| *wäl träṅkäṣ tñi kāswone-y(ä)ntu āṣānik ṣrum*
king speak.NPST.ACT.3SG GEN.2SG virtue-PL venerable cause
tāk(ar)-ñi *pälkār* [a2] ///
COP.PST.ACT.3PL$^{(?)}$-1SG see.IMP.MID.2SG
'The king speaks: "Your$_{\text{SG}}$ virtues, o venerable one, **have become my** reason (for this). Look! ..."'

(A147a1; trans. based on Thomas 1957: 190[18]; verse?)

The PC in this example represents the possessor of *ṣrum* 'cause,' while the possessor of *kāswoney(ä)ntu* 'virtues' is represented by an independent personal pronoun (*tñi*). Since two nominal expressions connected by the copula have the same distance from the licensor of a PC (VOICE), the first-person possessor seems to take precedence over the second-person possessor in this example.

6.5 Conclusion

This chapter discussed cases in which multiple arguments are pronominal. I showed that PCs do not arbitrarily determine which pronominal argument to represent. Instead, I found an asym-

18. Thomas (1957: 190): "Deine Verdienste, o Würdiger, sind mir Grund [hierfür] geworden [...]."

metric distribution of the PCs. PCs consistently represent the IO when both IO and DO are pronominal in ditransitive predicates. I utilized a hierarchical model developed in the previous chapter, which accounted for this restricted empirical distribution and offered two predictions. (1) PCs cannot represent the possessor of the DO when the IO is pronominal. (2) PCs cannot double the DO or the possessor of the DO when the IO is pronominal. I also found that doubling of the DO and the possessor of the DO are absent when the IO is pronominal. Furthermore, my analysis explains the absence of the examples whose PC represents the IO or DO of an infinitive with an independent pronoun describing the infinitive's agent.

CHAPTER 7

Clitic Doubling in Tocharian A and B

7.1 Introduction

In the previous chapters, pronominal clitics (PCs) of Tocharian A (1SG *-ñi*, 2SG *-ci*, 3SG *-(ä)ṃ*, PL *-(ä)m*) and Tocharian B (1SG *-ñ*, 2SG *-c*, 3SG *-ne*, PL *-me*) replaced overt nominal expressions.[1] The Tocharian PCs, however, sometimes cooccur with their antecedent, and in such cases, they appear to be redundant. In (7.1), for example, the plural PC *-äm* represents the direct object (theme) of the transitive verb *kaśal malkam-* 'I will put X together', although the direct object itself is represented by the full nominal expression *ce*(*smä*)*k āyäntu* 'the bones'. Likewise, in (7.2), the third-person singular PC *-ne* appears to repeat *uttareṃ śamaśkeṃ* 'the boy Uttara', which is the direct object (theme) of the transitive verb *tsopaṃ* '(the brahmin Durmukha) pokes X'.[2]

(7.1) [TA] Doubling of *ce*(*smä*)*k āyäntu*

wät träṅkäṣ näṣ nu ***ce*(*sm-ä*)**[b6]***k*** ***āy-äntu*** *p$_u$kāk*
second speak.NPST.ACT.3SG 1SG CONJ DEM.M.ACC.PL-EMP bone-PL completely
*puskās-yo kaśal malkam-****äm***
sinew.PL-INS together join.SUBJ.ACT.1SG-PL
'The second (artisan) says: "But I will join **the bones** with the sinews completely."'

(A11b6; trans. by CEToM; prose)

(7.2) [TB] Doubling of *uttareṃ śamaśkeṃ*

tumeṃ durmukhe brāhmaṇe ***uttare-«ṃ» śamaśke-ṃ*** *kärwā-ṣṣai witsakai-sa*
thereupon Durmukha brahmin Uttara-ACC boy-ACC reed-ADJZ.F.ACC.SG root-PERL

1. An earlier version of this chapter appeared in Onishi (forthcoming).

2. I use the term ASSOCIATE to refer to the nominal expression doubled by a PC.

*räskare tsopaṃ-**ne***
sharply sting.NPST.ACT.1SG-3SG
'Thereupon the Brahmin Durmukha harshly jabs **the boy Uttara** with a reed root.'

(B88a1; trans. based on CEToM; prose)

Scholars have recognized this phenomenon at least since the middle of the twentieth century (e.g., Krause 1952: 207, *TEB* I: 163 n. 1, Adams 2015: 149, among others).[3] For example, Meunier (2015: 139–41) noted that doubling clitics function as an anaphor which has a focalizing effect ("anaphore focalisante").[4] According to Pinault (2008: 537), doubling of a nominal expression by a pronominal clitic has a pragmatic function, that is, to refer to the theme of an utterance, and doubling is partly motivated morphologically because of the frequent lack of distinction between nominative and accusative in nouns.[5] In contrast, Peyrot (2017, 2019) and Adams (2015: 149) treated doubling clitics as object agreement, that is, as markers of agreement with a (direct) object.

However, despite these analyses, it is fair to say that many questions remain unanswered. Some outstanding questions are: What function does clitic doubling in TA and TB have? When or why does it occur? Does it have any semantic effect? Is it subject to any grammatical or semantic restriction(s)? Is there any difference between clitic doubling of TA and TB? How did clitic doubling develop in (pre-)TA and TB? This chapter focuses on the following two questions: (1) What does clitic doubling do in TA and TB? and (2) Does clitic doubling in TA and TB have any grammatical or semantic restriction(s)? This chapter reveals that doubling of a nominal expression by a PC indicates the nominal expression is topical. We will observe that a doubled associate that undergoes dislocation represents the primary topic. In contrast, a non-dislocated associate may represent a

3. It seems that it was not known to Schulze, Sieg, and Siegling (1931).

4. "L'emploi « focalisant » du clitique est peut-être plus difficile à cerner, mais il reste évident que si le clitique mis pour un génitif représente, comme on le pense, un complément d'intérêt, ou *dativus sympatheticus*, dans certaines phrases ce clitique est redondant par rapport à un génitif adnominal, ou par rapport à un génitif-datif ; il y a donc un phénomène d'« anaphore focalisante » mis en jeu dans ce clitique, que sa fonction grammaticale soit identique ou non à celle du terme anaphorisé." (Meunier 2015: 140–1)

5. "Un pronom suffixé peut aussi référer à un complément déjà exprimé par un constituant dans la même phrase: cette reprise a en partie une motivation morphologique, en raison de l'absence fréquente de distinction entre nominatif et oblique dans les noms. Mais elle a simultanément (et probablement à l'origine) une fonction pragmatique, pour renvoyer au thème de l'énoncé." (Pinault 2008: 537)

primary or secondary topic depending on whether or not the associate is in the subject position. In all cases of doubling, discourse participants must presuppose the existence of the associate's referent.

7.2 Topic and the Question Under Discussion model of discourse

7.2.1 What is a topic?

Before we examine the data, a few words are in order regarding the term *topic* since many scholars have used it in various contexts. I follow Reinhart (1981) and others in taking a topic to be PRAGMATIC ABOUTNESS (Reinhart 1981, Krifka 2008, C. Roberts 2011, Matić 2015, among others). A topic is a part of an utterance about which the utterance is meant to give information. For example, the utterance (7.3) concerns Mary, and the topic of this sentence is Mary. In (7.4), however, an addressee is interested in knowing about Harry regarding what Mary gave to him. The sentence topic of (7.4) is therefore not Mary but Harry.

(7.3) What about Mary? What did she give to Harry?
— [$_{\text{TOPIC}}$ *Mary*] *gave a shirt to Harry*.

(7.4) What about Harry? What did Mary give to him?
— [$_{\text{TOPIC}}$ *To him*] *Mary gave a shirt*.

(Examples based on C. Roberts 2011 [2] and Vallduví 1993: 7 [9a])

I assume that information that is mutually known to be shared by the discourse participants is stored in the COMMON GROUND (CG; Stalnaker 1978). The CG also contains a set of entities that have been introduced into the discourse before (Krifka 2008: 246). According to Krifka (2008: 265), new information is not just added to the content of the CG in the form of unstructured propositions, "but is rather associated with entities, just like information in a file card system is associated with individual file cards that bear a particular heading." A sentence topic corresponds to the header of a file card under which new information is stored (Reinhart 1981).

Sentence topic of (7.3): Mary

- She gave a shirt to Harry.
- ...

As summarized by Erteschik-Shir (2007: 13–5), if a topic is what a statement is about, and if one evaluates the truth value of a statement as true or false with respect to the topic, then a topic constituent must have a reference. Otherwise, a statement which "is *about* something is really about nothing" (Strawson 1964: 116, but see von Fintel 2004 for a different view). For example, (7.5i) fails to assign a truth value because the interlocutors do not presuppose the existence of the referent of the king of France in the world of their discourse. In contrast, one should intuitively think that the statement (7.5ii) is false as the king of France is certainly not in the set of individuals who visited the exhibition. In other words, the interlocutors must presuppose the existence of a topic referent in order to evaluate a statement as true or false.

(7.5) Topic expressions must be referential

i. [$_{\text{TOPIC}}$ *The king of France*] *is bald.* (No truth value)

ii. [$_{\text{TOPIC}}$ *The exhibition*] *was visited by the king of France.* (False)

This assumption entails that topic referents must be SPECIFIC since specific nominal expressions are those for which a speaker presupposes the existence of a particular referent (Lyons 1999: 173).[6] For example, the speaker in (7.6i) presupposes the existence of a specific kind of car (e.g., *blue Toyota*). At the same time, it is not the case in (7.6ii): the speaker does not presuppose that there is a specific kind of supermarket nearby.

(7.6) Specificity

i. *You know what? My dad bought a new car!* (SPECIFIC)

ii. *Excuse me. I'm looking for a supermarket.* (NON-SPECIFIC)

6. Specificity is a notoriously difficult term to define. For a recent overview, see von Heusinger (2019). I follow a somewhat informal definition according to which a speaker has "a particular individual in mind" (cf. Lyons 1999: 171).

A topic referent must be specific, and, furthermore, its existence has to be presupposed by both speaker and addressee at the time of the utterance.

7.2.2 Discourse-new referents may be a topic

Although most topics are discourse-old, discourse-new referents may serve as a topic. In (7.7), there are two topic constituents: *Mary* and *the door*. In this short discourse, a sentence topic shifts from Mary to the door, the latter of which has not been introduced to the discourse before.

(7.7) [$_{\text{TOPIC}}$ *Mary*] *bought a car. But* [$_{\text{TOPIC}}$ *the door*] *was broken.*

In this example, an addressee may presuppose the existence of a particular door from the relevant nominal expression *a car*. This process is called BRIDGING (Clark 1975), which enables an addressee to find a unique referent by making inferences from something that s/he already knows.[7] Bridging may license a discourse-new topic as in (7.7), and it is not limited to part-whole relationships (e.g., 7.8).

(7.8) *John was* ***murdered*** *yesterday.* [$_{\text{TOPIC}}$ ***The knife***] *lay nearby.* (Clark 1975: 172)

According to Wilson and Matsui (1998), discourse relevance plays a role in licensing a bridging inference. In contrast, Asher and Lascarides (1998) argue that rhetorical connections (i.e., discourse coherence) between the propositions introduced play a crucial role.[8]

A discourse-new referent may also serve as a sentence topic when it shows generic interpretation. For example, Japanese has a topic marker *-wa*, which may mark a sentence topic (Kuno 1973).[9] In example (7.9), *sono hon* 'the book,' which is discourse-old, is *wa*-marked and serves as a topic. In contrast, the nominal expression *kuzira* 'whale' in (7.10) is discourse-new. Still, it has a *wa*-marking and serves as the topic expression of the sentence. In such cases, a topic displays generic

7. In this case, an addressee implicitly presupposes that a car has a door. Relevant linguistic expressions do not have to be nominal; a verbal expression, or even a proposition may serve as a bridge (Hou 2015; e.g., *I travelled to Frankfurt.* [$_{\text{TOPIC}}$ *The train*] *was very full. Why do humans collaborate?* [$_{\text{TOPIC}}$ *The answer*] *lies in …).*

8. Zhao (2014) reviews previous approaches to bridging.

9. Kuno (1973: 38) calls this type "thematic" *-wa*.

interpretation, or a topic referent is identifiable from a listener's general knowledge about the world.

(7.9) [Japanese] Sentence topic = 'the book (that I bought yesterday)'

i. Taro: *watashi-wa kinou aru hon-wo kat-ta*
I-TOP yesterday some book-ACC buy-PST
Taro: "I bought a book yesterday."

ii. Taro: ***Sono hon**-wa yasuku-nakat-ta*
that book-TOP be.cheap-NEG-PST
Taro: "[$_{\text{TOPIC}}$ **The book**] was not cheap." (DISCOURSE-OLD TOPIC)

By (7.9i), two interlocutors set up a file card whose header is 'the book.' Then, the utterance (7.9ii) updates the file card by adding pieces of information therein.

Sentence topic: the book

- Taro bought it yesterday.
- It was not cheap.
- ...

In contrast, when a speaker produces (7.10) without any preceding context, *kuzira* does not refer to a specific whale but whales in general (Kuno 1972: 270).

(7.10) [Japanese] Sentence topic = 'whales (in general)'

CONTEXT: Out of blue

***Kuzira**-wa honyuu-doobutu desu*
whale-TOP mammal is
'[$_{\text{TOPIC}}$ **Whales**] (in general) are a mammal.' (DISCOURSE-NEW TOPIC)

Sentence topic: whales (in general)

- They are a mammal.
- ...

This chapter will show that clitic doubling always cooccurs with a topical associate in TA and TB.

However, doubling a nominal expression by a PC does not make the expression topical. I assume that topicality is defined not on expressions but referents (Lambrecht 1994; Nikolaeva 2001). It is determined in semantics and/or pragmatics and optionally realized morphologically. In other words, doubling is a sufficient condition for topicality: a nominal expression might represent a topic even if it lacks doubling.[10]

7.2.3 The Question Under Discussion model of discourse

This chapter follows the Question Under Discussion (QUD) discourse model. This framework models discourse as a game, organized around the questions under discussion by the interlocutors (C. Roberts 2012). The advantage of this model is that it may provide an unified perspective to semantic and pragmatic phenomena including presupposition inference and information structure such as topic and focus, which have been treated separately as different phenomena (Beaver et al. 2017).[11]

This model takes the goal of discourse to share information about our world regarding what it is like, that is, to answer the Big Question *What is the way things are?* (Stalnaker 1978; C. Roberts 2012). To achieve this goal, discourse participants set up several subinquiries that help to answer the Big Question, and answer each of the questions stated either explicitly or implicitly. Under the QUD model, discourse is structured around such immediate questions under discussion (QUDs) (Carlson 1983).

To achieve the goal, interlocutors may choose two types of *move*: setup move (i.e., question) and payoff move (i.e., assertion). The former proffers a question, which is a contextually restricted set of propositions that are possible answers to the question (Hamblin 1973; Karttunen 1977; Beaver et al. 2017). The latter chooses among the set of alternative propositions proffered. If the interlocutors accept a question, it becomes the immediate QUD. If the interlocutors accept an assertion, the chosen alternative proposition is added to the Common Ground. The CG contains a

10. Topicality is necessary but insufficient for clitic doubling. Most of the topic expressions lack clitic doubling, as the limited number of the examples suggests (Section 7.1).

11. Of course, it is not the only possible approach. See, for example, Yokoyama's (1986) Transactional Discourse Model as an alternative way to analyze the data.

set of propositions that the interlocutors take to be true. Taking a proposition as a set of possible world, the CG is a set of sets of possible worlds. Adding a proposition to the CG reduces the number of possible worlds contained in the intersection of the propositions (what is called CONTEXT SET). The goal of the discourse is to reduce the Context set to contain a single possible world, namely the actual world (C. Roberts 2012).

(7.11) CONTEXT: John, Mary, Sam, and Lucy are in the classroom.

i. QUD: *Whom does John know?*

ii. $[\![\text{(7.11i)}]\!] = \{ \textsc{know}(\mathbf{j}, y) \mid y \in \{ \mathbf{m}, \mathbf{s}, \mathbf{l} \} \}$
= { *John knows Mary*, *John knows Sam*, *John knows Lucy* }

(7.12) *John knows* [$_{\text{FOCUS}}$ MARY].

The speaker first sets up the implicit QUD (7.11i), which proffers three alternative propositions *John knows Mary*, *John knows Sam*, and *John knows Lucy* (excluding the union and intersection of individuals for the sake of simplicity). Other individuals who are not in the classroom are contextually excluded. The speaker then asserts (7.12), which has a focal intonation on *Mary*. This focal intonation helps an addressee identify the implicit QUD (7.11i). Roughly speaking, a focus constituent corresponds to the *wh*-constituent of the QUD, and in this example, *Mary* is the focus of this utterance. If the assertion (7.12) is accepted by the interlocutors, the (ordinary) semantic value of (7.12), namely $\textsc{know}(\mathbf{j}, \mathbf{m})$ = *John knows Mary* is added to the CG, reducing the number of possible worlds in the Context Set.

In addition to (ordinary) semantic value, a focus also introduces a set of alternative propositions (called "alternative set"; Rooth 1985, 1992, 2016). For example, the focus semantic value of (7.12) is an alternative set of the form '*John knows y*', where *y* is in the domain of individuals D_e. The (ordinary) semantic value and the focus semantic value of (7.12) are (7.13i) and (7.13ii), respectively.

(7.13) (Ordinary) semantic value and focus semantic value of (7.12)

i. (Ordinary) semantic value: $[\![$ *John knows* [$_{\text{FOCUS}}$ MARY] $]\!]^{o} = \textsc{know}(\mathbf{j}, \mathbf{m})$
= *John knows Mary*

ii. Focus semantic value: $[\![$ *John knows* $[_{\text{FOCUS}}$ MARY $]\,]\!]^f = \{\, \textsc{know}(\mathbf{j}, y) \mid y \in D_e \,\}$
= { *John knows Mary*, *John knows Sam*, *John knows Lucy*, *John knows Hiro* ... }

(7.14) *John* $[_{\text{FOCUS}}$ KNOWS $]$ *Mary*.

i. $[\![$ *John* $[_{\text{FOCUS}}$ KNOWS $]$ *Mary* $]\!]^o = \textsc{know}(\mathbf{j}, \mathbf{m})$
= *John knows Mary*

ii. $[\![$ *John* $[_{\text{FOCUS}}$ KNOWS $]$ *Mary* $]\!]^f = \{\, \textsc{know}(\mathbf{j}, \mathbf{m}), \textsc{see}(\mathbf{j}, \mathbf{m}), \textsc{like}(\mathbf{j}, \mathbf{m}), \textsc{hate}(\mathbf{j}, \mathbf{m}), \ldots \,\}$
= { *John knows Mary*, *John sees Mary*, *John likes Mary*, *John hates Mary* ... }

Since the focus semantic value (7.13ii) is a proper superset of the denotation of the QUD (7.11ii), the utterance (7.12) is congruent with the QUD (7.11). In contrast, (7.14), which has a focus on *like* and a focal intonation of *like*, induces the set of alternative propositions (7.14ii). This is not a proper superset of (7.11ii), making the utterance (7.14) infelicitous even though it has the same (ordinary) semantic value as (7.13i). In this way, QUDs, equivalent to discourse topics, constrain the felicitous flow of discourse (C. Roberts 2011).

The complement of a focus is called BACKGROUND. For example, *John knows* is the background of (7.12). A topic constituent is a proper subpart of the background of an utterance. For example, the topic constituent *John* is a proper subpart of the background *John knows* in (7.11).

(7.15) $[_{\text{BACKGROUND}}\, [_{\text{TOPIC}}$ *John* $]$ *knows* $]\, [_{\text{FOCUS}}$ *MARY* $]$.

Not all sentences have a topic. A topic constituent may be absent if a focus domain extends to the entire utterance. In (7.16), an utterance provides an answer to the QUD "*What happened*?" and the focus domain covers the entire sentence.

(7.16) QUD: *What happened?*
$[_{\text{FOCUS}}$ *I killed this reindeer* $]$.

There is no background in this example, and therefore, it does not have an overt topic constituent.

7.2.4 Secondary topic

A single sentence may have more than one topic. In (7.17ii) and (7.17iii), John is the topic of the sentences as they update information about what happened to John.

(7.17) i. *What happened to John*?

ii. ***He** married Rosa.*

iii. *But **he** didn't really love her.*

(7.17ii and 7.17iii from Dalrymple and Nikolaeva 2011: 54)

At the same time, however, (7.17iii) "also increases the addressee's knowledge about Rosa, namely, the fact that she was not loved by her husband John." (Dalrymple and Nikolaeva 2011: 54) In this case, the utterance (7.17iii) provides information regarding the relationship between the primary topic (John) and the referent (Rosa) introduced to the discourse in (7.17ii). Both interlocutors pragmatically presuppose her existence at the time of (7.17iii). I define a SECONDARY TOPIC as "an entity such that the utterance is construed to be about the relation that holds between it and the primary topic" (Nikolaeva 2001: 2; Dalrymple and Nikolaeva 2011: 54–7) and analyze Rosa to be the secondary topic of (7.17iii).[12]

	(7.17ii)	(7.17iii)
QUD	*What happened to John?*	*In what relation did John stand to Rosa?*
Focus	*married Rosa*	*didn't really love*
Topic expression/referent (primary)	*he*/John	*he*/John
Topic expression/referent (secondary)	—	*her*/Rosa

Table 7.1: Summary of (7.17ii) and (7.17iii)

Table 7.1 summarizes the information structures of (7.17ii) and (7.17iii). By producing (7.18iii), the speaker updates the addressee's knowledge regarding the relation between John and Rosa by asserting that the former did not love the latter.

(7.18) (= 7.17)

12. According to Lambrecht (1994: 148), "[a] sentence containing two (or more) topics, [...] conveys information, about the relation that holds between them as arguments in the proposition."

i. *What happened to John*?

ii. [$_{\text{TOPIC}}$ ***He***] [$_{\text{FOCUS}}$ *married Rosa*].

iii. *But* [$_{1^{\text{RY}}\ \text{TOPIC}}$ ***he***] [$_{\text{FOCUS}}$ *didn't really love*][$_{2^{\text{RY}}\ \text{TOPIC}}$ ***her***].

(7.18ii and 7.18iii from Dalrymple and Nikolaeva 2011: 54)

Primary and secondary topics correspond to Erteschik-Shir's (2007: 22–3) MAIN and SUBORDINATE TOPICS.[13] A secondary topic also roughly corresponds to Vallduví's (1993) TAIL, although the former may be a shifted topic while the latter cannot. A secondary topic constituent may be an overt object nominal expression or a referential null element (*pro*). A sentence with secondary topics always has a primary topic, but a sentence with a primary topic may not have a secondary topic. As in primary topics, secondary topics are proper subparts of the background and the current QUD.

Primary topics differ from secondary topics in pragmatic saliency: the former is more salient than the latter. The former is the most salient topic of the utterance, and it is equivalent to a sentence topic. In many cases, however, it is difficult to determine whether a given nominal expression is the primary or the secondary topic of a sentence. In such cases, we follow Givón (1983: 22) and take a nominal expression that occupies the subject position to represent the primary topic.

In this subsection, I outlined our assumptions regarding the term TOPIC. A topic is a part of an utterance about which an utterance gives information, and it is a proper subpart of background. A topic constituent must be either referential, with the interlocutors presupposing its existence, or capable of showing the generic interpretation. A sentence may have more than one topic constituent, and the one which denotes the most salient referent is the sentence topic.

13. Focus domain of (7.18iii) excludes the secondary topic (i.e., [$_{\text{FOCUS}}$ *didn't really love*] [$_{\text{TOPIC}}$ *her*]). In other words, a focus domain does not has to be a syntactic constituent (Dalrymple and Nikolaeva 2011: 86). According to Erteschik-Shir (2007), however, a (secondary) topic (her embedded topic) may be embedded within a focus domain (i.e., [$_{\text{FOCUS}}$ *didn't really love* [$_{\text{TOPIC}}$ *her*]]).

7.3 Data

Using the CEToM database, I collected 551 TA and 608 TB examples containing a PC. I examined whether a PC doubles an overtly expressed associate or is used just as a pronoun which substitutes a nominal expression. It turned out that 14x (2.5%) of the TA attestations and 20 examples (3.3%) of the TB verbs with a PC showed clitic doubling.

As these numbers suggest, doubling is quite limited in TA and TB. The question is why it is so rare. Many of the non-doubling cases of PCs are fragmentary, and perhaps some might actually contain doubling. Still, most PCs do not show doubling, and I follow the working hypothesis that doubling was never fully grammaticalized to mark a topic in Tocharian.[14] Perhaps doubling was partly motivated by metrical needs. In TB, for example, an additional third-person singular or plural PC conveniently provides an additional syllable.[15] Still, doubling is optional in TA and TB, and not all examples are explicable in this way. Furthermore, doubling is attested in prose and verse texts and their genres do not seem restricted.

7.4 Hypothesis and predictions

Regarding doubling of a nominal expression by a pronominal clitic in Tocharian A and Tocharian B, one may think of two hypotheses that offer different predictions. The first hypothesis is to take "redundant" clitics to be the manifestation of a single unitary phenomenon. It predicts the existence of a single set of restrictions that applies to all of the attested data (Table 7.2). The previous treatments of the Tocharian pronominal clitics have implicitly adopted this hypothesis. However, we argue against this view and show that at least two different types should be recognized, each of which is subject to its own morphosyntactic and pragmatic restrictions (Hypothesis 2 of Table 7.2).

There are two types of doubling that we distinguish (7.19). The first type has a doubled associate that undergoes dislocation. This type is further divisible into two subtypes: one whose associate

14. How TA and TB expressed a topic is an open question that needs to be investigated separately.

15. See, for example, (7.33).

	Hypothesis	Prediction
1	Clitic doubling in TA and TB is a unitary phenomenon.	A morphosyntactic/pragmatic condition which triggers doubling should be the same for all of the manifestations.
2	Clitic doubling in TA and TB is *not* a single phenomenon but it is a composite of different phenomena.	Conditioning environments can be different depending on morphosyntactic/pragmatic configurations.

Table 7.2: Hypotheses and predictions

precedes a subject and the other in which a dislocated associate follows a finite verbal complex, possibly separated by an intonational break. I label the former as CLITIC LEFT DISLOCATION (CLLD) and the latter CLITIC RIGHT DISLOCATION (CLRD). The second type has a non-dislocated associate in argument position, following a subject. I call this type CLITIC DOUBLING PROPER (CDP).

(7.19) Different types of doubling

i. Dislocated associate

- Associate preceding a (non-topical) subject (= CLITIC LEFT DISLOCATION)

  [$_{\text{SENTENCE}}$ … (Associate) … Subject … Verb+clitic]

- Associate following a verbal complex (= CLITIC RIGHT DISLOCATION)

  [$_{\text{SENTENCE}}$ … Subject … Verb+clitic, (Associate)]

ii. Non-dislocated associate

- Associate following a subject (= CLITIC DOUBLING PROPER)

  [$_{\text{SENTENCE}}$ … Subject … (Associate) … Verb+clitic]

For the first- and second-person singular PCs, doubling is separable from apposition. The former accompanies an associate that contains an independent form of a personal pronoun, while the latter does not. For example, *ārkiśoṣṣ<i>s krant knāṃmune*(*nāṃt*)*sunt cū* 'you (who) have become good wisdom of the world' is the associate of the second-person singular PC *-ci* in (7.20) and contains the independent form of the second-person singular pronoun *cū*. In contrast, the substantivized adjective *lareṃ* 'the beloved (one),' the associate of the second-person singular clitic *-c* in (7.21), does not accompany any independent personal pronoun (cf. TB *ci* [2SG]). Therefore, I take (7.20) as an example of doubling, whose associate underwent dislocation from a preverbal

argument position to a postverbal position (CLRD). In contrast, I consider (7.21) not an example of doubling but apposition.

(7.20) Clitic Right Dislocation [TA]

CONTEXT (Buddhastotra):

(*kärsnālaṃ wramäṃ ¦ pu)k (l)otkasyo tñi ¦ käsont tämyo pūk kärsnāl wram ¦ knānmuneyo lyalyku-ci* :

'The things to be understood with all manifestations have been understood by you$_{SG}$. Therefore, everything to be understood [is] illuminated by your$_{SG}$ knowledge. [29c]'

(*puk knānmune-yis*) ¦ *lukśone ypant naṣt* ¦
all knowledge-GEN light make-NMLZ.NOM.SG COP.NPST.ACT.2SG
*wināsam-**ci*** ***ārkiśoṣṣ<i>s*** ¦ ***krant*** ***knāṃmune*** [b3] ***(nāṃt)sunt***
praise.NPST.ACT.1SG-2SG world.GEN good.ACC wisdom be.PTCP.M.ACC.SG
cū 20-9
ACC.2SG

'You$_{SG}$ are the one who produces the illumination of all knowledge. I praise **you$_{SG}$, the one who has become the good wisdom of the world**. [29d]'

(A249b2; trans. based on Pinault 2008: 289; verse; [5¦5¦8¦7]×4)

(7.21) Apposition [TB][16]

CONTEXT (Buddhastotra):

śauläṃnmasa śauläṃnma ¦ śaulässontäs käryatai :

śaul r= anaiśai paṣṣatai ¦ śilä«ṣṣa»na sälyai(no :)

'You$_{SG}$ have bought the lives with lives from those who have lives. [22a]

As (if protecting your) life, you$_{SG}$ have carefully protected the rules of moral behavior. [22b]'

(*kos* [b1] *a)räñc-n(e) klyentä«r»* *ñ(i)* ¦ *to= ta= ña«kta»*
how.many heart-LOC stand.NPST.MID.3PL GEN.1SG so.many GEN.2SG lord.VOC
krentauna :
virtue.PL

po śaul-äṣṣeṃ klautken-ne ¦ *śault-sa lare-ṃ* ***triśim-c*** *mā* 22
all life-ADJZ.ACC.PL manner.PL-LOC life-PERL dear-ACC.SG fail.OPT.ACT.1SG-2SG NEG

'As many (virtues) stand in my heart, O Lord, so many virtues (stand in) your$_{SG}$ heart.$_{[22c]}$
In all life situations, may I not **fail** you$_{SG}$, the beloved (one), throughout (my) life! $_{[22d]}$'
(B241b1; trans. based on Thomas 1997: 100; verse; [7¦7]×4)

I will show that CLLD/CLRD and CDP are subject to different morphosyntactic and pragmatic conditions, and argue for Hypothesis 2 of Table 7.2. I will show that the first type (CLLD and CLRD) consistently marks a primary topic. In contrast, the second type cooccurs with a doubled associate, representing either a primary or a secondary topic in TA and TB.

7.5 Clitic Left Dislocation

Clitic Left Dislocation (CLLD) is a construction in which a clitic cooccurs with an associate to its left. In most cases an associate precedes a subject as in (7.22), where the pronominal clitic *ton* 'him' cooccurs with the associate *ton Kosta* 'Kosta,' which precedes the subject *i Maria* 'Mary.'

(7.22) Modern Greek

ton Kosta, [$_{SUBJECT}$ *i* *Maria*] ***ton*** *idhe.*
DET Kosta.ACC DET Mary.NOM him saw
'Mary saw **Kosta**.' (Iatridou 1995: 11)

CLLD is not a combination of Clitic Doubling Proper (CDP) and dislocation because some languages do not license CDP while they do CLLD (e.g., Standard Italian; Cinque 1990). The following two subsections show that left dislocated associates consistently denote a topic referent (primary

16. This example is to be distinguished from secondary predication, which consists of two types: resultatives and depictive predicates. While the former involves the resulting state caused as a result of an action (7.f), the latter describes a quality that applies before the action described by a verb (7.g).

(7.f) *John painted the house **red**.* (resultative)

(7.g) *John ate the meat **raw**.* (depictive predicate)

Though it appears that (7.20) contains a depictive predicate, depictive predicates usually describe a property that is not inherent (7.h; Rothstein 2017). An adjective or a prepositional phrase describing a person's inherent property is mostly infelicitous (7.i).

(7.h) *Mary met John **drunk**.* (depictive predicate; stage-level property)

(7.i) **Mary met John **tall**.* (non-depictive predicate; inherent property)

larem 'dear' in (7.20) describes an inherent property, not a stage-level property such as *drunk*. Therefore, we think (7.20) is an example of apposition, *ārkiśoṣṣ<i>s krant knāṃmune* (*nāṃt*)*sunt cū* and the second-person singular PC *-c* placed next to each other.

topic) in TA and TB.

7.5.1 Clitic Left Dislocation in Tocharian A

First, let us look at the examples from Tocharian A. Example (7.23) shows the third-person singular pronominal clitic *-äṃ* doubles *cam rupyāvateṃ śomäṃ* 'this boy Rupyāvata,' an associate that precedes the subject *utpalāvatṣiñi wrasañ* 'the people of Utpalāvatī.'

(7.23) [TA] CONTEXT:

– – – – (kā)swac cam ¦ yāmär pākär oṅk ñomyo :
lāntuneṣiṃ kärparäṃ ¦ ṣärpseñc cam krant ṣo(treyā :
– – – – [a2] – – – ¦ – – – – – y)p(e)yis : 1 ||
'... towards the (good) [thing?] they revealed this one with a man's name [= Rūpyāvata]. [1b] They point to the dignity of kingship (because of) the good si(gn). [1c] ... of the country. [1d]'

tmäṣ ***cam*** ***rupyāvateṃ śomäṃ*** [SUBJECT *utpalāvat-ṣiñi*
then DEM.M.ACC.SG Rupyāvata boy.ACC.SG Utpalāvatī-ADJZ.M.NOM.PL
wrasañ] *tsopatsäṃ* *abhisaṃskār-yo* *lāntun(e-ṣi* [a3]
people.M.NOM.PL great.ACC.SG mental.determination-INS kingship-ADJZ
*ynāñmune-yo yā)mr-****äṃ***
homage-INS make.PST.ACT.3PL-3SG
'Thereupon the people from Utpalāvatī (greet)ed [TOPIC **this boy [named] Rūpyāvata**] with careful mental preparation [and] (the homage due to) a king.'

(A63a3; trans. based on CEToM; prose)

This associate is the direct object (goal) of the verbal complex *abhisaṃskāryo ynāñmuneyo yāmr-* '(they) greeted X with mental preparation and respect' (*lit.* '[they] made X with mental determination and veneration').

This associate is the primary topic of (7.23), as it describes how he was welcomed by the citizens of Utpalāvatī. The name Rūpyāvata appears in Haribhaṭṭa's *Jātakamālā* (§6; Rūpyāvatī-jātaka). The story goes as follows (see Ohnuma 2000 for a summary). There was a young woman called Rūpyā-

vatī (Rūpāvatī in the *Divyāvadāna* §32, Rukmavatī in Kṣemendra's *Bodhisattvāvadānakalpalatā* §51). She witnessed another woman who was suffering from hunger and about to eat her newborn baby. Rūpyāvatī cut off her breasts for the woman and gave it to her as food. Śakra, the lord of the gods, transformed himself into a brahmin and tested her, asking if she regretted her actions. She denied it and vowed to him that if she had no regrets and offered her breasts for the sake of buddhahood, she would become a man. Thus, she became a young male Rūpyāvata. Subsequently, when the king of Utpalāvatī passed away, leaving no heir, ministers appointed him as a king, and he ruled Utpalāvatī for sixty years. Example (7.23) describes that Rūpyāvata is welcomed by the people of Utpalāvatī as a newly appointed king.

The corresponding Sanskrit passage reads as follows:

(7.24) Rūpyāvatī-jātaka in Haribhaṭṭa's *Jātakamālā* (§6)

tad idam atra prāptakālam ayaṃ rūpyāvataḥ kumāraḥ sakalarājalakṣaṇopeta ābhigāmikaguṇasaṃpannaś ca tad imam evādhipatyāyābhiṣekṣyāma iti |

tasyābhiṣekam atha cakrur udīrṇaharṣāḥ paurāḥ paropakṛtitatparamānasasya /

sārdhaṃ ca cāmarayugena mano 'bhirāmam uccikṣipe parijanena sitātapatram //

'[The ministers speaking to the citizens:] "Now is the moment to act. This young man, Rūpyāvata, bears all the marks of a king and has a king's personal magnetism. So let it be him we consecrate as king." **It was with intense joy that the citizens consecrated someone devoted heart and soul to helping others.** His retinue raised a delightful white parasol over him, as well as a pair of chowries.' (trans. by Khoroche 2017: 50)

A parallel passage that describes the citizens of Utpalāvatī celebrating Rūpyāvata is missing in the *Divyāvadāna* (§32) and Kṣemendra's (ca. 990–1066 CE) *Bodhisattvāvadānakalpalatā* (§51).

(7.25) Rūpāvatī-avadāna in the *Divyāvadāna* (§32; Vaidya 1959: 309)

tatra paṇḍatajātīyānāṃ mahāmātrāṇāmetadabhūt—yannu vayamutpalāvatyāṃ rājadhānyāṃ rājānaṃ sthāpayema | teṣāmetadabhūt—nānyatra rūpāvatakumārātkṛtapuṇyātkṛtakuśalāt | ***te rūpāvataṃ kumāramutpalāvatyāṃ rājadhānyāṃ rājānaṃ sthāpayanti |*** *atha sa ṣaṣṭivarṣāṇi rājyaṁ*

kārayati |

"The learned chief ministers had this thought about the matter: "We need to appoint a king for the capital Utpalāvatī." It occurred to them, "There is no one more qualified than the young man Rūpāvata—he has performed meritorious deeds and virtuous actions." **So they appointed the young man Rūpāvata as the king of the capital Utpalāvatī**, and there he ruled for sixty years." (trans. by Rotman 2017: 264)

In the *Bodhisattvāvadānakalpalatā* (11th century CE), however, Rukmavant is promoted to the subject, suggesting that he is the primary topic. Although the TA passage is not a word-by-word translation of a Sanskrit text, it is likely that the TA passage is also about Rupyāvata, describing what happened to him when the king of Utpalāvatī passed away.

(7.26) Rukmavatī-avadāna in Kṣemendra's *Bodhisattvāvadānakalpalatā* (§51.17–8; Straube 2009: 139)

nagaryāmutpalāvatyāmasminnavasare nṛpaḥ | *utpalākṣaḥ samāptāyurvyādhiyogādvyapadyata* || *lakṣaṇajñairathābhyetya pravarairvṛddhamantribhiḥ* | ***sadyaḥ samprāptapuṃstvo 'sau rukmavānabhyaṣicyata*** ||

At that time, in the city of Utpalāvatī, the lotus-eyed king, whose lifetime had expired, died due to illness. Then the best ministers, knowing signs, came near and **consecrated Rukmavant, who had suddenly become a man** (trans. based on Straube 2009: 269).[17]

Sentence topic: Rūpyāvata

- People of Utpalāvatī greeted him and showed respect to him.
- ...

(7.27) Summary of (7.23)

17. Straube (2009: 269): "Zu dieser Zeit starb in der Stadt Utpalāvatī der lotosäugige König, dessen Lebenszeit abgelaufen war, infolge einer Krankheit. Da kamen die besten zeichenkundigen Minister herbei und weihen den plötzlich zum Mann gewordenen Rukmavant."

- QUD: *What happened to the boy Rūpyāvata?*
- Focus: *utpalāvatṣiñi wrasañ tsopatsäṃ abhisaṃskāryo lāntun*(*eṣi ynāñmuneyo yā*)*mr-* 'the people of Utpalāvatī greeted (him) with great respect and homage due to a king'
- Topic expression/referent (primary): *cam rupyāvateṃ śomäṃ*/Rupyāvata

This TA passage sets up a stage, introducing the citizens of Utpalāvati into the discourse. The primary topic then shifts from Rūpyāvata to the citizens of Utpalāvati, describing how they celebrated him (7.28).

(7.28) [TA] Continuation of (7.23):

täm nu mänt wäkn-ā || *ārśi-lāñcin-aṃ* ||
DEM.N CONJ how way-PERL Ā–LOC

rakär oplās-yo ¦ *tkaṃ riy-aṃ ṣiraś* ¦ *prasar wrä-ntu*
cover.PST.ACT.3PL lotus.PL-INS earth city-LOC around sprinkle.PST.ACT.3PL water-PL
snum-ṣinä[a4](*s*[18] – ¦ – – *nāṃ*)*tsuṣ puk wrasañ* :
fragrance-ADJZ.M.ACC.PL COP.PTCP.M.NOM.PL all being.NOM.PL

"And that [they did] in which way? In [the tune] "Royal [anthem] of Ārśi": They covered the earth with lotus flowers, all around the city they sprinkled perfumed waters, all the beings have been (busy (?)). [1d] ..."

(A63a3-4; trans. by CEToM; verse [5¦5¦8¦7]×4)

Another example is from A395 (7.29). In this example, the PC *-äṃ* [3SG] doubles the associate *cam* 'him' which refers to *wasäṃ se* 'our son (i.e., Priyadatta).' This associate precedes the subject *ñäktañ* 'the gods.'

(7.29) [TA] CONTEXT:

klyomiṃ mar täpreṃ priyadatteṃ kāpñe se ṣurmaṣ klopaṃtsuts mäskatār puk wramäṃ ṣäpnā nāpak mā mäskanträ ṣñikek ***wasäṃ se*** *ṣokyo patatam*«†ä» [a2] *neṣ cmolwāṣināṣ krant pñintwāśśi plyāk ṣotre prant*

18. Is *snumṣinä(s)* 'of fragrance' [M.ACC.PL] an error for *snumṣinā(s)* [F.ACC.PL]? Cf. A395 b4 : *tmäṣ prāmnāñ preyadatteṃ* ***maṅkalṣināṣ***$_{\text{F.ACC.PL}}$ ***wräntu****yo yāyruräṣ* 'then, the brahmins having bathed (?) Priyadatta with **water of good fortune** ...'

(The house-master is speaking to his wife about their son Priyadatta:) "O noble (woman), don't be so sad because of (our) dear son Priyadatta! Not all things happen according to the dream. In contrast, **our son** (is) very fortunate[?] carrying the visible sign of the good virtues of (his) previous births."

ṣak-atsek ***cam*** [SUBJECT *ñäktañ*] *pāsaṃtr-**äṃ***
certainly DEM.M.ACC.SG god.M.NOM.PL protect.NPST.MID.3PL-3SG

ñātsey-ac *mā* *kumnäṣ*
danger-ALL NEG come.NPST.ACT.3SG
"The gods will surely protect **him**. [He] will not face [any] danger." (*lit.* come to danger)

(A395a2; prose)

The primary topic here is Priyadatta, as this sentence describes how he will be protected by the gods thanks to the virtues he gathered during his previous lives. Since the housemaster and his wife are talking about him, the referent is discourse-old, both speaker and addressee presuppose his existence.

Sentence topic: Priyadatta

- He has the signs of the good virtues he collected during his previous lives.
- The gods will undoubtedly protect him.
- He will not face any danger.
- ...

In this passage the speaker answers the implicit QUD_0 "*Will our son Priyadatta face any danger*?" The speaker's strategy to answer this question is to set up two another QUDs: QUD_1 "*Will things (in general) happen according to the dreams?*" and QUD_2 "*Is our son Priyadatta fortunate?*" The first QUD sets up a background reasoning for an answer to the aforementioned QUD_0. The second QUD serves as a bridge to another QUD "*What will happen to our son Priyadatta?*" (QUD_3), which in turn provides a background reasoning to QUD_0. The speaker then answers the QUD_0 with these two background reasonings.

(7.30) Summary of (7.29)

- QUD: *What will happen to our son Priyadatta?* (= QUD_3)
- Focus: *ṣak-atsek ñäktañ pāsaṃtr-* 'the gods will surely protect (him)'
- Topic expression/referent (primary): *cam*/Priyadatta

In (7.31), the plural PC *-m* doubles the associate *ces śtwar mäśkitāśśi* 'to these four princes,' namely Vīryavān, Śilpavān, Rūpavān, and Prajñāvān. This associate again precedes the subject.

(7.31) [TA] CONTEXT:

āmāśāñ ypeṣiñi wrasañ puro(*hi*)*tāñ knānmānäṣ p*$_u$*kāk puṇyavāṃ mäśkite parnore kärso*(*rä*)[b6]*ṣ ārtant pālant puṇyavāni abhiṣe*(*k*) *yāmrä cam ypeyaṃ lāṃt yāmtsāṃtäṃ || ratisāyakaṃ || ...*

'The ministers, people of the country, the chancellors, and the wise ones, who all had recognized prince Puṇyavān's splendor, performed the anointment of Puṇyavān, and made him king of the country. || In the R.-tune: || ...

(*tmä*)*ṣ* *ālyäkyāṃ* *praṣt-aṃ* ***ces*** ***śtwar mäśkitā-śśi*** [$_{SUBJECT}$ *tämne*
thereupon other.F.ACC.SG time-LOC DEM.M.ACC.PL four prince-GEN.PL so
wäkn-ā *lānt* *wätkāṣ-äl* *wram*] *kātka-**m*** (*tmäṣ*) [a4]
manner-PERL king be.decided.CAUS-GDV thing arise.PST.ACT.3SG-PL thereupon
po(*ṃ*)*ś* *lānt-ac* *kakmuṣ* *lānt* *pälko-r-äṣ* *lāñci*
all.M.NOM.PL king-ALL come.PTCP.M.NOM.PL king.ACC see.PTCP-NMLZ-ABS royal
waṣt-is *yok-m-aṃ* *klyānt*
house-GEN gate-DU-LOC stand.IMPF.MID.3PL

'Thereupon at another time a problem (which) could (be) solved by such a king arose **to these four princes**. (Then) they all came to the king, and facing the king they stood at the gate of the royal palace.'

(A16a3; trans. based on Stumpf 1971: 28 n. 23; prose)

The associate *ces śtwar mäśkitāśśi* 'to these four princes' is the indirect object (location/experiencer) of the intransitive verb *kātka-* '(the problem) arose to X.' It is the primary topic of (7.31) as this sentence explains why they came to the palace of King Puṇyavān. These referents are all discourse-old.

Sentence topic: The four princes

- A complex problem arose to them.
- They came to the palace of King Puṇyavān.
- They stood at the palace gate.
- ...

This story answers the QUD_1 "*What happened?*". To answer this QUD, the author first sets up a sub-QUD "*What happened to the four princes?*" (QUD_{1A}), which sets the basis for another sub-QUD "*What did they do?*" (QUD_{1B}). The answer to the first sub-QUD is presented here.

(7.32) Summary of (7.31)

- QUD: *What happened to the four princes?* (= QUD_{1A})
- Focus: *tämne wäknā lānt wätkāṣäl wram kātka-* 'a problem (that) could be solved by such a king arose (to them)'
- Topic expression/referent (primary): *ces śtwar mäśkitāśśi*/Vīryavān, Śilpavān, Rūpavān, and Prajñāvān

To summarize, I have examined the examples whose PC doubles a nominal expression that precedes a subject and shown that the doubled associate is always discourse-old, and the interlocutors presuppose its existence. In all of the examples, the left-dislocated associate represents the primary topic of the utterance. In the following subsection, we will turn to the examples of Clitic Left Dislocation in Tocharian B. Although evidence is somewhat limited, a left-dislocated associate also denotes a topic referent (primary topic) in TB.

7.5.2 Clitic Left Dislocation in Tocharian B

Tocharian B also attests Clitic Left Dislocation, but the number of examples is somewhat limited. In (7.33) from the Araṇemijātaka, the tree-god is speaking to his wife about King Araṇemi's son Uttara. In this example, the subject of *yärtten-ne* 'drag' (*ainäki caimp brā*(*hmaṇi*) 'those mean brahmins') follows the DO (theme) of the verb.

(7.33) [TB] CONTEXT:

The tree-god is speaking to his wife after he saw that the brahmin Rudraśarma seized Uttara and dragged him:

ykā-k *cwi* *śa-māne* *pācer* *wlo* ¦ *vipṇu-nta-ṃts*[19] *ra* *amāskai* ¦
nevertheless-EMP DEM.M.GEN.SG live-PTCP father king Viṣṇu-PL-GEN PTCL difficult
yām-tsi *sū* *erkatte* •
make-INF DEM.M.NOM.SG unfriendly

(*ya*)*k no* ***cwi*** ***soṃśke lalaṃ***[a6]***ṣke-ṃ*** ¦ [SUBJECT *ainākі* *caimp*
still CONJ DEM.M.GEN.SG son tender-ACC mean.NOM.PL DEM.NOM.PL
brā(*hmaṇi*] ¦ *yä*)*rt*(*t*)*en-**ne*** *śle* *tremeṃ* :
brahmin.NOM.PL drag.NPST.ACT.3PL-3SG with anger

"His (= Uttara's) father, the king (= Araṇemi) (is) still alive. Even for Viṣṇus, (it is) difficult to treat him badly (*lit.* he is difficult to treat badly). [1a] But still, those mean brahmins drag **his tender little son** with anger. [1b]"

(B88a6; verse; [8¦7¦6]×2 + [9¦9] + [7¦6])

This example is structurally ambiguous: the associate of the clitic *-ne* [3SG] is either *cwi soṃśke lalaṃṣkeṃ* 'his tender little son (i.e., Prince Uttara),' or *cwi* 'his (i.e., King Araṇemi),' as both of them are in the third-person singular. Since the tree-god is talking to his wife regarding how Prince Uttara is mistreated by the brahmin Rudraśarma, Uttara is likely to be the primary topic of this utterance. Therefore, although we cannot exclude a different interpretation, this example potentially shows that CLLD marks a sentence topic in Tocharian B.

The speaker tries to answer the QUD *What happens*? The speaker's strategy to answer this question is to set up a sub-QUD "*What happens to Prince Uttara*?" and answer this sub-QUD in pāda 1b. This sub-QUD serves as a bridge to another sub-QUD *What does he do?*, which the speaker answers in pāda 1c (7.34).

(7.34) [TB] B88a6-b1

19. *vipṇuntaṃts* is likely to be a copying error for *viṣṇuntaṃts* (CEToM).

pilko(*-s=* *ā*)*ñmālaṣkeṃ* *lkāṣṣän-me* ¦ *taṅ-sa* *sam*
look-PERL sympathetic.ACC look.NPST.ACT.3SG-PL love-PERL DEM.M.NOM.SG
mñcuṣke *lareṃ* *pātär* *ramt* :
prince.NOM.SG dear.ACC father.ACC as

mā *wa* *ksa* *ṣ* *cwimp* [b1] *mäsketrä* ¦ *waste* *comp*
NEG CONJ INDF CONJ DEM.GEN.SG be.NPST.MID.3SG protection DEM.ACC.SG
l(*akle-ne* 1)
suffering-LOC

'With a look begging for compassion that prince looks at them, full of love, as [if he were looking at his] dear father. [1c] Nevertheless, not a single one [of them] is [any] protection to him in that s(uffering). [1d]'

(B88a6; trans. based on CEToM; verse; [8¦7¦6]×2 + [9¦9] + [7¦6])

(7.35) Summary of (7.33)

- QUD: *What happens to Prince Uttara?*
- Focus: *ainäki caimp brā*(*hmaṇi yä*)*rt*(*t*)*en- ... śle trememṃ* 'those common brahmins drag (him) with anger'
- Topic expression/referent (primary): *cwi soṃśke lalaṃṣkeṃ*/Uttara

There is also an example of CLLD in which only a part of an antecedent precedes a subject. In (7.37), which corresponds to the Udānavarga 4.5 (7.36), the pronominal clitic *-ne* [3SG] doubles *ce*$_u$ *... wnolme* 'that living being' which refers to *maimaṃtse* 'the intelligent one.' This associate is the direct object (theme) of the transitive *melyan-* '(the flood) crushes X,' and it is discontinuous, separated by the subject *kerekauna* 'flood.'[20]

(7.36) Udānavarga 4.5 (Bernhard 1965: 127)

utthānenāpramādena saṃyamena damena ca /
dvīpaṃ karoti ***medhāvī*** *tam ogho nābhimardati* // 5

20. A hypothetical non-discontinuous alternative †*ce*$_u$ *wnolme* ˈ *kerekauna* ¦ *mā melyan-ne* would fit the meter better because a minor caesura (indicated by ˈ) would be placed after the third syllable, as seen in other pādas whose first colon consists of seven syllables. The motivation of this discontinuity is unclear. It appears either the violation of a minor caesura has some pragmatic effect (drawing attention of audience?) or *ce*$_u$ has undergone dislocation to align with the left edge of the pāda, perhaps imitating the Sanskrit passage (cf. *tam ogho nābhimardati* 'flood does not crush it,' although *tam* 'it' refers to *dvīpaṃ* 'island').

‘With resurrection, care, self-restraint, and self-control, **the intelligent (one)** makes an island which flood does not crush.’

(7.37) [TB] CONTEXT:

The Buddha is speaking the Udānavarga 4.5 to the monks:

(*spe*)[b7]*lke-sa snai ykorñe-sa ¦ wlāwalñe-sa maimaṃtse* (:) /// /// – *isa* :
zeal-PERL diligence-PERL control-PERL learned.M.NOM.SG
ce$_u$ [SUBJECT *kerekauna*] ***wnolme*** ¦ *mā melyan-**ne*** :
DEM.M.ACC.SG flood living.being NEG crush.PST.ACT.3SG-3SG

(*wc*)*e* (*śl*)*ok* ///
second strophe

‘By (effort), diligence, and self-control, the learned one [31a] … [31b] flood does not crush **such a living being**. [31c] (He spoke the se)cond strophe … [31d]’

(B12b7; trans. based on CEToM; verse; [7¦7] + [7¦4]×3)

Although the context is not available to us, the primary topic of this sentence does not seem the subject *kerekauna* ‘flood’ but the associate *ce$_u$ … wnolme* ‘that living being,’ which refers to *maimaṃtse* ‘the learned (one).’ This reference is discernible from the Udānavarga and the Pāli, Patna, and Gāndhārī Dhammapadas, where the primary topic is ‘the intelligent’ (e.g., *medhāvī* in the Udānavarga).[21] The associate seems to be discourse-old, which is first introduced in 31a. Since the preceding pāda is missing, the QUD of this passage is difficult to determine. Assistance from the Sanskrit text is also limited because the TB passage is not a word-for-word translation. We tentatively set *What happens to the intelligent one?* as the QUD, but we rather expect *what does the intelligent one do?* from the Sanskrit passage.

(7.38) Summary of (7.37)

- QUD: *What happens to the intelligent one?*
- Focus: *kerekauna … mā melyan-* ‘flood (in general) does not crush (him)’
- Topic expression/referent (primary): *ce$_u$ wnolme*/‘the intelligent one’

21. See Ānandajoti (2020: 61) for the corresponding Pāli, Patna, and Gāndhārī versions.

To summarize, I have examined two examples where a pronominal clitic doubles an associate which precedes a subject. Although both pieces of data are indecisive, it seems that the left-dislocated associates also represent the primary topics of the utterances in TB. Therefore, these examples in total suggest that TA and TB both use CLLD as a strategy to mark a non-subject constituent as a primary topic of an utterance.

In the following section, I will turn to Clitic Right Dislocation (CLRD) in Tocharian A and B. I will show that CLRD in TA also marks a sentence topic. Evidence is inconclusive for CLRD in TB.

7.6 Clitic Right Dislocation

Clitic Right Dislocation (CLRD) is a construction in which a clitic cooccurs with an associate to its right. An intonational break in many cases separates the dislocated associate as in (7.39) from Bulgarian.[22]

(7.39) Bulgarian

Decata ***ja*** *običat*, (φ ***Marija***).
the.kids ACC.3SG.F love Maria
'The kids love **her**, **Maria**.' (Harizanov 2014: 1038)

The distribution of CLRD is different from that of CLLD. For example, Krapova and Cinque (2005) point out that the so-called *na*-drop in colloquial Bulgarian (Vakareliyska 1994) is possible in CLLD but not in CLRD. They also show that specific indefinite DPs may undergo CLLD but not CLRD. CLRD is different from Clitic Doubling Proper (CDP) as some languages have the former but not the latter (e.g., French; Kayne 1975; Anagnostopoulou 2006). Inanimate DPs may undergo CLRD but not CDP in Standard Spanish (Anagnostopoulou 2006). It turns out that CLRD is very rare in both Tocharian A and B, limited to verse texts. While no secure conclusion is drawable for TB due to the limited amount of data, CLRD in TA seems to double a discourse-old associate and mark a sentence topic.

22. CLRD does not necessarily involve an intonational break (Anagnostopoulou 2006).

7.6.1 Clitic Right Dislocation in Tocharian A

Clitic Right Dislocation is extremely rare in TA, and I found only three possible examples. Two of them are from the TA translation of Mātṛceṭa's *Varṇārhavarṇastotra*. The first example corresponds to *Varṇārhavarṇastotra* II.63 (7.40).

(7.40) Mātṛceṭa's *Varṇārhavarṇastotra* II.63 (Hartmann 1987)
sarvākāraparijñānāt sarvajñ(*e*)*yāvabhāsine* /
jñānaloka(*karā*)*yāstu* ***jñāna*(*bhūtā*)*ya*** *te nama*(*ḥ*) //
'To him who, out of the complete understanding of all manifestations, illuminates all that is knowable, who illuminates knowledge, and **who has become knowledge**, to you may there be reverence!'

This passage is translated in Tocharian A as in (7.20), repeated here as (7.41):

(7.41) (= 7.20) [TA] CONTEXT:
(*kärsnālaṃ wramäṃ ¦ pu*)*k* (*l*)*otkasyo tñi ¦ käsont tämyo pūk kärsnāl wram ¦ knānmuneyo lyalyku-ci* :
'The things to be understood with all manifestations have been understood by you. Therefore, everything to be understood [is] illuminated by your knowledge. [29c]'

(*puk knānmune-yis*) ¦ *lukśone ypant* *naṣt* ¦
all knowledge-GEN light make-NMLZ.NOM.SG COP.NPST.ACT.2SG
*winäsam-**ci*** ***ārkiśoṣṣ<i>s*** ¦ ***krant*** ***knāṃmune*** [b3] ***(nāṃt)sunt***
praise.NPST.ACT.1SG-2SG world.GEN good.ACC wisdom be.PTCP.M.ACC.SG
cū 20-9
ACC.2SG
'You are the one who produces the illumination of all knowledge. I praise **you**, **the one who has become the good wisdom of the world**. [29d]'
(A249b2; verse; [5¦5¦8¦7]×4; trans. based on Pinault 2008: 289)

In this example, the pronominal clitic *-ci* [2SG] doubles the associate *ārkiśoṣṣ<i>s krant knāṃmune* (*nāṃt*)*sunt cū* 'you (who have) become the good wisdom of the world,' which translates Sanskrit

jñāna(*bhūtā*)*ya te* 'to you (who) have become the wisdom.'[23] This discourse-old associate is the primary topic of the sentence.

The second example is from Mātṛceṭa's *Varṇārhavarṇastotra* II.64.

(7.42) Mātṛceṭa's *Varṇārhavarṇastotra* II.64 (Hartmann 1987)

te 'pi lokasya guravo yeṣām asi aguror guruḥ /

ato ***gurūṇām api te gu(ra)ve gu(ra)ve*** *namaḥ //*

'Having no master, you are the master of those who (are) the masters of the world. Therefore, may there be reverence **to you (who) are the master of the masters, the master**!'

(7.43) [TA] CONTEXT:

bramñäktäṣṣ aci ¦ ñäktañ wras(*a*)*śśi ¦ käṣṣiñ puk śkaṃ śaikṣy aśaikṣy ¦ pañcābhijñ*(*e*)*ñ riṣaki* :

'The gods, beginning with the god Brahmā, all the disciples, the Arhats, the sages with five *abhijñā* are the masters of the beings. [30a]'

cesm-i *śkaṃ* p_u*kis* *tu* ¦ *käṣṣi* *naṣt* *nätäk* ¦
DEM.M.PL-GEN CONJ all.GEN NOM.2SG master COP.NPST.ACT.2SG lord
*winäsam-**ci*** ***puk käṣṣi-śśi*** ¦ ***käṣṣi*** ***wäṣpā käṣṣiṃ*** ***(cu*** :)
praise.NPST.ACT.1SG-2SG all master-GEN.PL master truly master.ACC ACC.2SG

'And you are the master to them all. Lord, I praise **you**, **the master of all masters, the true master**. [30b]'

(A249b4; verse; [5¦5¦8¦7]×4; trans. based on Pinault 2008: 289)

In (7.43), the nominal expression *puk käṣṣiśśi käṣṣi wäṣpā käṣṣiṃ* (*cu*) '(you), the master of all masters, the true master' follows the matrix verb *winäsam-* 'I praise X,' which accompanies the pronominal clitic *-ci* [2SG]. This nominal expression is the associate of the clitic and translates Sanskrit *gurūṇām api te gu*(*ra*)*ve gu*(*ra*)*ve* 'to you the master of the masters, the master.' This right-

23. In this example and (7.43), the second-person singular PC *-ci* occurs in Wackernagel's position (without counting a vocative). One might be tempted to consider examples such as these facilitated the change of a clitic that had been placed in the Wackernagel position to the position immediately following the finite verb. However, a different explanation would be required for the lack of case-distinction and the lack of co-occurrence of two or more PCs in TA and TB.

dislocated associate is discourse-old and the primary topic of the sentence.

Finally, the last example of CLRD found in TA is A358a1 (7.44). Unfortunately, there is no context available for this sentence.

(7.44) [TA] CONTEXT: N/A

rāhū swarbhaṇū ¦ asureñi lañś ¦ kaumary oki
Rāhū Svarbhāṇu Asura.NOM.PL king.NOM.PL prince.NOM.PL like
*prantär-**cy** opl-aṃ ¦ **pūttiśpar-ṣiṃ** **oppal cu** :*
carry.NPST.MID.3PL-2SG lotus-LOC Buddha's.dignity-ADJZ.ACC.SG lotus ACC.2SG
'Rāhu (and[?]) Svarbhāṇu, the Asura-kings, as if (they were) youths, carry you$_{SG}$ to the lotus, **you$_{SG}$, the lotus of the Buddha's dignity**.'

(A358a1; verse; [5¦5¦8¦7]×4)

In (7.44), the pronominal clitic *-cy* [2SG] doubles the associate *pūttiśparṣiṃ oppal cu* 'you, the lotus of the Buddha's dignity', which is discourse-old. It is the direct object (theme) of the transitive *prantär-* '(they) carry X (to Y$_{LOCATIVE}$).' This associate appears to be the primary topic of the sentence, but it is not secure because of the lack of context.

To summarize, I have shown that CLRD in TA marks a primary topic just as CLLD does. This parallelism between CLRD and CLLD is not surprising since in some languages left and right-dislocated associates both represent primary topics (see, e.g., De Cat 2007 for French). However, it is worth pointing out that CLRD in TA is limited only to a couple of passages written in verse, and no passage in prose displays CLRD.

7.6.2 Clitic Right Dislocation in Tocharian B

In Clitic Right Dislocation (CLRD), an associate follows a finite verb that hosts a pronominal clitic. However, if a verb also precedes some other constituent than the associate, one might be inclined to think what is displaced is not an associate but the verb. In Tocharian B, there are three examples in which an associate comes after a finite verb carrying a PC. In two of them, however, more than one constituent follows the verbal complex. The verbal complex appears sentence-

or clause-initially, aligned with a pāda boundary or a major caesura, suggesting that it is not the associate but the finite verb that underwent dislocation.

In (3.5), repeated here as (7.45), the finite verb with the pronominal clitic *lkoym-c* 'I would see you$_{SG}$' precedes *kr$_u$i* 'if' and *ynemane ypauna kwṣainne ci* 'you$_{SG}$ going through lands (and) villages' and appears clause-initially. In our analysis, this verbal complex underwent fronting to the beginning of the subordinate clause, aligned with the beginning of Pāda 79c.

(7.45) (= 3.5) [TB] CONTEXT (Buddhastotra):

The Buddha's mother (= Māyā) is speaking to him, recalling the happy days he still lived among the men:

• *lkoym-**c*** *kr$_u$i* ***yne-mane*** ¦ ***ypauna kwṣain-ne*** ***ci*** ¦
see.OPT.ACT.1SG-2SG whenever go-PTCP land.PL village.PL-LOC ACC.2SG
plu[a2]*ṣṣi-ñ* *sak-sa* *palskw ārañce* ¦ *yapit* *wat* *no*
float.IMPF.ACT.3SG-1SG happiness-PERL mind heart enter.OPT.ACT.2SG CONJ PTCL
wertsyai-ne (:)
assembly-LOC

ñakty= āñcāl [a3] *ṣar-ne* ¦ *keṃññi* *rämnoyeṃ* ¦
god.PL A. hand-DU knee.DU bow.IMPF.ACT.3PL

'Every time I saw **you going through lands and villages**, my mind (and) heart leapt for joy, or (every time) you entered the community [79c] the gods bowed their knees with the *añjali* hands ...'

(B246a1; verse; [5¦5¦8¦7]×4)

The nominal expression *ynemane ypauna kwṣainne ci* 'you going through lands (and) villages' is the associate of the clitic *-c* and represents the direct object (theme) of the transitive *lkoym-* 'I used to see X.'[24] This sentence seems to describe how Māyā used to feel when she saw his son. Therefore, the primary topic seems to be Māyā, the subject of *lkoym-* 'I used to see X.'[25]

24. According to Meunier (2015), pronominal clitics represent *dativus sympatheticus*. As *dativus sympatheticus* generally represents an individual affected by the event which a verb describes, we expect to find a doubled associate that is affected. In this example, however, the doubled direct object does not seem to be affected by Māya's seeing of the Buddha.

25. In this manuscript, the <ci> akṣara is added below <nne>. It seems that the author of this manuscript omitted

In (7.46), the finite verb with a PC *ṣärpsentär-ne* 'they indicate X' precedes the reciprocal pronoun *ālyauce* 'each other' and the full nominal expression *nraiṣṣe wnolme tallāntä* 'the miserable hell-being' and appears at the beginning of the matrix clause.

(7.46) [TB] CONTEXT:

The Buddha is speaking at the assembly: "If living beings do a deed, they will receive a terrible fruit from that (deed) in their (re)births. The miserable beings blamed themselves, evoked false thoughts, and blamed the good ones. [...] Here, the good ones are called those who stand in the pure moral conduct, (namely) in the discipline of the monkhood, the novitiate, and the lay brotherhood, and eventually in the eight-fold discipline day and night."

ce$_u$*(-sa tattaṃ) ¦ nāki neṣmye snai ya*[a7]*(mor* 10-4
DEM.M.ACC.SG-PERL place.SUBJ.ACT.3SG rebuke evil.rumor without basis
sū temeñ sraukaṃ ¦ nrai-ne tänmastär ¦ māka)
DEM.M.NOM.SG therefore die.SUBJ.ACT.3SG hell-LOC born.NPST.MID.3SG many
lykwarwa māka cmel-a ¦ māka lkāṣṣäṃ (läkle-nta :
times many rebirth-PL many see.NPST.ACT.3SG suffering-PL

*māka pudñäkti ¦ tsaṅkaṃ śaiṣṣe-ne ¦ ṣä)rpsentär-**ne** āly(au)c(e*
many Buddha.PL rise.SUBJ.ACT.3PL world-LOC indicate.NPST.MID.3PL-3SG each.other
*ka) ¦ **nrai-ṣṣe wnolme tall(āntä)** :*
PTCL hell-ADJZ being miserable.M.ACC.SG

'(If someone$_j$) puts blame or slander (which is) baseless on such (a good) one$_k$, [14d] because of this, (when) this one$_j$ dies, (he$_j$) will be reborn in hell many times [and] see many rebirths [and] many sufferings. [15a] If many Buddhas arise in the world, (they) will point out **the miserable hell-being$_j$** to one another. [15b]'[26]

(B15a7 = B17b1; trans. based on Hackstein, Habata, and Bross 2014: 51–3; verse;

this akṣara and added it later.

26. One might expect the reciprocal pronoun to appear as the genitive-dative †*ālyaucentse* rather than the accusative *ālyauce* found in this passage. The verb √*särp-* may take a non-human theme in the accusative and a human goal in the genitive-dative ('to explain/instruct/indicate something$_{ACC}$ to somebody$_{GEN}$'; e.g., THT255a5, THT255 b1 [2x], PKAS6C a4, PKAS6E b4, PKAS6K a7; cf. PKAS17H a4 that has a human goal in the locative), a human goal in the accusative and an embedded clause ('to point out to somebody$_{ACC}$ that EMBEDDED CLAUSE'; e.g., IOLToch214 a4; THT107 a10), or a human theme in the accusative and a human goal in the allative ('to lead/guide/direct somebody$_{ACC}$ to somebody$_{ALL}$'; e.g., THT107 a9). I am unaware of any example in which √*särp-* takes two accusative arguments.

[5¦5¦8¦7]×4)[27]

Again, I analyze the verbal complex to be fronted to the beginning of the matrix clause, placed immediately after the major caesura. The referent of the pronominal clitic *-ne* [3SG] is *sū* 'he' in a7, and seems to double the direct object *nraiṣṣe wnolme tall*(*āntä*) 'miserable hell-being.' It is not clear whether the associate represents the primary topic of this sentence. It seems that the primary topic is *māka pudñäkti* 'many Buddhas' and the associate is the secondary topic as this sentence elaborates the relationship between the many Buddhas and the man who experienced many rebirths in the hells.

Although an associate follows a finite verb with a PC in these cases, neither of them is likely to involve CLRD since more than one constituent follows the finite verb and since the finite verb appears clause-initially, aligned with a pāda-boundary or a major caesura. Instead, in our opinion, they display dislocation of the finite verb. The only possible example of CLRD in TB comes from PKAS17K a2, whose finite verb (*peññan-me* '[s/he] will pull X') accompanies a PC and precedes the subject (*märskoṣṣäṃ* 'the frightened ones').

(7.47) [TB] CONTEXT: N/A

sklok pr(*o*)*sk*(*ai-ṣṣe or*)*k*(*a*)*mñe* ¦ *pkāte* *n*(*a*)*k*(*-t*)*s*(*i olya*)*po* :
doubt fear-ADJZ darkness intend.PST.MID.3SG destroy-INF more

märkartsana pälsko-nta ¦ *tākäs-si-ṃtse* *pelkiñä* :
troubled.F.PL mind-PL destroy[?]-INF-GEN for.the.sake.of

(*y*)*n*(*eś śai*)*ṣṣ*(*e*) *com=* *parn*(*a*) *ñke* ¦ [a2] ***cä*** *peññan-**me***
clear world DEM.M.ACC.SG outside now DEM.M.ACC.PL pull.SUBJ.ACT.3SG-PL
märskoṣṣäṃ 1
be.afraid.PTCP.M.ACC.PL

'(He) intended to cer(tainly) destroy the (dark)ness of doubt [and] fe(ar). [1b] For the sake of destroying the troubled thoughts, [1c] (he) will now pull **them**, (namely) **the frightened**

27. 'Richtet jemand gegen einen solchen Tadel und Verleumdung, die gegenstandslos ist, und stirbt dieser deswegen, so wird er in der Hölle wiedergeboren, viele Male, und erlebt viele Wiedergeburten und Leiden. Erheben sich viele Buddhas auf der Welt, so weisen sie einander auf dieses unglückliche Höllenwesen hin.' (Hackstein, Habata, and Bross 2014: 51-53)

ones, out of this pre(sent wo)rld. [1d]'

(PKAS17Ka2; trans. based on CEToM; verse; [7¦7]×4[?])

Unfortunately no context is available, and the referent of *-me* [PL] remains uncertain. The function of the clitic seems to double *cä … märskoṣṣäṃ*[28] 'these frightened (ones),' which is the direct object (theme) of the transitive verb *peññan-* '(he) will pull X (out of Y).' The primary topic seems to be the subject of *pkāte* '(s/he) intended' and *peññan-me* '(s/he) will pull X.'

7.7 Interim summary

To summarize, the examples whose doubled associate undergoes left- or right- dislocation displayed that when a PC doubles a dislocated associate, the associate always represents the primary topic of the sentence. The associates discussed were all discourse-old, and the interlocutors presupposed their existence at the time of the utterance.

So far, all of the examples discussed contained a discourse-old associate. However, a discourse-new referent may become a topic (Section 7.2.2) as long as the discourse participants may presuppose its existence by bridging (7.7) or it shows generic interpretation (7.10). In the following example, however, the pronominal clitic *-m* [PL] seems to double *nimittājñes brāmnāśśi* 'the *nimittajña* Brahmins.' This example is puzzling because the associate is discourse-new and the existence of the *nimittajña* brahmins does not seem to be presupposed. There does not seem to be a linguistic expression from which one can bridge the existence of the brahmins. They do not show the generic interpretation either (i.e., "the *nimittajña* Brahmins [in general]"). Currently, we do not have an explanation regarding why they may be topical.[29]

(7.48) [TA] CONTEXT:

Priyadatta's father and mother heard that he had been captured and taken to King Prasenajit. They left the city of Sāketa and set out for the city of Śrāvastī. However, they could not cross the forest of Kosala.

28. According to CEToM, *cä* is a copying error for *ceṃ*, and *märskoṣṣäṃ* is a misspelling for *pärskoṣṣäṃ*, triggered by *märkartsana* in 1c.

mäṃt ne ***nimittājñes*** ***brāmnāśśi*** *Śrāvastī ri-yā pre* [SUBJECT
how COMP acquainted.with.omens Brahman.GEN.PL Śrāvastī city-PERL outside
säm maṇḍal] *plyocksā-**m*** *tmä(-k)* - - - - - - (*mana*)[b3]*rkāṃ*
DEM.M.NOM.SG maṇḍala arise.PST.ACT.3SG-PL DEM-EMP disciple.ACC.SG
cam maṇḍl-ac kātse wānt-aṃ
DEM.M.ACC.SG maṇḍala-ALL in.front.of lead.PST.MID.3PL-3SG

'When the maṇḍala arose outside the city of Śrāvastī **to the brahmins (who are) acquainted with omens**, (they) ... led the boy up to the maṇḍala.'

tämnek päñ känt oṅkälmās päñ känt ykas päñ kä«n»t kos $n_u$nak maṇḍlac kātse wāworäṣ asläntwac śarkr-äm •

'Then, having led 500 elephants, 500 horses, (and) 500 cattle close to the maṇḍala, they tied them to the (sacrificial) posts.'

(A395b2; trans. based on CEToM; prose)

The primary topic of this sentence is the *nimittajña* brahmins, and the discourse continues to explain how they performed the ritual. That the subjects of *wāworäṣ* 'having led X' and *śarkr-* '(they) led X', not expressed overtly, remain the same, suggests that the primary topic of (7.48) is the brahmins.

Sentence topic: The *nimittajña* brahmins

- A *maṇḍala* arose to them.
- They led the boy to the *maṇḍala*.
- They led 500 elephants, 500 horses and 500 cows to the *maṇḍala*.
- They tied the animals to the sacrificial posts.
- ...

The implicit QUD of (7.48) is *What happened to the nimittajña brahmins?*. It is a sub-QUD set up to answer the bigger QUD *What happened?* This sub-QUD also serves as a bridge to the following QUD *What did they do to the boy Priyadatta?*. It is unclear why the author was able to set up this sub-QUD even though the nimittajña brahmins have not been introduced to the discourse before. It seems

that the author somehow considered that discourse participants are able to presuppose their existence.

(7.49) Summary of (7.48)

- QUD: *What happened to the nimittajña brahmins?*
- Focus: *Śrāvastī riyā pre säm maṇḍal plyocksā-* 'a maṇḍala arose (to them) outside the city of Śrāvastī'
- Topic expression/referent (primary): *nimittājñes brāmnāśśi*/the nimittajña brahmins

The following section will turn to Clitic Doubling Proper (CDP) in TA and TB. I will show that the distribution of CDP is different from that of CLRD and CLLD: CDP cooccurs with a topical associate,

29. In contrast to CLLD, there is no example of CLRD in TA whose associate is discourse-new. Although this might be due to a mere lack of data, it might reflect some semanticopragmatic restriction. We find parallel examples in Catalan (Vallduví 1992, 1995) and Italian (Brunetti 2009), where CLLD may topicalize a discourse-new associate while CLRD cannot. In Catalan, for example, if an associate is discourse-old, CLLD and CLRD are both permissible as in (7.jii) and (7.jiii).

(7.j) [Catalan] Associate (*les llibres* 'the books') = discourse-old (introduced in 7.ji)

i. A: *On va posar **les llibres**?* B: *Em sembla que ...*
where PST.3SG put the books to.me seems that
A: 'Where did (s)he put **the books**?' B: 'It seems to me that ...'

ii. ***els llibres, els** va posar al despatx.*
the books them.M PST.3SG put in.the study.
'(s)he put the books in the study.' (CLLD; discourse-old)

iii. ***els** va posar al despatx, **els llibres**.*
them.M PST.3SG put in.the study the books.
'(s)he put the books in the study.' (CLRD; discourse-old)

If an associate is discourse-new, however, CLRD cannot be used. In contrast to (7.kii), where *les coses* 'the things' allows *els llibres* 'the books' to be topical (BRIDGING; Section 7.2.2), (7.kiii) is infelicitous (Villalba 1998, Erteschik-Shir 2007).

(7.k) [Catalan] Associate (*les llibres* 'the books') = discourse-new (not introduced in 7.ki)

i. A: *On va posar **les coses**?* B: *Em sembla que ...*
where PST.3SG put the things to.me seems that
A: 'Where did (s)he put **the things**?' B: 'It seems to me that ...'

ii. ***els llibres, els** va posar al despatx.*
the books them.M PST.3SG put in.the study.
'(s)he put the books in the study.' (CLLD; discourse-new)

iii. ***# els** va posar al despatx, **els llibres**.*
them.M PST.3SG put in.the study the books.
'(s)he put the books in the study.' (CLRD; discourse-new)

but it may represent either a primary or secondary topic.

7.8 Clitic Doubling Proper

In Clitic Doubling Proper (CDP), an associate neither precedes a subject nor is it separated by a prosodic boundary. We observe it where a full nominal expression usually appears (e.g., 7.50). It is challenging to distinguish CDP from CLRD in SVO languages since an associate follows a verb in both configurations. However, Tocharian A and B, which are SOV languages, allow us to distinguish CDP from CLRD even though their intonational evidence is quite limited.

(7.50) Bulgarian

Decata ***ja*** *običat* ***neja.***
the.kids ACC.3SG.F love her
'The kids love **her**.' (Harizanov 2014: 1036)

Clitic doubling is known to be sensitive to semantic or pragmatic conditions such as animacy, specificity, definiteness, and givenness. For example, Amharic may optionally double specific indefinites, while it cannot double non-specific indefinites (Baker and Kramer 2018). A definite direct object is obligatorily doubled, while doubling of an indefinite direct object is impossible in Macedonian (Kochovska 2011). In Albanian, doubling of a direct object is possible only when it is given (Kallulli 2008).

In the following subsections, I will show that the attested distribution of CDP in TA and TB is different from that of CLLD and CLRD: In contrast to CLLD and CLRD, CDP does not need to mark a primary topic but may cooccur with an associate that denotes a secondary topic. Firstly, I will examine the attestations in which a pronominal clitic doubles a direct object (theme). Secondly, I will turn to the examples whose direct object contains a possessor. I will show that a PC consistently doubles the possessor in such cases. Thirdly, I will move on to the cases in which a subject contains a possessor doubled by a PC. Finally, I will discuss some examples in which a PC doubles an indirect object (beneficiary) or a possessor of an indirect object (source).

7.8.1 Doubling of a theme of a transitive verb

7.8.1.1 Examples in Tocharian A

Unlike CLLD or CLRD, where an associate always represents a primary topic, CDP does not need to double a primary topic in Tocharian A. Instead, when it doubles a theme argument of a transitive verb, the doubled associate represents the secondary topic of a sentence. As defined in Section 7.2.4, a secondary topic is "an entity such that the utterance is construed to be about the relation that holds between it and the primary topic" (Nikolaeva 2001: 2; Dalrymple and Nikolaeva 2011: 54–7). Secondary topic has to be SPECIFIC, and our analysis therefore predicts that PCs never double non-specific quantified expressions such as 'anybody,' 'nobody,' and 'who/which' in Tocharian since they cannot be topical. Our analysis also predicts that doubling should be impossible in Tocharian if a focus extends to an entire utterance. In the following three examples, a doubled associate represents a secondary topic.

The first example of CDP is from Puṇyavantajātaka (7.1 repeated here as 7.51):

(7.51) [TA] CONTEXT (Puṇyavantajātaka):

sas träṅkäṣ ñi amokyo täṣ cämplune kupre ne waluntāp ṣñi ***āyäntu*** (*pkä*)[b5]*nt pkänt penu kākloñcäs kälpāmār cesäm näṣ wnā kaśal tswāsam* ||

'The first (artisan) says: "Through my art this is my ability: If I find **the bones** of a deceased, even [if] they have fallen apart, I will put them together again."'

wät träṅkäṣ [$_{\text{SUBJECT}}$ *näṣ*] *nu* ***ce(sm-ä)***[b6]***k*** ***āy-äntu***
second speak.NPST.ACT.3SG NOM.1SG CONJ DEM.M.ACC.PL-EMP bone-PL
p$_u$k-ā-k *puskās-yo* *kaśal* *malkam-****äm***
all-PERL-EMP sinew.PL-INS together put.together.SUBJ.ACT.1SG-PL
'The second (artisan) says: "But I will join **the bones** with the sinews completely."'

(A11b6; trans. based on CEToM; prose)

In (7.51), the pronominal clitic *-äm* [PL] doubles the associate *cesmäk āyäntu* 'the bones.' This associate is the direct object (theme) of the transitive verb *kaśal malkam* 'I will join X together.' Unlike CLLD and CLRD, this associate is not the primary topic: the sentence topic is *näṣ* 'I' (i.e.,

the second artisan) since his utterance describes how he is different from the first artisan.

Sentence topic: *näṣ* 'I' (the second artisan)

- can join the bones of a dead animal with sinews completely.
- ...

This discourse-old associate *cesmäk āyäntu* 'bones' has been introduced to the discourse by the first artisan, and it is pragmatically salient when the second artisan speaks. The utterance of the second artisan updates the relationship between the primary topic (the second artisan himself) and the bones. Therefore, in this example, *cesmäk āyäntu* 'the bones' is the secondary topic of the utterance.

The QUD of this discourse is "*Whose skill is the best?*". To answer this question, the first artisan sets up a QUD "*What can you do?*" and answers this implicit QUD. The second artisan accepts the first artisan's assertion and sets up another implicit QUD "*What can you do to the bones of a deceased?*".

(7.52) Summary of (7.51)

- QUD: *What can you do to the bones of a deceased*?
- Focus: *p$_u$kāk puskāsyo kaśal malkam-* '(I) will join (them) with sinews completely'
- Topic expression/referent (primary): *näṣ*/speaker (= Śilpavān)
- Topic expression/referent (secondary): *cesmäk āyäntu*/the bones

There is another example of CDP in Puṇyavantajātaka:

(7.53) [TA] CONTEXT (Puṇyavantajātaka):

(*tmä*)[b6]*ṣ śtärt kulmäṃtsyo wär camā eṣäk paṃpärs tmäk säm potäk pañwmāṃ śla śewiñlune lakeyäṣ kākä*[a1]*tkuräṣ*

'Then, the fourth (artisan) sprinkled water over him (= a dead lion) with a blowpipe[?]. Immediately, stretching his paw and yawning, he rose from his bed,'

kaśśi *yokañi* *pälkāt* *cesäm* *amoktses* *kātse käly-māṃ*
hungry thirsty see.PST.MID.3SG DEM.M.ACC.PL artisan.ACC.PL near stand-PTCP
cesm-äk *puk śtwar śälkās* *poke-yo* *wa(ltsu-r-ä)*[a2]*ṣ* ***poñcäs***
DEM.M.ACC.PL-EMP all four altogether[?] paw-INS crush.PTCP-NMLZ-ABS all.ACC.PL
*kosā-**m*** *tāpa-**m*** *śkaṃ lo*
kill.PST.ACT.3SG-PL eat.PST.ACT.3SG-PL CONJ PTCL
'being hungry and thirsty, he saw these artisans standing nearby. Crushing those very four altogether[?] with (his) paw, (he) killed **them** and ate **them** all up.'

(A13a2; trans. based on CEToM; prose)

In (7.53), the pronominal clitic *-m* [PL] doubles the associate *poñcäs* (= *cesäm amoktses* 'the artisans'). I consider it to be a substantivized adjective (i.e., 'the all'), following Schulze, Sieg, and Siegling (1931: 76) and Thomas (1997: 88). This associate is the direct object (theme) of the transitive *kosā-* '(the lion) killed X' and *tāpa-* '(the lion) ate X,' and has previously been introduced to the discourse. This example is particularly illustrative because the primary topic is unambiguously the lion: this sentence describes how he acted on the four artisans. The artisans are thus the secondary topic of the sentence.

Sentence topic: The lion

- He rose.
- He was hungry and thirsty.
- He saw the four artisans standing nearby.
- He crushed the artisans with his paw, killed them, and ate them up.
- ...

The big QUD of this discourse is "*What happened?*" (QUD_1). The author breaks this question into three sub-questions: QUD_{1A} "*What did the fourth artisan do?*," QUD_{1B} "*What happened to the lion?*," and QUD_{1C} "*What did the lion do to the four artisans?*." Before the author answers QUD_{1C}, he sets up another QUD_2 "*What was the lion like?*", which offers reasoning to QUD_{1C}.

(7.54) Summary of (7.53)

- QUD: *What did the lion do to the four artisans?*

- Focus: *pokeyo wa(ltsurä)ṣ poñcäs kosā- tāpa- śkaṃ lo* 'having crushed (them), (he) killed and ate (them) up'
- Topic expression/referent (primary): *pro*/the lion
- Topic expression/referent (secondary): *cesmäk puk śtwar*/the four artisans (= Vīryavān, Śilpavān, Rūpavān, and Prajñāvān)

In the following example (7.55), the subordinate clause beginning with *mäṃt ne …* 'when …' involves CLLD as observed in (7.48).[30] In the matrix clause, the pronominal clitic *-aṃ* (for *-äṃ* [3SG]; *TEB* II: 34) doubles the associate *manarkāṃ* 'the boy (= Priyadatta).'

(7.55) [TA] CONTEXT:

Priyadatta's father and mother heard that he had been captured and taken to King Prasenajit. They left the city of Sāketa and set out for the city of Śrāvastī. However, they could not cross the forest of Kosala.

mäṃt ne nimittājñes brāmnāśśi Śrāvastī riyā pre
how COMP acquainted.with.omens Brahman.GEN.PL Śrāvastī city-PERL outside
säm maṇḍal plyocksā-m tmä(-k) - - - - - - **(*mana*)**[b3]***rkāṃ***
DEM.M.NOM.SG maṇḍala arise.PST.ACT.3SG-PL DEM-EMP disciple.ACC.SG
*cam maṇḍl-ac kātse wānt-**aṃ***
DEM.M.ACC.SG maṇḍala-ALL in.front.of lead.PST.MID.3PL-3SG

'When the maṇḍala arose outside the city of Śrāvastī to the Brahmins (who are) acquainted with omens, (they) … led **the boy** up to the maṇḍala.'

(A395b2; trans. based on CEToM; prose)

This associate is the direct object (theme) of the transitive verb *kātse wānt-* '(they) led X (to

30. Although English allows dislocation mostly in matrix clauses, some languages license it even in subordinate clauses (e.g., Bulgarian; Krapova and Cinque 2008: 260).

(7.l) Bulgarian (Krapova and Cinque 2008: 260)

*Ivan kaza če **na Marija** ti s ništo ne si **ì** pomognal.*
Ivan said that to Maria you.NOM with nothing not be.2SG her.DAT helped.PTCP

'Ivan said that **Maria** you haven't helped **her** at all.'

Y$_{\text{ALLATIVE}}$)'. The primary topic of this sentence is *nimittājñes brāmnāśśi* 'brahmins who decode the omens.' This sentence updates the relationship between the brahmins and the boy Priyadatta, who is pragmatically salient at the time of the utterance. Therefore, *(mana)rkāṃ* 'the boy' is the secondary topic of this sentence.

Sentence topic: The *nimittajña* brahmins

- A *maṇḍala* arose to them.
- They led the boy to the *maṇḍala*.
- ...

The implicit QUD of (7.48) is *What happened to the nimittajña brahmins?*, which is a sub-QUD of the bigger QUD *What happened?* This sub-QUD serves as a bridge to the following QUD *What did the nimittajña brahmins do to the boy Priyadatta?*.

(7.56) Summary of (7.55)

- QUD: *What did the nimittajña brahmins do to the boy Priyadatta?*
- Focus: *maṇḍlac kātse wānt-* '(they) led (him) to the *maṇḍala*'
- Topic expression/referent (primary): *nimittājñes brāmnāśśi*/the *nimittajña* brahmins
- Topic expression/referent (secondary): *(mana)rkāṃ*/Priyadatta

As summarized in Table 7.3, when a clitic doubles a theme of a transitive verb in TA, the doubled theme argument is always topical. However, it does not represent a primary but a secondary topic. In this point CDP contrasts with CLLD and CLRD, where left or right-dislocated associates consistently represent a primary topic.

7.8.1.2 Examples in Tocharian B

Pronominal clitics may also double a theme of a transitive verb in Tocharian B. In (7.2), repeated here as (7.57), *uttareṃ śamaśkeṃ* 'Prince Uttara' is the internal argument (theme) of *tsopaṃ-* '(s/he)

	(7.51)	(7.53)	(7.55)
Genre	Prose	Prose	Prose
Associate	*cesmäk āyäntu*	*poñcäs*	*manarkāṃ*
Gloss	these bones	the all	the boy
Animacy	[-human]	[+human]	[+human]
Person	3rd	3rd	3rd
Grammatical Function	DO	DO	DO
Semantic Role	Theme	Theme	Theme
Is an associate pronominal?	No	No	No
Is an associate discourse-new?	No	No	No
Is an associate a primary topic?	**No**	**No**	**No**
Is an associate a secondary topic?	**Yes**	**Yes**	**Yes**

Table 7.3: Clitic doubling the theme of a transitive verb in TA

pokes X' and doubled by the pronominal clitic *-ne* [3SG].[31]

(7.57) (= 7.2) [TB] CONTEXT:

Prince Uttara was tormented by the brahmin Durmukha. His tongue was hanging out of his mouth:

tumeṃ durmukhe brāhmaṇe uttare-«ṃ» śamaśke-ṃ kärwā-ṣṣai witsakai-sa
thereupon Durmukha brahmin Uttara-ACC boy-ACC reed-ADJZ.F.ACC.SG root-PERL
räskare ***tsopaṃ-ne***
sharply sting.NPST.ACT.3SG-3SG

'Thereupon the brahmin Durmukha **jabs** the boy Uttara sharply with a reed root.'

(B88a1; trans. by CETOM; prose)

31. Since the instrument *kärwāṣṣai witsakaisa* 'with a reed root' is also in the third-person singular, one might wonder whether the clitic *-ne* [3SG] does not double the theme but the instrument. Alternatively, one might wonder whether the clitic does not double anything but represents a possessor of the instrument (i.e., 'with **his** reed root'). We cannot exclude these alternative interpretations in this example. However, in the following example (7.60), in which the plural PC *-me* [PL] appears next to the internal argument (*(ṣa)ñ k(e)wän* 'own cows') and the instrument (*śakātaisa* 'with a stick'), the clitic is unambiguously doubling the internal argument because the instrument and the possessor of the stick ('a herdsman') are both the third-person singulars, while the internal argument is the third-person plural. Therefore, given this example, we take the PC *-ne* in (7.57) to double the internal argument.

This sentence concerns Durmukha and describes what he did to Uttara, so I take the brahmin Durmukha to be the primary topic of this sentence.[32] Nevertheless, Uttara is also discourse-old and pragmatically salient when (9.109) was produced. Since this sentence updates the relationship between Durmukha and Uttara, I take Uttara to be the secondary topic of this sentence.

Sentence topic: the brahmin Durmukha

- harshly jabs the boy Uttara with a reed root.
- ...

The QUDs in this discourse shifts from QUD_1 "*What was his condition?*" to QUD_2 "*What then happened?*". The author's strategy to answer QUD_2 is to set up a sub-QUD "*What did the brahmin Durmukha do to Uttara?*"

(7.58) Summary of (7.57)

- QUD: *What does the brahmin Durmukha do to Uttara?*
- Focus: *kärwāṣṣai witsakaisa räskare tsopaṃ-* '(he) harshly jabs (him) with a reed root'
- Topic expression/referent (primary): *durmukhe brāhmaṇe*/Durmukha
- Topic expression/referent (secondary): *uttare«ṃ» śamaśkeṃ*/Uttara

CDP may refer to both discourse-new and discourse-old associates in TB. In the first example, the associate ('the boy Uttara') is discourse-old. In contrast, the following example (7.60), which corresponds to the Udānavarga 1.17, contains a PC (*-me* [PL]) which doubles a discourse-new associate (*(ṣa)ñ k(e)wän* '(his) own cows').

(7.59) Udānavarga 1.17 (Bernhard 1965: 101)

yathā daṇḍena gopālo ***gāḥ prāpayati*** *gocaram* /

evaṃ rogair jarāmṛtyuḥ āyuḥ prāpayate nṛṇām // 17[33]

32. One might be inclined to take Uttara as the primary topic of this sentence since the discourse explains how he is tormented by the brahmin Durmukha. Still, I think Durmukha is the sentence topic of this example because it is Durmukha, not Uttara, that is in the subject position.

‘Just as a herdsman **leads cows** to a pasture with a stick,

in this way, old age (and) death lead the life of the human beings with sickness.’

(7.60) [TB] CONTEXT:

Maudgalyāyana is explaining to Jātiśrona regarding how one’s life ends:

\- - - - - (ṣa)ñ k(e)wän ¦ śakātai-sa ***kalṣtär-me*** ¦ ṣñār wepeṃ-ś
own cow.PL stick-PERL goad.NPST.MID.3SG-PL respective corral.PL-ALL
aśan-me :
lead.NPST.ACT.3SG-PL

tu-yknesa ktsaitsñe srūka[a4](lñe) ¦ śaul kältsenträ wnolmen-tso ¦ ṣañ
thus old.age death life goad.NPST.MID.3PL being.ACC.PL-GEN own
kalymi-ś aken-ne :
direction-ALL lead.NPST.ACT.3PL-3SG

“(Just as a herdsman) **goads** (his) own cows with a stick, and leads them to their corrals, [89a] in this way old age and death goad the life of the beings, and lead it to its destination. [89b]”

mäkte cake (ṣ)*liye* - - - ¦ - - - - - - (*kl*)*autkot*(*rä*) :

mant kättaṅkäṃ śaulanma ¦ *mā ṣp wtentse klautkonträ* 80-9

“Just like a mountain stream ... (does not) turn back, [89c] so lives go by and do never turn back. [89d]”

(B3a3; trans. based on CEToM; verse; [8¦7¦6]×2 + [4/5¦4/5] + [7¦6])

Doubling in (7.60) is not imitating the corresponding Sanskrit passage since the direct object *gāḥ* does not show doubling of any independent or bound pronoun in (7.59). Thus, CDP found here is motivated by some properties of the Tocharian grammar.

Even though the nominal expression (ṣa)*ñ k*(*e*)*wän* ‘(his) own cows’ is discourse-new, I think the interlocutors presuppose the existence of the referents thanks to the subject ‘a herdsman’ (cf.

33. As observed by Thomas (1983: 142), the TB passage seems to contain translation from a text which had a variant reading *evaṃ jarā (ca mṛtyuś ca)* ‘in this way old age and death ...’ listed in Bernhard (1965: 101) (cf. Pāli Dhp. 135c *evaṃ jarā ca maccu ca*, with the same meaning).

Skt. *gopālo*). It is an example of bridging by which a listener may presuppose the existence of a referent from a relevant linguistic expression (Section 7.2.2). This example shows that it is not givenness that determines whether a PC may double a nominal expression or not. A discourse-new associate may show doubling when its existence is presupposed by bridging or when it offers a generic interpretation. The primary topic of the subordinate clause is 'a herdsman' (cf. Skt. *gopālo*), which offers a generic interpretation in this case (i.e., 'Just as a herdsman, in general, goads his cows ...'). The cows represent the secondary topic of the subordinate clause.[34]

The QUD of this utterance is "*What does a herdsman (in general) do to his livestock?*" The Buddha sets up this QUD to introduce a parallel to the following QUD "*What do old age and death (in general) do to us?*"

(7.61) Summary of (7.60)

- QUD: *What does a herdsman (in general) do to his livestock?*
- Focus: *śakātaisa kalṣtär-* '(he) goads (them) with a stick'
- Topic expression/referent (primary): NA/a herdsman (in general; cf. Skt. *gopālo*)
- Topic expression/referent (secondary): (*ṣa*)*ñ k*(*e*)*wän*/his cows

Table (7.4) summarizes the examples discussed. When there is a PC that doubles a theme in TA and TB, the associate is a secondary topic. I have shown that an associate does not have to be discourse-old: a PC may double a discourse-new associate whose existence the interlocutors presuppose via bridging or an associate which allows generic interpretation.

7.8.2 Doubling of a possessor of a direct object

So far, I have examined the examples in which a pronominal clitic doubles a theme of a transitive verb. In those examples, theme arguments did not have a possessor. However, when the theme argument accompanies a possessor, a PC may, in principle, refer to the theme (possessum) or the

34. In this example, the pronominal clitic does not double the goal (*ṣñār wepeṃś* 'to (their) own corrals') but the theme argument. The choice between these arguments seems determined by the REFERENTIAL HIERARCHY (i.e., first/second person » human » animate » inanimate). Note that when a PC doubles an IO, the doubled IO is always animate (e.g., 7.86, 7.88, and 7.92). In (7.60), the IO is inanimate while the DO is animate.

	(7.57)	(7.60)
Genre	Prose	Verse
Associate	*uttare«ṃ» śamaśkeṃ*	*(ṣa)ñ k(e)wän*
Gloss	Prince Uttara	own cows
Animacy	[+animate] [+human]	[+animate]
Person	3rd	3rd
Number	singular	plural
Grammatical Function	DO	DO
Semantic Role	Theme	Theme
Is an associate pronominal?	No	No
Is an associate discourse-new?	No	Yes
Is an associate a primary topic?	**No**	**No**
Is an associate a secondary topic?	**Yes**	**Yes**

Table 7.4: Clitic doubling of the theme of a transitive verb in TB

possessor who possesses the theme. If a possessor and a possessum are in the same person and number, one cannot decide if a PC doubles a possessor or a possessum. In the following example of Tocharian A (7.62), the referent of the pronominal clitic *-äm* [3SG] is ambiguous as the possessor *mācrik* 'of the mother' and the possessum *śol* 'life' are both in the third-person singular.

(7.62) [TA] CONTEXT:

– – – – – – – ¦ – – *(śa)lpmāṃ mācräṣ tāṣ* :

wiyoss oki cam klopyo ¦ mācar nuṃ nuṃ trekaṣ-äṃ :

'[...] (S/he) will be released from the mother. [3a] As if (she were) frightened, his/her mother will be confused by that suffering again and again. [3b]'

täm kärso-r-äṣ ·o /// [a3] /// (:)

DEM know.PTCP-NMLZ-ABS

mācr-i-k *śkaṃ śol* ***pāsantr-äṃ*** ¦ *mā śkaṃ cam-aṃ tuṅk*
mother-GEN-EMP CONJ life protect.NPST.MID.3PL-3SG NEG CONJ DEM.M.SG-LOC love
mskatr-äṃ : 3
be.NPST.MID.3SG-3SG

'Having recognized it [...]. [3c] and (they) **protect** the life **of the mother**. But she does not have love for him. [3d]'

(A152a3; verse; [7¦7]×4)[35]

Likewise, *klawāte-ne* 'He touched X' in (7.63) of Tocharian B accompanies the third-person singular clitic (*-ne* [3SG]), which may refer to the theme argument *kektseño* '(the Buddha's) body,' or the possessor *pudñäktentse* 'of the Buddha' since both of them are in the third-person singular.

(7.63) [TB] CONTEXT:

The Buddha was in Śrāvastī. In the morning he went out of the cell. The sun had already risen high. He sat on the seat, took off his upper garment, and held his back against the sun.

lyam= *ānande* *keni-sa* ¦ *(a)*[b5]*lyine-sa* *antapi* :
sit.PST.ACT.3SG Ānanda knee.DU-PERL palm.DU-PERL both

pudñäkte-ntse *kektseño* ¦ ***klawāte-ne*** *lyawā-ne* :
Buddha-GEN body touch.PST.MID.3SG-3SG rub.PST.ACT.3SG-3SG

'Ānanda sat on [his] knees. With both palms he **massaged** the body of **the Buddha** and rubbed it.'

(B5b5; trans. based on CEToM; verse; [7¦7]×4)[36]

In the following example, the matrix verb *śwāṃ-ne* '(he) eats X' takes the internal argument *pelaikneṣṣe kektseṃ cwi* 'his body of laws.' As the possessor (*cwi*) and the possessum are both third-

35. One might be inclined to take this pronominal clitic to represent the source of the transitive verb (i.e., 'protect X from Y'). However, we are unaware of a parallel example in which √*pās-* 'to protect, obey' takes a source argument/adjunct.

36. One might wonder whether the PC in this example is referring to *ānande* 'Ānanda,' representing the (inalienable) possessor of the instrument *(a)lyinesa antapi* (i.e., 'Using both of **his** palms'). We cannot exclude this interpretation (but cf. footnote 31).

person singular, it is ambiguous whether the clitic *-ne* [3SG] doubles the possessor or the possessum.

(7.64) [TB] CONTEXT (Satkāravarga):

'If someone gives up (his) possession and properties, [2c] because of faith and weariness of the world, he will not gather (them) again. [2d] ... But if he who has become a monk and (is) eating (alms he) begged [3c] obtains possessions, (he) will be smeared with great blame. [3d] If you$_{PL}$ had cared for veneration (and) flattery, you yourselves should rather have stayed (in) the house (i.e., should not have become monks). [4a] From (your) respective male- and female-slaves, (you) would surely have obtained veneration and gathered possessions. [4b] Now you$_{PL}$ have become a monk with the wish for Nirvaṇa. [4c] (But) you$_{PL}$ are (still) bound by the fetters of veneration, flattery, and profit. [4d]'

mäkte yelyi-tse ¦ *ku* *tallāw* *tākaṃ* ¦
COMP worms-ADJZ.NOM.SG dog.NOM.SG miserable.M.NOM.SG COP.SUBJ.ACT.SG
śwāṃ-ne *yṅkau«ṃ»* [b1] *kästwer* ¦ *yelyi* *pile-nta* :
eat.NPST.ACT.3PL-3SG by.day at.night worm.NOM.PL wound-PL

mant källau-ṣṣi *yelyi* *cmentär* ¦ *ontsoytñe-ṣṣe*
thus gain-ADJZ.NOM.PL worm.NOM.PL be.born.SUBJ.MID.3PL insatiability-ADJZ.SG
pīle-ne ¦ *pelaikne-ṣṣe*[37] *kektseṃ* *cwi* :
wound-LOC law-ADJZ body.ACC.SG DEM.GEN.SG

śwāṃ-ne *yṅkauṃ kästwer* ¦ *mā* *=ñu* *kälpāṣṣäṃ* :
eat.NPST.ACT.3PL-3SG by.day at.night NEG peace acquire.NPST.ACT.3SG
'(If) a miserable dog is (infected) with worms, the worms will eat (his) wounds by day (and) night. [5a] In this way, (if) the worms of profit are born in the wound of insatiability, (they) will **eat his** body of the law by day (and) night, (and) he will not obtain any peace. [5c]'

(B33b1; verse; [5¦5¦5¦5] + [8¦7¦7] + [5¦5] + [8¦7])

Therefore, the examples whose possessor and possessum differ in person or number are critical for us. In what follows, we use the attestations of Tocharian B and show that when a possessor and

37. *pelaikneṣṣe* 'of the law' [M.NOM/ACC.SG] is to be read as *pelaikneṣṣai* [F.ACC.SG]

a possessum differ in person or number, a PC consistently doubles the possessor. The possessors in the following examples are all discourse-old, and the existence of the referents is pragmatically presupposed, while the possessa are all discourse-new.

In (7.65), the first-person singular PC *-ñ* refers to the speaker, King Subhāṣitagaveṣin. It does not double the direct object *yakt-āñm ñi* 'my feeble (state),' which is third-person singular. Here the possessor is discourse-old and pragmatically salient at the time of Subhāṣitagaveṣin's utterance while the possessum *yakt-āñm* is not.

(7.65) [TB] CONTEXT: Indra, who changed his appearance to a yakṣa, asks King Subhāṣitagavesin why he is so sad. King Subhāṣitagaveṣin answers to him:

pūdñäktä-ññe pelai[b3](*kne* ¦ /// :)
buddha-ADJZ law

ce$_u$*-sa* *ñiś* *ñke* *meṅki-tse* ¦ *te-sa* ***pkārsa-ñ***
DEM.M.SG-PERL 1SG now lack-ADJZ.M.NOM.SG DEM.N.SG-PERL know.IMP.ACT.2SG-1SG
yakt-āñm *ñi* : 1
feebleness 1SG.GEN
" ... The law of the Buddha ... [1c] I lack it now. Because of this, **understand my** feeble state! [1d]"

(B99b3; verse; [7¦7]×4)

The speaker sets up an implicit QUD "*What does the speaker (King Subhāṣitagavesin) lack?*" (QUD$_1$) and answers it. This QUD proffers reasoning to another QUD "*What then should the addressee (Indra) do to the speaker (King Subhāṣitagavesin)?*" (QUD$_2$).

(7.66) Summary of (7.65)

- QUD: *What should the addressee (Indra) do to the speaker (King Subhāṣitagavesin)?*
- Focus: *pkārsa- yakt-āñm* 'Understand (my) feebleness'
- Topic expression/referent (primary): *pro*/addressee (= Indra)
- Topic expression/referent (secondary): *ñi*/speaker (= King Subhāṣitagavesin)

In the following example (7.67), the second-person singular PC *-c* [2SG] refers to the addressee, namely the Buddha. It doubles the possessor, not the possessum (*pelaikneṣṣai kektseñ* 'the body of the law'), which is third-person singular. Again, the possessor *tañ* is discourse-old and pragmatically salient at the time of the utterance. At the same time, the possessum *pelaikneṣṣai kektseñ* 'the body of the law' has not been introduced to the discourse before.

(7.67) [TB] CONTEXT (Buddhastotra): N/A

ka (— up)pāl-yok ¦ weś(e)ñ(ai)-sa brahmaswar (:)
lotus-colored voice-PERL Brahma.svara

śtwār= empre-nma-ṣṣe ¦ klene(nt — — — — — :
four truth-PL-ADJZ resounding

— — — — — ¦ — — —)[a2]*-mpa tsälpāre :*
...-COM be.free.PST.ACT.3PL

pelaikne-ṣṣai tañ ¦ kektseñ wato ***wināskau-c*** 40-7 ||
law-ADJZ.F.ACC.SG GEN.2SG body.ACC.SG again? honor.NPST.ACT.1SG-2SG

'... with the lotus-colored Brahmasvara-voice, [47a] ... resounding ... of the four truths. [47b] ... were free with ... [47c] I again? **honor your$_{sg}$** body of the law. [47d]'

(B244a2; trans. based on CEToM; verse; [5¦7]×4)

Because of the damage of the text, the QUD of this sentence is difficult to pinpoint. I tentatively set the QUD as "*What does the speaker do to the addressee (the Buddha)?*"

(7.68) Summary of (7.67)

- QUD: *What does the speaker do to the addressee (the Buddha)?*
- Focus: *pelaikneṣṣai kektseñ wato wināskau* 'praise (your) body of the law again'
- Topic expression/referent (primary): *pro*/speaker
- Topic expression/referent (secondary): *tañ*/addressee (= the Buddha)

Furthermore, it is possible to expand the list by adding the following example.

(7.69) [TB] CONTEXT (Commentary of the Udānavarga. 31.6 and 31.7):[38]

The Buddha lord saw Vajraka (i.e. one adorned with a jewel) from afar on the earth. Vajraka spoke to him from afar. The Buddha, in turn, spoke to him: "I have seen you from afar."

dharmaruci [a6] *weñā-ne-ś* ¦ *poyśeñcai* *lauk(a)r olypotstse* :
Dharmaruci speak.PST.ACT.3SG-3SG-ALL omniscient.VOC far very

kārpa *kent-sa* *poyśi-ntse* ¦ ***wi(nā)ṣṣa-ne*** *pai-(n)e*
descend.PST.ACT.3SG earth-PERL omniscient-GEN praise.PST.ACT.3SG-3SG foot-DU
l(a)laṃṣ(k)i 10-1
tender.DU

'Dharmaruci spoke to him: "O Omniscient, a long time (ago) [11c], (Vajraka) descended on the earth and **praised** the two tender feet **of the omniscient one**. [11d]"'

(PKAS6Aa6; trans. based on CEToM; verse; [7¦8]×4)[39]

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38. The example (7.69) is from a commentary which follows the translation of the Udānavarga 31.6 and 31.7.

(7.m) Udānavarga 31.6 and 31.7 (Cittavarga; Bernhard 1965: 409–10)
anekaṃ jātisaṃsāraṃ saṃdhāvitvā punaḥ punaḥ /
gṛhakārakaiṣamāṇas tvaṃ duḥkhā jātiḥ punaḥ punaḥ // 6
'Having experienced the cycle of countless rebirths again and again, you (were) seeking a house builder: (re)birth (and) suffering, again and again.'

gṛhakāraka dṛṣṭo 'si na punar gehaṃ kariṣyasi |
sarvo te pārśukā bhagnā gṛhakūṭaṃ visaṃskṛtam /
visaṃskāragate citte ihaiva kṣayam adhyagāḥ // 7
'O housebuilder, you have been seen. You will not build a house again. All your rafters have been broken, and the ridgepole has been destroyed. The mind has reached dissolution. Just here, you obtained disappearance.'

(7.n) [TB] Translation of the Uv. 31.6 and 31.7 (PKAS6A a1–4):
(*snai*) [a1] *keś cmel(a)ṣṣe serke* ¦ *mäkorm(eṃ)* $n_{ä}$*no-*$n_{ä}$*n= ost-yāmṣeñcai* :
ñ(ä)sk(e)m(a)ne tw(e) l(a)kle ¦ *c(ä)m(e)lyñe* $n_{ä}$*no-*$n_{ä}$*no śl(o)k yparwe* :
'Having passed the cycle of countless rebirths again and again, you (were) longing for a house builder (i.e., mind influenced by desire): [9b] rebirth (and) suffering, again and again. (This is) the first strophe. [9c]'

(o)[a2]*st-yāmṣ(e)ñcai lyelyku nest* ¦ *mā nano ost yāmttarä* 9
poṃc tañ kleñcaṃ kakautaṣ ¦ *ostantse mrāce käskowä* :
[a3] *käskālläññe ykūweṣn(e)* ¦ *(pa)lskone tane a(ttsaik)* :
nautalläññe yonmasta ¦ *se wcepi āke ślo*[a4]*kantse* :
'O house-builder, you$_{SG}$ have been seen: you$_{SG}$ will not build a house again. [9d] All your$_{SG}$ rafters are broken and the top of the house is destroyed. [10a] The mind has reached annihilation. Just here, you$_{SG}$ have [10b] obtained extinction. This is the end of the second strophe. [10c]'

39. One might be inclined to take this clitic to represent the direct object (theme) and to see here the so-called Accusative of Respect (i.e., '[Vajraka] praised him [with respect to] the two feet'). This account, however, would

In (7.69), the third-person singular PC *-ne* [3SG] doubles *poyśintse* 'of the omniscient one' who is the inalienable possessor of *paine* 'two feet' [DU]. This clitic does not seem to double the direct object (*poyśintse paine*) because a dual noun usually triggers dual or plural agreement. In (7.70), for example, a finite verb in the third-person plural carries a predicative adjective in the dual (Adams 2015: 68f.). In (7.71) from TA, a dual subject (*aśäṃ* 'two eyes' and *klośäṃ* 'two ears') takes a verb in the third-person plural (*lkeñc* '[they] see' and *klyosnseñc* '[they] hear', respectively).

(7.70) [TB] Plural subject taking a predicative adjective in the dual

– – – *sonopälle* • ***prakaryane***$_{\text{DU}}$ ***mäskeṃtär***$_{\text{3PL}}$ •

'... to be massaged, [and] (they) become$_{\text{3PL}}$ firm$_{\text{DU}}$.' (W26b3; Broomhead 1962: 26)

(7.71) [TB] Dual noun triggering plural agreement

(lke)ñc *pe* ***aśäṃ*** *krant* *wramäṃ* ¦ *swāräṃ* *rake*
see.NPST.ACT.3PL also eye.DU good.PL thing.PL sweet.ACC.SG word.SG
klyosnseñc *pe* ¦ ***klośäṃ*** *nāñi* :
hear.NPST.ACT.3PL also ear.DU GEN.1SG.F

'[My] **eyes**$_{\text{DU}}$ also **(se)e**$_{\text{3PL}}$ the good things, my **ears**$_{\text{DU}}$ also **hear**$_{\text{3PL}}$ the sweet word.'

(A58b3; trans. by CEToM; verse; [7¦7¦4]×4)

In example (7.69), the primary topic is Vajraka, who is the non-overt pronominal subject of the finite verbs *kārpa* '(he) descended' and *wi(nā)ṣṣa-me* '(he) praised X.' The Buddha is the addressee of Dharmaruci's utterance, which updates the relationship between Vajraka and the Buddha. Therefore, we analyze the Buddha as the secondary topic of the utterance. The PC's associate (*poyśintse* 'of the omniscient one') is discourse-old, and his existence is pragmatically presupposed by the interlocutors when Darmaruci spoke to him. At the same time, the possessum *paine* 'two feet' has not been introduced to the discourse before. The QUD of Dharmaruci's utterance seems to be "*What did Vajraka do to the omniscient one?*".

(7.72) Summary of (7.69)

leave the genitive *poyśintse* 'of the omniscient one' unexplained (cf. in a double accusative construction, a possessor is in the accusative). According to Luraghi (2020), Accusative of Respect is restricted to Middle/Neo Hittite, Greek and Armenian, and not reconstructable in PIE.

- QUD: *What did Vajraka do to the omniscient one?*
- Focus: *wi(nā)ṣṣa- pai(n)e l(a)laṃṣ(k)i* 'praised two tender feet'
- Topic expression/referent (primary): *pro*/Vajraka
- Topic expression/referent (secondary): *poyśintse*/the omniscient

So far, the examples discussed all had the following structure:

(7.73) ... [$_{\text{INTERNAL ARGUMENT}}$ POSSESSOR$_j$ POSSESSUM] VERB-PC$_j$.

All possessors were discourse-old, and their referents were pragmatically presupposed, whereas the possessa were all discourse-new. Doubling consistently targeted the possessors in these examples. The examples all expanded the discourse by updating the relationship between the primary topic and the discourse-old possessor by introducing a discourse-new possessum. CDP in TB always cooccurs with an associate that represents a secondary topic.

Returning to an ambiguous example (7.63), repeated here as (7.74), the possessor (*pudñäktentse* 'of the Buddha') is discourse-old, and his existence is pragmatically presupposed. At the same time, the possessum (*kektseño* 'the body') is discourse-new, first introduced here. Therefore, our analysis suggests that the third-person singular PC *-ne* in (7.74) does not double the direct object but the (inalienable) possessor *pudñäktentse* 'of the Buddha.'

(7.74) (= 7.63) [TB] CONTEXT:

The Buddha was in Śrāvastī. In the morning he went out of the cell. The sun had already risen high. He sat on his seat, took off his upper garment, and held his back up to the sun.

lyam= *ānande* *keni-sa* ¦ (*a*)[b5]*lyine-sa* *antapi* :
sit.PST.ACT.3SG Ānanda knee.DU-PERL palm.DU-PERL both

pudñäkte-ntse *kektseño* ¦ ***klawāte-ne*** *lyawā-ne* :
Buddha-GEN body touch.PST.MID.3SG-3SG rub.PST.ACT.3SG-3SG

'Ānanda$_{\text{PRIMARY TOPIC}}$ sat on [his] knees. With both palms [of his hands] he **massaged** the body of **the Buddha**$_{\text{SECONDARY TOPIC}}$ and rubbed it'

(B5b5; trans. based on CEToM; verse; [7¦7]×4)

In this example, Ānanda is the primary topic of the sentence as it concerns what he did to the Buddha. At the same time, it expands the discourse by introducing a discourse-new possessum *kektseño* and updating the relationship between him and the Buddha. Therefore, the Buddha is the secondary topic of the sentence.

The first QUD the author sets up is "*What happened?*" (QUD_1), which is answered by *lyam=ānande kenisa* 'Ānanda sat on [his] knees.' As a result of this payoff move (assertion), the CG now contains the proposition SATONTHEKNEES(**ā**) = *Ānanda sat on [his] knees.* Subsequently, the author sets up another QUD: "*What did Ānanda do to the Buddha?*" (QUD_2). This QUD contains Ānanda, introduced to the CG in the previous assertion.

(7.75) Summary of (7.74)

- QUD: *What did Ānanda do to the Buddha?*
- Focus: *(a)lyinesa antapi kektseño klawāte- lyawā-* '(He) massaged (his) body with both palms and rubbed it'
- Topic expression/referent (primary): *ānande*/Ānanda
- Topic expression/referent (secondary): *pudñäktentse*/the Buddha

7.8.3 Doubling of a possessor of an intransitive subject

7.8.3.1 Tocharian B

In the previous subsection, I have shown that when an internal argument (possessum) accompanies a possessor, it is always the possessor that is doubled by a pronominal clitic. In such cases, possessors are always discourse-old and topical, possessing discourse-new non-topical possessa. All possessa in the examples discussed are the direct object of a transitive verb. However, a PC may also double a possessor of an unaccusative subject (Chapter 4). In such cases, the PC's associate is unambiguous—it consistently refers to the possessor. Then, if the proposed analysis is on the right track, I expect to find a topical possessor, typically discourse-old, possessing a non-topical discourse-new possessum. I also expect discourse participants to presuppose the existence of the

topical possessor.

According to Krifka (2008: 267), "There is a well-documented tendency to keep the topic constant over longer stretches of discourse (so-called topic chains, cf. Givón 1983)". If a possessor represents a topical constituent and a *pro* represents a continued topic, we expect to find two consecutive sentences that retain the same topic but have different subjects. In other words, if an unaccusative subject carries a topical possessor and if the subject of an immediately following sentence is a *pro*, I predict that the *pro* does not refer to the possessum but the possessor (continued topic with subject shift). In contrast, if a possessum is the topic of a sentence and if the subject of an immediately following sentence is a *pro*, the possessum should be the antecedent of the *pro*.

(7.76) Primary topic = possessor

i. $[_{\text{SUBJECT}}$ POSSESSOR$_j$ POSSESSUM $]_k$ ... VERB.

ii. $[_{\text{SUBJECT}}$ *pro*$_j$] ... VERB.

(7.77) Primary topic = possessum

i. $[_{\text{SUBJECT}}$ POSSESSOR$_j$ POSSESSUM $]_k$ ... VERB.

ii. $[_{\text{SUBJECT}}$ *pro*$_k$] ... VERB.

This prediction is borne out. A discourse-old possessor represents the primary topic in the following two examples (7.78 and 7.80). In (7.78), the third-person singular PC *-ne* doubles *upagentse* 'of Upaga,' the inalienable possessor *mañu* 'desire,' which is the subject of an intransitive verb. This sentence concerns Upaga, regarding how he felt after Nānda and Nandābala rejected his request. Therefore, we analyze this associate to be the primary topic of the sentence. The subject of a sentence shifts from *upagentse mañu* 'Upaga's desire' to *pro*, which refers to Upaga. This non-overt subject shift supports the analysis that Upaga is the primary topic of the first sentence.

(7.78) [TB] CONTEXT:

Nānda and Nandābala were preparing rice porridge. An ājīvika ascetic Upaga came by and saw it. He requested it from them, but they rejected his request. They said they would

give it to the most brilliant among the sages.

upage-ntse *mañu* ***kärstāte-ne*** *ṣañ ytāri* [a6] *masa* ||
Upaga-GEN desire destroy.PST.MID.3SG-3SG own way.ACC go.PST.ACT.3SG

'The desire **of Upaga was destroyed**, (and he) set out on (his) way.'

(B107a6; trans. by CEToM; prose)

To answer the QUD "*What happened?*" the author sets up a sub-QUD "*What happened to Upaga?*" and answers it here.

(7.79) Summary of (7.78)

- QUD: *What happened to Upaga?*
- Focus: *mañu kärstāte-* '(his) desire was destroyed'
- Topic expression/referent (primary): *upagentse*/Upaga

In the second example (7.80), the clitic *-ne* [3SG] doubles *araṇemiñ lānte* 'of King Araṇemi' who is the inalienable possessor of the discourse-new referent (*pit* 'gall'). This sentence concerns King Araṇemi describing what happened to him after hearing his son Uttara. Therefore, King Araṇemi is the primary topic. This primary topic is continued into the following sentence as the omitted subject of *klāya* '(he) fell.'

(7.80) [TB] CONTEXT:

Prince Uttara is seeking help and speaking to his father, King Araṇemi: "My father, o lord, take me away from these Rākṣasas! You are still alive, but they will now devour me."

te keklyau«ṣo»rmeṃ ***araṇemi-ñ*** ***lā***[b5]***nte*** *pit* ***maiwāte-ne***
DEM.N hear.ABS Aranemi-GEN king.GEN gall tremble.PST.MID.3SG-3SG
k(eṃ)t-sa klāya •
earth-PERL fall.PST.ACT.3SG

'Having heard this, King Araṇemi fainted (*lit.* **King Araṇemi's** gall **trembled**) [and] fell to the ground.'

(B85b5; trans. by CEToM; prose)

The QUD of this discourse is "*What happened?*" (QUD_1). To answer this QUD, the author first sets up a sub-QUD "*What happened to King Araṇemi?*" (QUD_{1A}), which serves as a bridge to another sub-QUD: "*What did King Araṇemi do?*" (QUD_{1B}).

(7.81) Summary of (7.80)

- QUD: *What happnned to King Araṇemi?*
- Pragmatic presupposition: *Something happened to King Araṇemi.*
- Pragmatic assertion: *X = (his) gall trembled*
- Focus: *pit maiwāte-* '(his) gall trembled'
- Topic expression/referent (primary): *araṇemiñ lānte*/King Araṇemi

The following example likewise shows the doubling of a possessor of an intransitive subject. However, due to the lack of context, it is uncertain whether the possessor is topical or not.[40]

(7.82) [TB] CONTEXT: N/A

/// *auloñ* ***cpī*** ***sätk(e)ntär-ne*** *lyitkwä-nmā sruke-māne* k_u*se*
blood.vessel.PL this.GEN.SG spread.NPST.MID.3PL-3SG tube-PL die.NPST-PTCP REL
lä///

'... **his** blood vessels (of the body and) tubes **spread out**. He (who is) dying ...'

(B139a3; verse; [7¦7]×4[?])

In this example, the third-person singular PC *-ne* doubles *cpī* (for *cwi*) 'his,' which is the inalienable possessor of *auloñ ... lyitkwänmā* 'blood vessels and tubes.'

40. Cf. Schmidt (1974: 278): "Der einzige mediale Beleg aus Toch.B findet sich in einem durch grosse Lücken undurchsichtig gewordenen Kontext, der keine sichere Übersetzung erlaubt."

7.8.3.2 Tocharian A

In the following example (7.83), the third-person singular pronominal clitic *-äṃ* seems to double *āṣānikyāp bodhisatvāp* 'of the venerable Bodhisattva.' This associate represents the (inalienable) possessor of *puk marmañ* 'all of the veins,' which is the subject of the intransitive verb *protkar-* 'X is filled (with sufferings)'. Although it is unclear whether he has already been introduced to the discourse, it seems that the Bodhisattva is the primary topic of the sentence since the subject of *klā* '(he) fell' is likely to be *pro* referring to the Bodhisattva.

(7.83) [TA] CONTEXT:

nā – – (kāp)ñ(e) āriñc pācar k$_u$yal (täm ya)kṣe śwā(ts)i eṣṣ-äm

tñik anaprä ṣakk ats lyā āpsā – – m •

"O father, dear to (our) heart, why does (he) give us to the yakṣa as a food? In front of you, surely, [...] the limbs."

cam	*klop-yo*	***āṣāniky-āp***	***bodhisatv-āp***	*puk (ma)rmañ*
DEM	suffering-INS	venerable-GEN	Bodhisattva-GEN	all vein.NOM.PL[(?)]
protkar-äṃ	*– – tkan-ā*	*klā*	•	
be.filled.ACT.3PL-3SG	earth-PERL	fall.PST.ACT.3SG		

'All of the veins **of the venerable Bodhisattva are filled** with that suffering. [...] (he) fell on the ground.'

(A356b4; prose?)[41]

This sentence immediately follows the Bodhisattva's sons' speech. The QUD of this discourse is "*What happened?*" (QUD$_1$). The author sets up and answers a sub-QUD "*What happened to the Bodhisattva?*" in this passage.

(7.84) Summary of (7.83)

- QUD: *What happened to the Bodhisattva?*
- Focus: *cam klopyo puk (ma)rmañ protkar-* 'all of (his) veins are filled with the suffering'

41. A407 a4 attests a parallel passage: /// (*āṣāniky)āp bodhisatvāp puk marmañ* /// 'All of the veins of the venerable Bodhisattva ...'

- Topic referent (primary): the Bodhisattva
- Topic expression (primary): *āṣānikyāp bodhisatvāp* ‘of the venerable Bodhisattva’

In the following example (7.85), the third-person singular PC *-ṃ* [3SG] doubles the nominal expression *(wa)ṣ(t) lmontāp* ‘of the householder,’ which represents an inalienable possessor of *śäṃ* ‘wife.’ This associate is discourse-old. It seems to be the primary topic of the sentence, but it is not secure because of the damage on the manuscript.

(7.85) [TA] CONTEXT:

/// *säm waṣt lmo kuryaru kā(ma)t ā* ///

‘[...] the householder seized the goods [...]’

/// ***(wa)ṣ(t) lmont-āp*** *śäṃ ekrots* ***tāka-ṃ*** *– k· pyo śo*
house sit.PTCP-GEN wife poor.F.NOM.SG COP.PST.ACT.3SG-3SG

‘**The householder** had a poor wife (*lit.* there was a poor wife to the householder) [...].’

(A435b3; prose[?])

Table 7.5 summarizes the examples discussed. I have shown that when a PC doubles a possessor of an unaccusative subject, if there is sufficient context available, the possessor consistently represents the primary topic of the utterance. I have observed that a sentence that immediately follows may switch its subject to a *pro* without introducing an overt nominal expression. This suggests that the omitted subject (*pro*) represents the continued topic of the sentence and that the topic of the preceding sentence is not the possessum but the possessor doubled by a PC.

7.8.4 Miscellanea

Finally, I find three examples of doubling an indirect object (beneficiary) and two examples of doubling a possessor of an indirect object (source and location, respectively).

7.8.4.1 Doubling of an indirect object

In the first example (7.86), the plural clitic *-me* doubles an indirect object (beneficiary; 1PL) of a copula. The primary topic of this sentence is *yes upādhyāyai* ‘you masters,’ and *wesi* ‘to us’ serves

	(7.78)	(7.80)	(7.82)	(7.83)
Language	TB	TB	TB	TA
Genre	Prose	Prose	Verse	Prose?
Associate	*upagentse*	*araṇemiñ lānte*	*cpi*	*āṣānikyāp bodhisatvāp*
Gloss	Upaga's	King Araṇemi's	his	the venerable Bodhisattva
Animacy	[+animate] [+human]	[+animate] [+human]	[+animate] [+human]	[+animate] [+human]
Person	3rd	3rd	3rd	3rd
Number	singular	singular	singular	singular
Grammatical Function	A part of subject	A part of subject	A part of subject	A part of subject
Semantic Role	(inalienable) possessor	(inalienable) possessor	(inalienable) possessor	(inalienable) possessor
Possessum (subject)	*mañu* 'desire'	*pit* 'gall'	*auloñ ... lyitkwänmā* 'blood vessels (and) tubes'	*puk (ma)rmañ* 'all of the veins'
Is an associate pronominal?	No	No	No	Yes
Is an associate discourse-new?	No	No	No	?
Is an associate a primary topic?	**Yes**	**Yes**	**?**	**Yes**

Table 7.5: Clitic doubling of a possessor of an intransitive subject in TB and TA

as the secondary topic.

(7.86) [TB] CONTEXT:

500 disciples of Nadīkāśyapa and Gayākāśyapa all sat down on their knees and spoke to them:

yes upādhyāya[*i*] ***wes-i*** *saiym waste* ***ṣeycer-me***
NOM.2PL master.NOM.PL 1PL-GEN support protection COP.IMPF.ACT.2PL-PL

eśane klausane ṣeycer-me kartstse yolo lkā-tsi klyaus-si-sa
eye.DU ear.DU COP.IMPF.ACT.2PL-PL good bad see-INF hear-INF-PERL

kartstse kälā-tsi yesan-meṃ mañu-sa ṣeyem
good obtain-INF 2PL-ABL desire-PERL COP.IMPF.1PL

"You masters (= Nadīkāśyapa and Gayākāśyapa) were the support (and) protection **to us**;

(You$_{PL}$) were the eyes (and) ears for us to see (and) hear a good (and) a bad thing. We had (*lit.* We were with) a desire to obtain the good from you$_{PL}$."

(B108a6; prose)

The QUD of this utterance is QUD$_1$ "*What were the addressees (Nadīkāśyapa and Gayākāśyapa) like to the speakers (their disciples)?*" This question is set up by the speakers as part of a strategy to answer another QUD explicitly raised by Nadīkāśyapa and Gayākāśyapa in a5: *ostmeṃ lantsi camñcer mā wat* (*wesäṃ*)*mpa?* 'Can you$_{PL}$ leave the house (i.e., become a monk) with us?' (QUD$_0$). To answer this question, the disciples first set up this QUD$_1$, which serves as a bridge to the following QUD "*What did the speakers desire to do?*" (QUD$_2$).

(7.87) Summary of (7.86)

- QUD: *What were the addressees (Nadīkāśyapa and Gayākāśyapa) like to the speakers (their disciples)?*
- Focus: *saiym waste ṣeycer-* '(you$_{PL}$) were the support and the protection'
- Topic expression/referent (primary): *yes upādhyāya[i]*/addressees (= Nadīkāśyapa and Gayākāśyapa)
- Topic expression/referent (secondary): *wesi*/speakers (= 500 disciples of Nadīkāśyapa and Gayākāśyapa)

In the second example (7.88), the second-person singular clitic *-c* [2SG] represents an indirect object (beneficiary) of *lakle ... √yām* 'to make suffering to X; torture X.' There is a topic shift between 2d and 3a. The primary topic is *twe* 'you$_{SG}$' in 2d, but it shifts to *piś cmelaṣṣeṃs* '(the living beings) of five births' in 3a. The independent personal pronoun *ci* 'you$_{SG}$' seems to represent the secondary topic of this sentence.

(7.88) [TB] CONTEXT (Buddhastotra):

piś cmelaṣṣeṃs pernesa ¦ mā we wīna kälpāṣṣit •

pelaiknentse pelkiñ no ¦ ot ṣpä ramer arṣit twe • 2

'For the sake of (living beings) of the five births, you (the Buddha) did not obtain pleasure.

[2c] For the sake of the law, you immediately abandoned (it).' [2d]

snai kkarūṃ cai onolmi ¦ amaukacci yolo-sa •
without compassion DEM.M.NOM.PL living.being.NOM.PL unceasing.NOM.PL evil-PERL

saim pärmaṅk cī śaiṣṣe-ntse ¦ *lakle räskre* [a4] ***yāmṣiyeñ-c*** •
protection hope ACC.2SG world-GEN suffering bitter make.IMPF.ACT.3PL-2SG

'Without compassion, these living beings, (who are) unceasing with an evil (thought), [3a] harshly **tortured you**$_{SG}$ (*lit.* 'did bitter suffering [to] you$_{SG}$'),[42] **the protection (and) hope of the world.** [3b]'

(B231a4; verse; [7¦7] × 4; trans. based on Thomas 1957: 65 and Schmidt 1974: 129)

The QUD of this discourse shifts from QUD$_1$ "*What did you do?*" to QUD$_2$ "*What did the living beings do to you?.*" QUD$_2$ is answered in detail in pādas 3b, 3c and 3d (7.90).

(7.89) Summary of (7.88)

- QUD: *What did the living beings do to you$_{SG}$?*
- Focus: *lakle räskre yāmṣiyeñ-* 'made the bitter suffering'
- Topic expression/referent (primary): *cai onolmi*/the living beings
- Topic expression/referent (secondary): *saim pärmaṅk cī śaiṣṣentse*/addressee (= the Buddha)

(7.90) [TB] Continuation of (7.88)

ṣarne paine kärsnoyeñ-c ¦ inte kc= eśne tsaknoyeñ-c
hand.DU foot.DU cut.off.IMPF.ACT.3PL-2SG when INDF eye.DU pierce.IMPF.ACT.3PL-2SG
(•)

mahūr-tstsana āstäṃ toṃ ¦ empalkaicci kärsnoyeñ-c
diadem-ADJZ.F.PL head.ACC.PL DEM.F.PL unworried.NOM.PL cut.off.IMPF.ACT.3PL-2SG
: 3

42. Cf. *kṣānti* 'forgiveness' with √*yām* 'to do, make' means 'to do forgiveness to X; forgive X' (e.g., B34a5 *yāmṣa cau*$_{ACC}$ *kṣānti* '[S/he] did forgiveness to him; [S/he] forgave him').

‘[They] were cutting off your$_{SG}$ hands (and) feet, and then (*lit.* whenever) [they] pierce your$_{SG}$ eyes. [3c] Without any fear, [they] were cutting off those crowned heads of yours$_{SG}$. [3d]’

(B231a4; verse; [7¦7] × 4; trans. based on Schmidt 1974: 129)

The following example translates Karmavibhaṅga §32 (7.91). The associate of *-ne* [3SG] is *alyek īkene ykuweṣepi* ‘(to him) who has gone to another place,’ which translates Skt. *deśāntaragatasya* ‘id.’ The function of the clitic seems to double the indirect object (beneficiary/location) of the intransitive *pakṣtär-* ‘(the deed) ripens for/in X.’

(7.91) Karmavibhaṅga §32 (Kudō 2004: 88f.):

i. *tatra katamat karma deśāntaravipākam.*
‘Herein, what is the deed that has results in another country?’

ii. *ucyate.*
‘It is said:’

iii. *yat karma tasminn eva janmāntare vā **deśāntaragatasya** vipacyate.*
śubham aśubhaṃ vā tat karma deśāntaravipākam [...]
‘Whatever deed matures **for him who has gone to another country** already in this life or in another (life), whether (it is) good or bad, that deed has results in another country.’

iv. *idaṃ karma deśāntaravipākam*
‘this is the deed that has results in another country.’

(7.92) [TB] CONTEXT (cf. Karmavibhaṅga §32):
The deed which leads to a non-specific rebirth is discussed.

k$_u$se no sū yāmor¦alyek ī«ke»-ne yāmträ :
what CONJ DEM.M.NOM.SG deed other.ACC.SG place-LOC do.SUBJ.MID.3SG

alyek ī(ke)-ne ¦pke-lñe tuntse yänmāṣṣäṃ :
other.ACC.SG place-LOC ripen-NMLZ DEM.N-GEN obtain.NPST.ACT.3SG

[b3] *mäkcwi yāmor-ntse ¦ śäktalye āläṃ ktowä* (:)
REL.GEN deed-GEN seed differently strew.PTCP.M.NOM.SG

alyek īke-ne ¦ykuweṣepi pakṣtär-ne 5
other.ACC.SG place-LOC go.PTCP.M.GEN.SG ripen.NPST.MID.3SG-3SG

'But what deed [is] it, [if one] does [it] in a different place, [5a] (he) will obtain its maturity at the different place? [5b] (Answer:) The seed of whosesoever$_j$ deed, sown in a different (place), [5c] **will mature for him$_j$ who has gone to the different place**. [5d]'

(PKAS7Bb3; trans. based on Sieg 1938: 9; verse; [5¦7]×4)

The primary topic of this sentence seems to be *yāmorntse* 'of the deed (which has results in another country)' (cf. Skt. *karma deśāntaravipākam*). This example is puzzling since *alyek īkene ykuweṣepi* '(to him) who has gone to another place' does not seem topical, but it still receives doubling of the PC *-ne*.

The last example is A213 b3, corresponding to YQ II.5 a7–8.

(7.93) [TA] CONTEXT (cf. YQ II.5 a7–8[43]):

/// cäṃ • bādhari brāhmaṃ kuc kotraṣ • kospreṃ puklyi ko(s)pr(eṃ) manarkāśśi śāsträntu ākläṣ • mrāc kus mä ///

(The brahmin Bādhari is speaking to his disciples:) "If all of these thirty-two signs are complete in their entirety on his [= the Buddha's] body, then you, standing in front of him, only ask him questions without a hint in your minds as follows:) "As for Bādhari the brahmin, what is his descent? How old is he? How many brahmin youths does he teach the Śāstras? What is 'the top'? (What is 'falling from the top'?)""

/// (*kupre*)*-n*(*e*) [$_{\text{SUBJECT}}$ *säm*] ***ya(s-ä)ṃ*** (*caṣ pe*)*nu pärklune* •
if-COMP DEM.M.NOM.SG 2PL-GEN DEM.ACC.SG also question

sne (*tä*)*ṅk-l-une atäṅkät wätkāṣṣ-**äm** cam yas*
without hinder-GDV-NMLZ unhindered answer.SUBJ.ACT.3SG-PL DEM.ACC.SG NOM.2PL
wäṣpā wä(*tkālts tämne wäkn-ā kakmunt puk knān-mānänt*
truly certainly thus way-PERL come.PTCP.M.ACC.SG all know-PTCP.M.ACC.SG

ptāñkät pkärsäs)
buddha.lord know.IMP.ACT.2PL

"If he (is able to) answer these questions (*lit*. this question) **to you**$_{PL}$ immediately and without hesitation, then you$_{PL}$ (must) surely (and certainly recognize him as Tathāgata and the all knowing Buddha-god.)"

(A213b3; trans. based on Ji, Winter, and Pinault 1998; prose)

In this example, the plural PC *-äm* [PL] doubles the discourse-old associate *ya*(*sä*)*ṃ* 'you$_{PL}$ (= Bādhari's disciples).' This associate is the indirect object (addressee) of the transitive verb *wätkāṣṣ-* '(if s/he) answers (these questions) to X.' The primary topic of this sentence is *säm* 'he,' referring to the Buddha, and the associate is not the primary but the secondary topic of this sentence. This subordinate clause precedes a matrix clause whose subject is overtly marked by *yas* 'you$_{PL}$ (= Bādhari's disciples),' suggesting that a primary topic shifted from the Buddha to Bādhari's disciples.

Sentence topic: this one (= the Buddha)

- If he can immediately answer Bādhari's questions without hesitation, he should be recognized as the Buddha.
- ...

The QUD of this utterance is QUD$_1$ "*What should he do to us regarding these questions?*," which offers a condition to the following QUD$_2$ "*What should we do to him?*"

(7.94) Summary of (7.93)

- QUD: *What should he do to us regarding these questions?*
- Focus: *sne* (*tä*)*ṅklune atäṅkät wätkāṣṣ-* '(he) immediately answers (the questions to you) without hesitation'
- Topic expression (primary): *säm*/the Buddha
- Topic expression (secondary): *ya*(*sä*)*ṃ*/addressees (= Bādhari's disciples)

43. YQ II.5 a7–8: *kupre-ne säm yasäṃ caṣ penu pärklune* [a8] (• *sne täṅklune atäṅkät wätkāṣṣ-äm cam yas wäṣpā wätkālts tämne*) *w*(*ä*)*knā kakmunt puk knānmānänt ptāñkät pkärsäs*

- Topic expression (secondary): (*caṣ pe*)*nu pärklune*/the series of questions asked to the Buddha

7.8.4.2 Doubling of a possessor of an indirect object

There are two examples of doubling a possessor of an indirect object (source and location, respectively). Again, there is ambiguity about whether the PC doubles a possessor or a source/location when they are in the same person and number. The first example translates Karmavibhaṅga §76.

(7.95) [TB] Karmavibhaṅga §76

i. *Katame daśa guṇā gandha-pradānasya?*
'What are the ten virtues of giving incense?'

ii. *Ucyate:*
'It is said:'

iii. *Gandha-bhūto bhavati lokasya.*
'One becomes like incense to the world.' (1)

iv. *Ghrāṇendriyaṁ viśudhyati.*
'One's faculty of smell is purified.' (2)

v. *Kāya-daurgandhyam apaiti.*
'Bad odor of the body disappears.' (3)

vi. *Saugandhyam prādur-bhavati.*
'Good odor appears.' (4)

vii. *Daśa diśaḥ śīla-gandhaḥ pravāti.*
'The sweet fame of one's virtue blows in (all) ten directions.' (5)

viii. ...

(7.96) [TB] CONTEXT (Karmavibhaṅga §76):
10 advantages of giving perfumes are listed:

tu(*ñe* —)	*ta*(*tākau* —	*cmel-a*)-*n*(*e*) :
perfume.NOM.SG	COP.PTCP.M.NOM.SG	birth-PL-LOC

mele(ṃ)-ṣṣe indri cpi mā kauṣträ :
nose-ADJZ sense DEM.M.GEN.SG NEG destroy.NPST.MID.SG

kektseñ-meṃ c(p)i [a2] *karttse were yaṃ*
body-ABL DEM.M.GEN.SG good odor go.NPST.ACT.3SG

kektseñ-meṃ ***cpi*** *yolo mā* ***warṣä(ṃ)-ne***
body-ABL DEM.M.GEN.SG bad.NOM.SG NEG smell.NPST.ACT.3SG-3SG

kälymi-kälymi ṣäp cpi papāṣṣorñe-ṣe were kartts«e»
direction-direction CONJ DEM.M.GEN.SG moral.behavior-ADJ odor good
ya(ṃ)
go.NPST.ACT.3SG

'One will be(come like) a per(fume) in (the rebirths). His sense of smell (*lit.* pertaining to the nostrils) is not destroyed. Good odor comes (out) from his body. Bad (smell) does not come out (*lit.* [he] does not smell bad) from **his** body.[44] And the good odor of his virtuous observance goes in every direction.'

(PKAS7Na2; trans. based on CEToM; prose)

The associate of the pronominal clitic *-ne* [3SG] in this example is ambiguous since the indirect object (source) *kektseñmeṃ* 'from the body' and its inalienable possessor (*cpi*) are both the third-person singular. The latter is likely to represent the primary topic of this sentence as this passage discusses how he will attain benefit by giving perfume. If so, the third person singular clitic *-ne* doubles the primary topic.

In the second example (7.97), the third-person singular PC *-äṃ* [3SG] doubles either the location (*ka(pśi)ñäṃ* 'in the body') or, more likely, the possessor *cami* 'his,' which refers to *ācoyis* 'of the embryo.' This referent is discourse-old while the possessum *ka(pśi)ñäṃ* 'in the body' seems

44. All of the attested examples of the present stem TB *warṣṣä-/warske-*ACT (Present II as per Malzahn 2010: 887; IX as per Peyrot 2013b: 821; and IXa as per Krause 1952: 289) are intransitive. They usually accompany a predicative adjective and mean '(something/somebody) smells ADJ' (e.g., 7.o and 7.p).

(7.o) [TB] *sū wassi ykāk swāre warṣṣäṃ* 'this clothing still smells good.' (PKAS6Cb4)

(7.p) [TB] *askwaś*[*i*] *rano pupaṃñ warskeṃ* 'also the *darbha*-grass smells bad,' (B308b4; Peyrot 2013b: 821 n. 850).

The example (7.96) also carries a predicative adjective (*yolo* 'bad'). It seems that the indirect object *cpi kektseñmeṃ* 'from his body' in this example is an adjunct to the intransitive (i.e., *lit.* '(He) does not smell bad from his body.').

discourse-new. It is not clear whether this associate is the primary or the secondary topic of the sentence.

(7.97) [TA] CONTEXT:

cesäm ṣpät koṃsā kälytär ok prākroneyaṃ /// (ca)mi ācoyis mācri kātsaṃ ṣurmä – – – räṣ
'For these seven days (the embryo[?]) still stays in the firm state. [...] in the womb of this embryo's mother [...]

tämne wäkn-ā aneñcāṣ kākätkunt [b6] */// t·eñc*
thus way-PERL from.inside rise.PTCP

kus-ne ***cam-i*** *āñc* *ka(pśi)ñ̃ñ-aṃ wu lotas* ***ruseñc-äṃ***
REL-COMP DEM.M-GEN down body-LOC two hole.ACC.PL open.NPST.ACT.3PL-3SG
ṣom āsu wesis wcaṃ lyī wesi ///
one.ACC dry.PTCP.M.NOM.SG excrement.GEN second.ACC wet excrement

'In this way, [...] (the embryo) stepped out (*lit.* risen) from the inside (of his mother's womb) [...] (those) who **open** two holes in the lower (part of) **his** body, one for dry excrement (and) the other for wet excrement ...'

(A150b6; prose[?])

Determining the QUD of this passage is difficult because of the damage in the manuscript. We tentatively set the QUD as *What ... do to the embryo?*.

(7.98) Summary of (7.97)

- QUD: *What ... do to the embryo?*
- Focus: *āñc ka(pśi)ñ̃ñaṃ wu lotas ruseñc-* 'open two holes in the lower part of (his) body'
- Topic expression (primary): *kusne*/?
- Topic expression (secondary): *cami*/the embryo

To summarize, in this subsection I have examined the examples in which a pronominal clitic doubles an indirect object (beneficiary) or a possessor of an indirect object (source or location) (Table 7.6). In the former cases, the associates doubled by a PC represent the secondary topic of

a sentence. The PCs are likely to double the discourse-old topical possessors in the latter case. However, we cannot exclude an alternative analysis since the possessor and the possessum are in the same person and number.

	(7.86)	(7.88)	(7.92)	(7.93)	(7.96)	(7.97)
Language	TB	TB	TB	TA	TB	TA
Genre	Prose	Verse	Verse	Prose	Prose	Prose (?)
Associate	*wesi*	*saim pärmaṅk cī śaiṣṣentse*	*alyek īkene ykuweṣepi*	*ya(sä)ṃ*	*cpi*	*cami*
Gloss	to/of us	you, the protection (and) hope of the world	(him) who has gone to a different place	to you_{PL}	his	his
Animacy	[+animate] [+human]	[+animate] [+human]	[+animate] [+human]	[+animate] [+human]	[+animate] [+human]	[+animate] [+human]
Person	1st	2nd	3rd	2nd	3rd	3rd
Number	plural	singular	singular	plural	singular	singular
Grammatical Function	indirect object	indirect object	indirect object	indirect object	part of an adjunct	part of an adjunct
Semantic Role	beneficiary	beneficiary	beneficiary	addressee	(inalienable) possessor	(inalienable) possessor
Possessum	N/A	N/A	N/A	N/A	*kektseñmeṃ* 'from the body'	*āñc ka(pśi)ñ-aṃ* 'on the lower (part of) the body'
Transitivity of the host	intransitive	transitive	intransitive	transitive	intransitive	transitive
Is an associate pronominal?	Yes	Yes	No	Yes	Yes	Yes
Is an associate discourse-new?	No	No	No?	No	No	No
Is an associate a primary topic?	No	No	No	No	**Yes**	?
Is an associate a secondary topic?	**Yes**	**Yes**	**Yes**?	**Yes**	No	?

Table 7.6: Clitic doubling of an IO or a possessor of an IO in TB and TA

7.8.5 Summary

In all of the examples whose pronominal clitic doubles a theme of a transitive verb, the theme represents the secondary topic of a sentence. Its existence is pragmatically presupposed at the time of the utterance, and the sentence updates the relationship between the primary and the secondary topic.

When a theme of a transitive verb accompanies a possessor, a PC consistently doubles the possessor. I have shown that the possessors in the examples were all discourse-old and (inalienably) possess discourse-new possessa. The possessors are thus topical—they are primary or secondary topics depending on whether or not possessa sit in the subject position. When a possessum is in the subject position, its possessor represents the primary topic, which may continue as the *pro* in the following sentence. In contrast, when there is a separate external argument, the external argument is the primary topic, and the doubled associate represents the secondary topic. When a PC doubles an indirect object, the indirect object is likely to be the secondary topic of the sentence.

7.9 Conclusion

This chapter has shown that, in contrast to the previous treatments of the Tocharian pronominal clitics, we must recognize at least two different types of doubling in TA and TB: Clitic Left/Right Dislocation and Clitic Doubling Proper. They are used for different purposes and subject to different restrictions, supporting Hypothesis 2.

The two research questions that we tackled in this chapter are as follows: (i) What does clitic doubling do in TA and TB? and (ii) Does it have any grammatical or semantic restriction(s)? For (i), we have shown that CLLD and CLRD highlight a non-subject associate as the primary topic. In contrast, CDP may represent a primary or secondary topic, depending on a separate external argument. For (ii), we have seen that associates in CLRD/CLLD and CDP are topical. In order to have this status, the referent's existence at the time of the utterance must be presupposed.

Clitic doubling is optional in Tocharian. It contrasts with languages such as Tundra Nenets, where

object agreement is obligatory when an object is third-person and a primary or secondary topic (Dalrymple and Nikolaeva 2011). Doubling of a third-person DO is also obligatory when it is topical in Albanian (Kallulli 2008). Rather, it patterns with Persian indefinite specific objects, which may optionally be marked by *râ* when topical (Dalrymple and Nikolaeva 2011). In Chichewa, an object marker may cooccur with a full nominal expression only when the nominal expression is a dislocated topic (Bresnan and Mchombo 1987). Tocharian CDP is animacy insensitive: Inanimate DPs may show doubling in Tocharian. It contrasts with Romanian, where inanimate DPs do not show doubling (Cornilescu and Dobrovie-Sorin 2008). Tocharian CDP is definiteness insensitive; In Macedonian, DOs need to be definite for being doubled (Mišeka Tomić 2008); this is not the case in Tocharian. Tocharian CDP patterns with Hittite in that it is optional and driven pragmatically to mark a topic. It never doubles a focus constituent, as observed by Sideltsev (2011a, 2011b) for Hittite.

CHAPTER 8

Conclusion

8.1 Conclusion

The goal of this dissertation was twofold. One was to produce the descriptive generalization of the Tocharian pronominal clitics, and the other was to develop a morphosyntactic model that best accounts for their empirical distribution. The model I developed revealed the fine-grained distribution of the Tocharian PCs by predicting there is a gap in the data.

Chapter 2 reviewed the pronominal system of Tocharian. This chapter also showed that one should take the ablative and allative secondary case markers in Tocharian A (*anäṣ* and *anac*) as monomorphemic rather than bimorphemic formatives consisting of the third-person marker *-an-* and *-äṣ/-ac*. Chapter 3 outlined the representative uses of the Tocharian PCs and reviewed their multifunctionality. They were mostly compatible with the genitive-dative and accusative independent forms. They may also represent (inalienable) possession relations, although they rarely described kinship relations. Chapter 4 introduced theoretical premises on which I developed a morphosyntactic analysis. I assumed that syntax manipulates morphosyntactic feature bundles, which receive phonological realization post-syntactically, and that pronominal clitics only consist of person and number features, and they are defective goals when they agree with some functional head.

Chapter 5 developed a morphosyntactic model, in which PCs realize person and number features licensed by the functional head that introduces an external argument. This model accounts for the multifunctionality of the Tocharian PCs in that the licensor finds person and number features in various thematic positions. Furthermore, it predicts that the Tocharian PCs may not represent

the possessor associated with a transitive agent since the external argument is not in the domain where the licensor looks for valued person and number features. The model also predicts that PCs cannot represent the possessor of the nominal expression contained in another nominal expression since the embedded nominal expression and its possessor should be invisible to the licensor of a PC by the time it merges with the structure. Furthermore, this model enables us to separate unaccusative verbs in Tocharian without relying on the semantics of a verb.

Chapter 6 considered examples in which multiple arguments are pronominal. My analysis backed up Adams' (2015) finding in a more restrictive sense: when the IO and DO of a ditransitive verb are both pronominal, PCs consistently refer to the IO. This distribution finds a natural explanation since the licensor of a PC looks for valued φ-features and finds the IO before the DO. This analysis also enables us to analyze the semantics and pragmatics of a referential null object in Tocharian, a topic that awaits further research.

Chapter 7 treated cases in which a PC cooccurs with a nominal expression to which it refers. Based on the Question Under Discussion framework of discourse, I identified the topic and focus of each sentence. This chapter revealed that doubling of a nominal expression by a PC indicates the doubled expression to be topical, either primary or secondary. In either case, discourse participants presupposed the existence of a referent at the time of the utterance. Furthermore, I briefly compared clitic doubling in Tocharian with that in other IE languages (e.g., Hittite) and the languages in Balkan Sprachbund.

8.2 Further questions

Although this dissertation shed light on various aspects of the Tocharian PCs, it focused on their synchronic status and had to set aside many questions for future research. As discussed in Chapter 1, I believe it is now possible to seek answers to the questions regarding the diachronic aspect of the Tocharian PCs. For example, scholars commonly distinguish genitive/dative (PIE **moy* [1SG], **toy* [2SG]) and accusative (PIE **me* [1SG], **te* [2SG]) atonic personal pronouns in PIE (e.g., Fortson 2010: 143). In contrast, this distinction is presumably lost already in Proto-Tocharian. It remains an open question as to what pre-Proto-Tocharian changes caused this distinction to be

lost.

Another outstanding question is regarding the position in which Tocharian PCs appear. Scholars reconstruct PIE atonic personal pronouns to appear second after the first stressed element (WACKERNAGEL'S LAW; Delbrück 1878; Wackernagel 1892). In contrast, the Tocharian PCs almost always appear after a finite verb, except for some limited cases in TA. There is still no agreed view regarding how Tocharian PCs acquired their distributional pattern. Language contact could be a cause (Peyrot 2019). One might, however, be inclined to consider whether any language-internal mechanism could account for the change. The model I developed may explain the change, albeit specific details need to be worked out in the future. I. G. Roberts (2010) analyzes the second-position clitics as a D attracted to the left periphery by C's Edge Feature. They move to the position they appear in by passing through the edge of VOICE. VOICE does not incorporate them because they have other features than person and number features (e.g., prosodic and referential features; Cardinaletti and Starke 1999), and thus, they are not defective goals to VOICE (Chapter 4). However, when they somehow lose these features, they develop from D to φ and become defective goals to Voice and start undergoing incorporation. In this way, diachronic loss of features will give rise to the Tocharian pattern in which PCs cliticize to the T-Voice complex and occurs immediately after a finite verb.

It is also an open question whether the animacy of an argument or the Person Case Constraint (Bonet 1991; Anagnostopoulou 2005) plays a role in determining whether PCs represent the IO or DO of a verb (Chapter 6). For example, which argument do PCs represent when the IO is inanimate and the DO animate? My analysis predicts that PCs should represent the IO in such cases. A more thorough corpus study will provide insight into this question.

Chapter 3 confirmed that PCs may express an inalienable possession relation, particularly abstract concepts and (part-whole) body-part terms. In contrast, PCs representing kinship relations are extremely rare, although part-whole and kinship relations usually pattern to constitute the class of inalienable possession. Why Tocharian PCs rarely represent kinship relations is an open question. Regarding this issue, it is worth highlighting that PCs representing alienable possessions are also rare.

Chapter 7 considered the semantics and pragmatics of clitic doubling in Tocharian. However, it did not answer why clitic doubling is rare in these languages. If language contact played a role, we would find doubling more frequently. Neither TA nor TB seems to have grammaticalized clitic doubling. Why did Tocharian not grammaticalize doubling as a morphosyntactic or pragmatic-semantic marker? Subsequent research will provide further insight into this issue.

By examining the synchronic aspects of Tocharian PCs, I opened a way to understand their diachrony. The Tocharian PCs are attractive not just for Tocharologists or Indo-Europeanists but also for general linguists specializing in any subfield. I hope this dissertation established the empirical and theoretical bases and became the basis for further research that includes the various perspectives of diverse scholars with different expertise.

CHAPTER 9

Appendix: Representative unaccusative verbs in Tocharian A and B

9.1 Representative unaccusative verbs in TA and TB

This chapter lists representative roots in TA and TB that form an unaccusative verb (Table 9.1). I will briefly review each of the roots collected.

9.1.1 TB √*ār(ā)*- 'cease, come to an end'

The TB and TA root √*ār*(*ā*)- 'cease, come to an end' forms an unaccusative verb. The following example (9.1) from TB contains a pronominal clitic referring to *cey wnolmi* 'the human beings.' This PC represents the possessor of *yāmor śaul ṣpä* 'deed and life,' which is the subject of *aran*- 'X will cease'.

(9.1) [TB] FUNCTION: possessor of an intransitive subject

kᵤse no cey wnolmi ¦ ket śaul
REL.NOM CONJ DEM.M.NOM.PL human.being.NOM.PL REL.GEN life
nanautau ¦ yāmor rano pest nanautau ¦ kᵤce
disappear.PTCP.M.NOM.SG deed CONJ PTCL disappear.PTCP.M.NOM.SG what.ACC
klautke-sa aiśa-(lyi :
manner-PERL know-GDV.M.NOM.PL

/// [a5] - ¦ tetemo)ṣä tumeṃ no pest ¦ yāmor śaul ṣpä
be.born.PTCP.M.NOM.SG thereupon CONJ PTCL deed life CONJ
aran-me[1] *:*
cease.SUBJ.ACT.3PL-PL

	Language	Root	Gloss	Section
1	TB	√*ār(ā)-*	cease, come to an end	(§9.1.1)
2	TA	√*ār(ā)-*	cease, come to an end	(§9.1.2)
3	TA	√*i-|kälkā-*	go	(§9.1.3)
4	TB	√*kän-*	come about, occur, be fulfilled	(§9.1.4)
5	TA	√*kän-*	come about, occur	(§9.1.5)
6	TB	√*käly-|stäm(ā)-*	stand	(§9.1.6)
7	TB	√*käsk(ā)-*	be scattered	(§9.1.7)
8	TB	√*kulā-*	recede	(§9.1.8)
9	TB	√*klänts-*	sleep	(§9.1.9)
10	TB	√*klautk(ā)-*	turn, become	(§9.1.10)
11	TA	√*trik(ā)-*	be confused; faint	(§9.1.11)
12	TB	√*nas-|tāk(ā)-*	be, become	(§9.1.12)
13	TA	√*nas-|tāk(ā)-*	be, become	(§9.1.13)
14	TA	√*pränk*$^{?}$*-*	restrain oneself	(§9.1.14)
15	TA	√*prutk(ā)-*	be shut, be filled	(§9.1.15)
16	TB	√*plätk-*	overflow, develop, arise	(§9.1.16)
17	TB	√*plu-*	float, fly, soar	(§9.1.17)
18	TB	√*mäsk-*	be	(§9.1.18)
19	TA	√*mäsk-*	be	(§9.1.19)
20	TA	√*lotkā-*	turn, become	(§9.1.20)
21	TB	√*wāk(ā)-*	differ	(§9.1.21)
22	TB	√*ṣäm-|läm(ā)-*	sit	(§9.1.22)
23	TA	√*sätk(ā)-*	spread out	(§9.1.23)
24	TB	√*si-n-*	(Mid) satiate oneself; be depressed	(§9.1.24)
25	TA	√*si-n-*	(Act) satiate (Mid) satiate oneself; be depressed	
26	TB	√*spālkā*$^{?}$*-*	±strive actively/forcefully for	(§9.1.25)
27	TB	√*tsäm(ā)-*	grow, increase, come into being	(§9.1.26)
28	TB	√*tsälp(ā)-*	pass away, be released, be redeemed	(§9.1.27)

Table 9.1: Representative unaccusative verbs in TA and TB

'But who are the beings whose life has been disappeared (and whose) deed has completely disappeared also? With what manner are they to be recognized? [19a] ... having been (re)born, thereupon, however, **their** deed and life **will come to an end** completely. [19b]'

(PKAS7Ga5; trans. based on CEToM; verse; [5¦5¦8¦7]×4)

1. *aran-me* seems to be a misspelling of *āran-me*, which has the initial accent for Subjunctive V (Malzahn 2010: 283).

9.1.2 TA √*ār(ā)*- 'cease, come to an end'

We also find a PC representing th possessor of the subject of the root √*ār(ā)*- 'cease, come to an end' in TA. In (9.2), the third-person singular PC *-äṃ* represents the (inalienable) possessor of *śol* 'life,' which is the subject of *aratr*- 'X ceases, X comes to an end.'

(9.2) [TA] FUNCTION: possessor of an intransitive subject

[a1] /// *ṣ pñi-ṃtu* ***aratr-äṃ*** *śol* ///
virtue-PL cease.NPST.MID.3SG-3SG life
'... virtues. **His** life **comes to an end**.'

(A165a1; verse?)

In example (9.3), the third-person singular PC *-äṃ* represents the possessor of *lyalypäntu* 'deeds,' which is the subject of the intransitive verb *āreñc*- 'X will cease, X will come to an end.'

(9.3) [TA] FUNCTION: possessor of an intransitive subject

• *känta-ntu-yo pukl-ā kätkeñc cam-i kapśiññ-äṣ śwāl lātäṅkā-tsi mā*
100-PL-INS year-PL pass.SUBJ.ACT.3PL DEM.M.SG-GEN body-ABL flesh cut.off-INF NEG
aratär cam lāt··ntaṃ lyalyp-än(tw)-ā(śś)i ///
stop.NPST.MID.3SG DEM.M.ACC.SG deed-PL-GEN

[b1]*ntaṃ lyalyp-äntu* ***āreñc-äṃ***
deed-PL stop.SUBJ.ACT.3PL-3SG
'The years will pass by hundreds, (but) one does not stop cutting flesh from his body (*lit.* cutting off flesh from his body will not stop). This ... of the deeds ... **his** deeds **will come to an end**.'

(A295b1; trans. based on CEToM; prose)

There is another occurrence of a PC, *lyalypäntu* 'deeds' and √*ār(ā)*- (9.4). Although the context of this example is missing, it seems that the PC *-äm* [PL] represents the possessor of *lyalypäntu*, which is the subject of *arantr*- 'X ceases, X comes to an end.'

(9.4) [TA] FUNCTION: possessor of an intransitive subject (?)

[a2] – *lyalypä-ntu* ***arantr-äm*** ///
deed-PL cease.NPST.MID.3PL-PL

'... **their**(?) deeds **come to an end** ...'

(THT1308aa2; prose?)

Example (9.5) contains the first-person singular PC *-ñi*, referring to *nirdhane* 'Nirdhana [a name of a brahmin].' It represents the (alienable) possessor of *puk niṣpalntu* 'all of the possessions,' which is the subject of the intransitive verb *ārar-* 'X ceased, X came to an end.' This example also supports that TA √*ār*(*a*)- forms an unaccusative verb.

(9.5) [TA] FUNCTION: possessor of an intransitive subject

[a2] /// (*śäk*) *w*(*e*)*-pi pkul wsā* *elant* ¦
10 2-PTCL year give.PST.ACT.1SG alms

ārar-ñi *puk niṣpal-ntu* :
cease.PST.ACT.3PL-1SG all possession-PL

'I have been giving alms for twelve years; all **my** properties **are gone**.'

(A215a2; trans. based on Ji, Winter, and Pinault 1998: 45; verse; [7¦7]×4)

YQ I.6 b1 (9.6) attests a parallel passage.

(9.6) [TA] FUNCTION: possessor of an intransitive subject

/// – ¦ *p*$_u$*kis* *puk ākāl knäs-si* *pke* :
all.GEN all wish be.fulfilled-INF intend.PST.MID.1SG

śäk we-pi *p*$_u$*kul wsā* *elant* ¦ ***ārar-ñi*** *pu*[b2](*k niṣpal-ntu* :)
10 2-PTCL year give.PST.ACT.1SG alms cease.PST.ACT.3PL-1SG all possession-PL

[Bādhari speaking to Nirdhana:] "I intended every wish to be fulfilled for everyone. I have been giving alms for twelve years; all (properties) **of mine are gone** ..."

(YQ I.6b1; trans. based on Ji, Winter, and Pinault 1998: 45; verse [7¦7]×4)

9.1.3 TA √*i*-|*kälkā*- ‘go’

The TA root √*i*-|*kälkā*- ‘go’ forms an unaccusative verb, which may accompany a PC that represents the possessor of the subject. For example, *kalkaṣ*- ‘X (will) go’ in (9.8), used metaphorically, accompanies the first-person singular PC *-ñi* that represents the inalienable possessor of the verb’s subject *ime* ‘thought, mind.’ This sentence follows a passage that translates the Udānavarga 21.7.

(9.7) Uv. 21.7 (Tathāgatavarga; Bernhard 1965: 280)
na hi santaḥ prakāśyante viditvā lokaparyāyam /
ādeśayanto virajaḥ padaṃ śāntamanīṣiṇaḥ // 7
‘For, having understood the way of the world, the good ones are not illuminated, (they are) calm (and) intelligent, indicating the dustless place.’

(9.8) [TA] FUNCTION: possessor of an intransitive subject

mā nu kraś pälkiñc ¦ ārkiśoṣṣi-s ym(e) ¦ kärso-r-äṣ
NEG CONJ good.NOM.PL appear.NPST.ACT.3PL world-GEN way know.PTCP-NMLZ-ABS
mā āksisa-māṃ ¦ sne twe lame knānmās [a5] – (:)[2]
NEG instruct-PTCP without dust place knowing.NOM.PL

/// tti ¦ weñam tāpärk ślokaśśi wram ¦ kos ne ime
speak.SUBJ.ACT.1SG now strophe.GEN.PL thing how.much COMP thought
kalkaṣ-ñi :
go.SUBJ.ACT.3SG-1SG

‘And having understood the way of the world, the good ones do not shine. (They are) intelligent, not indicating the place without dust. [15a] ... I will now tell (you) the sense of the strophes as much as **my** memory **goes**. [15b]

(A218a5; verse; [5¦5¦8¦7]×4[?])[3]

2. Sieg and Siegling (1933: 171 n. 5), followed by Bernhard (1965: 280), emend *knānmāṣ* as *knānmānäṣ* ‘knowing, intelligent’ [NOM.PL].

3. The TA passage *mā āksisamāṃ* ‘not teaching’ seems to translate Sanskrit *adeśayanto* ‘not indicating’, rather than *ādeśayanto* ‘indicating’ (Sieg and Siegling 1933: 172).

Example (9.9) attests the same combination of *īme* 'thought' and √*i-*|*kälkā-* 'go' with a PC. In this example, the first-person singular PC *-ñi* also represents the inalienable possessor of *īme*, which is the subject of the intransitive verb *kälkā-* 'X went.'

(9.9) [TA] FUNCTION: possessor of an intransitive subject

prasku *lyalypur-äṣ* ¦ *mar märka* ///
be.afraid.PST.ACT.1SG deed-ABL NEG law

/// *tsopats wäl* *nunak* «:»
great king again

raritwā *kāvvi* ¦ *kos* *ne* *īme* ***(kä)lkā-ñi*** :
translate.PST.ACT.1SG poem how.much COMP awareness go.PST.ACT.3SG-1SG

kanis *ā*[b4]*yāt*(*w*)*ā* ¦
tune.GEN.SG according.to

'I was afraid of the deed. Don't ... the Law! ... ... O great king, again, [60b] I translated the poem as much as **my** awareness **went**, [60c] following the tune.'

(A230b3; verse; [5¦7 + 5¦4¦6 + 5¦7 + 5¦4¦6])

The following example (9.10) contains the third-person singular PC *-äṃ*, which refers to an embryo. This PC seems to represent the inalienable possessor of the missing subject, but this example is not secure because of the lacuna in the manuscript.

(9.10) [TA] FUNCTION: possessor of an intransitive subject (?)

(*wikiñu*)*piñcinäs ṣ*(*pät k*)*oṃs-aṃ* *i* – – [a6] /// *m nas-l-une-yaṃ* ***yiñc-äṃ*** ||
29th.M.ACC.PL 7 day.PL-LOC be-GDV-NMLZ-LOC go.NPST.ACT.3PL-3SG

'In the 29th week, ... **his ... go** into ... existence.'

(A151a6; prose?)[4]

4. Cf. A115 a1: *okāk prākär nasluneya(ṃ) yäṣ* '(it) goes into a solid existence.'

9.1.4 TB √*kän*- ‘come about, occur, be fulfilled’

Our analysis in Chapter 5 identifies the TA and TB root √*kän*- ‘come about, occur, be fulfilled’ as a root that forms an unaccusative. This root frequently accompanies TB *ākālk* and TA *ākāl* ‘wish’ as the subject and a pronominal clitic as the subject’s inalienable possessor.[5]

In example (9.11), the plural PC *-me* represents the possessor of *akālk* ‘this wish,’ which is the subject of the intransitive verb *knetär*- ‘will X be fulfilled.’

(9.11) [TB] FUNCTION: possessor of an intransitive subject

mai no ***knetär-me*** ¦ *ritau* *akālk laukaññe* : 1 ||
PTCL CONJ be.fulfilled.SUBJ.MID.3SG-PL wish.PTCP.M.NOM.SG wish for.a.long.time

(Nandā [and] Nandabalā speaking to God Brahma): “But **will our** long-wished wish still **be fulfilled**?” [1d]

(B107b1; verse; [5¦7]×4)

Moreover, the following examples attest a formulaic expression { *paiykalñesa X-vārg* | *X-vārg paiykā-mai* } *akālk kñitär-ñ* ‘{ By the writing of the X-varga | I have written the X-varga }, may my wish be fulfilled!’.

(9.12) [TB] PKAS 4A b2 (verse; [7¦7¦4]×4):

paiykalñesa drohavārg«†ä» ¦ *akālk* ***kñītär-ñ*** *serkene* ¦ *po cmelaṣṣe* :

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5. The following example (9.q) contains a PC *-ñ* [1SG], a gerundive *knelle* ‘to be fulfilled,’ and *akālk* ‘wish,’ which represents the subject of the gerundive. But this example does not support the unaccusativity of √*kän*- since the PC is not hosted by the gerundive but by the finite copula *star*-.

(9.q) [TB] FUNCTION: possessor of a subject of a gerundive

(- - - - *puwa*)*r-ne nauṣ* *yopu* *mā ṣpä* *akālk* ***kne-lle*** ***star-ñ***
fire-LOC earlier enter.SUBJ.ACT.1SG NEG CONJ wish be.fulfilled.NPST-GDV COP.NPST.3SG
pañaktä[a6](*-ññe śloksa*) /// *lareṃ pelaikne klyau-tsi*
Buddha-ADJZ stroph-PERL dear law hear-INF

(King Subhāṣitagaveṣin speaking to Indra who changed his shape to a yakṣa): “(But) if I enter into the fire first, **my** wish to hear the dear law with a Buddha-strophe **cannot be fulfilled**.”

(B100a5; trans. based on CETOM; prose)

Example (9.q) follows Thomas’s (1983: 121 n. 12) restoration *pañaktä*[a6](*ññe śloksa*); *klyautsi* is for *klyauṣtsi* (Thomas 1983: 121 n. 13).

‘By writing of Drohavarga, **may my** wish **be fulfilled** in the cycle of all births!’

(9.13) [TB] PKNS 27 a3 (verse; [7¦7¦4]×4):

paikalñesa droha(*vārg* ¦ *akālk*) ***kñītär-ñ*** *serkeṃne* ¦ *po cmela*(*ṣṣ*)*e*(*ṃ*)

‘By writing of Drohavarga, **may my** wish **be fulfilled** in the cycle of all births!’

(9.14) [TB] PKAS 4A b4 (verse; [7¦7¦4]×4):

po krentaunaṃts śmoññai ce ¦ *paiykalñesa smṛtivārg*«†ä» ¦ *akālk* ***kñītär-ñ*** :

‘By the writing of Smṛtivarga, the foundation of all virtues, **may my** wish **be fulfilled**!’

(9.15) [TB] PKNS 27 a5 (verse; [7¦7¦4]×4):

po krentaunaṃts śmoññai ce ¦ *paikalñesa smṛtivārg* ¦ *s=* *akālk* ***kñitär-ñ***

‘By the writing of Smṛtivarga, the foundation of all virtues, **may** this wish **of mine be fulfilled**!’

(9.16) [TB] PKAS 5A b3 (verse; [7¦7¦4]×4):

/// [b3] *paiykāmai* ¦ *cwī yāmorntse* «*o*»*kosa* ¦ *se=* *kālk* ***kñītär-ñ*** :

‘I have written (the Anityavarga). Through the fruit of this deed, **may** this wish **of mine be fulfilled**!’

(9.17) [TB] PKAS 5B a6 (verse; [7¦7¦4]×4):

(*krodhavā*)[a6]*r*(*g*) *paiykāmai* ¦ *cwī yāmorntse okosa* ¦ *s=* *ākālk* ***kñītär-ñ*** :

‘I have written the Krodhavarga. As the fruit of this deed, **may** this wish **of mine be fulfilled**!’

(9.18) [TB] PKAS 5C a6 (verse; [7¦7¦4]×4):

nirvāṇavārg«†ä» *śpālmeṃ ce* ¦ *paiykalñesa akālk*«†ä» *se* ¦ *nemc*(*ek*) [a6] ***kñītär-ñ*** :

‘By writing this excellent Nirvāṇavarga, **may** this wish **of mine be fulfilled** for sure!’

(9.19) [TB] PKNS 25 and 26 b4 (verse; [7¦7¦4]×4):

nirvāṇavārg paiykāmai ¦ *cew yāmorsa akālk se* ¦ *ne*(*mc*)*ek* ***(k)ñītär-ñ*** ¦

‘I have written the Nirvāṇavarga. By the deed, **may** this wish **of mine be fulfilled** for sure!’

Furthermore, we may list two additional examples, although their contexts are missing.

(9.20) [TB] M 500.1 a1 (verse; [7¦7¦4]×4):

/// *nemceksa* ¦ *akālk* ***kñītär-ñ«†ä»*** :

'... for sure, **may my** wish **be fulfilled**!'

(9.21) [TB] PKAS 5D a5 (verse; [7¦7¦4]×4):

/// (*nemñceksa* ¦ *akālk* ***kñītä***)[a6]***r-(ñ)«†ä»*** :

'... for sure, **may my** wish **be fulfilled**!'

9.1.5 TA √*kän-* 'come about, occur'

TA also attests the combination of *ākāl* 'wish,' √*kän-*, and a PC. Example (9.22) contains the second-person singular PC *-cy*, referring to Bṛhadyuti. It represents the inalienable possessor of *ākāl* 'wish,' which is the subject of the intransitive verb *knitär-* 'May X be fulfilled.'

(9.22) [TA] FUNCTION: possessor of an intransitive subject

knitär-cy *ākāl* (*kni*)[b5]*tär-ci* ¦ *mar klopa-ṃtt-yo*
be.fulfilled.OPT.MID.3SG-2SG wish be.fulfilled.OPT.MID.3SG-2SG NEG suffering-PL-INS
si(*näṣtār* :)
be.depressed.NPST.MID.2SG

'**Your** wish **shall come true**, it shall be granted to you, You will not despair through suffering. [2b]'

(A25b4; trans. based on Sieg 1944: 30[6]; verse [7¦7]×4)

The following example (9.23) also contains a PC that represents the inalienable possessor of *ākāl* 'wish.' This nominal expression is the subject of the intransitive verb *knatr-* 'X will be fulfilled'.[7]

6. Sieg (1944: 30): "Dein Wunsch soll in Erfüllung gehen, er soll dir in Erfüllung gehen, du sollst durch Leiden nicht verzagen."

7. One might wonder whether this PC represents the agent of the preterite participle *rito* (i.e., 'the wish desired by you$_{SG}$'), rather than the possessor of *ākāl* 'wish.' Indeed, Tocharian PCs may represent the agent of a preterite participle, as we reviewed in Chapter 4. However, preterite participles always function predicatively with a finite copula in such cases. Tocharian PCs never represent the agent of a preterite participle used attributively. I think this is because External Merge of VOICE triggers Transfer of the complement of the lower phase-defining head D. If the agent of an attributively-used preterite participle resides in this Transfer-domain, it cannot move out of the phase to incorporate to VOICE.

(9.23) [TA] FUNCTION: possessor of an intransitive subject

ke-ne *kus-ne* *naṣ* *nati* *muk* *tampe* ¦
REL.GEN-COMP REL.NOM-COMP COP.NPST.ACT.3SG strength zeal(?) strength
oñi[b5](*cmolṣi ṣñi* *āñcä*)*m* : *ārwar* *yāmu-r-äṣ* ¦ *cam* *koṃ*
by.nature own self prepared make.PTCP-NMLZ-ABS DEM.M.ACC.SG sun
tām *tkan-ā* ¦ *pukmäs* ***knatr-äm***
DEM.F.ACC.SG earth-PERL come.IMP.ACT.2PL come.about.SUBJ.MID.3SG-PL
rito *ākāl* ¦ *plāntac* *k$_u$leñciṃ* *ñemi-yo* [b6] (1)
desire.PTCP.M.NOM.SG wish rejoice.SUBJ.ACT.2PL female.M.ACC.SG jewel-INS

(King Mahendrasena ordering his ministers to announce to the messengers:) "Whoever [of you] have power, zeal(?), strength [and] manly (nature), having made (yourselves) ready, come to this place on this day! **Your**$_{PL}$ cherished wish **will be fulfilled**. You will take delight in the jewel of women."

(A66b5; verse [5¦5¦8¦7]×4)

In example (9.24), *ākāl* 'wish' is the subject of *knäṣtär* 'X is fulfilled.' It accompanies the first-person singular PC *-ñi*, which refers to *brahmadatte* 'Brahmadatta (king of Jambudvīpa).' This PC also represents the inalienable possessor of the subject *ākāl* 'wish.'

(9.24) [TA] FUNCTION: possessor of an intransitive subject

jambudvip-ā *kākmärtik* ¦ *wäl* *näṣ* *pācar* *ñom-yo* [a2] /// *w·*
Jambudvīpa-PERL master king NOM.1SG father name-INS
ypamār *ṣñi* *se-yo* : *rake* *cam-äṣ* *pānäsmār* ¦ *nmäs-māṃ*
made.NPST.MID.1SG own son-INS word DEM-ABL ask.NPST.MID.1SG bow-PTCP
kapśñ-o *śl=* *āñcālyi* : *mā* *nu* *ākāl* ***knäṣtär-ñi*** ¦ *penä*
body-INS with hands.put.together NEG CONJ wish fulfill.NPST.MID.3SG-1SG say.IMP

(The king Brahmadatta speaks:) "I [am] the ruler over the Jambudvīpa, the king, father by name (only) [a2] ... I make through my son. A word from him I ask, bowing with my body [and] with hands folded. But **my** wish **is** not **fulfilled**. Say [you], ..."

(A71a2; trans. by CEToM; verse [7¦7]×4)

In A309 b2 (9.25), Carling, Pinault, and Winter (2009: 62) restore *(knäṣt)r-äm* 'X is fulfilled'.[8] If their restoration is correct, this example also supports that TA √*kän-* forms an unaccusative verb.

8. This restoration, according to Malzahn (2010: 569), in fact goes back to Siegling's personal copy.

(9.25) [TA] FUNCTION: possessor of an intransitive subject (?)

[b1] /// *·t·ne ptāñkat mā*
buddha.lord NEG

[b2] ***///··r-äm*** *ākāl rito* [b3] ///
wish desire.PTCP.M.NOM.SG

'... the Buddha-lord ... not ... **Your**$_{PL}$ cherished wish **is fulfilled**.'

(A309b2; trans. based on CEToM; verse?)

9.1.6 TB √*käly*-|*stäm*(*ā*)- 'stand'

In the following example (9.26), the third-person singular PC *-ne* refers to the inalienable possessor of *kwipe ike* 'shame place,' which is the subject of *kalltärr-* 'X stands (up).' This example suggests that the TB verb *kalltärr-* is unaccusative.

(9.26) [TB] FUNCTION: possessor of an intransitive subject

ṣamāne-ntse yśelmi pälsko-ne tsa[a4]*ṅkaṃ kwipe ike ke$_u$wco*
monk-GEN pleasure.PL mind-LOC arise.SUBJ.ACT.3PL shame place upwards
kalltärr-ne *tu maś-ne eṅkastär*
stand.NPST.SUBJ.MID.3SG-3SG DEM fist-LOC seize.NPST.MID.3SG
nuskaṣṣäṃn-ne [a5] *tu-ne swāralyñe yamastär krāke*
squeeze.NPST.ACT.3SG-3SG DEM-LOC pleasure make.NPST.MID.ACT.3SG filth
län-ne saṅghā-träṅ(*k*)*ä kätä*[a6]*ṅkäṃ*
go.out.SUBJ.ACT.3SG-3SG s. commit.a.sin.NPST.ACT.3SG

'If the sexual desire arises in the mind of a monk, (and) **his** the shame-place **stands up**, (if) he seizes it in the fist and presses it, he finds pleasure in it (and) the filth of him runs out, he commits SA.-sin.'

(B334a4; trans. based on Ogihara 2009; prose)

This phrase appears four times in the same manuscript (9.26, 9.27, 9.28, and 9.29).

(9.27) [TB] B334 a8: *ṣamāne*[a8]*ntse yśelmi pälskone tsaṅkaṃ kwipe īke ke$_u$wco* ***kalltärr-ne***

(9.28) [TB] B334 b3: *ṣamānentse yśel(mi pä)*[b3]*lskone tsaṅkaṃ kwipe īke ke$_u$wco* ***kalltärr-ne***

(9.29) [TB] B334 b7: *ṣamāneṃntse yśe*[b7]*lmi pälskone tsaṅkaṃ kwipe īke ke$_u$wco* ***kalltärr-ne***

9.1.7 TB √*käsk(ā)*- 'be scattered'

Example (3.49), repeated here as (9.30), suggests that TB √*käsk(ā)*- 'be scattered' forms an unaccusative verb. In this example, *āśce* 'head' is the subject of the intransitive verb *käskañ̇ñ̇ītär*- 'X is scattered.' The third-person singular PC *-ne*, hosted by *käskañ̇ñ̇ītär*-, refers to Devadatta and represents the inalienable possessor of the subject.

(9.30) (= 3.49) [TB] FUNCTION: possessor of an intransitive subject

laur-sa eñcwañ̇ñe ¦ tarne räskre ¦ tsopyeṃ-ne :
spike-PERL of.iron top violent sting.ACT.IMPF.3SG-3SG
käskañ̇ñ̇ītär-ne *¦ waiptār āśce ¦ po lykaśke «:»*
be.scattered.IMPF.MID.3SG-3SG apart head.NOM.SG all small.NOM.SG
'With an iron spike, they violently pierced him the crown of his head. [74a] **His** whole head **was scattered** apart [into] small [pieces]. [74b]'

(B22b5; trans. based on CEToM; verse; [5¦7]×4)

9.1.8 TB √*kulā*- 'recede'

Based on the following examples, we may add the TB root √*kulā*- 'recede' to the list of roots that form unaccusative verbs. In example (9.31), *maiyo* 'power, strength' is the subject of *kuletär* 'X recedes.' In this example, the third-person singular PC *-ne* represents the inalienable possessor of the subject.

(9.31) [TB] FUNCTION: possessor of an intransitive subject

ś(r)āwa-ṃne śāmñe ayā-ṣe ṣat yamaṣäle sana-tse yoñiye-ne tsapanale maiyo
śravaṇā-LOC manly bone-ADJZ piece make.GDV enemy-GEN city-LOC crush.GDV power
kuletär-ne
recede.NPST.MID.3SG-3SG
'In [the lunar mansion] Śrāvana a splitter of human bones [is] to be made; it has to be crushed on the passage of the enemy, [and] **his** strength **will recede**.'

(PKAS8Ba4; trans. by CEToM; prose)

B21 b5 (9.32) attests the same combination of *maiyyo* 'power, strength', √*kulā*- 'recede,' and a PC. In this example, *maiyyo* is also the subject of k_u*lātär*- 'X will recede,' and the plural PC *-me*, which

seems to refer to *pakwāreṃts* 'the evil ones,' represents the inalienable possessor of the subject.

(9.32) [TB] FUNCTION: possessor of an intransitive subject

pakwāreṃ-mpa nauṣ ¦ /// (:)
evil.PL-COM earlier

/// ¦ (*att*)*s*(*ai*)*k* *maiyyo* ¦ ***k*$_u$*lātär-me*** 60
completely power recede.SUBJ.MID.3SG-3PL

'With the evil ones, earlier, … [60c] … **their** power **will recede** completely. [60d]'

(B21b5; verse; [5¦4¦3]×4)[9]

In (9.33), the first-person PC *-ñ*, referring to King Araṇemi, represents the inalienable possessor of *palsko* 'mind, spirit.' This nominal expression is the subject of *k*$_u$*lā-* 'X has receded, diminished.'

(9.33) [TB] FUNCTION: possessor of an intransitive subject

sū *ñi* *yärke* *śpālme*(*ṃ*) *ṣai* ¦ *pāramit-ne* *āyor-ṣṣe* ¦
DEM.M.NOM.SG GEN.1SG veneration excellent COP.IMPF.ACT.3SG virtue-LOC gift-ADJZ
mā *no* ***k*$_u$*lā-ñ*** *palsko* :
NEG CONJ recede.PST.ACT.3SG-1SG mind

[King Araṇemi speaking to his wife]: "This was the highest veneration for me. And **my** spirit **has not diminished** in the virtue of (giving) a gift (= generosity). [1b]"

(B78a1; trans. based on Thomas 1957: 218; verse; [5¦5] × 2 + [7¦7¦5] × 2)[10]

B231 b1 (9.34) also attests the combination of *palsko* 'mind, spirit,' √*kulā-* 'recede,' and a PC. The first-person singular PC *-ñ* in this example also seems to represent the possessor of the subject *palsko*.

9. CEToM: 'With the bad ones first .... their power will recede completely. [60d]' Cf. Hackstein, Habata, and Bross (2015: 79): "Mit den schlechten (Kämpfern) vorne ... ... fürwahr wird ihnen die Kraft nachlassen."

10. Thomas (1957: 218): "In der Vollkommenheit des Gebens [d.h. in der Freigebigkeit] hat aber mein Denken [bis jetzt] nicht nachgelassen."

(9.34) [TB] FUNCTION: possessor of an intransitive subject

mā twe ceṃ-ne krämpitar ¦ mā ra palsko
NEG NOM.2SG DEM.ACC.PL-LOC disturb.IMPF.MID.2SG NEG also thought
kulyitär-ś :
recede.IMPF.MID.3SG-2SG

pelaikne-ṣṣe śaul śpālmeṃ ¦ cau-k twe ñyās-sa ñäṣṣitar • 4
law-ADJZ life excellent DEM.ACC.SG-EMP NOM.2SG desire-PERL wish.IMPF.MID.2SG

'You were never angry at them, nor **did your** spirit **diminish**. [4c] The excellent life of the law, you wished this with longing. [4d]'

(B231b1; trans. based on Thomas 1957: 65; verse; [7¦7] × 4)[11]

In the following example, the second-person singular PC, referring to the Buddha, represents the (inalienable) possessor of *warkṣäl* 'energy,' which is the subject of the intransitive verb *k_ulā-* 'X receded, diminished.'

(9.35) [TB] FUNCTION: possessor of an intransitive subject

ṣeme ṣṣeme ślok-sa $k_u$ce ¦ yältse-nma-sa karsta-tsi ¦
one.M.ACC.SG one.M.ACC.SG strophe-PERL since 1000-PL-PERL cut.off-INF
wsāsta āstaṃ :
give.PST.ACT.2SG head.PL

yetse tsaṅ-tsi kektseñ-meṃ ¦ ysār-a ṣis-(s)i (mrestī)[a4]*we ¦ mā*
outer.skin flay-INF body-ABL blood-PL drain-INF marrow NEG
k_ulā-c *warkṣäl* :
recede.PST.ACT.3SG-2SG energy

'Since, for each single strophe, you allowed the heads to be cut off by the 1,000 (people), [2b] the outer skin to be flayed from the body, and the blood (and) the marrow to be drained, **your** energy did not **recede**. [2c]'

(PKAS4Ba4; verse; [7¦7¦4] × 4)

M 500.1 b1 (9.36) and B104 a1 (9.37) attest the same passage.

11. Thomas (1957: 65): "Du warst nie ärgerlich [wörtl. gestört, gehemmt] auf sie, auch liess dein Denken nie nach. Nach dem Leben des Gesetzes als dem besten, nach dem eben begehrtest du [immer wieder] mit Verlangen."

(9.36) [TB] FUNCTION: possessor of an intransitive subject

(*ṣeme*) *ṣṣeme* *ślok-sa* *k$_u$ce* ¦ *yältse-nma-sa* *karsta-tsi* ¦
one.M.ACC.SG one.M.ACC.SG strophe-PERL since 1000-PL-PERL cut.off-INF
wsāsta *āstäṃ* :
give.PST.ACT.2SG head.PL

yetse *tsaṅ-tsi* *kekts*(*e*)*ñ-meṃ* ¦ *ysār-a* *ṣis-s*(*i*) *mr*(*estīwe* ¦ *mā*)
outer.skin flay-INF body-ABL blood-PL drain-INF marrow NEG
k$_u$l*(*ā*)*-c (*warkṣäl* :)
recede.PST.ACT.3SG-2SG energy

'Since, for each single strophe, you allowed the heads to be cut off by the 1,000 (people), the outer skin to be flayed from the body, and the blood (and) the marrow to be drained, **your** energy did not **recede**.'

(M500.1b1; verse; [7¦7¦4] × 4)

(9.37) [TB] FUNCTION: possessor of an intransitive subject

/// (*ṣi*)*s-si* *mrestīwe* ¦ *mā* ***k$_u$lā-c*** *warkṣäl* (:) ///
drain-INF marrow NEG recede.PST.ACT.3SG-2SG energy

'... the marrow to be drained, **your** energy did not **recede**.'

(B104a1; verse; [7¦7¦4] × 4)

In the following example, *āk* '(my) zeal' is the subject of the intransitive verb *k$_u$loytär-* 'May X recede!' This example attests the first-person singular PC *-ñ*, that represents the inalienable possessor of the subject.

(9.38) [TB] FUNCTION: possessor of an intransitive subject

śīla-ṣṣana *sälyeṃno* ¦ *prākre* *ysomo* *eñcīmar* ¦ *mā* *āk*
moral.behavior-ADJZ.F.PL rule.PL firm altogether seize.OPT.MID.1SG NEG zeal
k$_u$loytär-ñ 20-4
recede.OPT.MID.3SG-1SG

'May I seize the rules of moral bahavior firmly (and) completely! **May my** zeal not **recede**! [24d]'

(PKAS4Aa3; verse; [7¦7¦4] × 4)

Finally, the following sentence (9.39) contains the verbal complex *k_ulā-ne* 'X receded.' The subject of this verb is *pilkw añmaṣṣe* 'self-view' (corresponding to Skt. *ātmadṛṣṭi*; Thomas 1983: 143). The third-person singular PC of this example seems to refer to *brāhmaṇ(i)* 'the brahmin' and represent the possessor of the subject.

(9.39) [TB] FUNCTION: possessor of an intransitive subject (?)

te keklyauṣ-or-meṃ brāhma[a5]*ṇ(i)* ¦ *śaul-ne* *(s)kw(añ)ñ(e)*
DEM hear.PTCP-ABS-ABL Brahman.GEN.SG life-LOC happiness
wikā-ne ¦ *pilkw añma-ṣṣe* ***k_ulā-ne*** :
disappear.PST.ACT.3SG-3SG view self-ADJZ recede.PST.ACT.3SG-3SG

'When he had heard this, the brahmin's pleasure in life faded and **his** self-view **diminished**. [90a]'

(B3a5; verse; [8¦7¦6]×2 + [4/5¦4/5] + [7¦6])[12]

9.1.9 TB √*kläntṣ(ā)*- 'sleep'

Example (9.40) shows that *lkäntsan*- (for *kläntsan*-) is an unaccusative. The subject of this verb is *pro*, referring to *kektseñ* 'body,' and the restored third-person singular PC *-n(e)* represents this subject's (inalienable) possessor.[13]

12. CEToM: 'When he had heard this, the Brahman lost his (pleasure) in life, and his view on his own self disappeared in him.' Thomas (1983: 143) proposes to restore *brāhmaṇ(e)* [NOM.SG], rather than *brāhmaṇ(i)* [GEN.SG],

13. One might wonder whether this PC refers to *kektseñ* 'body' and represents the verb's subject (i.e., 'it [= the body] sleeps'). However, there is no parallel example of a PC representing the subject of an intransitive verb while being hosted by the intransitive verb itself.

(9.40) [TB] FUNCTION: possessor of an intransitive subject

(*ke*)*kts*(*e*)*ñ mā palkṣträ* ¦ *sak-sa ṣp aiksnar*
body NEG be.burned.NPST.MID.3SG pleasure-PERL CONJ (all).together
***lkäntsan-n*(*e*)** :
sleep.NPST.ACT.3SG-3SG

āksau ṣpak kāccä(*n* ¦ *pa*)*pāṣṣoṣ-äṃts toṃ*
wake.PTCP.M.NOM.SG CONJ rejoice.NPST.ACT.3SG protect.PTCP-GEN.PL DEM.F.PL
skwa-nma 10[b4](4)
happiness-PL

'The body is not burned, and thanks to the pleasure **his** (body) **sleeps** (well) altogether, [14c] [and] having awoken he is all the more pleased. These [are] the goods of happiness for those who have obeyed the rules [14d]'

(B14b3; trans. based on CEToM; verse; [5¦7]×4)

9.1.10 TB √*klautk(ā)*- 'turn, become'

As examples (9.41), (9.42), and (9.43) suggest, TB √*klautk(ā)*- 'turn, become' forms unaccusative verbs.

(9.41) [TB] FUNCTION: possessor of an intransitive subject

(*ṣañ lä*)*kle-nta warpa-tsi* ¦ *waśīr* ***klautkoy-ñ*** *ara*(*ñce*) ¦
own suffering-PL endure-INF diamond become.OPT.ACT.3SG-1SG heart

'**May my** heart **become** a diamond to endure (my) own sufferings!'

(M500.1b5; trans. by CEToM; verse; [7¦7¦4]×4)

In this example, the first-person singular PC *-ñ* represents the inalienable possessor of *arañce* '(my) heart.' As this PC represents the subject's possessor, the intransitive verb *klautkoy*- 'May X become (a diamond)!' is unaccusative. PKAS4B b1 attests the same passage (9.42).

(9.42) [TB] FUNCTION: possessor of an intransitive subject

ṣañ läkle-nta warpa-tsi ¦ waśīr ***klautkoy-ñ*** *arañce* ¦
own suffering-PL endure-INF diamond become.OPT.ACT.3SG-1SG heart
tsmoytär-ñ nete :
increase.OPT.MID.3SG-1SG strength

'**May my** heart **become** a diamond to endure (my) own sufferings! May my strength increase! [4a]'

(PKAS4Bb1; trans. by CEToM; verse; [7¦7¦4]×4)

In (9.43), *kektseñe* 'body' is the subject of *klautkañ-* 'X will become (heavy).' This verb contains the second-person singular PC *-cä*, representing the inalienable possessor of *kektseñe* 'body.'

(9.43) [TB] FUNCTION: possessor of an intransitive subject

(wa)lo weṣṣäṃ brāhmaṇiśka mäkcepi ṅke kektseñe
king speak.NPST.ACT.3SG little.brahmin.VOC REFL.GEN PTCL body.F.NOM.SG
krarma[b5](*rtsa*) ***klautkañ-cä*** *- - - - · l · ntsi :*
heavy.F.NOM.SG become.SUBJ.ACT.3SG-2SG

kr$_u$i (twe re)ki-meṃ mā pä - - - - - - - -
if NOM.2SG word-ABL NEG

'(The ki)ng speaks: "Little Brahmin! **Your** own body **will become** heavy ... if you don't ... from the word."'

(B78b5; trans. based on CEToM[14]; verse?)

9.1.11 TA √*trik(ā)*- 'be confused; faint'

We may also add TA √*trik(ā)*- 'be confused; faint' to the list of unaccusative verbs based on example (3.47), repeated here as (9.44) This example contains the third-person singular pronominal clitic *-äṃ*. It represents the inalienable possessor of *mācar* 'mother,' which is the subject of the intransitive verb *trekaṣ-* 'X will be confused.'

14. CEToM seems to consider the PC represents an IO (experiencer; "(The ki)ng speaks: 'Little Brahmin! Your own body will become heavy **for you** .... If from the (wo)rd (you) don't ... '").

(9.44) (= 3.47) [TA] FUNCTION: possessor of an intransitive subject

wiyoss *oki* *cam* *klop-yo* ¦ *<u>mācar</u>* *nuṃ* *nuṃ*
be.frightened.PTCP.F.NOM.SG like DEM.M.ACC.SG suffering-INS mother again again
trekaṣ-äṃ :
be.confused.SUBJ.ACT.3SG-3SG

'**His** <u>mother</u> **will be confused** for a long time (*lit.* again and again), as if (she were) upset by this pain. [3b]'

(A152a2; verse; [7¦7]×4)

9.1.12 TB √*nes-*|*tāk(ā)-* 'be, become'

The TB root √*nas-*|*tāk(ā)-* 'be, become' forms an unaccusative verb. The following example (9.45) contains *tākoy-* 'May X be (firm and respectful)!' with the first-person PC *-ñ*. This PC represents the inalienable possessor of *arañce* 'heart,' which is the verb's subject. Therefore, we take TB *tākoy-* as unaccusative.

(9.45) [TB] FUNCTION: possessor of an intransitive subject

(*rekauna-ṣṣeṃ* *ścirenäṃ* ¦ *kwri ra*) [b1] *yepeṃ*
word-ADJZ.ACC.PL harsh.M.ACC.PL if PTCL sword.ACC.PL
swāṣye-ñ *tsa* ¦ *ainaki* *ra* :
rain.CAUS.OPT.ACT.3PL-1SG EMP mean.NOM.PL PTCL

kälṣamñe-ṣṣe *niṣke* *su* ¦ *prākre* ***tākoy-ñ*** *<u>arañce</u>* ¦ *poś*
patience-ADJZ ornament DEM.M.NOM.SG firm COP.OPT.ACT.3SG-1SG heart all-ALL
pautarṣke :
respectful

'Even if the mean ones should make the swords of harsh words rain on me, [27c] **may my** <u>heart</u>, this ornament of patience, **remain** firm [and] respectful to everybody! [27d]'

(PKAS5Bb1; verse; [7¦7¦4]×4)

9.1.13 TA √*nas-*|*tāk(ā)-* 'be, become'

The TA root √*nas-*|*tāk(ā)-* 'be, become' also forms an unaccusative verb. Example (9.46) contains the first-person singular PC *-ñi*. It represents the inalienable possessor of *se* 'son,' which serves

as the subject of the intransitive verb *tākiṣ-* ‘May X become (the arhat)!’.

(9.46) [TA] FUNCTION: possessor of an intransitive subject

pättāñäkte mācar tākim || *tem-i-k noṣpeṃ* [a6] ///
Buddha.lord.GEN mother COP.OPT.ACT.1SG DEM.F-GEN-EMP ?
(*lakṣa*)*ṇäs-yo yetu ārānt se* ***tākiṣ-ñi*** •
mark.PL-INS decorate.PTCP.M.NOM.SG arhat son COP.OPT.ACT.3SG-1SG

‘May I become the mother of the Buddha-lord! ... to/of her ... **May my** son **become** the arhat decorated with ... marks!’

(A118a6; prose?)

9.1.14 TA √*pränk*$^{?}$- ‘restrain oneself’

The following example (9.47) shows that the TA root √*pränk*$^{?}$- ‘restrain oneself’ forms an unaccusative verb.[15] In this example, the first-person singular PC *-ñi*, referring to *sundari* ‘Sundari,’ serves as the inalienable possessor of *käryāñ* ‘choice, will,’ which is the subject of the intransitive verb *präṅki-* ‘X restrain oneself.’

(9.47) [TA] FUNCTION: possessor of an intransitive subject

sundari träṅkäṣ /// [a4] /// *oki ñi poñcäṃ truṅk-aṃ roñcäm klop*
Sundari say.NPST.ACT.3SG like GEN.1SG all.ACC.SG hole-LOC jealousy suffering
: *käryāñ* ***präṅki-ñi*** {*t*}*patär-ñy*[16] *oki ni* ///
will.NOM.PL restrain.NPST.ACT.3PL-1SG ?.NPST.MID.3SG-1SG like

‘Sundari says: “... like ... for me ... jealousy (and) suffering ... in the entire hollow. **My** thoughts **restrain myself**, like my ... ”’

(A115a4; trans. based on CEToM; verse)

15. There seems to be only two attestations of the non-causative stems of this root in TA: A115 a4 (9.47) and A64 b1 : *ote täpreṃ märkampal sälpāṣl*(*u*)*ne o*(*t*)*e* (*tä*)*preṃ t*(*ñ*)*i bodhiṣi ytär pākär yāmlune* • *ote täpreṃ* [b1] (*ñäktaśśi empelune kus-ne* ***p*)*rä*(*ṅ*)*k*(*i*)*ñc*** “Oh, what glowing of the Law, oh, what revelation of your path to enlightenment, oh, what (cruelty of the gods who) **restrain themselves**!” (A64b1; trans. based on CEToM; prose)

16. For the reading {*t*}*patär-ñy*, see Schulze, Sieg, and Siegling (1931: 446) and Malzahn (2010: 652f.).

9.1.15 TA √*prutk(ā)*- 'be shut; be filled'

I consider that TA √*prutk(ā)*- 'be shut; be filled' forms an unaccusative verb based on the following example (7.83), repeated here as (9.48). In this example, the subject of *protkar*- 'X were filled' is *puk marmañ* 'all of the *marman* (veins?).' This verb accompanies the third-person singular PC *-äṃ*, which doubles the subject's possessor *āṣānikyāp bodhisatvāp* 'of the venerable Bodhisattva.'

(9.48) (= 7.83) [TA] FUNCTION: Doubling of the possessor of an intransitive subject

k$_u$yal (*täm ya*)*kṣe* *śwā*-(*ts*)*i eṣṣ-äm*
why DEM Yakṣa.GEN eat-INF give.NPST.ACT.3SG-PL

tñi-k *anaprä ṣakk* *ats* *lyā* *āpsā* [b4] – – *m* •
GEN.2SG-EMP before certainly PTCL parts.NOM.PL

cam klop-yo ***āṣāniky-āp*** ***bodhisatv-āp*** *puk* *(ma)rmañ*
DEM suffering-INS venerable-GEN Bodhisattva-GEN all vein?.NOM.PL
protkar-äṃ – – *tkan-ā* *klā* •
be.filled.PST.ACT.3PL-3SG earth-PERL fall.PST.ACT.3SG

'Why does (he) give us to the yakṣa as a food? In front of you, surely, the parts [...]. All veins **of the venerable Bodhisattva were filled** with this pain. [...] (he) fell on the ground.

(A356b4; prose?)

9.1.16 TB √*plätk*- 'overflow, develop, arise'

The TB root √*plätk*- 'overflow, develop, arise' also forms an unaccusative verb. The following example (9.49) contains *pletkar-c* 'X overflowed,' whose subject is *ysāra* '(your) blood.' The second-person singular PC *-c* hosted by *pletkar*- refers to the Buddha and represents the inalienable possessor of the subject. PKAS4B a4 (9.50) attests the same passage.

(9.49) [TB] FUNCTION: possessor of an intransitive subject

(*säswa āñm plyäñca-lñe-sa ¦ klokastäṃ-meṃ o)k tmane ¦* ***pletkar-c***
lord.VOC self.ACC sell-NMLZ-PERL pore.PL-ABL 8 10,000 overflow.PST.ACT.3PL-2SG
ysār-a 40-2
blood-PL

'Oh lord! By selling yourself, **your** blood **overflowed** from 80,000 pores. [42d]'

(M500.1b2; trans. based on CEToM; verse; [7¦7¦4]×4)

(9.50) [TB] FUNCTION: possessor of an intransitive subject

säswa ā(ñm plyäñca-)lñ(e)-sa ¦ klokastäṃn-meṃ ok tmane ¦ ***pletkar-c***
lord.VOC self.ACC sell-NMLZ-PERL pore.PL-ABL 8 10,000 overflow.PST.ACT.3PL-2SG
ysār-a 2
blood-PL

'Oh lord! By selling yourself, **your** blood **overflowed** from 80,000 pores. [2d]'

(PKAS4Ba4; trans. based on CEToM;[17] verse; [7¦7¦4]×4)

9.1.17 TB √*plu*- 'float, fly, soar'

We may also add the TB root √*plu*- 'float, fly, soar' to the list of the representative roots that form unaccusative verbs. In the following example, the subject of *pluṣṣi-ñ* 'X leaped, floated' is *palskw ārañce* 'mind (and) heart,' and the first-person singular PC *-ñ* represents the inalienable possessor of the subject.

(9.51) [TB] FUNCTION: possessor of an intransitive subject

• *lkoym-c kr$_u$i yne-mane ¦ ypauna kwṣain-ne ci ¦*
see.OPT.ACT.1SG-2SG whenever go-PTCP land.PL village.PL-LOC ACC.2SG
plu[a2]***ṣṣi-ñ*** *sak-sa palskw ārañce ¦*
float.IMPF.ACT.3SG-1SG happiness-PERL mind heart

[Māyā, the Buddha's mother, speaking:] "Every time I saw you (= the Buddha) going through lands and villages, **my** mind (and) heart **leaped** for joy [...]"

(B246a1-2; verse; [5¦5¦8¦7]×4)

17. CEToM: 'O lord, by (sell)ing y(ourself) blood overflowed out from eighty thousand pores.'

9.1.18 TB √*mäsk*- ‘be’

The following examples show that the root √*mäsk*- ‘be’ forms an unaccusative verb in TB. In (9.52), the third-person singular PC *-n*(*e*) represents the inalienable possessor of *cämpamñe* ‘power,’ which is the subject of the intransitive verb *mä*(*s*)*k*(*e*)*tär* ‘X remains (superior)’ (*lit.* ‘X is more’).

(9.52) [TB] FUNCTION: possessor of an intransitive subject

mant se pals(*k*)*o mā yairu* ¦ *tākaṃ kwri śtwer*
thus DEM mind NEG practice.PTCP.M.NOM.SG COP.SUBJ.ACT.3SG if 4
warä[b1](*ṣ-lyñe-sa* :
practice-NMLZ-PERL

mä)*kc*(*e*)*w ra tsa indrī-sa* ¦ *eṅkal-ṣe śänman-ne-ś swese* 80-5
REL.ACC PTCL PTCL sense-PERL passion-ADJZ come.SUBJ.ACT.3SG-3SG-ALL rain

su ce$_u$ *palsko päst kauṣäṃ* ¦ *cämpamñe*
DEM.M.NOM.SG DEM.M.ACC.SG mind away destroy.NPST.ACT.3SG power
mä[b2]***(s)k(e)tär-n=*** *oṃṣap* :
be.NPST.MID.3SG-3SG more
‘In this way, if this spirit$_j$ has not been exercised by the four exercises, [85c] to which$_j$ the rain of passion also comes through (the hole of the) sense(s), [85d] this (rain)$_k$ will utterly destroy the spirit. **Its**$_k$ power **is** superior. [86a]’

(PKAS6Cb1; verse; [7¦8]×4)

Although the context is limited, the third-person singular PC *-ne* in Example (9.53) seems to show the inalienable possessor of *käṃtwo* ‘tongue,’ which is the subject of *mäsketär*- ‘X is (white).’

(9.53) [TB] possessor of an intransitive subject (?)

/// [b6] *ānts-ne cpi lkānträ* 10 *pilko*
shoulder-DU DEM.M.GEN.SG appear.NPST.MID.3PL view
mäntäṃtär-ne tucya-ne e(śa-ne) ///
be.destroyed.NPST.MID.3SG-3SG yellow-DU eye-DU

///[b7] *rämer satāṣṣäṃ • ārkwi **mäsketär-ne** käṃtwo*
quickly exhale.NPST.ACT.3SG white.M.NOM.SG be.NPST.MID.3SG-3SG tongue
epe wat no ///
CONJ CONJ CONJ

'(His) two shoulders will appear to this one as .... [10] His view is destroyed. (His) two yellow eyes ... (He) exhales quickly. But **his** tongue **is** white or ...'

(B118b7; verse)

9.1.19 TA √*mäsk*- 'be'

In example (9.54), *kapśañi* 'body' is the subject of the intransitive verb *mäskatr*- 'X is (like the golden mountain Jāmbūnada).' The third-person singular PC *-aṃ* represents this subject's inalienable possessor.

(9.54) [TA] FUNCTION: possessor of an intransitive subject

• (*säm nape*)*n-äṣ lyutār penu knānmune yāt-l-une-yo*
DEM.M.NOM.SG human-ABL more also wisdom be.capable-GDV-NMLZ-INS
kaknu mäskatär
come.about.PTCP.M.NOM.SG be.NPST.MID.3SG

lyalypä-ntw-āśśi ta(*m*)*pe-wāts-une-yā nu mā ok täm*
deed-PL-GEN power-ADJZ-NMLZ-PERL CONJ NEG yet DEM
ksa-l-une-yaṃ ytsi [a7] *cämpäṣ •*
come.to.extinction-GDV-NMLZ-LOC go-INF be.able.NPST.ACT.3SG

ja(*mb*)*unāt wsā-ṣi ṣull oki kapśañi **mäskatr-aṃ** •*
Jāmbūnada gold-ADJZ mountain like body be.NPST.MID.3SG-3SG

'(He) is more than (a [normal] human being) endowed with knowledge and power. But because of the powerfulness of (his) deeds, (he) is not able to go to the Nirvāṇa yet. **His** body **is** like the golden mountain Jāmbūnada.'

(A295a7; trans. based on CEToM; prose?)

9.1.20 TA √*lotkā*- ‘turn, become’

As the following example suggests, TA √*lotkā*- ‘turn, become’ forms an unaccusative verb. In (9.55), the intransitive verb *lotka*- ‘X becomes (clean)’ accompanies the third-person singular PC *-ṃ* that represents the (inalienable) possessor of the subject *kapśañ*ñ*i* ‘body.’

(9.55) [TA] FUNCTION: possessor of an intransitive subject

(*o*)[a3]*mäskenäṃ lyalypūr-äṣ ¦ pärsäk prākär tampewāts* : 60(-8)
evil.M.ACC.SG deed-ABL be.afraid.PST.ACT.3SG strong powerful

– m-äk praṣt-äṃ[18] *sne wraske ¦ āṣtraṃ* ***lo{t}ka-ṃ*** *kapśañ*ñ*i* (:) ///
-EMP(?) time-LOC without sickness clear turn.PST.ACT.3SG-3SG body

‘The powerful (person) was afraid of an evil deed very much. [68d] At that(?) time, **his** body **became** clean (and) without sickness. [69a]’

(A221a3; verse; [7¦7]×4)

9.1.21 TB √*wāk(ā)*- ‘differ’

The TB root √*wāk(ā)*- attests an (intransitive) present IV *woko*-MID ‘X become divided, X blossom’ and a (transitive) preterite IV *wākäṣṣa*-ACT ‘split X, make X blossom.’ In addition, this root also forms a present VIII intransitive *wākṣ*-MID ‘X differ (from Y_{ABL}),’ as attested in (9.56). The intransitive verb *wākṣtär*- ‘X differs’ in this example is unaccusative as the second-person singular PC represents the possessor of *yakne* ‘manner,’ which is the subject of this verb.

18. *praṣt-äṃ* seems to be a misspelling for *praṣt-aṃ*. Also, *āṣtraṃ* [F.NOM/ACC.PL] is likely to be a grammatical error for *āṣtri* [F.NOM.SG].

(9.56) [TB] FUNCTION: possessor of an intransitive subject

po-sa auṣap po-s= olypo ¦ po-meṃ ***wākṣtär-ś*** *seṃ*
all-PERL moreover all-PERL more all-ABL differ.PST.MID.3SG-2SG DEM.M.NOM.SG
yakne •
manner

te-sa ykū ñī saim wästa ¦ cī-ne aurtse [b5]
DEM-PERL go.PTCP.M.NOM.SG GEN.1SG protection refuge 2SG-LOC broad.M.NOM.SG
larauññe • 6
love

'More than all, over all, and from all, this manner **of yours distinguishes itself**. [6c] That is why deep [lit. broad] love to you, o help and stay, has come to me. [6d]'

(B231b4; trans. by CEToM; verse; [7¦7]×4)

9.1.22 TB √*ṣäm-*|*läm(ā)-* 'sit'

Example (5.82), repeated here as (9.57), contains the first-person singular PC *-ñ*. It represents the inalienable possessor of *prosko* 'fear,' which is the subject of the intransitive verb *lāma-* 'X may rest.' Therefore, we consider *lāma-* to be an unaccusative verb.

(9.57) (= 5.82) [TB] FUNCTION: possessor of an intransitive subject

tune taukau-c saim pācer ¦ ***lāma-ñ*** *prosko* :
therein hide.SUBJ.ACT.1SG-2SG protection father rest.SUBJ.ACT.3SG-1SG fear.NOM.SG
'Therein I will hide in your protection, father, (so that) **my** fear **may rest**.'

(IOLToch5b2; verse [7¦7¦4]×4)

9.1.23 TA √*sätk(ā)-* 'spread out'

Example (9.58) shows that TA √*sätk(ā)-* 'spread out' forms an unaccusative verb. This example contains the third-person singular PC *-ṃ*, that represents the possessor of *tuṅk* 'love.' This nominal expression is the subject of the intransitive verb *sätkā-* 'X spread.'

(9.58) [TA] FUNCTION: inalienable possessor of an intransitive subject

māk cmol-w-ā /// [b6] /// m(au)dgalyāyann-aṃ cmaul-ṣi tuṅk
many birth-PL-PERL Maudgalyāyana-LOC birth.ADJZ love
sätkā-ṃ : - ///
spread.PST.ACT.3SG-3SG

'Through many births ... ... **his** genuine love for Maudgalyāyana **spread**.'

(A50b6; trans. by CEToM; verse)

9.1.24 TB √*si-n-* 'satiate oneself, be depressed'

Unlike the TA root √*si-n-*, which shows causative-inchoative alternation (i.e., *sinäṣ-*^{ACT} 'to satiate X [tr.]' vs. *sinäṣ-*^{MID} 'to satiate oneself [itr.]'), TB √*si-n-* does not take any active inflection to form a transitive verb. Instead, it uses a causative stem Xb *sīnäṣṣä-/sīnäske-*^{ACT} to represent a transitive verb meaning 'to satiate X.' The following example shows that *sīntsate-* in TB is unaccusative. In example (9.59), *pälsko* 'mind' is the subject of the intransitive verb *sīntsate-* 'X was satisfied,' and the second-person singular PC *-c* represents the subject's (inalienable) possessor.

(9.59) [TB] FUNCTION: possessor of an intransitive subject

*śaiṣse-ntse kärtse-ṣc ¦ mā pälsko nta **sīntsate-c** (:)*
world-GEN.SG good-ALL NEG mind EMP be.satiated.PST.MID.3SG

ket no cämpämñe ¦ seṃ takoy alyek-e[a2]*pi* (:)
REL.GEN.SG CONJ power DEM.M.NOM.SG COP.OPT.NPST.ACT.3SG another-GEN

'[...] For the good of the world, **your** spirit **was** never **satisfied**. [2b] Who else could have that ability? [2c]' (B224a1; verse; [5¦7] × 4)

9.1.25 TB √*spālkā*$^{?}$- '±strive actively/forcefully for'

In the following example (9.60), the first-person singular PC *-ñ* represents the possessor of *marmanma* 'veins,' which is the subject of the intransitive verb *spalkkaskentär*. This verb is built on the root TB √*spālkā*$^{?}$- '±strive actively/forcefully for' (Malzahn 2010: 965f.).

(9.60) [TB] FUNCTION: possessor of an intransitive subject

spalkkaskentär-ñ *marma-nma katkauña-ṣṣe warkṣält-sa*
strive.actively.for.NPST.MID.3SG-1SG vein-PL joy-ADJZ power-PERL
'**My** veins forcefully **strive for** (it) by the strength of joy'

(PKNS 19a4; trans. by CEToM)

In view of this example, one might wonder, however, whether *spalkkaskentär* should be classified as an unaccusative verb since the gloss '±strive actively/forcefully for' (Malzahn 2010: 965) or 'make an effort' (Peyrot 2013b: 837) gives an impression that a subject has control over an action, which is not typical for unaccusative verbs (see, e.g., Sorace 2000, 2004).

In fact, there is a debate over the the semantics of TB √*spālkā*$^{?}$- (and TA √*spāltkā*$^{?}$-; see Malzahn 2010: 965f. for a summary). Scholars have traditionally connected the root with a noun *spelke* 'zeal' (cf. Schulze, Sieg, and Siegling 1931: 480 'sich anstrengen'; Krause 1952: 302 'sich beeifern'; *TEB* II: 259 'sich beeifern, sich bemühen'; Schmidt 1974: 28 'sich beeifern'; and Pinault 2008: 326 'faire effort, s'efforcer, s'appliquer à'). In contrast, Couvreur (1954: 84f.) glosses it as 'sich wälzen.' Winter (1984: 120) also thinks that this verb involves a motion and thus translates it as 'flap around, crawl.' Malzahn (2010: 965f.) describes that according to her correspondence with Adams, the meaning 'act/move with force' may explain all of the attested cases. When there is no goal associated with it, the verb means 'thrash about;' when it takes an infinitive as a complement, it means 'strive actively/forcefully.'

However, as Table (9.2) shows, the root √*spālkā*$^{?}$- may select an animate entity and a body-part as a subject. In the latter case, the subject is not a volitional entity capable of striving.

In (9.61), *spalkāte-ne* is followed by an infinitival phrase *rīmeṃ lantsi* 'to go out of the city.' In this example, one may take the PC as representing either the possessor of *arañce* 'heart,' which is the subject of *spalkāte*, or the subject of the infinitive *lantsi* 'to go out,' with clitic climbing. Again, the subject *arañce* 'heart' is *not* a volitional entity that has the ability to control the process described by *spalkāte*.

	LG	Attestation		Subject		Verb	
1	TB	THT100	b4	?		*spalkaṣyeṃ(ntär)*	IMPF.MID.3PL
2	TB	THT1573	a4	*wnolmi*	'human beings'	*spalkaṣyenträ*	IMPF.MID.3PL
3	TB	PKAS13F	a5-6	?		*spalkaskema*[a6](*ne*)	PTCP
4	TB	PKNS19	a4	*marmanma*	'veins'	*spalkkaskentär-ñ*	NPST.MID.3PL-1SG
5	TB	PKNS398	a1	*arañce*	'heart'	*spalkāte-ne*	PST.MID.3SG-3SG
6	TB	IOLToch 55	b2	*ara*(*ñce*)	'heart'	(*spa*)*lkāte-ne*	PST.MID.3SG-3SG
7	TB	IOLToch 5	b5	*walo māga*(*tṣe*)	'King of Magadha'	*spalkāte*	PST.MID.3SG
8	TA	A116	b5	*tāloṣ*	'miserable ones'	*spāltäṅkänträ*	NPST.MID.3SG
9	TA	A237	a3	?		*spāltäṅkāmāṃ*	PTCP

Table 9.2: Attestations of TB √*spālkā*$^{?}$- and TA √*spāltk*$^{ā?}$-

(9.61) [TB] FUNCTION: possessor of an intransitive subject or subject of an infinitive

... (krenta) yāmor-nta ñitkāre-ne
good deed-PL push.away.PST.MID.3PL-3SG

spalkāte-ne *ram no* *arañce rī-meṃ* *lan-tsi*
√*spālkā*$^{?}$-.PST.MID.3SG-3SG as CONJ heart city-ABL go.out-INF
'... the (good?) deeds held him off, (but) **his** heart **urges** (him) to go out of the city, as it were.'

(PKNS398a1; trans. based on CEToM)

The same passage is found in (9.62). Again it is not immediately clear whether *-ne* is the subject of an infinitive or the possessor of *ara(ñce)*.

(9.62) [TB] FUNCTION: possessor of an intransitive subject (?)

... ***(spa)lkāte-ne*** *ram no* *ara*(*ñce*) *...*
√*spālkā*$^{?}$-.PST.MID.3SG-3SG as CONJ heart
'**his** heart **urges**, [...] as it were.' (IOLToch55b2; trans. by CEToM)

Therefore, it seems reasonable to consider that the verb √*spālkā*$^{?}$- describes an *uncontrolled* involuntary bodily function/process (such as English 'sweat,' 'shiver,' and 'tremble'), rather than a controlled process; such as 'strive' or 'make an effort.' We propose to gloss √*spālkā*$^{?}$- as 'tremble, be agitated' and translate (9.60) as 'my veins tremble because of the power of joy.'

In Sorace's (2000; 2004) Auxiliary Selection Hierarchy (Table 5.2 in §5.4), verbs denoting uncon-

trolled processes include involuntary bodily functions (e.g., 'shiver,' 'tremble') and emission of substance, light, sound, or smell (e.g., 'ring,' 'shine'). TB √*spālkā*$^{?}$- (and probably TA √*spālk*$^{ā?}$- also) belongs to this class, which surfaces as unaccusatives.

9.1.26 TB √*tsäm(ā)*- 'grow, increase, come into being'

The following examples show that the TB root √*tsäm(ā)*- 'grow, increase, come into being' forms an unaccusative verb. In (9.63), the first-person singular PC *-ñ* represents the inalienable possessor of *nete* 'strength,' which is the subject of *tsmoytär*- 'May X increase!'.

(9.63) [TB] FUNCTION: inalienable possessor of an intransitive subject

ṣañ läkle-nta warpa-tsi ¦ waśīr klautkoy-ñ arañce ¦
own suffering-PL endure-INF diamond become.OPT.ACT.3SG-1SG heart
tsmoytär-ñ *nete* :
increase.OPT.MID.3SG-1SG strength
'May my heart become a diamond to endure (my) own sufferings! **May my** strength **increase**!'

(PKAS4Bb1; trans. by CEToM; verse; [7¦7¦4]×4)

Likewise, PKAS4B b2 (9.64) attests *tsmoytär*- 'May X increase!' which takes *nete pälskoṣṣe* 'strength of the mind' as its subject. The first-person singular PC *-ñ* hosted by *tsmoytär*- represents the subject's inalienable possessor.

(9.64) [TB] FUNCTION: possessor of an intransitive subject

(*piś cmel-a*)-*ṣṣ*(*e-ṃ*)*ts* *pakāna* ¦ *apiś-ne* *ka* *kwri cmīmar* ¦
five birth-PL-ADJZ-GEN.PL for.the.sake.of Avici-LOC PTCL if be.born.OPT.MID.1SG
kalpa-nma-sa :
practice-PL-PERL

tsmoytär-ñ *nete* *pälsko-ṣṣe* ¦
increase.OPT.MID.3SG-1SG power mind.ADJZ

'If, for the sake of (the beings) of the five births, I were reborn in the Avici-hell for the *kalpa*s, [4c] **may my** strength of the mind **increase**!

(PKAS4Bb2; trans. based on CEToM;[19] verse; [7¦7¦4]×4)

(9.65) [TB] FUNCTION: Possessor associated with an intransitive subject (?)

/// (yśā)[a4]*m(na)* ¦ *ś(a)teṃ* *o(st)-ne* *(tä)nmaske(n)trä* ¦ *(e)kñiññe-sa*
among.men rich.ACC house-LOC be.born.NPST.MID.3PL possession-PERL
kekenoṣ :
be.fulfilled.PTCP.M.NOM.PL

tākaṃ *orocci* ¦ *ktsaitsäññe śman-me* ¦
COP.SUBJ.ACT.3PL great.M.NOM.PL old.age come.SUBJ.ACT.3SG-PL
tsmeṃtär-ne *ka* *waipecce-nta* ¦ ///
increase.NPST.MID.3PL-3SG EMP possession-PL

'They are reborn (among) humans in a rich house, (and) provided with possession. [6a] [When] they become adults [and] old age comes to them, **their** possessions (PL) **will** surely **increase**. [6b] ...'

(PKAS7Ea4; verse; [5¦5¦8¦7]×4)

Regarding example (9.65), CEToM considers that the third-person singular *-ne* refers to *ktsaitsäññe* 'old age' and represents the indirect object (benefactive) of the intransitive verb *tsmeṃtär-* '(possessions will) increase for X.'[20] However, since a PC representing bene- or malefactive usually refers to a [+animate] referent, I am inclined to follow Sieg (1938: 21 n. 2) in considering *-ne* to be an error for *-me*, referring to the subject of *(tä)nmaske(n)trä* and *tākaṃ*. This PC represents

19. CEToM: 'If for the sake of the beings of the five births I were even be reborn in the Avīci [hell], may my spiritual strength increase! (May I remain?) without turning back from the omniscience! 4.'

the possessor of *waipeccenta* 'possessions,' which is the subject of *tsmeṃtär-* 'X will increase.'

9.1.27 TB √*tsälp(ā)-* 'pass away, be released, be redeemed'

The following example shows that *tsälpā-* 'X was released (from Y_{ABL})' is unaccusative. This intransitive verb accompanies the first-person singular PC *-ñ* that represents the possessor of *palsko* 'mind, spirit.' This nominal expression is the subject of the intransitive verb.

(9.66) [TB] FUNCTION: inalienable possessor of an intransitive subject

(*śtwāra e*)[b2]*mpreṃ-nma* ¦ *auspa lyakāwa* ¦ ***tsälpā-ñ*** *palsko*
four truth-PL truly see.PST.ACT.1SG be.relased.PST.ACT.3SG-1SG spirit
kleśa-nma-meṃ ¦ *yonwa* *ik*(*e* *kekeṣos* 10-3)
affliction-PL-ABL obtain.PST.ACT.1SG place become.extinguished.PTCP.M.ACC.SG
'I have truly seen the four truths. **My** mind **has been released** from afflictions. I have reached the place of extinction. [13d]'

(PKAS6Eb2; trans. based on CEToM; verse; [5¦5¦8¦7]×4)

9.2 Limitation 1: Verbs of appearance/disappearance

The previous section listed representative roots in TA and TB that form unaccusative verbs. I consider them to be unaccusatives based on the function of pronominal clitics: they may take a PC that represents a possessor of a subject. However, my analysis has two limitations. The first limitation is that when a PC appears next to a verb of appearance or disappearance, its function is often ambiguous: it may represent either a possessor of the verb's subject or an indirect object (source, location, benefactive, or experiencer) of the verb. Table 9.3 lists representative verbs of appearance and disappearance in TA and TB.

20. CEToM: "(Among) humans they are reborn in a rich house provided with possession. [6a] [When] they become adults [and] old age comes to them, the richness (pl.) will surely increase for it [= old age]. [6b]"

20. CEToM: 'I have truly seen the (four) truths; my mind is freed from passions, I have reached the place (of extinction).'

	Language	Root	Gloss	Section
1	TA/TB	√*näk*-$^{\text{MID}}$	‘fall into ruin, disappear’	(§9.2.1)
2	TA/TB	√*wik*(*ā*)-	‘disappear’	(§9.2.2)
3	TA/TB	√*spärk*(*ā*)-	‘disappear, perish’	(§9.2.3)
4	TB	√*naut*(*ā*)-	‘disappear’	(§9.2.4)
5	TB	√*musk*(*ā*)-	‘disappear, perish’	(§9.2.5)
6	TA	√*pyutk*-$^{\text{ACT}}$	‘come into being’	(§9.2.6)
7	TA	√*kātkā*-	‘(a)rise’	(§9.2.7)
8	TA	√*pärkā*-	‘(a)rise; become clear’	(§9.2.8)
9	TA/TB	√*läk*(*ā*)-$^{\text{MID}}$	‘appear; be seen’	(§9.2.9)
10	TA/TB	√*täm*-	‘be born, come into being’	(§9.2.10)
11	TB	√*tsäṅkā*-	‘(a)rise’	(§9.2.11)
12	TA/TB	√*länt*-	‘go out, emerge’	(§9.2.12)

Table 9.3: Verbs of appearance/disappearance

9.2.1 TA/TB √*näk*-$^{\text{mid}}$ ‘fall into ruin, disappear’

The function of a pronominal clitic is ambiguous when it appears next to a verb of disappearance. For example, there are examples in which TA and TB √*näk*-$^{\text{MID}}$ ‘fall into ruin, disappear’ hosts a PC.[21] In (9.67), the third-person singular PC *-ṃ*, referring to *rāvane* ‘Rāvaṇa,’ appears to represent the inalienable possessor of *kärparäṃ* ‘dignity,’ which is the subject of *nakt-* (i.e., ‘his dignity disappeared’). However, it is also possible to take the PC as representing the IO (source) of the verb (i.e., ‘dignity disappeared from him’).[22]

21. E.g., TA: A11 a5 (9.67); A332 b1; TB: B108 a10 (9.68)

22. It might even be possible to take the PC to represent both; whether a PC may have more than one thematic role is an open question.

(9.67) [TA] FUNCTION: possessor of an intransitive subject or IO (source)?

wartsi krop-lyāṃ praṣṭ-ā ¦ (*wa*)[a4]*rtsi kot rāvane* ¦
accompany gather-GDV.F.ACC.SG time-PERL accompany split.PST.ACT.3SG Rāvaṇa
sne knānmuney-ā :
without knowledge-PERL

nati eṣ-lyāṃ praṣṭ-ā ¦ *nati kot rākṣts-āśśi* ¦
power give-GDV.F.ACC.SG time-PERL power split.PST.ACT.3SG Rakṣas-GEN.PL
vibhi(*ṣa*)[a5]*ne-ṃ -ṣt* :
Vibhīṣana-ACC.SG

kälymey-ā eñlune ¦ *keṃpar eṃtsāt pracr-i* ¦
direction-PERL teaching wrongly understand.PST.MID.3SG brother-GEN
nakt-äṃ *kärparäṃ* :
disappear.PST.MID.3SG-3SG dignity

'At the time that company had to be gathered, Rāvaṇa split the company out of ignorance. [1a] At the time that power had to be given, he split the power of the Rākṣasas and struck Vibhīṣana. [1b] He misinterpreted the proper advice from his brother and { the dignity **disappeared from him | his** dignity **disappeared** }. [1c]'

(A11a5; trans. based on CEToM; verse; [6¦6¦5]×4)

Likewise, ambiguity remains as to whether the plural clitic *-me* in (9.68) represents the possessor of an intransitive subject ("das Jaṭila-Gewand"; Thomas 1983: 259) or the IO (source) of the intransitive *neksate* '(the *jaṭila*-robe) disappeared from X.'

(9.68) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

te tot we(*weñormeṃ*) /// ***neksate-me*** • *kaṣār-wässa-nma ka*
DEM.N so.much say.ABS disappear.PST.MID.3SG-PL K-robe-PL PTCL
ṣ kektseñt-sa lyakānte-me.
CONJ body-PERL appear.PST.MID.3PL-PL

'Having sa(id) this much [...] { (the *jaṭila*-robe) **disappeared from them | their** (*jaṭila*-robe) **disappeared** }, and *kaṣār*-robes appeared on their bodie[s].'

(B108a10; prose)

9.2.2 TA/TB √*wik*(*ā*)- 'disappear'

We may take a PC hosted by TA/TB √*wik*(*ā*)- 'disappear' as representing either the possessor of the verb's subject or the source of the verb.[23] In the following example (9.69) from TA, the function of the first-person singular PC *-ñi* is either the inalienable possessor of *yoke* 'thirst,' which is the subject of *wekaṣ-* (i.e., 'my thirst will disappear') or the IO (source) of *wekaṣ-* (i.e., 'thirst will disappear from me').

(9.69) [TA] FUNCTION: possessor of an intransitive subject or IO (source)?

[b7] /// *lā ñi* *tsokam* *yoke* ***wekaṣ-ñi*** *tñi*
GEN.1SG drink.SUBJ.ACT.1SG thirst disappear.SUBJ.ACT.3SG-1SG GEN.2SG
tampey-aṃ ///
power-LOC
'... (If) I drink my ..., { thirst **will disappear from me | my** thirst **will disappear** }. In your power ...'

(A431b7; prose?)

Example (9.70) from TB is also ambiguous. The first-person singular PC *-ñ* in this example represents either the possessor of a missing subject or the IO (source) of *wikoytär*'may ... disappear!'.

(9.70) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

kos *te* *postäṃ saṃsār-ne* ¦ *kliñi-ñ* *walka* *spārta-tsi*
how DEM.N after Saṃsāra-LOC be.necessary.OPT.ACT3SG-1SG for.a.long.time turn-INF
:

tañ *pern·* - - - [b2] *ñi* ¦ *yekte-perne* ***wikoytär-ñ*** 10
GEN.2SG glory GEN.1SG? of.little.worth disappear.OPT.MID.3SG-1SG
"How would it be necessary for me to be in the Saṃsāra for a long time after this? [10c]
Your glory ... **May** { [...], being low-rank, **disappear from me | my** [...], being low-rank, **disappear** }! [10d]"

(B249.ab2; verse; [7¦7]×4)

23. E.g., TA: A46 b4; A340 a4; A431 b7 (9.69) TB: B249.a b2 (9.70)

9.2.3 TA/TB √*spärk*(*ā*)- ‘disappear, perish’

The TA and TB root √*spärk*(*ā*)- ‘disappear, perish’ also shows this type of ambiguity.[24] In the following example, *ere* ‘color, appearance’ is the subject of the intransitive verb *sparkā*- ‘X disappeared, perished.’ The third-person singular PC *-ne* hosted by *sparkā*- represents either the (inalienable) possessor of the subject or the IO (source) of the verb.

(9.71) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

/// (*subhāṣitagave*)*ṣ*(*i*) *walo* *olyapotse läklessu* *ere* *päst*
S king.NOM very sorrowful color away
sparkā-ne ||
disappear.PST.ACT.3SG-3SG
‘... King (Subhāṣitagave)ṣin [became] very sorrowful, { the color **disappeared from him | his** color **disappeared** }.’

(B99a1; trans. based on CEToM; prose)

9.2.4 TB √*naut*(*ā*)- ‘disappear’

We find several examples where a PC appears next to TB √*naut*(*ā*)- ‘disappear.’[25] Example (9.72) contains the first-person singular *-ñ*. It seems to represent the inalienable possessor of the noun *yāmor* ‘deed,’ which is the subject of the intransitive verb *nauyto* (sic) ‘May X disappear!’ Nevertheless, it is also possible to take the PC as representing the IO (source) of the verb (i.e., ‘May X disappear from me!’).

24. E.g., TA: A11 a5, A222 a4; A239 a2 TB: B99 a1 (9.71)

25. E.g., IOL Toch 5 b3-4 (9.72), b4 (9.73), B22 a4 (9.75), B271 a3 (9.76), and PKAS7G a1 (9.74).

(9.72) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

*ciṣṣe saim-äś kloyomar **nauyto-ñ** yāmor*
your protection-ALL fall.NPST.MID.1SG disappear.OPT.NPST.ACT.3SG-1SG deed
kāntoytär-ñ, kṣ[ā]nt[i] tākoy-ñ
rub.off.OPT.NPST.MID.3SG-1SG forgiveness COP.OPT.ACT.3SG-1SG

'I fall onto your protection. May { **my** deed **disappear** | the deed **disappear from me** }! May my (deed) be wiped out! May there be forgiveness for me!'

(IOL Toch 5 b3-4; trans. based on CEToM)

Examples (9.73) and (9.74) attest the same combination of a PC, √*naut*(*ā*)-, and *yāmor*/*yāmornta* 'deed/deeds.' In these examples, *yāmor*/*yāmornta* 'deed/deeds' is the subject of *nautā*- 'X disappeared' in (9.73), and *nautan*- 'X will disappear' in (9.74), respectively. The third-person singular PC *-ne* describes either the possessor of the subject or the IO (source) of the verb.

(9.73) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

*ci-ne yāmu śrigupti yolo yāmor **nautā-ne** ciṣṣe-k*
you-LOC do.PTCP.M.NOM.SG protection evil deed disappear.PST.ACT.3SG-3SG your-EMP
saimt-sa
protection-PERL

'He who has taken (excellent) protection in you, { **his** evil deed **disappeared** | the evil deed **disappeared from him** } through your protection.'

(IOL Toch 5 b4; trans. based on CEToM)

(9.74) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

k$_u$se no su wnolme ¦ ket śaul nanautau ¦
REL.NOM CONJ DEM.M.NOM.SG human.being ¦ REL.GEN life disappear.PTCP.M.NOM.SG ¦
yāmor-nta no ykāk nesaṃn-ne ¦ māw-k ***nautan-ne***
deed-PL CONJ still COP.NPST.ACT.3PL-3SG ¦ NEG-EMP disappear.SUBJ.ACT.3PL-3SG
po-ykne-sa :
all-way-PERL

'But whoever person he (is), whosesoever life (has) disappeared, his deeds still exist. { **His** (deeds) **will** not surely **disappear** | (They) **will** not surely **disappear from him** } in any way. [17a]'

(PKAS7Ga1; verse; [5¦5¦8¦7]×4)

The following two examples (9.75) and (9.76) have a different subject than *yāmor* (*perne* 'dignity' in [9.75] and *empelñe* 'horror' in [9.76]). Still, the PC used in these examples is ambiguous between the possessor of the subject and the IO (source).

(9.75) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

ṣñār ekñe-nta-sa ¦ soy-tsi lāñco mā campe(ṃ)
respective possession-PL-PERL be.satisfied-INF king.NOM.PL NEG be.able.NPST.ACT.3PL
(:)

[a5] *(co)wai tärkan(aṃ ¦ ypauna) k_u(ṣ)aino alyeṅkä-ts* •
PREV rob.NPST.ACT.3PL land.PL village.PL other-GEN.PL

nautaṃ-me *perne ¦ tumeṃ yukseṃ* *ce_u*[26]
disappear.SUBJ.ACT.3SG-PL dignity then overcome.NPST.ACT.3PL DEM.ACC.SG
aly(ai)k •
other.NOM.PL

taiknes= erkatte ¦ lāñc mäskeṃtr ontsoytñe-sa 60[a5](-6)
thus hostile king.NOM.PL be.NPST.MID.3PL insatiability-PERL
'Kings cannot be satisfied with (each of) their own possessions [66a], (and) they rob others' (lands) [and] villages. [66b] [But] **if { their** dignity **disappears | dignity disappears from them }**, then the others will defeat them (*lit.* him). [66c] In this way, kings are hostile because of [their] insatiability. [66d]'

(B22a4; trans. based on CEToM; verse; [5¦7]×4)

(9.76) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

tūsa tāppoṃ sai[a3]*m-wästi ¦ mai no* ***nauta-ñ***
therefore appear[?].OPT.ACT.3PL protector.PL PTCL CONJ disappear.SUBJ.ACT.3SG-1SG
empelñe ¦ arañcä-ntse :
horror heart-GEN

"Therefore, may protectors appear[?], so that the horror of (my) heart **may disappear from me**. [39c]"

(B271a3; trans. based on CEToM; verse; [7¦7¦4]×4)

26. Is *ce_u* 'this one' [M.ACC.SG] in this example an error for *ceṃ* 'them' [M.ACC.PL] (referring to the kings)?

9.2.5 TB √*musk*(*ā*)- ‘disappear, perish’

The following example (9.77) contains an intransitive verb *musk*(*entä*)*r*- ‘X disappear,’ accompanying the plural PC *-me*. Nevertheless, it is unclear whether the plural PC *-me* in this example represents the possessor of the subject of *musk*(*entä*)*r*- ‘X disappear,’ which is in the lacuna, or the IO (source) of the intransitive verb (i.e., ‘... disappeared from X’).

(9.77) [TB] FUNCTION: possessor of an intransitive subject or IO (source)?

cai *kr*$_u$*i nta* *yśāmna* ¦ *cmenträ* *onolmi* ¦
DEM.M.NOM.PL if INDF among.men be.born.SUBJ.MID.3PL living.being.PL
snaice *ost-ne* *tänmaskenträ* ¦ *ekñiññe-sa* *meṅkīce* :
poor.ACC.SG house-LOC be.born.NPST.MID.3PL possession-PERL lacking.ACC

tāk· /// [b3] *ṣpä* ¦ ***musk(entä)r-(m)e*** *po-ykne-sa* (:)
CONJ disappear.NPST.MID.3PL-PL all-manner-PERL

When these beings are reborn somehow among humans, they are reborn in a poor house (which) lacks possession. [8b] ... and { **their ... disappear** | ... **disappear from them** } in every way. [8c]’

(PKAS7Eb3; verse; [5¦5¦8¦7]×4)

9.2.6 TA √*pyutk*-^{act} ‘come into being’

Likewise, TA √*pyutk*- ‘[ACT] come into being; [MID] establish, create, accomplish’[27] resists our classification. We may interpret a PC used in example (9.78) to represent either the possessor of a subject or the IO (experiencer or location) of the verb.

27. E.g., A2 b6, A372 a2, and YQ III.6 b5 (9.78).

(9.78) [TA] FUNCTION: possessor of an intransitive subject or IO (location)?

[b4] /// (*ka*)*nak* *eṃtsāträ* *ptāñkät* *käṣyāp* *el* *eṣ*
cotton.cloth take.SUBJ.MID.3SG Buddha.lord teacher.GEN gift give.NPST.ACT.3SG
täm *ṣurmaṣ* *ṣakkats* *klyomäntā*(*p* [b5] *meträkyāp*) /// • *taryāk* *we-pi*
DEM because.of certainly noble.M.GEN.SG Maitreya.GEN 30 2-PTCL
lakṣañi *salu* ***pyutkāseñc-äṃ*** •
mark.NOM.PL entirely emerge.SUBJ.ACT.3PL-3SG
'... (if) he takes this cotton cloth, he will give it as a present to the Buddha-god the teacher. For this reason, the ... of the noble (Metrak) certainly ... the thirty-two marks will **appear on him** in their entirety.'

(YQ III.6b5; trans. based on Ji, Winter, and Pinault 1998: 161 followed by CEToM; prose?)

9.2.7 TA √*kātkā*- '(a)rise'

We find ambiguous examples in which TA √*kātkā*- '(a)rise' hosts a PC.[28] In the following example (9.79), *ākāl* 'wish' is the subject of *kātka*- 'X arose.' This verb hosts a third-person singular PC that refers to *Bṛhadyuti* 'Bṛhadyuti.' This PC represents either the possessor of the subject (i.e., 'X's wish') or the IO (experiencer or location) of the verb (i.e., '... arose in X').

(9.79) [TA] FUNCTION: possessor of an intransitive subject or IO (experiencer/location)?

ākāl ***kātka-ṃ*** ¦ *puttiśparn-ac* ¦ *ṣokyo wärṣṣälts* : 1 ||
wish arise.PST.ACT.3SG-3SG Buddha's.dignity-ALL very strong.NOM.SG
'A very strong wish for the rank of Buddha **arose in him**. [1d]'

(A24b2; trans. based on CEToM; verse [4¦4¦4]×4)

9.2.8 TA √*pärkā*- '(a)rise; become clear'

TA √*pärkā*- '(a)rise; become clear' also shows this type of ambiguity.[29] The second-person singular PC -*ci* of example (9.80) describes either the possessor of *prāptiñ* '*prāpti*; the power of obtaining everything (one of the eight superhuman faculties),' which is the subject of *parkar*- 'X appeared'

28. E.g., A24 b2 (9.79), A307 b6, A313 a1, A366 a2, and A394 a3

29. E.g., A372 a4 (9.80), and A412 a2 (9.81)

or the IO (experiencer or location) of *parkar-* '(The *prāpti*-s) appeared on/to X.'

(9.80) [TA] FUNCTION: possessor of an intransitive subject or IO (experiencer/location)?

[a4] /// (*kā*)*swone-ntw-āśśi* ***parkar-ci*** *prāptiñ* :
virtue-PL-GEN arise.PST.ACT.3PL-2SG possession.NOM.PL

tākaṣt pättāññākät puk knānmāṃ āṣānik ca ///
COP.ACT.2SG Buddha.lord all wisdom venerable

'[...] of (all) virtues **appeared to you** (as) the *prāpti* ("possession"). You have become the Buddha, all-knowing Arhat [...]'

(A372a4; verse)

The same passage appears in A412 a2 (9.81).

(9.81) [TA] FUNCTION: possessor of an intransitive subject or IO (experiencer/location)?

[a2] /// *pūk kāswone-ntw-āśśi* ***parkar-ci*** *prāptiñ* ///
all virtue-PL-GEN arise.PST.ACT.3PL-2SG possession.NOM.PL

'[...] of all virtues **appeared to you** (as) the *prāpti* ("possession"). [...]'

(A412a2; verse)

9.2.9 TA/TB √*läk(ā)*-$^{\text{mid}}$ 'appear; be seen'

When √*läk(ā)*- takes an active ending and hosts a PC, the PC's function is often unambiguous. For example, the second-person singular PC in (5.31), repeated here as (9.82), represents the possessor of *ersna* '(beautiful) forms,' the DO (theme) of the verb.

(9.82) (= 5.31) [TB] FUNCTION: inalienable possessor of a DO (theme)

ersna ***lkāskeṃñ-c*** ¦ *pä(l)l(āntär-ci* ¦) ///
form.F.PL see.NPST.ACT.3PL-2SG praise.NPST.MID.3PL-2SG

'(They) **see your** (beautiful) forms. (They) praise you. [...]'

(B213b2; verse; [4¦4¦4]×4)

When it takes a middle ending, however, the function of a PC is often ambiguous.[30] In the follow-

30. E.g., TA: A397 a7 (9.86), and b1 (9.87). TB: B5 b5 (9.83), b6 (9.84), B76 a1 (3.20), b5 (3.20), B207 b4 (9.90), B213 b2 (5.31), and B242 a4 (9.85),

ing two examples (9.83) and (9.84), Ānanda, who massages the Buddha, speaks to him. Both examples contain a verb of appearance (*lkāntär-* 'X appear'), which accompanies the second-person singular PC *-c*, referring to the Buddha. This PC seems to represent the possessor of the subject (i.e., 'your$_{SG}$ X appear'), but it is also possible to interpret the PC as representing the IO (location) of the verb (i.e., 'X appear on you$_{SG}$').

(9.83) [TB] VERB OF APPEARANCE + PC = IO (location) or possessor of an intransitive subject?

weña *poyśiṃ-ś* *ānande* ¦ ***lkāntär-c*** *ñakta*
speak.PST.ACT.3SG Omniscient-ALL Ānanda appear.NPST.MID.3PL-2SG lord.VOC
(*indri*)[b6]*-nta-ṃts* •
sensory.organ-PL-GEN

allek *te-sa* *nesalyñe* ¦ *eśne* *warñai* *piśa-ntso* 73
other DEM-PERL existence eye.DU beginning.with five.PL-GEN

'Ānanda spoke to the Omniscient: "O God, being-another-than-this (i.e., the change) of the five sensory organs, beginning with eyes, **is seen on you**." [73d]'

(B5b5; trans. based on CEToM; verse; [7¦7]×4)[31]

(9.84) [TB] VERB OF APPEARANCE + PC = IO (location) or possessor of an intransitive subject?

kauta-läñe *yetse-ntse* ¦ *misā-ṃts* ***lkāntär-c*** *īlār-ñe* :
break-NMLZ skin-GEN flesh.PL-GEN appear.NPST.MID.3PL-2SG weak-NMLZ

[Ānanda speaking to the Buddha:] "The cracking of the skin and the frailness of the flesh **are seen on you**. [74a]"

(B5b6; trans. by CEToM; verse; [7¦7]×4)[32]

The following example (9.85) is also ambiguous: The second person singular PC *-c* represents either the IO (location/experiencer) of *lkāntär-* or the possessor of *yärponta* '(good) deeds.'

31. The subject of *lkāntär* 'appear' is *allek tesa nesalyñe* 'the being other than this,' which is singular. However, *lkāntär* shows plural agreement, influenced by *indrintaṃts* 'sensory organs' [GEN.PL] (Thomas 1983: 150).

32. In this example, location seems more likely since the possessor seems embedded under *kautaläñe* (i.e., 'cracking of your skin').

(9.85) [TB] VERB OF APPEARANCE + PC = IO (location/experiencer) or possessor of an intransitive subject?

/// [a4] ***lkāntär-c*** *yāmwa nauṣ yärpo-nta* •
appear.NPST.MID.3PL-2SG do.PTCP.F.PL former good.deed-PL
'[...] the (good) deeds, accomplished earlier, **will appear to you** [...]'

(B242a4; verse; [4¦4¦4]×4[?])

Examples (9.86) and (9.87) from TA attest a third-person singular PC that represents either the IO (location/experiencer) of *lkātr-* (i.e., '[something] appears on/to X') or the possessor of *wles* 'work, service, effort' (i.e., 'His X appears').

(9.86) [TA] VERB OF APPEARANCE + PC = IO (location/experiencer) or possessor of an intransitive subject?

uddeśake träṅkäṣ tm-ann ats wles wätkāltsi ***lkātr-äṃ*** •
Uddeśake speak.NPST.ACT.3SG DEM-LOC PTCL work.F certain see.NPST.MID.3SG-3SG

k$_u$yalte maltowinu dhyāṃ pälskālune-yo pa(päly)ku ///
because first *dhyāna* thinking-INS burn.PTCP.M.NOM.SG
'Uddeśaka says: "Thus, the task certainly **appears to him**. Because the first *dhyāna* has been burnt by the thinking ..."'

(A397a7; prose?)

(9.87) [TA] VERB OF APPEARANCE + PC = IO (location/experiencer) or possessor of an intransitive subject?

täm ne-k pälske – /// [b1] */// naṃ nu ṣokyo tsopats cämp-l-une*
DEM COMP-EMP think CONJ very great be.able-GDV-NMLZ
lkātr-äṃ
see.NPST.MID.3SG-3SG
'Thereupon, ... and great ability **appears on him**.'

(A397b1; prose?)

Still, we can find examples in which a PC unambiguously represents an IO. The second-person singular PC *-c* of example (3.20), repeated here as (9.88), unambiguously represents the IO (ex-

periencer) of *lkāntar-* '(the Śuddhāvāsa gods) will appear to X.' It is not likely to represent the IO (location) (i.e., 'the Śuddhāvāsa gods will appear on X') nor the possessor of the subject (i.e., 'X's Śuddhāvāsa gods will appear').

(9.88) (= 3.20) [TA] VERB OF APPEARANCE + PC = IO (experiencer)

/// ¦ (*śuddha*)*vāsä-ṣṣi* ¦ *ña*(*k*)*t*(*i*) ***lkāntar-c*** *kauñī ram no* ¦
Śuddhāvāsa-ADJZ.NOM.PL god.NOM.PL see.SUBJ.MID.3PL-2SG sun as CONJ
ompalskoñe ṣme(*-mane* :) ///
meditation sit-PTCP

'The (Śuddhā)vāsa gods **will appear to you** like a sun, sit(ting) in meditation.'

(B76a1; trans. based on Schmidt 1974: 234; verse; [5¦5¦8¦7]×4)[33]

Finally, the following two examples contain a nominal expression with a locative marker (e.g., *kektsen-ne* 'on the body'). It is uncertain whether a PC hosted by *lkāntar* 'appear, are seen' represents the possessor of the subject ('X's ... appear') or the possessor of the IO ('... appear on X's body').

(9.89) [TB] FUNCTION: possessor of an intransitive subject or possessor of an IO (location)?

/// (- - *sa*)*swa* ¦ ***lkāntar-c*** *kektsen-ne* ¦ *täryāka wī lakṣānä-nta* ¦ *mai* ///
master.VOC see.NPST.MID.3PL-2SG body-LOC 30 2 mark-PL PTCL

'O (mas)ter, the 32 marks **appear** on **your** body ...'

(B76b5; trans. based on Schmidt 1974: 234; verse; [5¦5¦8¦7]×4)[34]

Example (9.90) attests *lkantar-c*, which one should read as *lkāntär-c* 'X appear' [NPST.MID.3PL-2SG]. The passage of this example is restored based on B221 a5 : /// (*ysā-yo*)[a5]*kñana swañcaiyno po kälymintsa cärkāsta maiytarṣṣana* 'You discharged the (gold)en rays of friendship to all directions.'

33. *lkāntar-c* for *lkāntär-c* 'X will appear' [SUBJ.MID.3PL-2SG]

34. *lkāntar-c* is to be read as *lkāntär-c* 'X appear' [NPST.MID.3PL-2SG]

(9.90) [TB] FUNCTION: possessor of an intransitive subject or possessor of an IO (location)?

/// [b4] *kektse(ñ̃ñ)e*[35] ¦ ***lkantar-c*** *ñakta* :
body.NOM.SG? see.NPST.MID.3PL-2SG lord.VOC

ysa-yok(ñana swañcaiyno ¦ *po kälymint-sa* *cärkāsta* ¦ *maiytar-ṣṣana*
golden.F.PL ray.F.ACC.PL all direction-PERL emit.PST.ACT.2SG friendship-ADJZ.F.PL
:) ///

'(...) **appear** on **your** body, O Lord! You discharged the golden rays of friendship to all directions.'

(B207b4; verse; [7¦7¦4]×4)

9.2.10 TA/TB √*täm*- 'be born, come into being'

The intransitive root √*täm*- 'be born, come into being' is ambiguous in TA and TB.

Example (9.91) contains the third-person singular PC *-ne*, which represents either the inalienable possessor of *takarṣkäññe* 'faith' or the IO (location) of the verb. It is likely to represents the location since *takarṣkäññe* seems indefinite. Likewise, the third-person singular PC *-äṃ* in example (9.92) [TA] is ambiguous: it represents either the possessor of *puskāñ* 'nerves' or, more likely, the IO (location/benefactive) of the verb.

35. An upper part of the <ñ̃ñe> akṣara is visible (cf. Sieg and Siegling 1953: 124 n. 9: "Nach Ausweis des Originals wohl zu *kektse(ñ̃ñ)e* sic zu erg."), although we expect *kektse(nn)e* 'body' [LOC.SG] rather than *kektse(ñ̃ñ)e* [NOM.SG].

B207 b4 ⟨ ke ktse (ñ̃ñ)e lka nta⁀rc ña kta ⟩

(9.91) [TB] FUNCTION: inalienable possessor of an intransitive subject or IO (location)

/// sa tarya naumīye-nta kärso(r-m)e(ṃ ta)karṣkäññe
three.F.PL jewel-PL understand.ABS-ABL faith
tänmastär-ne •
be.born.NPST.MID.3SG-3SG
'... Having understood the three jewels, faith **was born in him**.'

(B159a5; prose?)

(9.92) [TA] FUNCTION: IO (location/benefactive) (?)

wiki [a3] */// s-aṃ puskāñ* ***tmäṃsaṃtr-äṃ*** ||
23rd.M.ACC.PL day.PL-LOC nerve.NOM.PL be.born.NPST.MID.3PL-3SG

wiki(śtwarpiñcinäs) ṣpät koṃs-aṃ śwāl kapśiññ-ā tämnäṣtr-äṃ ||
24th.M.ACC.PL 7 day.PL-LOC flesh body-PERL be.born.NPST.MID.3SG-3SG

wikipäñpiñcinäs [a4] */// tämnäṣtr-äṃ* ||
25th.M.ACC.PL be.born.NPST.MID.3SG-3SG

wikiṣäkpiñci(näs ṣpät koṃ)s-aṃ ya· (kapśi)ññ-ā tämnäṣtr-äṃ ||
26th.M.ACC.PL 7 day.PL-LOC skin body-PERL be.born.NPST.MID.3SG-3SG

wikiṣpätpiñcinäs ṣpät koṃs-aṃ [a5] */// ṣtr-ä(ṃ)* ||
27th.M.ACC.PL 7 day.PL-LOC be.born.NPST.MID.3SG-3SG
'In the 23rd week, nerves **are born to him**. In the 24th week, flesh is born to him on the body. In the 25th week, (inner-skin) is born to him (on the body). In the 26th week, skin is born to him on the body. In the 27th week, ... is born to him.'

(A151a3; prose?)

9.2.11 TB √*tsäṅkā-* '(a)rise'

We find examples that contain TB √*tsäṅkā-* '(a)rise' and a PC.[36] It is often not easy to determine whether a PC represents the possessor of an intransitive subject or the IO (location/experiencer).

It seems that a PC unambiguously represents the IO of an intransitive verb when the verb's subject is indefinite. In example (9.93), *palsko* 'thought' is the subject of the verb *tsāṅkaṃ-* '(if) X arises.'

36. E.g., B107 a3 (9.97), B169 b3 (9.98), M 500.1 b2 (9.94), PKAS 6E b6 (9.95), b7 (9.96), and PKAS 8C b2 (9.93).

It contains the third-person PC, referring to *kete* '(he) to whom.' It does not seem to represent the possessor of the subject (*palsko*) but the IO (location/experiencer) of the intransitive verb.

(9.93) [TB] FUNCTION: IO (location/experiencer)

ket(e āñ)m(e) tākaṃ (śwātsi yoktsi [b2] *kä)llā-tsi* •
REL.GEN desire COP.SUBJ.3SG food drink obtain-INF

erkenma-meṃ śerk pra-lle •
cemetery.PL-ABL rope bring.NPST-GDV

cew śerkwa-meṃ wente yamaṣ-le •
DEM.M.ACC.SG rope-ABL covering make.NPST-GDV

cew wente-sa ñuwe kuntiśke taṣa-le •
DEM.M.ACC.SG covering-PERL new little.pot set.NPST-GDV

ton āyar-sa śwātsi yoktsi eneṃ taṣa-lle •
DEM.F.ACC.PL giving-PERL food drink inside set.NPST-GDV

tumeṃ ṣukt nässait yama-ṣle
thereupon 7 spell make.NPST-GDV

ente palsko ***tsāṅkaṃ-ne*** *ot śwātsi* (*yo*[b3]*ktsi*) *kälpāṣäṃ*
when(ever) thought arise.SUBJ.MID.3SG-3SG then food drink obtain.NPST.ACT.3SG
7 ||

'(If) one has a desire to obtain food (and) drink, (he) should bring a rope from cemeteries. From this rope, (he) should make a covering. On this covering, (he) should put a new little pot. (He) should put food (and) drink inside, in the manner of giving them. Then, (he) should cast a spell 7 (times). He will obtain food (and drink) whenever a thought (of them) **arises to him**. 7'

(PKAS8Cb2; trans. based on CEToM; prose)[37]

M 500.1 b2 (9.94) attests the same combination of *palsko* 'thought,' √*tsäṅkā-* '(a)rise,' and a PC.

37. CEToM: '[If] one has the desire to obtain (food and drink) one should take rope out of cemeteries, from this rope one should make a covering, with this covering one should cover [lit. set] a new pot. In the manner of giving those [little pieces] one should put food [and] drink inside. Thereupon one cast [lit. make] a spell seven times. Whenever the thought arises to anyone, then he obtains food [and] (drink). 7.'

(9.94) [TB] FUNCTION: IO (location/experiencer)?

*rṣāke-ṃts lānte kreñc-epi ¦ **tsäṅkā-ñ** palsko klāwäs-si ¦ lālyi*
sage.PL-GEN king.GEN good-GEN arise.PST.ACT.3SG-1SG thought announce-INF striving
wrotsai :
great.F.ACC.SG

'A thought **arose to me** to proclaim the great striving of the good king of Riṣis. [43a]'

(M500.1b2; verse; [7¦7¦4]×4)

In example (9.95), *kᵤse ksa* (...) *vitark* 'whatever consideration' is the subject of *tsäṅkā-* '... arose (to X).' This nominal expression contains *ksa* and is indefinite. The first-person singular PC of this example, referring to the Buddha, describes the indirect object (location/experiencer) of the intransitive verb, rather than the possessor of the verb's subject.

(9.95) [TB] FUNCTION: IO (location/experiencer)

– – – (lyka)[b5]*śk-ñe ¦ vitarkä-nt-aṃts toṃ ¦ yneś yama-lyñe akwatsä-ññe ¦*
small-NMLZ consideration-PL-GEN DEM.F.PL manifest do-NMLZ sharp-NMLZ
mällarṣkä-ññe pälkor-meṃ :
pressing-NMLZ see.ABS

/// [b6] ¦ yneś toṃ mäskeṃträ ¦ istak campeṃ
manifest DEM.F.PL become.NPST.MID.3PL instantly be.able.NPST.ACC.3PL
*putkatsi päst ¦ kᵤse ksa **tsäṅkā-ñ** vitark ñke* 10(-4)
separate-INF away what.NOM INDF arise.PST.ACT.3SG-1SG consideration now

'(The coarseness and) the fineness, having seen the manifestation, the sharpness and the pressure of these considerations, [14c] ... These (considerations) become manifest. They can be immediately distinguished clearly, whatever consideration **has arisen to me** now. [14d]'

(PKAS6Eb6; verse; [5¦5¦8¦7]×4)[38]

38. Cf. CEToM: "b6/7 Twice attested *tsäṅkā-ñ* clearly has a suffixed 1. singular pronoun, and even though the Buddha is speaking, such a reference is somewhat disturbing." We find the content of this passage in the Udānavarga 31.33 (Cittavarga).

(9.r) Uv. 31.33 (cittavarga; Bernhard 1965: 419)
*sthūlāṃ vitarkān atha vāpi sūkṣmāṃ **samudgatāṃ** mānasaṃplavārtham /*
vitarkayaṃ vai satataṃ vitarkān etāṃ sadā dhāvati bhrāntacittaḥ // 33
'Coarse or fine thoughts, **arisen** on account of flowing of the mind, [33b] considering these thoughts constantly, the puzzled one always wanders. [33d]'

PKAS 6E contains another instance of √*tsäṅkā-* '(a)rise' occurring with a PC. Again, the subject (*kᵤse ksa pals(k)a-ly(ñ)e* 'whatever thought') contains *ksa* and is indefinite. This suggests that the PC represents the IO (location/experiencer).

(9.96) [TB] FUNCTION: IO (location/experiencer)

/// ¦ [b7] *ineś mäskentär* ¦ *mā ṣp kärsnanträ kleśä-mpa*
manifest become.NPST.MID.3PL NEG CONJ know.NPST.MID.3PL affliction-COM
ṣe ¦ *kᵤse ksa* ***tsäṅ(k)ā-ñ*** *pals(k)a-ly(ñ)e* (:) ///
with what.NOM INDF arise.PST.ACT.3SG-1SG think-NMLZ

'... (If the considerations) do (not) become manifest, they are not recognized with affliction anymore, whatever thought **has arisen to me**. [15a]'

(PKAS6Eb7; verse; [5¦5¦8¦7]×4)

The PCs used in (9.97) and (9.98) also seem to represent the IO (location/experiencer) rather than the possessor of an (indefinite) subject.

(9.97) [TB] FUNCTION: IO (location/experiencer)?

CONTEXT: An ājīvika Upaga saw Nānda and Nandābala preparing rice porridge.

akālk ***tsäṅkā-ne*** *mäkte pi kca tā oṅkorñai ñiś śwā-tsi*
wish arise.PST.ACT.3SG-3SG how PTCL INDF DEM.F.ACC.SG porridge I eat-INF
källā-lle ṣeym •
obtain.SUBJ-GDV COP.IMPF.ACT.1SG

'A wish **arose to him**: "How on earth could I manage to eat this rice porridge?"'

(B107a3; prose)

(9.98) [TB] FUNCTION: IO (location/experiencer)?

CONTEXT: N/A

/// (*pratītyasa*)*mutpāt* *klyauṣṣäṃ* *takaṣkäṃñe* ***tsāṅka-ne*** *keś* *tä*
pratītyasa-mutpāda hear.SUBJ.ACT.3SG faith arise.SUBJ.ACT.3SG account
/// [b4]

'(...) will hear *pratītyasa-mutpāda* and faith **will arise in him**. [...]'

(B169b3; prose)[39]

9.2.12 TA/TB √*länt*- 'go out, emerge'

Finally, when there is a PC attested next to the TA/TB root √*länt*- 'go out, emerge,' we may take the PC to represent the possessor of the subject (i.e., 'X's ... goes out') or the IO (source) of the verb (i.e., '... goes out from X').[40]

For example, the third-person singular PC *-ne* in (9.99) represents either the possessor of an intransitive subject or the IO (source) of the verb. The same passage appears five times in this manuscript (9.100, 9.101, 9.102, and 9.103).

(9.99) [TB] FUNCTION: possessor of an intransitive subject or IO (source)

[a1] *tu-ne* *swāralñe* *yamasträ* *krāke* ***läṃn-ne***
DEM-LOC pleasure make.NPST.MID.ACT.3SG filth go.out.SUBJ.ACT.3SG-3SG
saṅghā-träṅkä *kätäṅkäṃ*
s. commit.a.sin.NPST.ACT.3SG

'(if) he finds pleasure in it (and) filth **comes out of him**, he commits the *saṃghāvaśeṣa* offence.'

(B334a1; trans. based on Ogihara 2009; prose)

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39. One might be tempted to construe the PC in this example with *takaṣkäṃñe* (i.e., 'faith in him'). However, although PCs may represent an alienable possessor and part-whole relationship, such complement usage is hardly attested.

40. E.g., TA: A82 b5, A146 b4, A153 b2, A295 b1, and A298 a5; TB: B88 a1 (9.109), B334 a1 [2x] (9.99, 9.104), a5 (9.100), a6 (9.100), a10 (9.101), b1 (9.106), b4 (9.102), b5 (9.107), b8 (9.103), and b9 (9.108).

(9.100) [TB] B334 a5: [a5] *tune swāralyñe yamastär krāke* ***län-ne*** *saṅghā-träṅ(k)ä kätä*[a6]*ṅkäṃ*

(9.101) [TB] B334 a10: *tune swāralyñe yamas*(*tär krāke*) [a10] ***läṃn-ne*** *saṅgha-träṅko kätäṅkäṃ*

(9.102) [TB] B334 b4: *tu*[b4]*ne swāralyñe yamastär kr*(*ā*)*ke* ***läṃn-ne*** *saṅghā-träṅko kätäṅkäṃ*

(9.103) [TB] B334 b8: *tune swāralyñe yamastär krāke* ***läṃn-ne*** *saṅghā-träṅko* [b9] *kätäṅkäṃ*

The following example also shows that a PC represents the inalienable possessor of an intransitive subject or an IO (source).

(9.104) [TB] FUNCTION: possessor of an intransitive subject or IO (source)

> *kr$_u$i mā krāke* ***läṃn-ne*** [a2] *koss tu māka ette ke$_u$wcä*
> If NEG filth go.out.SUBJ.ACT.3SG-3SG as.much DEM much downwards upwards
> *maścä-ś tot stulāṃñcana träṅkä-nta kätta[a3]ṅkäṃ po sāṅ-ne*
> fist-ALL so.much s. offense-PL commit.a.sin.NPST.ACT.3SG all community-LOC
> *teśitä yamaṣällona*
> confession make.GDV.F.PL
> 'If filth does not **come out of him**, as much as he rubs it over the fist upward or downward, so much he commits Sthūlātyatya-sins that should be confessed before the whole community'
>
> (B334a1; trans. based on Ogihara 2009; prose)

This manuscript attests a similar passage five times (9.104, 9.105, 9.106, 9.107, and 9.108), although each example has a different apodosis.

(9.105) [TB] B334 a6: *mā krāke* ***läṃn-ne***

(9.106) [TB] B334 b1: [b1] *kr$_u$i mā krāke* ***läṃn-ne***

(9.107) [TB] B334 b5: *kr$_u$i mā krā*[b5]*ke* ***läṃn-ne***

(9.108) [TB] B334 b9: *kr$_u$i mā kkrāke* ***läṃn-ne***

Finally, when √*länt-* and a PC accompany a nominal expression that represents the IO (source), the PC may represent either the possessor of the IO or the possessor of the subject (9.109).

(9.109) [TB] FUNCTION: possessor of an intransitive subject or possessor of an IO (source)

k(a)ntwo koyna-meṃ parna ***lnaṣṣi-(ne)*** ||
tongue mouth-ABL outside go.out.IMPF.ACT.3SG-3SG
'[**His**] tongue was hanging [lit. going] out of **his** mouth.'

(B88a1; trans. by CEToM; prose)[41]

9.3 Limitation 2: Further ambiguous examples

The second limitation to our analysis is that some intransitive verbs allow multiple interpretations of a PC: Table 9.4 summarizes them. In this subsection, I briefly look at each root with an example.

	LANGUAGE	ROOT	GLOSS	SECTION
1	TB	√*kärstā-*	cut off	(§9.3.1)
2	TA	√*klawā-*	fall	(§9.3.2)
3	TA	√*tkälā-*	illuminate	(§9.3.3)
4	TB	√*mänk(ā)-*	be inferior, lack, be deprived of	(§9.3.4)
5	TB	√*re(-sk)-*	flow	(§9.3.5)
6	TB	√*lik(ā)-*	wash	(§9.3.6)

Table 9.4: Ambiguous intransitives

9.3.1 TB √*kärstā-* 'cut off'

The following example (9.110) contains *karstaytär-* 'May X be cut off!', which accompanies a PC. The first-person singular PC *-ñ* of this example represents either the inalienable possessor of *yātalñe* 'ability,' which is the verb's subject or the IO (source) of the verb.

41. As CEToM points out, although Thomas (1983: 110) read *lnaṣṣine*, the *ne* akṣara is actually in the lacuna.

B88 a1 ⟨ lna ṣṣi (ne) ⟩

(9.110) [TB] FUNCTION: possessor of an intransitive subject or an IO (source)

/// (*aran*)*ñcä-ṣṣe vimā-ne* ¦ *saṃvarä-ṣṣe* *yāta-lñe* ¦ *mā*
heart-ADJZ palace[?]-LOC restraint-ADJZ be.capable-NMLZ NEG
karstaytär-ñ 30-6
cut.off.OPT.MID.3SG-1SG

"**May** the ability of restraint in the heart-palace not **be cut off from me**! [36d]"

(B270a3; trans. based on Schmidt 1974: 208;[42] verse; [7¦7¦4]×4)

9.3.2 TA √*klawā-* 'fall'

In example (9.111), *kratswañ śorkmi ṣutkmi* 'clothes, pegs, (and) strings' is the subject of the intransitive verb *klār-* 'X fell.' This example contains *-äṃ* [3SG], which seems to represent the possessor of the subject. However, one could also interpret this PC as representing the IO (source) of *klār-* (i.e., '[clothes, pegs, and strings] fell off from X').

(9.111) [TA] FUNCTION: possessor of an intransitive subject or an IO (source)?

pkänt pkänt kratswañ śorkmi ṣutkmi ***klār-äṃ,*** (*śo*[a6]*miṃ*) *mā* *śkaṃ*
apart apart clothes pegs strings fall.PST.ACT.3PL-3SG girl NEG CONJ
tāk
COP.PST.3SG

'**Her** clothes, pegs, (and) strings **fell** apart, and there was no longer (a girl).'

(A7a5; trans. by CEToM; prose)

42. Schmidt (1974: 208): 'Die Fähigkeit der Zurückhaltung im Herzenspalast möge mir nicht abgeschnitten werden.' *vimā-ne* is for *vimān-ne* 'in the palace' and *karstaytär-ñ* is for *karstoytär-ñ* 'may X be cut off!'

9.3.3 TA √*tkälā*$^{?}$- ‘illuminate’

(9.112) [TA] FUNCTION: IO (location/experiencer)?

> [b2] /// *ne-yā āsäñc-ac porr oki eṅkäl santān-aṃ* ***täklā-ṃ***
> -PERL buttocks-ALL fire like passion continuity-LOC illuminate.PST.ACT.3SG-3SG
> *kapśañi sākäs-si mā śkaṃ campäs ṣūraṃ lcā-ṃ ///*
> body restrain-INF NEG CONJ be.able.PST.ACT.3SG semen come.out.PST.ACT.3SG-3SG
> ‘... passion for buttocks **shone in him** like a fire in [his] (birth) sequence. He could not hold back his body; semen came out of it.’
>
> (A153b2; trans. based on Schmidt 1997: 235[43]; prose?)

Malzahn (2010: 664) lists this verbal root as transitive, but as Peyrot (2013b: 758 n. 304) points out, there are only three forms attested for this root: (1) preterite participle *täklo*,[44] (2) verbal noun *tkālluneyo* (see Pinault 2013: 223–4),[45] and (3) preterite I *täklā-ṃ* attested here. If *täklā-* is transitive and if *eṅkäl* ‘passion’ is the subject of the verb, the third-person PC *-ṃ* in example (9.112) represents the direct object (theme) of the transitive *täklā-* (i.e., ‘[passion] illuminated him’). However, if we consider *täklā-* to be an intransitive verb (i.e., ‘X shone, X illuminated oneself’; cf. Present VIII transitive *nt*-participle *tkäl*(*ṣa*)*ntā*|(*s*) ‘illuminating X’ in A273a3–4), this PC is ambiguous. It represents either the inalienable possessor of *eṅkäl* ‘desire,’ which is the subject of *täklā-* (i.e., ‘his desire for buttocks shone’) or the IO (location/experiencer) of the verb (i.e., ‘desire for buttocks shone in him’).

9.3.4 TB √*mänk(ā)*- ‘be inferior, lack, be deprived of’

In example (9.113), *ekñinta* ‘possessions’ is the subject of the intransitive verb *mäṅkāntär-* ‘(if) X are missing’ that hosts the plural PC *-me*. This PC seems to serves as the possessor of *ekñinta* or the IO (source/experiencer) of the verb.

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43. Schmidt (1997: 235): “... sein leidenschaftliches Verlangen nach Hinterbacken leuchtete wie ein Feuer in [seiner] Geburtenfolge. Und er vermochte seinen Penis nicht zurückhalten; Sperma trat aus ihm heraus.”

44. A308 b6: /// [b6] *yāytunt* ***täklo*** ///

45. A397 b2: *pälskālune* ***tkālluneyo*** *papälykunt pat nu maltowinuṃnt dhyāṃ* ‘Or the first meditation burnt by thought and **enlightenment**’

(9.113) [TB] FUNCTION: possessor of an intransitive subject or an IO (source/experiencer)

cai *no* *akn*(*ātsa-ñ*) ¦ – – *po* – – (*mā*) *aiś-e*(*ñca*)-*ñ* :
DEM.M.NOM.PL CONJ fool-NOM.PL all NEG know-PTCP-NOM.PL

kektseñt-s= *ekñi-nta* ¦ *mā* ***(mä)ṅ(k)ān(tä)r-me*** *ce-k* *warñai* (:)
body-PERL possession-PL NEG lack.SUBJ.MID.3PL-PL DEM.ACC.SG-EMP including
'And these fools ... (not) recognizing ... all ... **If** possessions on the body **are** not **lacking to them** in any way, [...]'

(B24b3; verse; [5¦8]×4 + [8¦8¦5])

9.3.5 TB √*re(-sk)*- 'flow'

In example (9.114), *ysāra* '(drops of) blood' is the subject of the intransitive verb *reske«ṃ»*- 'X flow.' This verb accompanies the first-person singular PC *-ñ*, which represents either the possessor of the subject or the IO (source) of the verb.

(9.114) [TB] FUNCTION: possessor of an intransitive subject or IO (source)

/// *wartto yne-mane* ¦ ***reske«ṃ»-ñ*** *ysār-a* :
forest go-PTCP flow.NPST.ACT.3PL-1SG blood-PL
'... while walking into the forest, (drops of) blood **are running from me** ...'

(B90a6; trans. based on CEToM; verse; [7¦7¦4] × 4[?])

9.3.6 TB √*lik(ā)*- 'wash'

The following example (9.115), containing *laikontär*- 'may X be washed,' is also ambiguous. The first-person singular PC *-ñ* in this example represents either the inalienable possessor of the verb's subject *käntwaṣṣana yāmornta* 'deeds related to speeches' or the possessor of the verb's external argument *ce yāmorsa* 'by this deed.'

(9.115) [TB] FUNCTION: possessor of an intransitive subject or possessor of an external argument

takarṣkñe-sa nätkausa ¦ *kᵤce palamai-c* *päla-lyu* :
belief-PERL hold.off.PTCP.F.NOM.PL REL praise.PST.MID.1SG-2SG praise-GDV.M.VOC.SG

ce *yā*[b6]*mor-sa* ***laikontär-ñ*** ¦ *käntwa-ṣṣana* *yāmor-nta* :
DEM.ACC.SG deed-PERL wash.OPT.MID.3PL-1SG tongue-ADJZ.F.PL deed-PL

'As I, pressed by faith, have praised you, O praiseworthy one, [25a] **may my** deeds of speeches **be washed** by this deed! [25b]' (B241b6; verse; [7¦7]×4)[46]

46. Thomas (1957: 172): "Weil ich, auf Gläubigkeit gestützt, dich gepriesen habe, o [du] zu Preisender, möchten mir durch diese Tat [meine] Zungensünden abgewaschen werden" (followed by Schmidt 1974: 247).

A

A 2 a5 56
A 2 b6 59
A 7 a5 311
A 8 b5 16
A 8 b6 17
A 10 b6 51
A 11 a5 291
A 11 b6 . . . . . 74, 182, 218
A 13 a2 . . . . . 171, 219
A 14 b2 . . . . . 44, 53
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A 20 b3 43
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A 56 a1 . . . . . 14, 23
A 58 b3 . . . . . 122, 233
A 59 b2 49
A 61 a4 . . . . . 19, 24
A 63 a3 197
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A 64 b1 277
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A 79 a3 45
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A 92 a5 . . . . . 48, 159
A 95 a5 161
A 95 b4 160
A 99 a3 55
A 101 b5 43
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