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Traces of language contact in Niya Prakrit: Bactrian and other foreign elements

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Traces of language contact in Niya Prakrit

Bactrian and other foreign elements

Proefschrift

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(<https://idp.bl.uk/collection/D0BC8167E5AD420898F7450A78CEA501/?return=%2Fcollection%2F%3Fpage%3D3%26term%3DNiya%2B6%2Bnovember>)

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<i>soṃstaṃni</i> ‘trousers’	261
<i>sotira</i> , a title	520
<i>stora</i> ‘large animal, horse, camel’	97
<i>sp̄ara</i> / <i>sp̄ura</i> ‘full, completely’	100
<i>sp̄aṣa</i> ‘watching, guarding’	179
<i>harga</i> ‘dues, tax’	181
<i>hastama</i> ‘quarrel, dispute’	210
<i>hinaṣha</i> ‘army commander’	230

TEXT SIGLA

Gāndhārī texts

Texts written in Gāndhārī (including Niya Prakrit) are cited from Baums & Glass (2002b–). CKC stands for “Corpus of Kharoṣṭhī Coins”, CKD for “Corpus of Kharoṣṭhī Documents”, CKI for “Corpus of Kharoṣṭhī Inscriptions”, and CKM for “Corpus of Kharoṣṭhī Manuscripts”. In the case of literary texts and the Aśokan inscriptions, the following sigla are additionally employed (again following Baums and Glass):

Av ^{L1}	Avadānas from British Library fragment 1 (Lenz 2010) = CKM 1.
Av ^{L6}	Avadānas from British Library fragment 16 + 25 (Lenz 2003) = CKM 18 + 27.
BC 4	Bajaur fragment 4 (Schlosser 2022) = CKM 267.
BC 6	Bajaur fragment 6 (Schlosser 2022) = CKM 269.
BC 11	Bajaur fragment 11 (Schlosser 2022) = CKM 274.
DHP ^K	Khotan Dharmapada (Brough 1962) = CKM 77–82.
DHP ^{SP}	Dharmapada from Split collection fragment 3 (Falk 2015a) = CKM 369.
MĀN	Aśokan inscriptions discovered at Mānsehrā (Hultzsich 1925) = CKI 16–28
Nird ^{L2}	Nirdeśa from British Library fragments 7, 9, 13, and 18 (Baums 2009) = CKM 9; 11; 15; 20.
SĀ ^{s1}	Saṃyuktāgama sūtras from Senior fragment 5 (Glass 2007) = CKM 237.
SĀ ^{s5}	Saṃyuktāgama sūtras from Senior fragment 19 (Lee 2009) = CKM 251.
SHĀH	Aśokan inscriptions discovered at Shāhbāzgarhī (Hultzsich 1925) = CKI 1–14.

Bactrian texts

For administrative documents, letters, and Buddhist texts written on leather, parchment, cloth, wood, and birch bark, I use the signatures assigned to these documents by Sims-Williams. See the catalogues of BD I² (10–21), BD II (17–34), BD III (12–31), and, for more recently published documents, SCBD (9) and Sims-Williams (2022–23). For other types of texts (mostly inscriptions), I adopt the following sigla:

Ayrtam	Ayrtam inscription (Sims-Williams fthc.).
DilT ₅	Fragment 5 (<i>olim</i> 4) from Dilberjin Tepe (Davary 1982: 131–133; 2023: 40–45).
DN ₁	The monolingual Bactrian inscription from Dasht-e Nawur (Sims-Williams & Cribb 1995–96: 95f.; cf. recently also Halfmann et al. 2024 <i>contra</i> Palunčić, Palunčić & Maharaj 2023: 337–350).
h ₄	Hephthalite fragment 4 (Sims-Williams 2006 with ref.; pictures at https://turfan.bbaw.de/dta/h/images/h4_seite1.jpg).
h ₅	Hephthalite fragment 5 (Sims-Williams 2006 with ref.; pictures at https://turfan.bbaw.de/dta/h/images/h5h6_seite1.jpg).
h ₈	Hephthalite fragment 8 (Sims-Williams 2004b).
M 1224	Manichaean Bactrian fragment (Sims-Williams 2009a).
NPlate	Inscription on a silver plate from Kanīška's rule (Sims-Williams 2015).
Rab.	Rabatak inscription (Sims-Williams 2008c: 2012b: 77f.).
SK ₄ A	Great Surkh Kotal inscription version A (Davary 1982: 53–64; Sims-Williams 2012b: 78f.).
SK ₄ B	Great Surkh Kotal inscription version B (Davary 1982: 53–64; Sims-Williams 2012b: 78f.).
SK ₄ M	Great Surkh Kotal inscription version M (= Monolith) (Davary 1982: 53–64; Sims-Williams 2012b: 78f.).
TiS	Inscription from Tang-i-Safedak (Sims-Williams & Lee 2003).
Ur ₁	Inscription from Uruzgan 1 (Davary 1982: 68).
Ur ₂	Inscription from Uruzgan 2 (Davary 1982: 69).

Texts in Middle Iranian languages other than Bactrian

Texts in Manichaean script not included among the abbreviations below are referred to with the M-numbers of Boyce's (1960) catalogue. See also the Digitales Turfan-Archiv (https://turfan.bbaw.de/dta/m/dta_m_index.htm).

AN	Āzandnāmē (MSogd.; Benkato 2017).
BBB	Bet- und Beichtbuch (MMP; MParth.; MSogd.; Henning 1937; Sims-Williams, Sheldon & Gulácsi 2022).
ŠKZ	Trilingual inscription of Shapur I at Ka'ba-i Zardušt (MP; Parth.; Gr.; Huyse 1999).
Z	Book of Zambasta (Khot.; Emmerick 1968; Sims-Williams 2022: 109–310).

(Vedic) Sanskrit texts

AVP	Atharvaveda Paippalāda	KS	Kāṭhakaśaṃhitā
Hcar.	Harṣacarita	Mvy.	Mahāvvyutpatti
Kir.	Kirātārjunīya	RV	Ṛgveda

Avestan texts

A	Āfrīnagān	Y	Yasna
N	Nērangestān	Yt	Yasht
Vd	Vīdēvdād		

Tocharian texts

Texts composed in Tocharian A and B are cited from the online database CEToM (“Comprehensive Edition of Tocharian Manuscripts”). For the sigla used, see the list of manuscripts at <https://cetom.univie.ac.at/?manuscripts>.

ABBREVIATIONS AND SYMBOLS

Grammatical abbreviations

ABL.	ablative case	INTR.	intransitive
ABS.	absolute	MASC.	masculine
ACC.	accusative case	NEUT.	neuter
ADJ.	adjective	NOM.	nominative case
ADV.	adverb	LOC.	locative case
COMP.	compound	OBL.	oblique case
DIR.	direct case	OPT.	optative
DOM	differential object marking	PASS.	passive
FEM.	feminine	PERF.	perfect tense
FUT.	future tense	PL.	plural
GEN.	genitive case	PLPF.	pluperfect tense
GERV.	gerundive	PRET.	preterite tense
IMP.	imperative	PRES.	present tense
INF.	infinitive	PST.PTCP.	past participle
INJ.	injunctive	SG.	singular
INS.	instrumental case	SUBJ.	subjunctive
		TR.	transitive

Other abbreviations

emph.	emphasis	PN	personal name
et.	etymology	ref.	references
doc.	document	tr.	translation
LW	loanword	v.	verse
p.c.	personal communication	v.l.	<i>varia lectio</i> (variant reading)

Languages

N.B. 1: For the notation of Old and (Early) Middle Chinese, Baxter and Sagart's (2014) system has been adopted.

N.B. 2: For hypothetical Old Iranian forms reconstructed on the basis of lexemes in one or more Middle and/or New Iranian languages, I follow the notation of Sims-Williams in the glossary of his BD II (179–286); for roots and words in Proto-Iranian (= the common ancestor of all Iranian languages), I use the notation of Dragoni (2023, see p. 16), with **č* corresponding to OIr. **s* and **f* corresponding to OIr. **z* (on which cf. also Peyrot, Dragoni & Bernard 2022: 417f.).

Ap.	Apabhraṃśa	Māh.	Māhārāṣṭrī Prakrit
Aram.	Aramaic	MBactr.	Manichaean
Arm.	Armenian		Bactrian
Av.	Avestan	Med.	Median
Bab.	Babylonian	MIA	Middle Indo-Aryan
Bactr.	Bactrian	MIr.	Middle Iranian
Bal.	Balochi	MMP	Manichaean
BHS	Buddhist Hybrid		Middle Persian
	Sanskrit	MP	Middle Persian
BSkt.	Buddhist Sanskrit	MSogd.	Manichaean
BSogd.	Buddhist Sogdian		Sogdian
Chin.	Chinese	NIA	New Indo-Aryan
CSogd.	Christian Sogdian	NIr.	New Iranian
D.	Digoron	Niya	Niya Prakrit
Elam.	Elamite	NP	New Persian
(E)MC	(Early) Middle	OAv.	Old Avestan
	Chinese	OC	Old Chinese
Gandh.	Gāndhārī	OIA	Old Indo-Aryan
GBactr.	Graeco-Bactrian	OIr.	Old Iranian
Gr.	(Ancient) Greek	OP	Old Persian
Hebr.	Hebrew	Oss.	Ossetic
I.	Iron	OT	Old Turkic
IA	Indo-Aryan	Parth.	Parthian
Ir.	Iranian	Pers.	Persian
Khot.	Khotanese	PIE	Proto-Indo-
Khwar.	Khwarezmian		European
Kurd.	Kurdish	PIIr.	Proto-Indo-Iranian

Plr.	Proto-Iranian	TA	Tocharian A
Pkt.	Prakrit	TB	Tocharian B
Psht.	Pashto	Tib.	Tibetan
PToch.	Proto-Tocharian	Tumsh.	Tumshuqese
Skt.	Sanskrit	Ved.	Vedic
Sogd.	Sogdian	YAv.	Young Avestan
Syr.	Syriac	ZMP	Zoroastrian
Śaur.	Śaurasenī Prakrit		Middle Persian

Symbols

→	borrowed into
←	– borrowed from
	– yielded through derivation from
/x/	phonological form
<x>	– written form
	– letters secondarily added by the scribe in Bactrian
<*x>	editorial addition of omitted text in Gāndhārī
(x)	– letters or words omitted by the scribe in Bactrian
	– restorations of missing text in Tocharian
	– additions to the translation for ease of comprehension
(*x)	editorial restoration of lost text in Gāndhārī
[x]	– phonetic form
	– uncertain reading of text in Gāndhārī
	– restorations of missing text in Bactrian/Khotanese and translations from these languages
	– damaged, but reasonably certain reading of text in Tocharian
	– editorial addition to a citation from the secondary literature
x̣	uncertain reading of text in Bactrian
///	textual loss at left or right edge of support
*x	reconstructed form (= diachronic)
x*	inferred form (= synchronic)
**x	expected, but wrong form
>	developed into
<	developed from
×	crossed with
~	corresponding to; translated as
/_	phonological context of a sound law

#	word boundary
+x	conjectured form in Vedic
√	verbal root
C	cover symbol for consonants
N	cover symbol for nasals
V	cover symbol for vowels

CHAPTER 1 Introduction

This monograph examines traces of language contact in Niya Prakrit. The focus lies on Bactrian influence, but I will also study contact with other languages. The present chapter introduces the topic of foreign influence on Niya Prakrit (§1.1); outlines the research questions to be addressed (§1.2); and presents the languages studied in their historical context (§§1.3–1.5).

1.1 Foreign influence on Niya Prakrit

In the 3rd and 4th centuries AD, in oases on the southern edge of the Tarim Basin in NW China, scribes in the Shanshan kingdom were relentlessly writing accounts, letters, and other official documents. Remarkably, the language used was neither their own nor Chinese; they used an Indian language and Kharoṣṭhī, an Indian script. We know this because archaeologists have, since the early 1900s, discovered hundreds of documents which reveal that a dialect of Gāndhārī, a Middle Indo-Aryan (MIA) language related to Sanskrit, spread from Pakistan to the deserts of Xinjiang to function as “a language not of literature, but of affairs” (Thomas 1921: 278). This dialect of Gāndhārī was baptised Niya Prakrit after the find spot of most documents.¹

Even a cursory glance shows that Niya Prakrit has been subject to the effects of linguistic contact: its phonology is marked by “puzzling phonetic peculiarities”, not all of them explainable by language-internal sound changes, while its vocabulary is, although containing “official designations familiar from ancient Indian usage” and some “purely Indian names”, interspersed with foreign words, e.g. “some of the titles borne by officials”.²

1.1.1 Iranian loanwords

The presence of Iranian loanwords had been apparent even before Burrow (1934; 1935a) devoted two articles to the topic (see also §3.1.2). In his view, many loanwords “had been taken into the Prakrit in N.W. India before it came to be used in Central Asia” (LKD: vii). For reasons to be given in §4.2, I accept Burrow’s view, as do Weber (1997: 31) and Wright (1998: 237). However, “Iranian” is not one language but a language family. Before asking *where*

¹ For convenience, I will sometimes use “Niya” as a shorthand for “Niya Prakrit” (following Jamison 2000: 65 fn. 16).

² The quotations are from Stein (1903: 399f.).

these loanwords were adopted, one should first investigate *from which language(s)* they were borrowed. Yet, the latter question has only rarely been addressed (Weber 1997 is one important exception).

The past decades have nonetheless seen progress on this point, as it became clear that one source of Iranian loanwords in Niya Prakrit is Bactrian, a Middle Iranian language once spoken in present-day Afghanistan but hardly known when Burrow wrote his articles (cf. §1.4.1). Three by now familiar examples of Bactrian loans are (i) *aviṃdama* ‘fine, recompense’ ← αβινδαμο /əvindāmə/; (ii) *kṣuna* ‘date, reign, regnal year’ ← χρουνο /xšunə/; and (iii) *lastana* ‘dispute, lawsuit’ ← λαστανο /lāstānə/ (BD II: 184; 281; 226; §3.2.1 s.vv.).

Even so, Bactrian loanwords in Niya Prakrit have not yet been explored in depth, with the result that we still do not know how many previously known Iranian loans came from Bactrian and if there are as yet unrecognised loanwords from this language.

Many more questions remain largely unanswered. For instance, were the loanwords all adopted together, or can we stratify them? Do these loanwords come from more than one dialect of Bactrian? Is there evidence that these loanwords were not restricted to Niya Prakrit but also present in other varieties of Gāndhārī, perhaps even other Indo-Aryan languages? What information do these loanwords provide on the pronunciation of Bactrian and other donor languages? To what extent and how were loanwords adapted to the inflectional system of Niya Prakrit? Which semantic domains are covered by the Bactrian loanwords? Do loans from other Iranian languages span different domains?

1.1.2 Other types of Iranian influence

Depending on the type and intensity of the contact situation, loanwords are not the only type of borrowing possible: languages can also adopt foreign phonemes and morphemes; they can calque words from another language (loan translations); and their syntax can be influenced by corresponding patterns in neighbouring languages.

Niya Prakrit is no exception: Burrow (1935a: 789f.) already discovered “Iranian idioms in Niya Prakrit”. However, Burrow presented his discovery only as an appendix to his work on the loanwords, and there have hardly been any subsequent studies on the non-lexical influence of Iranian

languages on Niya Prakrit (see further §5.1.2).³ Consequently, we are even less well informed on this topic than we are on the loanwords. Which grammatical elements were adopted? Was the donor language Bactrian or another Iranian language? Which mechanism is involved: substrate interference or borrowing from a prestige language?

1.1.3 A more controversial hypothesis: the Shanshan substrate

In addition to the Iranian influence, scholars have hypothesised substrate interference from the undocumented language of the local inhabitants of the Shanshan kingdom to account for (i) a corpus of words and personal names in Niya Prakrit neither inherited nor immediately recognisable as Iranian loans and (ii) some foreign-looking grammatical features.

Burrow (1935b; LKD: vii–ix) proposed that the language spoken by the Shanshan people was an otherwise unknown third Tocharian language, nowadays referred to as “Tocharian C”. He tried to substantiate this claim with some loan etymologies and a phonological examination of the supposedly non-Iranian loanwords and foreign personal names; the latter would, amongst other things, prove that the substrate language was, like Tocharian, “devoid of voiced stops and aspirates”.⁴

Were Burrow’s theory correct, it would not only have repercussions for the linguistic interpretation of Niya Prakrit but, for instance, also for our understanding of “the prehistorical migrations of the Tocharians” (Peyrot 2013: 2; cf. also Mallory 2015). However, despite its possible significance, Burrow’s hypothesis has “not prompted further study” (Hansen 2012: 44), and a re-examination in light of the continued advances in Gāndhārī and Tocharian studies since the 1930s is long overdue.⁵

In Schoubben (2021), I argued that some Niya Prakrit words for which Burrow suggested a Tocharian etymology were unrecognised loans from

³ A recent exception is Barchi & Peschl (2022), on which see §5.4.

⁴ According to Thomas (1925; 1926b; 1927; 1944), the assumed substrate language would have been a Tibeto-Burman language distinct from Old Tibetan, while Lüders (1940b: 34f.) thought it to be “eine ostasiatische Sprache”, historically related to, but still different from, Chinese. The evidence for either theory remains weak, and Tremblay (2001: 35 fn. 54) seems to have been the only scholar to have approved of them in recent decades. Therefore, I will not discuss these alternative substrate theories.

⁵ The only in-depth review of Burrow’s argument is an unpublished handout by Banti (2000); see §6.1.1.

Bactrian. Thus, the question arises whether substrate influence from the undocumented Shanshan language—be it “Tocharian C” or something else—has been overestimated and the generally acknowledged influence from Bactrian and other Iranian languages on Niya Prakrit not yet appreciated to the extent which it deserves.

1.1.4 The historical context behind the linguistic contact

As foreign influence on a language does not come about in a vacuum, there is a historical context behind every linguistic contact. Yet, the historical context responsible for the Bactrian and other influences on Niya Prakrit is another underexplored topic. Here are three examples of issues needing further study: (i) were the loans adopted in a specific sociolinguistic setting; (ii) did speakers of Bactrian transfer words and grammatical features of their native language to Niya Prakrit because they had only imperfectly learnt the latter, or was the prestige of Bactrian responsible for the borrowings; (iii) do these loanwords support the idea of a Kuṣāṇa domination over the Tarim Basin (§5.4.7, fn. 852; Chapter 8), or are they consistent with different scenarios of how Niya Prakrit spread to the Tarim Basin?

1.2 Research questions and aims

In light of the above, this monograph seeks to address four overarching research questions:

- (i) Which Iranian languages contributed loanwords to Niya Prakrit, and can we identify more loanwords, especially Bactrian ones?
- (ii) Was Iranian influence limited to loanwords, or did Iranian languages, in particular Bactrian, also exert a structural impact on Niya Prakrit’s grammar?
- (iii) Is the assumption of Tocharian substrate influence on Niya Prakrit justified?
- (iv) Which sociolinguistic scenario accounts best for the foreign influence on Niya Prakrit?

For each question, I shall now briefly elaborate on the exact topics studied, their wider relevance, and the methods applied to study them. The introductions to the pertinent chapter(s) provide more detailed discussions on these matters. Here and throughout the book, the way of presentation is data-driven rather than theory-heavy: concepts and methodologies from

(historical) contact linguistics are applied, but the use of overly technical terminology is avoided to ensure accessibility to a wider audience.⁶

1.2.1 Lexical influence from Bactrian and other Iranian languages

The first research question has led me to investigate the lexical influence of Bactrian and other Iranian languages on Niya Prakrit. First, I aimed to compile an up-to-date corpus of the Iranian loanwords in Niya Prakrit in which the words discussed are classified according to their most likely donor language and the reliability of the etymology (Chapter 3). Secondly, I examined the thus accumulated material to determine which Iranian languages have been in contact with Niya Prakrit; how loanwords were phonologically and morphologically integrated; and which semantic domains are covered by them (Chapter 4). Both types of research require one to analyse Niya Prakrit and Bactrian words phonologically—not always an easy task given the deficiencies of the scripts used to write these languages. Therefore, the investigation starts with an introductory chapter on the phonology of both Niya Prakrit and Bactrian (Chapter 2).

When compiling the loanword corpus, I first tried to collect all Niya Prakrit words for which an Iranian source had already been proposed. For each word, I examined the arguments to consider it a loanword and not an inherited lexeme; whether its semantics were safely deducible from the context; whether they matched the meaning of the proposed donor form; and whether there were any phonological problems with the etymology, e.g. an unusual and unparalleled sound correspondence. Based on this examination, I rejected 24 unconvincing proposals (§3.7). The remaining proposals were divided into four categories depending on their reliability, i.e. “secure”, “plausible”, “arguable”, and “tentative” etymologies (see §3.1.7). With these proposals, I also aimed at identifying the most likely donor language by investigating whether (i) the etymology requires the donor form to have undergone a sound change specific to one relevant Iranian language or (ii) the semantics fit only one particular donor form because its cognates have a different meaning.⁷

⁶ For discussions on the application of contact linguistic theory to corpus languages (both regarding loanwords and structural influence), see e.g. Langslow (2002); Adams (2003: 1–110); Mullen (2013: 3–143); McDonald (2015: 36–62); Bianconi (2019: 82–95); Noonan (2019: 8–20); Boyd (2021: 48–113); Dickey (2023: 1–19); Meyer (2023: 215–235).

⁷ For the classification system which resulted from this procedure, see §3.1.4.

Another aim of my research was to enlarge the corpus with newly suggested Iranian loanwords, especially Bactrian ones. Here, the first step was to draft a list of all etymologically obscure words in Niya Prakrit and lexemes whose currently assumed derivation from Old-Indo-Aryan (OIA) requires irregular phonological changes and/or ad hoc semantic developments. Ideally, the next step would then have been to look in the glossary of Sims-Williams' edition of the Bactrian documents (BD II: 179–286) and in texts not excerpted in this glossary to find Bactrian words (i) which have a clear Iranian etymology; (ii) whose semantics are transparent; (iii) which form a semantic fit with a probably not inherited Niya Prakrit word; and (iv) which also phonologically match with the same Niya word. If one finds a word satisfying all four criteria, one can be confident to have discovered a possible Bactrian loanword in Niya Prakrit, although one still has to investigate if the Niya word could also be a loan from a cognate form in another Iranian language (cf. *supra*).

Regrettably, strictly following this methodology leads one into a blind alley: the Bactrian text corpus may have been significantly enlarged over the past decades (cf. §§1.4.1–1.4.2), but we nonetheless know only a tiny proportion of the vocabulary of this language. For this reason, looking at the words currently available in Sims-Williams' glossary and elsewhere does not yield much more than the occasional minor addition to the already established loanword corpus. Did we know as much about Bactrian vocabulary as we do about the lexicon of languages like Sanskrit or Middle Persian, it would probably be far less challenging to discover further Bactrian loanwords in Niya Prakrit.

As it would be difficult to make much progress otherwise, I also reconstruct possible Bactrian sources of Niya Prakrit words by applying Bactrian sound changes to word forms and morphemes known from other Old and Middle Iranian languages. For a fuller justification of this method, see §3.1.6.⁸ Needless to say, loan etymologies whereby the source form is not actually attested are less reliable than those where the source does occur,

⁸ A not strictly academic parallel is provided by an anecdote from the life of J.R.R. Tolkien (taken from Garth 2003: 16). When as a young school boy Tolkien wanted to address the annual Latin debate at King Edward's School (Birmingham) in Gothic, the fact that Gothic is not so well attested obliged him to apply his knowledge of Gothic historical phonology to cognate forms in other Old Germanic languages to reconstruct unrecorded Gothic words!

and I have taken account of this point when classifying the etymologies according to their reliability (see §3.1.7).

As a corollary of my investigations into Bactrian and other Iranian loanwords in Niya Prakrit, it has additionally been possible to clarify the semantics of some words, correct a few erroneous readings, and refine the translation and interpretation of certain passages.

1.2.2 Non-lexical influence from Bactrian

Whether, as asked in the second research question, there is also evidence for grammatical borrowings from Bactrian will be dealt with in Chapter 5, which is a collection of case studies. One reason to study this topic has been given in §1.1.2: it is an underexplored research terrain because previous studies have been concerned almost exclusively with lexical influence from Bactrian and other Iranian languages. In addition, looking at grammatical borrowings is relevant when trying to determine the type and intensity of the contact between Bactrian and Niya Prakrit because the combination of lexical borrowings and structural influence typically points to more than casual contact.

The investigation in Chapter 5 will start with two appurtenance suffixes, which I propose to have been borrowed from Bactrian into Niya Prakrit. Here, the methodology is largely the same as with the loanwords. For a borrowing scenario to be plausible, four requirements need to be met: (i) the Niya suffix cannot be inherited from OIA; (ii) this suffix is especially frequent in loanwords; (iii) the proposed Bactrian source descends from a clear Old Iranian preform; and (iv) the Niya suffix and its suggested donor form match both formally and semantically.

The remainder of Chapter 5 will investigate the possibility that Bactrian exerted a structural influence on the morphosyntax of reciprocals and reflexives in Niya Prakrit, on the one hand, and preterite formations, on the other. The methodology follows again a similar pattern as with the lexical influence. I begin by synchronically examining the morphosyntax of the relevant grammatical item in Niya Prakrit. In so far as possible, I then compare other MIA languages to try to determine which of the morphosyntactic features observed are inherited and which could be due to contact. Finally, I draw a comparison with a corresponding formation in Bactrian to see if there are significant parallels that could point to Bactrian influence on Niya Prakrit. When necessary, this comparison is preceded by a synchronic study of the Bactrian formation.

1.2.3 A re-examination of the “Tocharian C” substrate

In keeping with the third research question, Chapter 6 re-examines Burrow’s hypothesis of a “Tocharian C” substrate in Niya Prakrit (§1.1.3). This chapter takes the form of a critical review of (I hope) all arguments which have been adduced in support of a Tocharian substrate. Commenting on these arguments one by one, I try to show that hardly any of them stands up to closer scrutiny. Complementing the findings of Chapters 3–5, I also argue that some linguistic features of Niya Prakrit that have been ascribed to the hypothetical “Tocharian C” could instead come from an attested language already known to have influenced Niya Prakrit, i.e. Bactrian.

1.2.4 A sociolinguistic scenario

To address the fourth research question, Chapter 7 briefly studies against which historical background the foreign influence on Niya Prakrit is best understood. The aim is to find out when, why, and in which circumstances the Bactrian (and other foreign) elements entered Niya Prakrit.

The examination will proceed in three steps. First, I will take stock of the evidence for foreign influence on Niya Prakrit assembled in other chapters. In a second step, I shall use Thomason and Kaufman’s oft-cited borrowing scale (1988: 74–76) to determine the intensity of contact required to result in the Bactrian influence visible in Niya Prakrit. The third step will consist of finding a parallel, better-researched example of language contact in the ancient world that can inform us about the type of contact between Bactrian and Niya Prakrit.

Proceeding in this way, I shall argue that we should distinguish between two levels of contact. On the one hand, there seems to have been casual contact between speakers of Bactrian and most, perhaps all, dialects of Gāndhārī because of the geographical proximity between the two languages and the sociopolitical influence of the Kuṣāṇa empire on Gandhāra. This influence may, for instance, be responsible for the Bactrian loanwords which Niya Prakrit shares with South Asian Gāndhārī, sometimes also with other Indo-Aryan languages.

The second level of contact—seemingly more intense—would be that between Bactrian and Niya Prakrit itself. Based on a comparison with the contact between Old Persian and Achaemenid Official Aramaic, I shall hypothesise a scenario whereby speakers of Kuṣāṇa Bactrian adopted the immediate ancestor of Niya Prakrit as a chancellery language; this type of

contact would explain administrative and economic loanwords not found in other variants of Gāndhārī and traces of structural influence exerted by Bactrian on Niya Prakrit.

It should be obvious that the sociolinguistic scenario to be proposed is a hypothesis that will need further testing in subsequent research. Yet, even when the sociolinguistic scenario will need revision, it illustrates how a strictly linguistic and philological examination can contribute to the wider historical study of Gandhāra, Bactria, and the Tarim Basin.

1.3 Niya Prakrit and other varieties of Gāndhārī

The rest of this chapter introduces in somewhat more detail Niya Prakrit (§1.3), Bactrian (§1.4), and other languages that (may) have been in contact with Niya Prakrit, either in Gandhāra or the Tarim Basin (§1.5).

1.3.1 Niya Prakrit

Niya Prakrit is the best-attested variety of Central Asian Gāndhārī. It is alternatively known as Niya Gāndhārī, Kroraina Prakrit, or Shanshan Prakrit.⁹ The chancellery idiom of the Shanshan kingdom at the southern edge of the Tarim Basin,¹⁰ Niya Prakrit is documented in more than 900 administrative documents in Kharoṣṭhī script written on wood and leather and dating back to the 3rd–4th centuries AD.¹¹

Most Niya documents were discovered by the explorer-cum-philologist Aurel Stein during four archaeological expeditions to the southern part of the Tarim Basin (1900–01; 1906–07; 1913–14; 1930). Editing them required, as Stein anticipated (1903: 398; 1907: 363), “much time and patient labour”; they were eventually published between 1920 and 1929 in three volumes by Augustin-M. Boyer, Émile Senart, Edward J. Rapson, and Peter S. Noble (Boyer et al. 1920–29 = KD).¹² Rapson’s student Thomas Burrow contributed

⁹ As pointed out by Jamison (2000: 64 fn. 7), Fussman (1989: 440; cf. also 2012: 191 fn. 5) went too far in claiming that Niya Prakrit should not be considered a variety of Gāndhārī due to the high amount of foreign influence.

¹⁰ Some of the more recent studies on the history and Buddhist culture of the Shanshan kingdom are Atwood (1991); Padwa (2007); Hansen (2004; 2012: 25–55); van Schaik (2014); Høisæter (2020; 2023); and Jiang & Loukota (2023).

¹¹ For the documents on leather, see Stein (1907: 344–347), and for the date of the Niya documents, cf. Høisæter (2020: 91–103).

¹² Before the publication of the edition, preliminary results had been made known in Rapson (1905); Boyer (1905); and Boyer, Rapson & Senart (1918).

a grammar of Niya Prakrit (LKD), an edition of additional documents (1937), and a translation of the whole corpus (TKD). Nowadays, the whole corpus, including more recently discovered documents, is online available as Baums & Glass (2002b–).

1.3.2 Central Asian Gāndhārī

The spread of the Gāndhārī language from its heartland in present-day Pakistan to the Tarim Basin in NW China is “the result of the unifying force of the vast Kuṣāṇa empire, in which Gāndhārī served both as a vehicle for the Buddhist message and as an administrative language” (Salomon 2002: 120; cf. also Salomon 2011b). Nevertheless, the exact relationship between the various forms of Central Asian Gāndhārī and their ancestor dialects remain hard to establish due to the scantiness of the available evidence (Burrow 1936; Caillat 1992; Kogan 2017).

The Khotan area was the scene of the discovery of arguably the most famous text in Central Asian Gāndhārī, i.e. the *Khotan Dharmapada*, a local version of a Buddhist verse collection partially preserved on a birchbark manuscript discovered in 1892 by Jules-Léon Dutreuil de Rhins (Brough 1962). From Khotan, there is further one, possibly two, administrative documents (CKD 661 and perhaps 843) in a regional variety of Gāndhārī called Khotan Prakrit.¹³ Likewise often associated with Khotan are the Sino-Kharoṣṭhī coins, bilingual coins in Gāndhārī and Chinese the earliest of which date back to the 1st century AD (cf. now Cribb 2023); such coins have nevertheless also been discovered in places like Kashgar and Kuča (Cribb 2020).

The territory of the ancient Shanshan kingdom saw not only the discovery of the Niya documents but also of a few other Gāndhārī texts: in Endere, a stone inscription has been discovered (CKI 363; Salomon 1999b); two of the famous frescos at Miran are accompanied by inscriptions (CKI 443; 445; Boyer 1911: 414–418); and an inscribed piece of silk hails from the same find spot (CKM 406; Boyer 1911: 418–422).

At the northern fringe of the Tarim Basin, a few literary fragments were discovered now housed in Paris as part of the Pelliot collection (CKM 90–97;

¹³ On CKD 661, see §5.4.7 and Appendix 3 (p. 525). Based on evidence from the *Prophecy of the Li Country* (Emmerick 1967), Yoshida (*apud* de la Vaissière 2014: 87 fn. 14) tentatively dates this document to ca. 320 AD. For a preliminary study of CKD 843, see Duan (2013b).

Salomon 1998a). In addition, there are some administrative documents in Kuča Prakrit, including bilinguals with Tocharian B on the other side (CKD 829–838; 844–845; 870–877; 883; 891–896). Their exact dating and interpretation remain to be established with certainty.¹⁴

1.3.3 South Asian Gāndhārī

Central Asian Gāndhārī is to be distinguished from, yet closely related to South Asian Gāndhārī. As the vernacular Middle-Indo-Aryan (MIA) language spoken in the Peshawar valley (Pakistan), the latter form of Gāndhārī is attested for more than six centuries: from the 3rd century BC onwards in the form of the Aśokan Rock Edicts at Shāhbāzgarhī (SHĀH) and Mānsehrā (MĀN) until the 3rd or 4th century AD when Gāndhārī got so much Sanskritised as to become Sanskrit eventually (Strauch 2012).

As the result of spectacular manuscript finds over the past decades,¹⁵ the present-day corpus consists not only of the long-known coin legends and inscriptions but also of a substantial corpus of Buddhist manuscripts on birch bark and palm leaf.¹⁶ In addition, there are two administrative documents comparable in form and function to the Niya documents: a silk fragment from the Gilgit area (CKM 430; Falk 2021; Schoubben fthc.) and a loan contract preserved as Bajaur collection fragment 15 (CKM 278; to be published by Gudrun Melzer).¹⁷

¹⁴ See mainly Schmidt (2001) and Ching (2013). Some Kuča Prakrit sources from the Pelliot collection remain unpublished. An offshoot of the Central Asian Gāndhārī writing tradition is seen in a small corpus of fragments in what has been named “Formal Kharoṣṭhī”. While still largely undeciphered, this script may write an Iranian language related to Khotanese and Tumshuqese (Dragoni, Schoubben & Peyrot 2020 *contra* Schmidt 2018).

¹⁵ Cf. e.g. Salomon (1999a; 2003); Strauch (2008); Falk (2011); Falk & Strauch (2014).

¹⁶ For the historical development of the writing materials and formats used, cf. e.g. Baums (2014; 2021). For an introduction to Gāndhārī literacy, with a translation of selected fragments, see Salomon (2018).

¹⁷ For preliminary remarks on the Bajaur loan contract, see Strauch (2008: 127) and Falk & Strauch (2014: 72). There is also one specimen of a monastic ledger in Gāndhārī, published in Allon (2019).

1.4 Bactrian

1.4.1 The language

Bactrian is the name given by Henning (1960: 47f. = 1977 II: 545f.) to the Middle Iranian language spoken in the region of ancient Bactria and neighbouring territories, approximately corresponding to present-day (northern) Afghanistan. The language is attested in documentary sources spanning most of the first millennium AD and mainly written in a modified form of the Greek script (see §2.2.1).¹⁸

Before the discovery of a substantial inscription at Surkh Kotal, there was only a small evidential basis to study Bactrian, the corpus being limited to coin legends.¹⁹ It took the discovery of the Rabatak inscription and a corpus of more than 150 administrative documents and letters in the 1990s before our knowledge of Bactrian grammar reached a standard comparable to that of some other Middle Iranian languages (cf. Sims-Williams 1997a; 2018).²⁰ Bactrian's vocabulary is still only imperfectly known (cf. §1.2.1; §3.1.6).²¹

1.4.2 The text corpus

The Bactrian corpus nowadays consists of legends on coins and seals; some longer inscriptions; administrative documents and letters; some fragments of Buddhist literature (BD II: 173–177; Sims-Williams 2010b: 204f.); the Hephthalite fragments from the Berlin Turfan collection (Sims-Williams 2004b); and a unique specimen of a Manichaean Bactrian folio written in an

¹⁸ For the Manichaean Bactrian fragment, see below. Falk (2023) has argued that the Issyk-Kushan script (also known as the “Unknown Script”) was also used to write Bactrian, whereas Bonmann et al. (2023) propose that the language recorded in this script is a previously unknown Middle Iranian language. As the conclusions of this book are not affected by it, I will leave this question aside here.

¹⁹ First publication of the Surkh Kotal inscription in Maricq (1958) and Benveniste (1961: 114–140). Synoptic edition in Davary (1982: 53–64), with English translation in Sims-Williams (2012b: 78f.).

²⁰ *Editio princeps* of the Rabatak inscription in Sims-Williams & Cribb (1995–96); more recent edition and translation in Sims-Williams (2008c; 2012b: 77f.). The documents have been edited by Sims-Williams in BD I–III. For their chronology, see Sims-Williams & de Blois (2018 = SCBD).

²¹ Julian Kreidl (Bloomington) is preparing a Bactrian-German dictionary and kindly put a preliminary version of this dictionary at my disposal.

adapted form of the Manichaean script (M 1224; Sims-Williams 2009a; 2011a).²²

The corpus is divided into two parts: an older part dating back to Kuṣāṇa times and written in a more archaic variant of the language, i.e. Kuṣāṇa Bactrian (1st–3rd cent. AD), and a more recent part composed in the linguistically more innovative but better-known post-Kuṣāṇa Bactrian language (3rd–9th cent. AD). The earliest longer text in Bactrian is DN₁, found in Dasht-e Nawur and dated to 105 AD (Halfmann et al. 2024: 7). The last tangible evidence of Bactrian literacy is the Tochi inscriptions (ITAB; ITSB; ITB), which are datable to the middle of the 9th century (SCBD: 85ff.). By then, Arabic had established itself as the new language of culture in the region (cf. Khan 2007).

1.4.3 The collateral tradition: Bactrian loans into other languages

Because of the prestige which the Bactrian language enjoyed during the Kuṣāṇa (1st–3rd cent. AD) and Hephthalite periods (5th–8th cent. AD), Bactrian words were not only borrowed into Gāndhārī, but also into (Buddhist) Sanskrit (Schoubben 2022b); Tocharian (Schwartz 1974; Tremblay 2005a: 435–437); Khotanese (Weber 1985); Sogdian (Sims-Williams 1996a: 51; 2004a: 541 fn. 8); Persian (Lurje & Yakubovich 2017); and Nuristani languages (Halfmann 2023).²³ Some of the established Bactrian loanwords in these languages do not occur in the currently available Bactrian texts, but they can be reconstructed based on words in other Old and Middle Iranian languages (see also §3.1.6). We can therefore speak of a Bactrian collateral tradition, comparable in significance, albeit less well researched than the Old Iranian *Nebenüberlieferung* in, for instance, Elamite and Aramaic and the Parthian one in Armenian.

1.5 Other languages in contact with Niya Prakrit

This section finally introduces which languages other than Bactrian (could) have been in contact with (the ancestor of) Niya Prakrit. The structure is at the same time chronological and geographical. First, I give an overview of languages in contact with Niya Prakrit during the prehistory of the language

²² One still hopes for an online edition of the currently available Bactrian materials, comparable to what Baums & Glass (2002b–) provide for Gāndhārī.

²³ For loanwords into Bactrian, cf. Sims-Williams (2002) and Gholami (2018).

in Gandhāra when various foreign people invaded this area.²⁴ These languages are Old Persian, Greek, “Indo-Scythian”, and Parthian. Secondly, I introduce languages that could have influenced Niya Prakrit in the Tarim Basin, viz. Khotanese, Tocharian A/B, Sogdian, and Chinese.

1.5.1 Contact languages in Gandhāra

The earliest identifiable stratum of loanwords in Niya Prakrit comes from Old Persian (cf. §4.2.2). These loanwords were borrowed by the ancestor of Niya Prakrit when the Achaemenid empire ruled over Gandhāra from the 6th until the 4th century BC (Vogelsang 1990; Ruffing 2021), and Aramaic literacy was introduced to the area (cf. §2.1.1).

From the 3rd to 1st century BC, the Graeco-Bactrians and Indo-Greeks left their mark on large parts of northern India (Mairs 2020). A part of their legacy is a number of Greek loanwords in Gāndhārī, some of them attested in Niya Prakrit as well (cf. §3.2.1 s.v. *kṣuna*; §3.2.2 s.v. *milima*; Appendix 1, p. 515).

Concurrently, other Iranian people started to invade Gandhāra and influence the local language and culture. First among them were the Indo-Scythians or Indic Śakas, who began to penetrate the South Asian subcontinent in the 2nd century BC and whose influence lasted in some parts of India until the 4th century AD (see e.g. Neelis 2007: 56–79). While their Middle Iranian language has not been put to writing, it has been argued to be closely related to Khotanese (Lüders 1913 = 1940a: 236–255) and to have left loanwords in Gāndhārī (e.g. KI: xx) and other Indo-Aryan languages, including Sanskrit (Burrow 1975). “Indo-Scythian” must thus also be taken into account as a possible donor language of loanwords in Niya Prakrit (cf. §4.2.7).²⁵

A second group of Iranians occupying parts of NW India were the Indo-Parthians (e.g. Fröhlich 2020). Their reign started at the beginning of the 1st century AD when Gondophares, their first king, declared independence from the Parthian empire. It lasted until the first half of the 3rd century AD. Although the Parthian heartland in present-day NE Iran and Turkmenistan was geographically remote from Gandhāra, one accordingly expects there

²⁴ For recent overviews of the various invasions and their role in the development of a Buddhist culture in the region, cf. Falk (2013b) and Albery (2020: 21ff.).

²⁵ But see §3.1.6 for the methodological problems faced when working with loanwords from reconstructed languages.

also to have been some Parthian influence on the predecessor of Niya Prakrit (cf. §4.2.4).

1.5.2 Contact languages in the Tarim Basin

Its spread to the Tarim Basin brought Niya Prakrit in contact with still other languages. In the southwestern part of the Tarim Basin, around the modern city of Khotan, a Middle Iranian language was spoken, which we now call Khotanese (sometimes also Khotan Saka), and which is documented by way of religious texts (Maggi 2009) and secular documents (e.g. Zhang 2016). We know from the Niya documents that the Shanshan kingdom frequently exchanged with the Khotan area (cf. Høisæter 2020: 357–363; 2023: 419). Therefore, Khotanese is one of the languages that can have contributed loanwords to Niya Prakrit (cf. §4.2.5).²⁶

In the northern part of the Tarim Basin, Tocharian A and B were spoken, two closely related Indo-European languages known from Buddhist literature and administrative documents.²⁷ Tocharian A (also “Agnean” or “East Tocharian”) was indigenous to the kingdom of Agni/Yānqí in the northeast of the Tarim Basin; Tocharian B (also “Kuchean” or “West Tocharian”) was spoken more to the west, in the kingdom of Kuča (Lévi 1913). Since the Niya documents testify to encounters between the Shanshan kingdom and the Tocharian-speaking areas (cf. Høisæter 2020: 367–369), linguistic contact between Niya Prakrit and Tocharian may have existed too (see Chapter 6, also on the issue of “Tocharian C”).

Besides these locally spoken languages, Niya Prakrit can also have been in contact with languages that played a role in the Tarim Basin for different reasons. Such a language is Sogdian (cf. §4.2.6), a Middle Iranian language originally home to the region known as Sogdiana and located in present-day Uzbekistan and Tajikistan. Sogdians were living in the territory of the Shanshan kingdom because of their role as traders on the Silk Road (Høisæter 2020: 370–374; 405–413), and some of the oldest Sogdian texts have been discovered in the Tarim Basin, including in Niya itself (Sims-Williams & Bi 2018; Sims-Williams 2023: 71ff.).

²⁶ It seems geographically and historically unlikely that Tumshuqese, a sister language of Khotanese spoken in the NW corner of the Tarim Basin (Konow 1935), influenced Niya Prakrit.

²⁷ Secular documents in Tocharian A have been discovered only recently (Ogihara 2014).

Due to various military conflicts, there was additionally a Chinese influence on the Tarim Basin for most of the first millennium AD, although in different degrees of intensity according to time and place. As concerns the Shanshan kingdom, the non-linguistic evidence for encounters with Chinese civilisation has recently been described by Høisæter (2020: 120–124; 363–367).²⁸ Potential linguistic influence from Chinese on Niya Prakrit has yet to receive a systematic investigation, and will only be tangentially touched upon in subsequent chapters.²⁹

²⁸ Chinese people living in the Shanshan kingdom left records of their presence in the form of Chinese documents contemporaneous with the Niya Prakrit ones (Chavannes 1913; Conrady 1920; Maspero 1953; Hou & Yang 1999).

²⁹ To my knowledge, there is so far only one secure example of a loanword directly adopted from Chinese, i.e. the political title *jīṭumgha* ← Chin. *shì zhōng* 侍中 ‘serve, wait upon’ + ‘centre’ > ‘palace attendant’, (E)MC *dzyiH trjuwng* (Brough 1965: 600ff.; 1970a = 1996: 295ff.; 351–357). Recently, Duan (2016a: 183–188) has proposed that the administrative term *hastalekha*, literally ‘hand-document’, would be a calque of Chin. *chǐ dú* 尺牘 ‘tablet measuring one foot’. I find this proposal unlikely because Gandh. *hastalekha* (dir.sg. *hastalekho*) is also attested in a loan contract found in Bajaur (CKM 278), i.e. outside the Chinese sphere of influence.

CHAPTER 2 Phonological preliminaries

This second chapter treats selected topics in the (historical) phonology of Niya Prakrit (§2.1) and Bactrian (§2.2). These preliminaries are needed for the later arguments about Bactrian loanwords into Niya Prakrit and the sound substitutions shown by them (treated in Chapters 3–4).

The main difficulty with the phonological interpretation of Niya Prakrit is the large sign inventory of the Kharoṣṭhī script. Sometimes, one phoneme can be indicated by two or even three akṣaras, but at the same time, many akṣaras have more than one phonological value, depending on the position in the word and the etymological source of the represented sound.

The issue with Bactrian is that there were more phonemes than there were graphemes in the Graeco-Bactrian alphabet. As a result, some letters had to be used for more than one sound, thus requiring one to determine when which letter represents which phoneme. Mostly, arguments from historical phonology and comparisons with the orthography of a Bactrian text in Manichaean script (M 1224) are sufficient to determine this. Yet, sometimes, the phonological interpretation is complicated by the late date and fragmentary nature of the Manichaean evidence.

For a summary of the phonological values which I assume for Niya Prakrit, see Table 1 (p. 37); for Bactrian, see Table 2 (p. 62).

2.1 Kharoṣṭhī and Niya phonology

2.1.1 Kharoṣṭhī and its characteristics

The history of the Gāndhārī language is inextricably connected to the history of the Kharoṣṭhī script. Together with Brāhmī, Kharoṣṭhī is one of two abugida scripts (= alphasyllabaries) developed in South Asia in the last few centuries before the common era.³⁰ Brāhmī was from its beginnings conceived as a pan-Indian script. Kharoṣṭhī, by contrast, never lost its

³⁰ Despite many proposals, the etymology of the name “Kharoṣṭhī” has never been clarified (Falk 1993: 84–90; Salomon 1998b: 50f.; Glass 2000: 10f.). Kharoṣṭhī had its own alphabetical order, called *arapacana*, because it started with the sequence 𑀓 *a*, 𑀔 *ra*, 𑀕 *pa*, etc. (Thomas 1950; Brough 1977 = 1996: 450–460; Salomon 1990; 1993; Baums 2009: 194–197). In modern scholarship, the *varṇamālā* system known from Brāhmī is used instead. Modified akṣaras are placed behind the unmodified form, e.g. 𑀧𑀺 *ga* /γ/ after 𑀧 *ga* /g/.

association with the northwestern regions, from where the script also spread to large parts of Central Asia.³¹ Being attested from the 3rd century BC until at least the 4th century AD,³² Kharoṣṭhī naturally developed over time, a process which included the creation of new signs in order to more faithfully represent certain phonological (and phonetic) distinctions.³³

Kharoṣṭhī is written from right to left. This is one out of many indications of a close connection with the Aramaic script, of which Kharoṣṭhī most likely represents a reworking to make the script suit the needs of an Indo-Aryan language (Falk 1993: 77–81; 84–105; Salomon 1998b: 51–54; Glass 2000: 11–20). As the chancellery language of the Achaemenid empire, Aramaic was used over a vast territory stretching from present-day Egypt to Afghanistan and NW India (Gzella 2015: 157–211; 2023: 139–183). So far, no archive of administrative documents in Achaemenid Official Aramaic has been discovered in Gandhāra. The discovery of such an archive in neighbouring Bactria (Naveh & Shaked 2012 = ADAB) makes it, however, plausible that they must have existed in Gandhāra too. Further support for this hypothesis comes from the Aramaic translations of some Aśokan edicts and the continuation of Aramaic writing habits and phraseology in Gāndhārī (e.g. Sims-Williams 1996b: 81; Yakubovich 2006: 338; Baums 2014; 2022).³⁴

Three defining features of the Kharoṣṭhī script sometimes hamper our understanding of the phonology of Niya Prakrit.

First, Kharoṣṭhī orthography has never been completely standardised (see e.g. Fussman 1989).³⁵ Inconsistencies include, for instance, writing an

³¹ For an overview of Kharoṣṭhī materials discovered outside of the Gandhāran heartland, see now Salomon (2024). In this article (p. 537), Salomon also convincingly rejects Falk's recent proposal that an ancient knife hilt excavated in Austria (Wels, ancient Ovilava) would be written in a Central Asian variety of Kharoṣṭhī (Falk, Miglbauer & Pfahl 2023: 202–208).

³² The Kuča Prakrit materials have been argued to be more recent, but their dating is difficult to establish. See e.g. Ching (2013: 86f.), who cautiously dates them to the 5th or 6th century AD.

³³ A comprehensive palaeography of Kharoṣṭhī, taking the various newly discovered materials into account, remains to be written. See Glass (2000) for a preliminary investigation. Although outdated in some respects, see also KD (295–322) for the specific type of Kharoṣṭhī used in the Niya documents. For conjunct consonants unique to the Niya corpus, see now Glass (2024).

³⁴ The Aramaic heritage in Gāndhārī deserves more comprehensive research in the future.

³⁵ It still seems that the Niya documents are slightly more standardised than many of the literary documents in South Asian Gāndhārī (cf. also §7.3).

anusvāra (ṣ) where it is etymologically unjustified, e.g. in opt.2sg. *preṣeyamṣi* ‘you should send’ for ***preṣeyasi* (CKD 399), or leaving it out where it is historically expected, e.g. in *abhyadara* ‘inside’ instead of ***abhyamḍara* < *abhyantara*- (CKD 291, cf. also LKD: §47).³⁶

Second, geminate consonants are generally left unmarked in Kharoṣṭhī. Consequently, one has to base oneself on arguments from historical phonology and comparisons with other MIA languages to decide when, for instance, ṣ *cha* writes a single consonant /c^h/ or a geminate /cc^h/.

Third, vowel length is only inconsistently indicated. In its earliest forms, the Kharoṣṭhī script could not distinguish short from long vowels at all. By the time of the Niya documents, a length mark had been adopted which could be used to mark a vowel as long, e.g. ṣ *ā* next to ṣ *a* or ṣ *kā* next to ṣ *ka*. Yet, the scribes did not use this length mark with any consistency (see e.g. KD: 298f.; Glass 2000: 36f.).

An unfortunate consequence of the last two features is that we do not know for sure whether Gāndhārī participated in the MIA sound change known as the *Zweimorengesetz* or “law of two morae” (von Hinüber 2001²: §§108–110). This law states that “overlong” syllables consisting of a long vowel followed by more than one consonant were generally prohibited in MIA (but note Turner 1967; 1973 = 1975: 405–415; 430–435). Accordingly, either the vowel or the consonant cluster could be shortened, as in Pāli *issara*- ‘lord’ < *īśvara*- or *dīgha*- ‘long’ < *dīrgha*-. The currently available data do not allow us to reasonably confirm the extent to which the same procedures were active in Gāndhārī (see Baums 2009: 121–124). To account for this uncertainty, I will, in phonological transcriptions of Gāndhārī words, mark originally long vowels followed by more than one consonant with the anceps signs *ā̃*, *ī̃*, *ū̃*, *ē̃*, and *ō̃*.

Short /a/ was, as in OIA, probably phonetically realised as a schwa (Allen 1953: 57–61; Baums 2009: 112 fn. 26), but because of its phonemic relationship with long /ā/, I will still use /a/ and not **/ə/ in phonological transcriptions. Word-final vowels seem to have been pronounced only weakly, if at all (LKD: §13; Fussman 1989: 45).

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The following sections will briefly introduce some of the phonological changes characteristic of Niya Prakrit and their relation to developments in

³⁶ Unetymological anusvāras are also common in Khotanese.

Gāndhārī more generally.³⁷ The discussion consists of two parts. §§2.1.2–2.1.5 each present one feature of Niya (historical) phonology, i.e. the lenition of intervocalic consonants; confusion of aspirated and unaspirated stops; confusion of voiced and unvoiced stops; and the treatment of stops after nasals. §§2.1.6–2.1.7 respectively concern the phonological value of some selected akṣaras and the transliteration of the Kharoṣṭhī sign 𑀘 as *jha*.

2.1.2 The lenition of intervocalic consonants

In line with the phonological developments in contemporary MIA languages, most of the OIA intervocalic aspirated stops lost their occlusion in Niya Prakrit, i.e. they became *-h-* (LKD: §27).³⁸ Some examples are *suha* ‘pleasure’ < OIA *sukha-*, *lahu* ‘light, small’ < OIA *laghu-*, and *parihaṣa* ‘claim’ < OIA *paribhāṣā-*. At the same time, it is possible to find historical spellings with the aspirates preserved, e.g. *lekha* ‘letter’ < OIA *lekha-*.³⁹

The treatment of OIA intervocalic *-th-* and *-dh-* requires more discussion. In Niya Prakrit and some other forms of Central Asian Gāndhārī, the default outcome of *-th-* and *-dh-* appears to be *-h-*, as exemplified by frequent words such as *taha* ‘so’ < OIA *tathā* and *gohoma* (*gohomi*, also contracted *goma*) ‘wheat’ < OIA *godhūma-* (LKD: §27; 88 s.v. *goma*; Loukota 2023: 10). Historical spellings of the type *tatha* exist as well. In other dialects of Gāndhārī, OIA *-th-* and *-dh-* underwent spirantisation to /z/, e.g. *tasa* / *taṣa* ‘so’ < OIA *tathā* or *krosa* / *kroṣa* ‘anger’ < OIA *krodha-* (cf. e.g. Salomon 2000: 85; 2008: 114; 339f.).⁴⁰ At least for *-dh-*, there are occasional instances of the

³⁷ For more details on Niya Prakrit phonology, see LKD (§§1–50). For the (historical) phonology of other types of Gāndhārī, see Baums (2009: 110–200).

³⁸ Palatals are unaffected by this process. For the lenition of intervocalic retroflexes, see below. On similar sound changes in other MIA languages, see e.g. Bubeník (1996: 56f.); von Hinüber (2001²: §§187–194); De Clercq (2009: 41).

³⁹ Contrast *leharaga* ‘courier’ < **leharaga* < OIA *lekha-hāraka-*, whose haplology must postdate the lenition of *-kh-* to *-h-*. For confusions between aspirated and unaspirated stops, see §2.1.3.

⁴⁰ Probably, *-dh-* (and *-th-*) first became a fricative *-ḍ-, before developing further to /z/ (Brough 1962: 95f.; Pinault 1987a: 143; Baums 2009: 144f.). The dir.pl. *sasumate* ‘considered good’ < OIA *sādhumata-* in SHĀH I 2 (the parallel in MĀN I 3 has *sa[dhu]mata*) has been considered an early instance of the change to /z/ (cf. e.g. Caillat 1992: 110; Salomon 1999a: 126 “anticipates the later development”). One could also hypothesise that the akṣara 𑀭 *su* in *sasumate* was intended as an approximation for *-ḍu- because intervocalic 𑀭 *da* probably still indicated a

same reflex in Niya Prakrit, i.e. *masu* ‘wine’ < OIA *madhu-* (§3.7.1 s.v.); *asimatra* / *aṣimatra* / *ajhimatra* ‘above measure’ < OIA *adhimātram*; and *anavarajhi* ‘faultless’ < OIA *anaparādh(y)a-* (LKD: 110 s.v. *masu*; TKD: 74; also §2.1.7). Since *-dh-* > *-h-* seems regular in Niya Prakrit, these examples may be loans from a different dialect of Gāndhārī.

Intervocalic non-aspirated stops, voiced and unvoiced, were affected by a process of lenition which generally resulted in voiced fricatives, even though historical spellings are not infrequent (see LKD: §§16–23).

OIA intervocalic *-k-* and *-g-* became a fricative /ɣ/, written in Kharoṣṭhī with the sign 𑀧 *ga* (older transcription *ga*). Two such examples are *anega* ‘many’ < OIA *aneka-* and *aroga* ‘health’ < OIA *aroga-* (LKD: §16).

The lenited outcome of OIA intervocalic *-c-* and *-j-* could be written with 𑀦 *śa* or 𑀭 *ja* (older transcription *ja*), thus suggesting a phonological value /ʒ/.⁴¹ This lenition can be exemplified by words such as *praśura* ‘abundant’ < OIA *prapura-* or *yajitaga* ‘requested’ < OIA **yācitaka-* (LKD: §17).

The sound resulting from intervocalic weakening of the retroflex stops *-ṭ-* and *-ḍ-* is spelled with 𑀭 *ḍa*, phonologically most likely /r/ (see §2.1.6).⁴² This sound change is seen in *kukuḍa* ‘cock’ < OIA *kukkuṭa-*, *vaḍavi* ‘mare’ < OIA *vaḍavī-*, and other examples (LKD: §18). The aspirated *-ṭh-* of OIA *viheṭhayati* ‘(s)he injures’ underwent the same change, having become Niya *viheḍeti*. The only inherited word in Niya Prakrit containing an intervocalic *-ḍh-* is *oṣaḍha* ‘medicinal herb’ < OIA *auṣadha-* (CKD 225). In view of the lenition process undergone by the other intervocalic retroflexes, it is conceivable that *-ḍh-* stands here for /r^h/ (so also Baums 2009: 144 on other forms of Gāndhārī).⁴³

plosive /d/ in Aśokan Gāndhārī (cf. Fussman 1989: 464), and there was thus no straightforward way to write /ḍ/.

⁴¹ In a few sources in South Asian Gāndhārī (e.g. CKI 48; 174; 176; 328), the phoneme /ʒ/ is written with the special sign 𑀦 *śa* (Glass 2000: 100).

⁴² Because of this lenition to /r/ and by lack of an example in initial position, 𑀭 *ḍa* is used in Niya Prakrit for a geminate /tṭ/. Burrow (LKD: §18) noted some exceptions to this rule, but they can all be explained differently. The reading of *coṭaga* ‘clothing’ < *coṭaka-* (CKD 316) and *viheṭa* ‘injury’ < *viheṭha-* (CKD 621, 2x) can be corrected to *coḍaga* and *viheḍa*, respectively. For *guṭa* ‘hidden’ < *gūḍha-* (CKD 17), I propose to change the reading to *guja* ‘idem’ < *guhya-* (as in CKD 376). The element *ṭera* in *saṃghaṭera* ‘community elder’ (CKD 419) is probably a mistake for ***thera* < *sthavira* (cf. LKD: 93 s.v.).

⁴³ The same lenition happened in NIA languages, e.g. Hindi *paurhā* ‘stomach’ < **prauḍhaka-* (CDIAL: no. 9021). Further support for the existence of /r^h/ in (later

For OIA intervocalic *-t-* and *-d-*, the akṣaras 𑖅 *ta* and 𑖆 *da* were used indiscriminately, e.g. *lihitaḡa* besides *lihidaḡa* ‘written’ < OIA **likhitaka-* (LKD: §19). Because the other intervocalic consonants had been weakened to voiced fricatives, I assume, with Baums (2009: 141), that 𑖅 *ta* and 𑖆 *da* wrote /δ/ in this type of context.⁴⁴ In some other forms of Kharoṣṭhī, intervocalic /δ/ could be written with the special signs 𑖇 *ṭa* and 𑖈 *ḍa* (older transcriptions *ṭa* and *ḍa*; cf. Glass 2000: 77; 79f.).

The unaspirated labial stops *-p-* and *-b-* were lenited to /v/, as shown by lexemes such as *avi* ‘also, too’ < OIA *api* and pres.3pl. *pivaṃti* ‘they drink’ < OIA *pibanti*. Historical spellings were common nevertheless (LKD: §20).⁴⁵

Lenition also affected intervocalic sibilants. The outcome of OIA *-ś-* can, in between vowels, be written with either 𑖉 *śa* or 𑖊 *ja*, e.g. *daśa* / *daja* ‘ten’ < OIA *daśa*. As the sign 𑖊 *ja* has the phonological value /ž/ (cf. supra), one can conclude that intervocalic *-ś-* became a voiced /ž/ (LKD: §21).

Because of the voicing of intervocalic *-ś-* (and *-s-*), one suspects retroflex *-ṣ-* to have become a voiced /z/ as well. Niya Kharoṣṭhī did not have a separate sign for /z/, and the outcome of OIA intervocalic *-ṣ-* is simply spelled with 𑖋 *ṣa*, as in *śeṣa* ‘remainder’ < OIA *śeṣa-* (LKD: §23). Some other types of Kharoṣṭhī, including the one used in the Khotan Prakrit document CKD 661, made use of a special sign 𑖌 *ṣa* to write the phoneme /z/ unambiguously (cf. e.g. Baums 2009: 150).⁴⁶

Between vowels, OIA *-s-* became /z/ (cf. LKD: §22), a phoneme which could be spelled with 𑖍 *ṣa*, 𑖎 *ṣa*, or 𑖏 *jha* (see in more detail §2.1.7).⁴⁷ A word appearing in all three spellings is *dasa* / *daśa* / *dajha* ‘slave’ < OIA *dāsa-*.

forms of) Gāndhārī comes from the recent discovery of a Kharoṣṭhī sign 𑖐 *ḍha* in the Bajaur fragments (Schlosser 2022: 55). The sign *ḍha* found in foreign names in Niya Prakrit, e.g. *ḍhagiya*, is palaeographically distinctive; it probably indicates a different, yet still undetermined sound (Burrow 1935b: 668).

⁴⁴ In a few frequent words, intervocalic dentals are sometimes even weakened to Ø, e.g. in *caūra* ‘four’ < OIA *catur-*.

⁴⁵ Occasionally, *avi* ‘also, too’ < OIA *api* results further into *ami* (e.g. CKD 189). In this case, *-m-* conceivably stands for a nasalised labial approximant [ũ], which, like Baums (2009: 138f.), I consider to be an allophone of /v/ and /m/.

⁴⁶ In CKD 661, Boyer et al.’s (1920–29: 249) readings *maṣa* (2x) ‘coins’, *niravaśiṣo* ‘without remainder’, and *ajiṣanayi* ‘at the request of’ are to be corrected to *maśa*, *niravaśiṣo*, and *ajiṣanayi*, respectively.

⁴⁷ The few cases when 𑖎 *ṣa* occurs word-initially are in words of an enclitic nature, such as *ṣaca*. See LKD (§22) and Glass (2000: 107–109).

2.1.3 Confusion of aspirated and unaspirated consonants

Except for the intervocalic lenitions described above, OIA aspirated consonants were normally preserved unchanged in Niya Prakrit. Like in South Asian Gāndhārī, there is nevertheless an occasional tendency for the aspiration to be lost, both word-initially and in other positions (LKD: §§24f.). Examples include *gaṣa* besides *ghaṣa* ‘fodder’ < OIA *ghāsa-*; *grida* besides *ghrida* ‘ghee’ < OIA *ghṛta-*; *śavata* besides *śavatha* ‘oath’ < OIA *śavatha-*; and *kumbha* instead of **kumbha* ‘jar’ < OIA *kumbha-*. Although etymologically correct forms still make up the majority of cases, instances like these may suggest that aspiration was no longer phonologically distinctive. Indeed, scribes sometimes also wrote aspirated consonants where unaspirated ones are expected etymologically, e.g. *dhura* besides *dura* ‘away, far’ < OIA *dūra-* or *upaśamgh-* besides *upaśamg-* ‘to suspect, to worry’ < OIA *upa* + $\sqrt{\text{śaṅk}}$ (LKD: §26). These confusions between aspirated and unaspirated consonants have been plausibly ascribed to Iranian influence (cf. KI: ci; Salomon 1999a: 128; 2008: 340; 2016: 375f.; §5.1.2).

2.1.4 Confusion of voiced and unvoiced stops

Confusions of voiced and unvoiced stops can also occur, including in Anlaut (Burrow 1935b: 667f.; LKD: §§14f.). Unvoiced stops can sometimes be written instead of a voiced one, e.g. *kilane* besides *gilani* / *gilanaga* < OIA *glāna(-ka-)*; *can-* besides *jan-* ‘to know’ < OIA $\sqrt{\text{jñā}}$; and *tura* besides *dura* ‘away, far’ < OIA *dūra-* (LKD: §14). Occurrences are sporadic, and the etymologically expected spelling is typically more frequent. Yet, there is at least one well-attested word which consistently undergoes initial devoicing, i.e. *pal̥yi* ‘tax’ < OIA *bali-* (ca. 90 attestations; cf. Burrow 1935b: 675; LKD: §14; Lüders 1936b: 647). At times, voiced stops can also be written instead of an etymologically expected unvoiced stop, e.g. ins.sg. *dena* besides *tena* ‘therefore’ < OIA *tena* (LKD: §15). Confusion of voiced and unvoiced consonants is typical of Niya Prakrit, but there are rare examples of the same phenomenon in other forms of Gāndhārī (cf. §6.3).

2.1.5 The treatment of consonants after nasals

In some variants of Gāndhārī, including Niya Prakrit, etymologically unvoiced consonants became voiced after a nasal, while originally voiced (aspirated) consonants were assimilated to a preceding nasal (LKD: §§45f.; Baums 2009: 159; 2015: 76). In the variety of Central Asian Gāndhārī used in

the *Khotan Dharmapada*, these sound changes are regularly observed in writing, whereas in the Niya documents historical spellings frequently occur (Brough 1962: 98f.).⁴⁸ Niya examples of the first change are *upaśaṃg(h)*- besides *upaśaṃk*- ‘to suspect, to worry’ < OIA *upa* + $\sqrt{śaṅk}$ and *mahaṃda* besides *mahaṃta* ‘big’ < OIA *mahat*-.⁴⁹ Instances of the second are *chiṃn*- ‘to cut’ < OIA $\sqrt{chid}$ (cf. Pāli *chindati*) and *baṃn*- ‘to bind’ < OIA $\sqrt{bandh}$.

Because only the etymologically voiced (aspirated) consonants were assimilated to a preceding nasal, this change needs to be dated before the voicing of originally unvoiced consonants after nasals. To what extent the latter process had been phonologised is hard to say. In the phonological representations of Niya words, I tentatively assume it had.

2.1.6 The phonological value of selected akṣaras

What follows is a list of akṣaras (i) which are specific to Niya Kharoṣṭhī or at least used there more frequently than elsewhere (𑖦 *kṣa*; 𑖧 *lyā*; 𑖨 *va*; 𑖩 *śpa*; 𑖪 *śpa*); (ii) whose phonological value needs more extensive argumentation (𑖫 *tha*; 𑖬 *ḥa*; 𑖭 *ḍa*); or (iii) which are used slightly differently than in other forms of Gāndhārī (𑖮 *ka*; 𑖯 *na*; 𑖰 *vha*). For each akṣara, I shall indicate the most common source(s) of the sound it represents; summarise the arguments supporting the proposed phonological (or sometimes phonetic) value; and point out if its transliteration has changed over time.⁵⁰

𑖮 *ka*

The sign 𑖮 *ka* is formed by adding a vertical stroke on top of 𑖫 *ka* (Glass 2000: 52f.; Schoubben 2021: 48f.). *ka* most often corresponds to OIA *-sk-*, e.g. in *namaḥkaro* ‘homage’ < OIA *namaskāra*-. In the *arapacana* poem in Bajaur fragment 5 (CKM 268) to be published by Gudrun Melzer (Munich), the same akṣara can reflect OIA *-skh-* or *-ṣk-*, viz. in *kalīta* / *kalamaṇa* ‘stumbling’ < $\sqrt{skhal}$ and *duḥkara* ‘difficult’ < *duṣkara*- (Schoubben 2021: 49f.). In Niya

⁴⁸ Some scholars assume these sound changes to be restricted to Central Asian Gāndhārī (e.g. Barchi & Peschl 2022: 426f.). I will return to this issue in §5.4.6.

⁴⁹ I am unaware of a Niya Prakrit example whereby a voiceless aspirate becomes voiced after a nasal, but there are examples of this type in the *Khotan Dharmapada*, e.g. abs. *saghaī* < OIA *saṃkhyāya* ‘having considered’ (DHP^K 68).

⁵⁰ Compound akṣaras whose transliteration has also changed over time but which are not discussed here are 𑖱 *tsa* (older transliteration *nka*); 𑖲 *tga* (*nḡa*); 𑖳 *śpa* (*n̄sa*); 𑖴 *rma* (*m̄a*); 𑖵 *kla* (*kra*); 𑖶 *pla* (*pra*); and 𑖷 *śla* (*śra*).

Prakrit, *ka* is further used to substitute Bactr. -*ḥk-* /*šk-*/, as exemplified by *maḥa* ‘bean’ ← **μαḥko* /*māškə*/ and other words (cf. §3.2.2 s.v. and §4.3.18). I therefore assume that in Niya Prakrit *ka* could stand for either /*sk-*/ or /*šk-*/.⁵¹ Yet, one should not exclude Brough’s idea (1962: 75) that it stood instead for “a sound developed from an earlier *ska* [or *ška*]”.

𑀓 *kṣa*

In Niya Kharoṣṭhī, 𑀓 *kṣa* occurs much more often than 𑀔 *kṣa*, the sign commonly used in other forms of the script; the only palaeographic difference is the horizontal line added on top of 𑀓 *kṣa*.⁵² These signs are used to represent the outcome of OIA -*kṣ-*, e.g. *kṣetra* (*kṣetra*) ‘field’ < OIA *kṣetra-*, or as a substitution of Ir. *-*xš-*, e.g. *kṣuna* (*kṣuna*) ‘date, reign, regnal year’ ← Bactr. *χpovo* /*xšunə*/ (§4.3.18). Given that *kṣa* and *kṣa* freely interchange in the Niya documents, both may have been pronounced in the same way (KD: 302; Glass 2000: 116). Yet, it is possible that there originally was a distinction between the two: *kṣa* may have been a way to write the Iranian cluster *-*xš-* unambiguously, while *kṣa* stood for the outcome of OIA -*kṣ-* in inherited words (Hitch 1984: 198–202). Based on Gāndhārī loanwords into Chinese and evidence from Dardic historical phonology, some scholars assume that OIA -*kṣ-* yielded Gandh. [tʃ] (e.g. Bailey 1946a: 774; Brough 1962: 72f.). This interpretation is not universally accepted, however (cf. Salomon 1998b: 75; 2008: 123; Cheung 2013: 624; Schoubben 2022a: 150 fn. 12).

𑀕 *ṭha*

In inherited words, the akṣara 𑀕 *ṭha* typically represents the outcome of OIA -*ṣṭ(h)-*, e.g. *naṭha* ‘destroyed’ < OIA *naṣṭa-* or *pratiṭhaveti* ‘(s)he establishes’ < OIA *pratiṣṭhāpayati*.⁵³ In contrast to the corresponding Brāhmī sign, *ṭha* probably does not indicate a voiceless aspirated retroflex /*ṭʰ*/, but the cluster /*ṣṭʰ(h)*/. This is suggested by foreign renderings of Gāndhārī words containing *ṭha*, such as Gr. *Τιαστάνης*; TB *Caṣṭane*; Uyghur *čšt’ny* ← Gandh. *Caṭhana* (PN) or TA *ṣoṣṭaṅk** (nom.pl. *ṣoṣṭāṅkāṇ*) ← Niya *ṣoṭhaṃga* ‘finance officer’. Corroborating evidence for the value /*ṣṭʰ(h)*/ comes from occasional spelling variations as between *suveṭha* and *suveṣṭa* (a title) and from the preservation

⁵¹ In contrast to Bajaur fragment 5 (CKM 268), there is no Niya example of 𑀓 *ka* standing for /*skʰ*/.

⁵² Burrow still transliterated these signs as *čḥa* and *chā*, respectively.

⁵³ OIA -*ḥsth-* is another source, cf. *paraṭhida* ‘standing in front’ < *paraḥ-sṭhita-*.

of the relevant cluster in modern Dardic languages, as in Khowar *oṣṭ* < OIA *aṣṭā* ‘eight’. For more details, see Bailey (1949a: 123–125; 1950a: 398); Brough (1962: 75–77); Baums (2009: 164).

१ *ḥha*

१ *ḥha* is more or less consistently distinguished from १ *ṭha* /ṣṭ^(h)/, which implies that their pronunciations must have been sufficiently different to have called for the creation of separate graphemes. Yet, the phonological value of *ḥha* is contended (see e.g. Konow 1943: 68–72; Brough 1962: 75–77; Baums 2009: 164–167). For reasons of space, I cannot delve very deeply into the debate here, so I shall limit myself to the Niya evidence. In Niya Prakrit, only two words containing this akṣara have a secure etymology, i.e. *aḥhovaga* ‘fit for a purpose, suitable’ < OIA **arthopāka*- and *vaḥhayaga* ‘attendant’ < OIA *upasthāyaka*-.⁵⁴ In *aḥhovaga*, -*ḥh*- corresponds to OIA -*rth*-. Its phonological value seems to be /ṭṭ^h/, as unaspirated -*rt*- yields Niya -*ṭ*- /ṭṭ/ (e.g. *kaṭavo* ‘to be done’ < *kartavyah*). In *vaḥhayaga*, -*ḥh*- is the reflex of OIA -*sth*-.⁵⁵ The Pāli cognate of this word is *upaṭṭhāka*- < *upasthāka*-, which suggests that the -*ḥh*- in Niya *vaḥhayaga* could likewise stand for /ṭṭ^h/. This view receives further support from the variant spelling *vaṭayaga*,⁵⁶ whose -*ṭ*- /ṭṭ/ could result from deaspiration of /ṭṭ^h/ (cf. §2.1.3).

५ *ḍa*

In older literature (e.g. LKD), ५ was transcribed as *ḍa*. Because this akṣara is distinguished from ५ *ḍa* by an extra line at the bottom right, *ḍa* is these days the preferred transliteration. Except for occurrences in loanwords, ५ *ḍa* ordinarily represents the outcome of a lenited intervocalic -*ṭ*- or -*ḍ*-, as in *kukuḍa* ‘cock’ < OIA *kukkuṭa*- or *vaḍavi* ‘mare’ < OIA *vaḍavī*-. ५ *ḍa* probably stood for a rhotic sound, here phonologically transcribed as /r/ (cf. LKD: §18

⁵⁴ The meaning and etymology of *kuḥhakṣira* are obscure (see §3.7.2 s.v.); the same is true of the adj. *raḥhi* in CKD 574; and the PN *Kruḥhaka* in CKD 513 is etymologically unclear as well. In CKD 422 (perhaps also 852), there is a variant spelling *uḥha* for the more common *uṭa* ‘camel’, traditionally assumed to be from OIA *uṣṭra*- but perhaps rather a loanword (see fn. 940).

⁵⁵ The outcome of OIA -*sth*- can alternatively be written with + *tha*, as in *thavitaga* ‘deposit’ < **sthāpitaka*-.

⁵⁶ Attestations: dir.sg. *vaḥhayaga* in CKD 419; 576 (*rayavaḥhayaga* ‘royal attendant’); 579 (2x); 581; 782 (2x); gen.pl. *vaḥhayagana* in CKD 357; 637; 796.

and §2.1.2). One can deduce this pronunciation from Gāndhārī loanwords into, for instance, Tocharian, given that speakers of this language substituted *-ḍ-* with *-r-*, e.g. in TB *kor* ‘myriad’ ← Gandh. *koḍi* /kōḍi/ < OIA *koṭi-* (DoT: 215). Another indication of the value /r/ is the spelling variation between loc.sg. *śarataṃmi* and *śaḍataṃmi* ‘in the autumn’ in CKD 574.⁵⁷ Phonetically, 𑖅 *ḍa* may have been a retroflex flap [ɾ] as in NIA languages, including Dardic ones (see von Hinüber 2001²: §201; Baums 2009: 141; cf. also §4.3.26).

𑖅 *na*

In Niya Kharoṣṭhī, there was a strong preference for writing dental 𑖅 *na* everywhere, also in places where retroflex 𑖅 *ṇa* would be expected etymologically (KD: 305).⁵⁸ In other words, the two types of nasal had probably merged in Niya Prakrit (LKD: §34), as they had in some other forms of Gāndhārī (cf. Brough 1962: 97f.; Baums 2009: 134–136; 147f.). Because in Niya Prakrit the outcome of this merger is by default written as 𑖅 *na*, I phonologically represent it as /n/.⁵⁹

𑖅 *l̥ya*

The sign above occurs mainly in borrowings, but it can occasionally be found in inherited vocabulary too. By Boyer et al. (KD), it had been transcribed as *l̥pa*, but Burrow (1935b: 670) and Lüders (1936b: 637ff.) changed the reading of this akṣara to *l̥ya*. They did so because *l̥ya* and *lya* (written 𑖅) interchange in the case of the PN *Kal̥yanadharma* / *Kalyanadharma* and because *l̥yi* and *li* alternate in examples such as *l̥yihida* ‘written’ next to *lihida*, and *Lipe* (a foreign PN) next to *L̥yipe(va)*.⁶⁰ These interchanges suggest that *l̥ya* indicates a palatal /l̥/. See further §6.3.6.

⁵⁷ Baums (2009: 141; cf. also Emeneau 1931) further mentions the prefix variation *paḍi-* and *pari-* in South Asian Gāndhārī; for a Niya example of this variation, cf. *parichitama* in CKD 249, which Burrow (1940: 46) interprets as a variant spelling of *paḍichitama* ‘we received’.

⁵⁸ The akṣara 𑖅 *ṇa* is hardly used in Niya Kharoṣṭhī.

⁵⁹ The exact phonetic value of /n/ is difficult to determine, as it could have been a dental [n], an alveolar [n̪], or a retroflex [ɳ].

⁶⁰ *Kal̥yanadharma* is attested in CKD 536; 605; *Kalyanadharma* in CKD 123; 477; 560; 597; 601; 611 (2x); 618; 619; 762; 763; *l̥yihida* in CKD 575; and *Lipe* in CKD 754.

𑀭 𑀘a

The akṣara 𑀭 𑀘a (by Burrow transliterated as *va*) is distinguished from 𑀭 𑀘a by the addition of a vertical line at the bottom right, the so-called *cauda* (Glass 2000: 98). Outside the Niya documents, 𑀭 𑀘a has hitherto only been discovered on some Kuṣāṇa-period coins. In Niya Prakrit, 𑀭 𑀘a commonly occurs in foreign personal names, such as *Varpa*. It can additionally be used as a hiatus filler after back vowels like *u*, e.g. *hetuyena* ‘by reason’ < *hetu-*. Therefore, 𑀭 𑀘a most likely represents a semivowel /w/, sufficiently distinct from /v/ to have warranted the creation of an additional grapheme. Nonetheless, scribes often confused 𑀭 𑀘a and 𑀭 𑀘a; they did so in foreign words, such as *vasu* next to *vasu* (a title), but also in inherited words, such as *viṃṇāyeti* beside *viṃṇāveti* ‘(s)he orders’ < OIA *vijñāpayati*. See also LKD (§29).

𑀭 𑀘a

Boyer et al. (KD) and Burrow (LKD; TKD) transliterated the Kharoṣṭhī sign 𑀭 as *p̥ha*. Nowadays, Lüders’ (1909: 657f.) transliteration *vha* is preferred for the following two reasons: (i) “the graphic form [of *vha*] appears to consist of a *va* with a diacritic ... attached to the right of the vertical” (Brough 1962: 66; cf. also Glass 2000: 118); (ii) *vha* can represent the outcome of an OIA *-bh-* that underwent intervocalic lenition, as in Khotan Pkt. *avhiñanu* ‘recognition mark’ < OIA *abhijñāna-* (CKD 661). As argued in detail by Baums (2009: 145–147), the initially intended phonological value of *vha* was probably /v^h/ (perhaps ~ IPA [v^h]). In late forms of Gāndhārī, including Niya Prakrit, a subsequent lenition to *-h-* had happened, as in *prahuḍa* ‘gift’ < OIA *prābhṛta-* (cf. LKD: §27). Consequently, there are no inherited words in Niya Prakrit containing *vha*: this akṣara only occurs as a substitution of Ir. **-f-*, e.g. *Tiravhara* (PN) ← Bactr. **τ(ε)ιροφαρρο* /tīrəfarrə/ < **tira-farnah-* ‘glory of the god Tir’. The same usage of *vha* occurs in other forms of Gāndhārī, and we may presume that Ir. **-f-* was approximated there as /v^h/. Since Niya Prakrit no longer had a phoneme /v^h/ in inherited words (cf. supra), I cautiously assume that in this late form of Gāndhārī *vha* had become a way to write a loan phoneme /f/.

𑀓 śpa and 𑀔 s̥pa

The Kharoṣṭhī signs 𑀓 śpa and 𑀔 s̥pa have so far not been discovered outside of the Niya documents. The element transcribed as -ś- “consists of a loop at the base of the character and crossing the stem slightly” (Glass 2000: 126). 𑀓 śpa only occurs in the foreign personal names Śpālu (CKD 781) and Śpālyaya / Śpālyiya, the latter having a variant with 𑀕 s̥va, i.e. Śvalyaya (CKD 709). 𑀔 s̥pa can also be found in inherited vocabulary, e.g. in *paros̥para* ‘one another’ < *paraspara*-. Similar to how 𑀓 śpa can alternate with 𑀕 s̥va, 𑀔 s̥pa interchanges with 𑀖 sva, e.g. *s̥parna* ‘gold’ next to *svarna* (CKD 113). It seems therefore likely that the element -ś- indicates a fricative close to /v/, possibly /f/. See also LKD (§49).

2.1.7 The transliteration of Kharoṣṭhī 𑀑 as *jha*

The transliteration of the Kharoṣṭhī script adopted in this book is the same as that used in the online Gāndhārī dictionary and text catalogue—with the exception of one essential point, i.e. the transliteration of the akṣara 𑀑. Whereas Baums and Glass (2002ab-) transliterate 𑀑 as *za*, I use the older transliteration *jha*.

The most extensive argumentation in favour of the transliteration *za* that I know of is by Brough (1962: 60–62); he advanced the following three arguments (see also Glass 2000: 67; 110–112):

- (i) 𑀑 is used to render a foreign *z* in loanwords from Iranian and Greek.
- (ii) When other MIA languages have *-(j)jh-*, the corresponding sound in Gāndhārī is typically written as 𑀙 *ja* or 𑀚 *ja*, and not as 𑀑.⁶¹ One such example is *uvaṛjae* (CKI 46), also gen.sg. *upajayasa* (CKI 161), < *upādhyāya*- ‘teacher’ (cf. Pāli *upajjhāya*-).
- (iii) It is potentially confusing to use the transliteration *jha* when 𑀑 is also used for the outcome of intervocalic OIA *-dh-* and interchangeable with 𑀖 *sa* and 𑀗 *sa* /*z*/, as e.g. in *asimatra* / *aṣimatra* / *ajhimatra* (or *azimatra*) ‘above measure’ < *adhimātram*.

This section hopes to show that none of these arguments is compelling. Although it is undeniable that 𑀑 can also stand for /*z*/, it seems that spelling variations, chronological distributions, and arguments from palaeography

⁶¹ Originally, 𑀚 *ja* may have been used to write a geminate /*jj*/ (cf. Baums 2009: 197–200), but 𑀚 *ja* and 𑀙 *ja* have become interchangeable in the extant texts.

bolster the conclusion that the originally intended value of ʿ was /j^(h)/. For this reason, I prefer to transliterate ʿ as *jha* and not as *za*.

2.1.7.1 The substitution of foreign *z*

Brough’s first argument needs the assumption that ʿ has always been a loan phoneme that exactly replicates a foreign *z*. Yet, if there is no exactly corresponding phoneme in the language, it is cross-linguistically more common to adapt foreign sounds to the phonological system of the recipient language, meaning that the foreign sound is approximated, not exactly replicated (cf. also §4.3).⁶² This process of phonological adaptation is also evidenced in Gāndhārī, as ʿ is not the only way to approximate *z* in loanwords (see further §4.3.19).

Most importantly, there are examples of *z* being substituted with ʿ *ja* in both Niya Prakrit and South Asian Gāndhārī: a Niya example is *jenavida* ‘chief of the armour’ ← Bactr. ζηνοβιδο /zēnəvidə/ < **zaina-pati*- (§3.2.2 s.v.);⁶³ an instance from South Asian Gāndhārī is the PN *Damijada* (CKI 42, gen.sg. *Damijadasa*) ← **dāميزād(ə)* < OIr. **dāmi-zāta*- ‘born through (the will of) the creator’.⁶⁴ Otherwise, Iranian names containing **-zād(ə)* < OIr. **-zāta*- are usually rendered with ʿ (cf. e.g. Salomon 1997: 233).⁶⁵

⁶² /z/ was only added later to the phonemic inventory of Gāndhārī due to intervocalic lenition of OIA *-th-*, *-dh-*, and *-s-* (cf. §2.1.2). To the best of my knowledge, the earliest evidence for ʿ used to substitute a foreign *z* are a few coins of the middle of the 2nd century BC, on which the name of the Indo-Greek king Zoilus I (Ζωῖλος) is rendered in Kharoṣṭhī as *Jhoila* (gen.sg. *Jhoīlasa* in CKC 37; 38; 39).

⁶³ Contrast *jheniga* ‘in charge of, under the care of’ ← Bactr. *ζηνιγο (attested ζινιγο) /zēnīgə/ < **zainiya-kā*-.

⁶⁴ For the idea that *-jada* is to be identified as Ir. **-zāta*-, see already Konow (KI: 14), who points to variants of the same name written in Brāhmī script as *Dāmajada* and *Dāmaysada*. The reconstruction of the compound as **dāmi-zāta*- can be found in Harmatta (1989: 301), but only the etymology of the second part of *Damijada* is relevant for the argument about ʿ.

⁶⁵ One such example is the PN *Mahajhada* (*Mahazada*) (CKI 102; 327; 332), in my view a rendering of Bactr. *μαροζαδο /māhəzādə/ < **māha-zāta*- ‘born through (the will of) the Moon (god)’. Another instance is the PN *Arajha(m)da* (CKI 108; 564), which I consider a rendering of Bactr. *αροζαδο /ahrəzādə/ ‘born through (the will of) Ahura’ < **ahura-zāta*- (differently Harmatta 1989: 301; Falk 2015: 10).

Also in Sanskrit, *j* can be employed as an approximation of a foreign *z*.⁶⁶ The word *jagara*- ‘armour’, for instance, is commonly assumed to have been borrowed from a cognate of Khwar. *zɣryk*; Oss. I. *zɣær*, D. *æsqær*; and Psht. *zɣəra* ‘idem’ (Abaev 1958–89 IV: 308f.; EWAia III: 205; EDP: 101). A second instance is *jena*- / *jayana*- ‘saddle, armour (for a horse)’, which has been identified as a loanword from Mir. **zēn(ə)* < **zainu*- (EWAia III: 212). The example of *gañja*- ‘treasury’ ← OP **ganza*- reveals that the same rendering was also possible after a nasal (see also §3.5.1 s.v. *gaṃṇā*).

The fact that a foreign *z* could be substituted with *j* in Gāndhārī and other Indo-Aryan languages shows that the use of ʈ as a substitute for a foreign *z* does not necessarily imply that ʈ represents a phoneme /z/ rather than /jʰ/. As Burrow (1937: 112) puts it, “the Indians themselves in those days as well as now used their own *j* or *jh*, or modifications, to express the sound [i.e. *z*] which was foreign to them”.⁶⁷ Consequently, Brough’s first argument in favour of transliterating ʈ as *za* is not compelling.

2.1.7.2 The Gāndhārī equivalent(s) of MIA *-(j)jh-*

As a second argument in support of ʈ being *za*, Brough observed that the Gāndhārī equivalent of *-(j)jh-* in other MIA languages is spelled with ʈ *ja* or ʈ̄ *jā*, not with ʈ. Brough’s observation is, however, no longer fully accurate: at least one example of ʈ corresponding to MIA *jh-* has meanwhile come to light. The Gāndhārī cognate of MIA *jhāna*- ‘meditation’ < OIA *dhyāna*- is usually spelled with ʈ *ja* or ʈ̄ *jā*, and in Senior fragment 12 (CKM 244) also with ʈ̄ *ca* (cf. Silverlock 2015: 166). Yet, in the Senavarma inscription (CKI 249), there is one instance of the same word spelled with ʈ, i.e. *jhāṇa* (*zaṇa*).⁶⁸ How should we interpret this variant form?

⁶⁶ In what follows, I exemplify this substitution with borrowings from Iranian, but the same rendering is found with Greek loanwords. Note e.g. Skt. *jūka*- ‘the constellation Libra’ ← ζυγόν / ζυγός ‘idem’ (EWAia III: 211). This astrological term occurs in Varāhamihira’s *Bṛhajjātaka*, a text datable to the 6th century AD, i.e. when Gr. ζ no longer stood for /zd/ or /dz/, but for /z/ (VG³: 58).

⁶⁷ Speakers of Indian languages copying Avestan manuscripts also frequently confused *-j-*, *-z-*, and *-ž-*.

⁶⁸ In its other instance in CKI 249, the word is written as *jāṇa*. There is another sequence *jhana* (*zana*) in CKI 841, but the context makes it unlikely that the word for ‘meditation’ is intended there (Scherrer-Schaub, Salomon & Baums 2012: 165 with fn. 25).

Preferring the reading *zaṇa*, Glass (2000: 110) has argued that a sound change from *dhy-* > *jh-* > *z-* operated in this word. As support, he cited examples of intervocalic *-dhy-* becoming *-z-* in modern Dardic languages.⁶⁹ Glass' argument has, however, been cogently refuted by Baums (2009: 171f.), who noted that all palatal sounds became *-z-* in Dardic, meaning that the Gāndhārī outcome of OIA *-dhy-* could still have been palatal.

Baums (2009: 171f.) approached the problem posed by *jhaṇa* (*zaṇa*) from a different angle. Seeing that the Gāndhārī outcome of OIA *-dhy-* is typically written with *𑀧 ja* or *𑀧̃ ja*, Baums searched for other evidence that could tell us the value of *𑀧 ja* and *𑀧̃ ja*. He mentions in this respect the Gāndhārī outcome of OIA *dahyamāna-* 'burning' (cf. Pāli *dayhamāna-*; *ḍayhamāna-*). This word is currently attested in three different spellings:

- (i) *dajamaṇa* (NIRD^{L2} recto 79);
- (ii) *ḍajamaṇa* (DHP^K 75; 159 ins.sg. *ḍajamaṇeṇa*);
- (iii) *daśamaṇa* (NIRD^{L2} recto 76; DHP^{Sp} 37a; 37b ins.sg. *daśamaṇeṇa*).

The latter spelling illustrates the default change of OIA *-hy-* to Gandh. /ʒʒ/, here written with *𑀧 śa*, but elsewhere also with *𑀧 ja*. On this basis, Baums concluded that the *𑀧 ja* and *𑀧̃ ja* in *dajamaṇa* / *ḍajamaṇa* also stand for /ʒʒ/.

The same conclusion was earlier reached by Brough (1962: 62), who, however, added that "this does not exclude the possibility that in initial position and where representing an older double stop, the sign might still have represented a palatal plosive or affricate." Indeed, it seems suspicious that, apart from this one example cited by Baums, *𑀧 ja* and *𑀧̃ ja* from OIA *-dhy-* never interchange with *𑀧 śa* or *𑀧 ja*.⁷⁰ Note, for instance, Niya *parib(h)uj-* 'to understand' < *paribudhy-*, which in its more than 70 attestations is never written with *𑀧 śa* or *𑀧 ja*, suggesting that the *𑀧 ja* in *parib(h)uj-* stands for a geminate /jj/, deaspirated from earlier /jjh/ (cf. infra). Because initial stops are generally resistant to lenition in Gāndhārī (as

⁶⁹ Cf. e.g. Pashai *waraz-* 'to protect, keep, feed' < OIA **uparādhyati* 'to favour' (CDIAL: no. 2217).

⁷⁰ Moreover, the outcomes of *dahyamāna-* listed above all come from the same verse, attested with minor variants in the *Khotan Dharmapada*, the *Split Dharmapada*, and the *Nirdeśa* commentary contained in British Library fragment 9. The outcome of *-hy-* is always written with *𑀧 śa* in the *Khotan Dharmapada* (Brough 1962: 105), and *ḍajamaṇa* would be the only example where *𑀧̃ ja* is not used for the outcome of *-dhy-* (cf. Falk 2015a: 57 "treats *hya* as if it was *dhya*").

in MIA in general), it also stands to reason that in initial position Υja and $\bar{\Upsilon} ja$ from OIA *-dhy-* represent /j/ and not a fricative /ʒ/.

The value /j/ is further confirmed by the fact that Gandh. *jaṇa* / *ṇaṇa* < *dhyāna-* was borrowed into Khotanese as *jāna-* and into Chinese as *chán* 禪 ‘Chán/Zen Buddhism’, in (Early) Middle Chinese *dzyen*: the initial *j-* in Khot. *jāna-* and the initial *dzy-* in (E)MC *dzyen* stand for a voiced affricate (approximately IPA [d͡ʒ]) and thus corroborate that Gandh. *jaṇa* / *ṇaṇa* did not begin with a fricative.

The Gāndhārī development of OIA *-dhy-* to /j/ implies an intermediary stage when aspiration was still preserved, i.e. */jʰ/ (see von Hinüber 1982: 248 = 2009–19: 308).⁷¹ Hence, one can simply assume that *jhaṇa* is a historical spelling that preserves the original aspiration.

Another possibility is that *jhaṇa* is a loanword. Because of the high frequency of Buddhist formulae in the Senavarma inscription (cf. von Hinüber 2003), *jhaṇa* could, instead of being inherited, also have been borrowed from an eastern MIA form **jhāṇa-*. Also in this case, 𑀧 would stand for /jʰ/, thus warranting the transliteration of this akṣara as *jha*.

A second word where 𑀧 seems to correspond to MIA *-(j)jh-* is *gujha* (*guza*) (SĀ^{s1} recto 3). Because this word occurs in a list of body parts, Glass (2007: 124; 159–161) interpreted it as a Gāndhārī cognate of OIA *guhya-* in its derived meaning ‘pudenda, anus’. This etymology is accepted by Baums (2009: 171) and taken as evidence that 𑀧 could also stand for /ʒʒ/, the default outcome of OIA *-hy-* in Gāndhārī (cf. supra). In my view, there is no need to do so. Since it occurs in a canonical *sūtra* text based on a now lost original in an eastern MIA language, *gujha* / *guza* could instead be a loan from eastern MIA **gujjha-* < *guhya-* (CDIAL: no. 4222).⁷² In this case, *gujha* would be the preferred transliteration, and one does not have to take recourse to complicated phonological arguments: *gujha* could simply write /gujjʰa/.

In brief, there is nowadays at least some evidence that Kharoṣṭhī 𑀧 can correspond to *(j)jh* in other MIA languages. As a result, Brough’s second argument in favour of the transliteration *za* can no longer be upheld.

⁷¹ It is probably due to this deaspiration that 𑀧 is absent from the Aśokan Gāndhārī inscriptions. The fact that 𑀧 *jha* was scarcely used in inherited vocabulary may also explain why this akṣara became the standard way to render a foreign *z* in loanwords from Greek and Iranian.

⁷² For the phonological development, cf. e.g. Ved. dat.sg. *máhya(m)* ‘I’ > Pāli *mayha(m)* > Pkt. *majjha(m)* (von Hinüber 2001²: §245; §366).

2.1.7.3 Akṣaras alternating with 𑀘 and changing phonological values

This brings us finally to Brough's third argument, i.e. the potential confusion that can result from transliterating 𑀘 as *jha* when this grapheme is also used for the outcome of OIA intervocalic *-dh-* and more generally interchanges with 𑀓 *sa* and 𑀚 *śa /z/*. Even though I agree that this type of alternation would be less confusing when transliterating 𑀘 as *za*, two observations nonetheless weaken the force of this argument significantly.

First, it should be noted that 𑀘 can also alternate with the palatal obstruents 𑀅 *ca*, 𑀆 *cha*, and 𑀇 *ja*. So, if one transliterates 𑀘 as *za*, this type of interchange is no less confusing than the one with 𑀓 *sa* and 𑀚 *śa* when adopting the transliteration *jha*.

The alternation between 𑀘 and palatals occurs in both Central Asian and South Asian Gāndhārī. In Niya Prakrit, for instance, *jhorita* is attested as a variant of *c(h)or-* 'to steal' < OIA *√cur*, while *jhuṭhi*, a type of corn, occurs as a variant spelling of *cuṭhi(ye)* and *juṭhi*.⁷³ In both cases, the currently adopted transcriptions *zorita* and *zuṭhi* fail to properly visualise this type of interchange. For the same reason, it seems preferable to transcribe the South Asian Gāndhārī PN gen.sg. *Budhazi[a]sa* < OIA *Buddhajīva-* as *Budhajhi[a]sa* instead (CKI 557).

Still more data come from the *arapacana* poem transmitted as fragment 5 of the Bajaur collection of Gāndhārī manuscripts (CKM 268). This poem, cited from a preliminary transcription by Gudrun Melzer (Munich), is a collection of Buddhist verses arranged according to the *arapacana* sequence of the Kharoṣṭhī script. The two hemistichs of verse 39 start with the words *jharita* (*zariṭa*) 'aged' and *jhara* (*zara*) 'old age', whose etymologies from respectively *jarita-* and *jarā-* strongly suggest that they ought to be transcribed with an initial *jh-*.

Second, it seems that the interchange between 𑀘 and 𑀓 *sa* and 𑀚 *śa /z/* is a characteristic of Central Asian as opposed to South Asian Gāndhārī, suggesting that it may be a late (or perhaps dialectal) development. I could find only one instance in a South Asian source of 𑀘 being used where one would expect 𑀓 *sa* or 𑀚 *śa*, i.e. in the Kuṣāṇa inscription CKI 149, where the

⁷³ *jhorita* is attested in CKD 177; 678; 694; *jhuṭhi* in CKD 677; *cuṭhi(ye)* in CKD 422; 782; and *juṭhi* in CKD 291; 571; 703 (2x).

outcome of the OIA loc.sg. *māse* ‘in the month’ is spelled as *majhe* (*maze*) and not as *mase* or *maṣe* as in other inscriptions.⁷⁴

The alternation between ṛ *sa*, ḷ *sa*, and ʎ allows one to conclude that /z/ was a possible phonological value of ʎ. It does not follow that ʎ has always been /z/ or that /z/ was the only value possible. The evidence assembled above supports there to have been an alternative phonological value /(j)jʰ/.

The key question is which phonological value is the originally intended one. In my view, the confusion between ṛ *sa*, ḷ *sa*, and ʎ being restricted to late sources counts as an argument that /(j)jʰ/ is the originally intended value. Further support for this view is to be found in palaeography. If ʎ had always been a sign for /z/, one wonders why a new grapheme ḷ *sa* was developed to unambiguously write /z/ as the outcome of a lenited intervocalic *-s-*, *-th-*, and *-dh-* (so also Burrow 1935a: 780; LKD: §22).⁷⁵ What is more, the shape of the akṣara ʎ potentially reveals that its originally intended value was *jha* and not *za*, as it may not be a coincidence that ʎ not only looks like a vertically mirrored image of Kharoṣṭhī 𑀧 *ña*, another palatal sound (cf. Baums 2009: 171), but also as a mirror of the Early Brāhmī sign 𑀧 *jha* (Stefan Baums p.c.).⁷⁶ I therefore find it preferable to transcribe Kharoṣṭhī ʎ as *jha*.

The subsequent use of Kharoṣṭhī ʎ to write /z/ may be conceived of as the result of internal phonological developments in Gāndhārī. The lenition of OIA *-th-*, *-dh-*, and *-s-* had resulted in the addition of /z/ to the phonemic inventory of Gāndhārī—at least in intervocalic position—and the sign ḷ *sa* was developed to write this new phoneme /z/ in inherited words (cf. *supra*). ʎ *jha*, on the other hand, was still the default way to render a foreign *z* in loanwords. Since, however, intervocalic /z/ was now part of Gāndhārī’s phonemic inventory, foreign *z* could at once be rendered more faithfully as /z/ rather than /(j)jʰ/. This new way to render a foreign *z* could, in turn, have caused a change in the phonological value of ʎ *jha*, i.e. from /(j)jʰ/ to /z/, therewith enabling ʎ *jha* to start interchanging with ṛ *sa* and ḷ *sa* in inherited words (and ṛ *sa* and ḷ *sa* to be used as a substitution for a foreign /z/, see §4.3.19).

⁷⁴ For the spelling *mase*, see CKI 61; 155; 225; 226; 244; 245; 309; 312; 320; 368; 455; 497; 828. For *maṣe*, see CKI 152; 328; 509, and the Niya documents.

⁷⁵ On the historical development of ḷ *sa*, see recently Schlosser (2022: 85f.).

⁷⁶ Baums (2009: 172; 196) additionally points out that the position of Kharoṣṭhī ʎ in the *arapacana* sequence would fit with its originally being an aspirated voiced palatal.

Most likely, this change in the phonological value of ʃ *jha* was originally restricted to intervocalic position. Yet, in some Niya Prakrit names, ʃ *jha* can be seen alternating with ʃ *sa* (not ʃ *sa*) also initially and before /m/. Note, for instance, *Jhagamoya* (CKD 630) and *Jhagimoya* (CKD 632), otherwise spelled as *Sagamoya*, and names ending in *-rajhma* / *-rasma* ← Ir. **razman*- 'battle'. Such alternations evidence that the value of ʃ *jha* had changed to /z/ also in these positions. The fact that initial ʃ *jha* can still interchange with ʃ *ja* and other palatal obstruents (see above on *jhuthi*, a type of corn and *jhorita* 'stolen') leads one to believe that this process may not have been fully completed. Therefore, I cautiously assume that ʃ *jha* still had two phonological values in Niya Prakrit, i.e. /j^(h)/ and /z/.

TABLE 1 Niya Prakrit phonology

This table outlines the most likely phonological value(s) of the akṣaras used in Niya Kharoṣṭhī. For the assumed value(s) of *ka*; *kṣa*; *kṣa*; *jha*; *ṭha*; *ṭha*; *ḍa*; *na*; *lā*; *ya*; *vha*; *ṣpa*; *spa*, see §§2.1.6–2.1.7. I do not mention /gg^h/ and /bb/ as possible values of respectively *gha* and *ba* because I did not find a relevant example in Niya Prakrit. These values do occur in other types of Gāndhārī.⁷⁷ As in OIA (Nikolaev 2021), geminate /rr/ was probably absent from the language.

LETTER	VALUE	EXAMPLE(S)
𑀓 a	/a/ /ā/	<i>aja</i> / <i>ajja</i> / ‘now, today’ < <i>adya</i> <i>gamana</i> (<i>gamam</i>) / <i>gamana</i> / ‘going’ < <i>gamana</i> - <i>agach-</i> / <i>āyacch-</i> / ‘to come’ < <i>āgaccha</i> - <i>kala</i> (<i>kāla</i>) / <i>kāla</i> / ‘time’ < <i>kāla</i> -
𑀓 i	/i/ /ī/	<i>ich-</i> / <i>icch-</i> / ‘to wish’ < <i>iccha</i> - <i>lihidaga</i> / <i>lihiḍaya</i> / ‘written’ < * <i>likhitaka</i> - <i>nidaga</i> / <i>nīḍaya</i> / ‘taken’ < * <i>nītaka</i> -
𑀓 u	/u/ /ū/	<i>udaga</i> / <i>uḍaya</i> / ‘water’ < <i>udaka</i> - <i>puno</i> / <i>punō</i> / ‘again’ < <i>punar</i> <i>dura</i> / <i>dūra</i> / ‘away, far’ < <i>dūra</i> -
𑀓 r	/ri/ /ru/	<i>kṛta</i> (<i>kṛita</i>) / <i>kṛiḍa</i> / ‘made’ < <i>kṛta</i> - <i>prch-</i> (<i>pruch-</i>) / <i>prucc-</i> / ‘to ask’ < <i>prccha</i> - (cf. LKD: §5)
𑀓 e	/ē/ /ē/	<i>eka</i> / <i>ēkka</i> / ‘one’ < <i>eka</i> - (cf. Pkt. <i>ekka</i> -) <i>pitupetri</i> / <i>piḍupētrī</i> / ‘ancestral’ < <i>pitṛpaitṛka</i> - (cf. Pāli <i>pitupettika</i> -) <i>eṣa</i> / <i>ēṣa</i> / ‘this’ < <i>eṣa</i> - <i>lekha</i> / <i>lēkha</i> / ‘writing’ < <i>lekha</i> -
𑀓 o	/ō/ /ō/	<i>yoga</i> / <i>yōgga</i> / ‘proper’ < <i>yogya</i> - (cf. Pāli <i>yogga</i> -) <i>omaga</i> / <i>ōmaya</i> / ‘short’ < * <i>avamaka</i> - (cf. Pāli <i>omaka</i> -) <i>kośala</i> / <i>kōśala</i> / ‘well-being’ < <i>kauśala</i> -
𑀓 m	/ṃ/ /ñ/ /ṇ/ /n/ /m/	<i>upaśamk-</i> (<i>upaśamg(h)-</i>) / <i>upaśaṅg</i> / ‘to worry’ < <i>upa</i> + √ <i>śaṅk</i> <i>paṃca</i> / <i>pañja</i> / ‘five’ < <i>pañca</i> (cf. DHP ^K <i>paja</i>) <i>piṃḍa</i> / <i>piṇḍa</i> / ‘total’ < <i>piṇḍa</i> - <i>mahamta</i> (<i>mahamda</i>) / <i>mahanda</i> / ‘big’ < <i>mahat</i> - <i>gamam</i> / <i>gaman</i> / ‘going’ < <i>gamana</i> - (cf. LKD: §13) <i>sampujita</i> / <i>sambūḍiḍa</i> / ‘honoured’ < <i>sampūjita</i> -

⁷⁷ Cf. *ughuṭhago* ‘proclaimed’ < OIA **udghuṣṭaka*- (Pāli *ugghuṭṭha*-) in Av^{L4} verso 306 and *babaka* ‘made from grass’ < *bālbaja*- (Pāli *babbaja*-) in DHP^K 169.

ṛ ka	/k/ /kk/	kama /kāma/ 'desire' < <i>kāma-</i> ukas- /ukkaz/ 'to go away' < <i>ut + √kas</i> (cf. Pāli <i>ukkas-</i>) eka /ēkka/ 'one' < <i>eka-</i> (cf. Pkt. <i>ekka-</i>)
ṛ kā	/sk/ /šk/	namaḱaro /namaskārō/ 'homage' < <i>namaskāra-</i> maḱa /māṣka/ 'bean' ← Bactr. *μαῖκο /māškə/ (§3.2.2 s.v.)
ṛ kṣa ṛ kṣa	/kṣ/ /kṣa/	kṣetra (kṣetra) /kṣētra/ 'field' < <i>kṣetra-</i> sakṣi (sakṣi) /sākṣi/ 'witness' < <i>sākṣin-</i>
ṣ kha	/k ^h / /kk ^h /	khara /k ^h ara/ 'ass' < <i>khara-</i> nikhal- /nikk ^h āl/ 'to remove, provide' < <i>niṣkālaya-</i> dukha /dukk ^h a/ 'sorrow' < <i>duḥkha-</i> (cf. Pāli <i>dukkha-</i>)
ṛ ga	/g/ /gg/	goṭha /gōṣṭ ^(h) a/ 'farm, household' < <i>goṣṭha-</i> yoga /yōgga/ 'proper' < <i>yogya-</i> (cf. Pāli <i>yogga-</i>)
ṛ ḡa	/gn/	viḡa /vigna/ 'obstacle' < <i>vighna-</i>
ṛ ga	/γ/	anega /anēya/ 'many' < <i>aneka-</i> aroga /arōya/ 'health' < <i>aroga-</i>
ṛ ḡa	/γn/	Suḡuta /sūṽnūḍā/, foreign PN ~ <i>Sugnuta</i>
ṛ gha	/g ^h / /gh/	ghrida /g ^h riḍa/ 'ghee' < <i>ghṛta-</i> śighra /śiḡhra/ 'quickly' < <i>śiḡhram</i>
ṛ ca	/c/ /cc/	cora /cōra/ 'thief' < <i>caura-</i> kica /kicca/ 'task' < <i>kr̥tya-</i> (cf. Pāli <i>kicca-</i>)
ṛ cā	/śc/	pača /paścā/ 'afterwards' < <i>paścāt</i>
ṛ cha	/c ^h / /cc ^h /	chagalaga /c ^h aḡalaya/ 'she-goat' < * <i>chagalaka-</i> pruch- /prucc ^h / 'to ask' < <i>pr̥ccha-</i> (cf. Pāli <i>pucch-</i>)
ṛ ja	/j/ /jj/	jēṭha /jēṣṭ ^(h) a/ 'eldest' < <i>jyeṣṭha-</i> raja /rājja/ 'kingdom' < <i>rājya-</i> (cf. Pāli <i>rajja-</i>)
ṛ ja	/ž/ /žž/	pradeja (<i>pradeśa</i>) /praḍēža/ 'district' < <i>pradeśa-</i> yajitaga /yāžiḍaya/ 'requested' < * <i>yācitaka-</i> guja /gužža/ 'hidden' < <i>guhya-</i> (cf. Pāli <i>guyha-</i> , Pkt. <i>gujja-</i>)
ṛ jha	/j ^(h) / /z/	jhorita (<i>c(h)or-</i>) /j ^(h) ōriḍa/ 'stolen' < <i>corita-</i> divajha (<i>divasa</i> ; <i>divaṣa</i>) /divaza/ 'day' < <i>divasa-</i>
ṛ ña	/ñ/ /ññ/	ñana /ñāna/ 'knowledge' < <i>jñāna-</i> (cf. Pāli <i>ñāna-</i>) a(m)ña /añña/ 'other' < <i>anya-</i> (cf. Pāli <i>añña-</i>)
ṛ ṭa	/ṭṭ/	paṭa /paṭṭa/ 'silk roll' < <i>paṭṭa-</i>
ṛ ṭha	/ṣṭ ^(h) /	naṭha /naṣṭ ^(h) a/ 'destroyed' < <i>naṣṭa-</i>
ṛ ṭha	/ṭṭ ^h /	vaṭhayaga (<i>vaṭayaga</i>) /vaṭṭ ^h āyaya/ 'attendant' < <i>upasthāyaka-</i> aṭhovaga /aṭṭ ^h ōvāya/ 'fit for a purpose, suitable' < * <i>arthopāka-</i>

ᳵ ḍa	/ḍ/	<i>daṃḍa</i> / <i>daṇḍa</i> / ‘stick, punishment’ < <i>daṇḍa</i> -
ᳶ ḍa	/ṛ/	<i>kukuḍa</i> / <i>kukkuṛa</i> / ‘cock’ < <i>kukkuṭa</i> - <i>vaḍavi</i> / <i>vaṛavi</i> / ‘mare’ < <i>vaḍavi</i> - <i>giḍa</i> / <i>giṛa</i> / ‘taken’ < <i>grhīta</i> -
᳷ ḍha	/ḍ ^(h) /	<i>muṣḍhaṣi</i> / <i>muṣḍ^(h)aṣi</i> /, woman exchanged within exogamous marriage practices ← Bactr. * <i>možḍopī</i> / <i>muždḍṣī</i> / * <i>mižda-strī</i> - ‘reward woman’ or * <i>mižduṣi</i> - ‘gnädige (Frau)’ (§3.2.3 s.v.)
	/ṛ ^h /	<i>oṣaḍha</i> / <i>oṣar^ha</i> / ‘medicinal herb’ < <i>auṣadha</i> -
	/ḍḍ ^h /	<i>aḍha</i> / <i>aḍḍ^ha</i> / ‘half’ < <i>ardha</i> - (cf. Pāli <i>aḍḍha</i> -)
᳸ ta	/t/	<i>taha</i> / <i>tahā</i> / ‘thus’ < <i>tathā</i>
	/tt/	<i>utara</i> (<i>utvara</i>) / <i>uttara</i> / ‘higher’ < <i>uttara</i> -
	/ḍ/	<i>lihitaḡa</i> / <i>lihiḍaya</i> / ‘written’ < * <i>likhitaka</i> -
᳹ tha	/t ^h /	<i>thavitaḡa</i> / <i>t^hāviḍaya</i> / ‘deposit’ < * <i>sthāpitaka</i> -
	/tt ^h /	<i>iṃthu</i> / <i>itt^hu</i> / ‘thus’ < <i>ittham</i> (Schlosser 2022: 186; 295)
ᳺ da	/d/	<i>doṣa</i> / <i>dōṣa</i> / ‘fault’ < <i>doṣa</i> -
	/dd/	<i>udīṣa</i> / <i>uddiṣṣa</i> / ‘concerning’ < <i>uddiṣya</i> (cf. Pāli <i>uddissa</i>)
	/ḍ/	<i>lihidaḡa</i> / <i>lihiḍaya</i> / ‘written’ < * <i>likhitaka</i> -
᳻ dha	/d ^h /	<i>dhanu</i> ‘bow’ / <i>d^hanu</i> / < <i>dhanu(s)</i> -
	/dd ^h /	<i>nadha</i> / <i>nadd^ha</i> / ‘bundle’ < <i>naddha</i> -
᳼ na	/n/	<i>nama</i> / <i>nāma</i> / ‘name’ < <i>nāman</i> - <i>manuśa</i> / <i>manuśṣa</i> / ‘man’ < <i>manuṣya</i> - (cf. Pāli <i>manussa</i> -)
	/nn/	<i>a(m)na</i> / <i>anna</i> / ‘food, cereal’ < <i>anna</i> -
᳽ pa	/p/	<i>pita</i> / <i>piḍā</i> / ‘father’ < nom.sg. <i>pitā</i> ← * <i>pitṛ</i> -
	/pp/	<i>pipali</i> / <i>pip^hali</i> / ‘pepper’ < <i>pippalī</i> -
᳾ pha	/p ^h /	<i>phalophala</i> / <i>p^halōp^hala</i> / ‘all kinds of fruit’ < <i>phalāphala</i> -
	/pp ^h /	<i>pupha</i> / <i>pup^hpa</i> / ‘flower’ < <i>puṣpa</i> - (cf. Pāli <i>puppha</i> -)
᳿ ba	/b/	<i>budha</i> / <i>budd^ha</i> / ‘Buddha’ < <i>buddha</i> -
᳾ bha	/b ^h /	<i>bhata</i> / <i>b^hatta</i> / ‘food’ < <i>bhakta</i> -
	/bb ^h /	<i>abhomata</i> / <i>abb^hōmaḍa</i> / ‘disrespected’ < <i>abhyavamata</i> - (cf. Pāli <i>abbhomata</i> -)
᳾ ma	/m/	<i>muli</i> / <i>mūlī</i> / ‘price’ < <i>mūlya</i> -
	/ram/	<i>ram</i> - / <i>ram</i> / ‘to enjoy’ < <i>√ram</i>
	/mm/	<i>samuha</i> / <i>samm^hu</i> / ‘face to face’ < <i>sammukham</i>
᳾ ya	/y/	<i>yadi</i> / <i>yaḍi</i> / ‘if’ < <i>yadi</i>
	/priya/	<i>priya</i> / <i>priya</i> / ‘dear’ < <i>priya</i> -
	/yy/	<i>payati</i> / <i>payy^hatti</i> / ‘capacity’ < <i>paryāpti</i> -

𑀓𑀲 <i>ra</i>	/r/	<i>raya</i> /rāyā/ 'king' < nom.sg. <i>rājā</i> ← <i>rājan-karana</i> /kārana/ 'reason' < <i>kāraṇa-parikraya</i> /parikraya/ 'rent' < <i>parikraya-</i>
𑀓𑀸𑀲 <i>la</i>	/l/ /ll/	<i>lih-/lih/</i> 'to write' < $\sqrt{\text{likhati}}$ <i>kila</i> /kīla/ 'wedge' < <i>kīla-vulasi</i> /vullāzi/ 'admiration' < <i>ullāsa-</i>
𑀓𑀸𑀲𑀸 <i>lyā</i>	/l̥/	<i>lyihida</i> /lihiḍa/ 'written' < <i>likhita-Lyipe</i> /l̥ip(p)ē/, foreign PN
𑀓𑀲𑀸 <i>va</i>	/v/ /vv/	<i>vivada</i> /vivāḍa/ 'dispute' < <i>vivāda-avi</i> /avi/ 'also, too' < <i>api</i> <i>sava</i> /savva/ 'all' < <i>sarva-</i> (cf. Pāli <i>savva-</i>)
𑀓𑀲𑀸𑀲 <i>ya</i>	/w/	<i>yaṃti</i> (<i>vaṃti</i>) /wāṇdi/ 'in, at, to' < <i>upānte hetuṇena</i> /hēḍuṇēna/ 'by reason' < <i>hetu-</i>
𑀓𑀲𑀸𑀲𑀸 <i>vha</i>	/f/	<i>Tiravhara</i> /tīrafara/, PN ← Bactr. *τ(ε)ιροφαρρο /tīrəfarrə/ < *tīra-farnah- 'glory of the god Tir'
𑀓𑀲𑀸𑀲𑀸𑀲 <i>śa</i>	/ś/ /śś/ /ž/	<i>śata</i> /śaḍa/ 'hundred' < <i>śatam</i> <i>avaśa</i> /avaśśa/ 'certainly' < <i>avaśyam</i> (cf. Pāli <i>avassam</i>) <i>daśa</i> (<i>daja</i>) /daža/ 'ten' < <i>daśa</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸 <i>ṣa</i>	/ṣ/ /ṣṣ/ /z/	<i>ṣamanera</i> /ṣāmanēra/ 'novice' < <i>śrāmaṇera-vaṣa</i> /vaṣṣa/ 'year' < <i>varṣa-</i> (cf. Pāli <i>vassa-</i>) <i>śeṣa</i> /śēza/ 'remainder' < <i>śeṣa-</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸𑀲 <i>ṣa</i>	/ṣn/	<i>kriṣaga</i> /kriṣnaya/ 'blackish' < <i>kṛṣṇaka-</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸 <i>śpa</i>	/ṣf/	<i>ṣpālyaya</i> /ṣfālāya/, foreign PN ~ <i>ṣvalāyaya</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲 <i>sa</i>	/s/ /ss/ /z/	<i>saṃvatsara</i> /samvatsara/ 'year' < <i>saṃvatsara-osuka</i> /ōssukka/ 'eagerness' < <i>autsukya-dasa</i> (<i>daṣa</i> ; <i>dajha</i>) /dāza/ 'slave' < <i>dāsa-</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸 <i>śa</i>	/z/	<i>śaca</i> /zacā/ 'with' < <i>sacā</i> <i>viśaj-</i> /vizajj/ 'to send' < <i>visarjaya-</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲 <i>śa</i>	/sn/	<i>śatra</i> /snātra/ 'bath' < <i>snātra-ins.sg. pritiśehena</i> /prīḍisnehena/ 'with love and affection' < <i>prīti-</i> + <i>sneha-</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸 <i>śpa</i>	/sf/	<i>śpārna</i> /sfarna/ 'gold' < <i>suvarṇa-parospara</i> /parōsfara/ 'one another' < <i>paraspara-</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲 <i>ha</i>	/h/	<i>hasta</i> /hasta/ 'hand' < <i>hasta-suha</i> /suha/ 'happiness' < <i>sukha-</i>
𑀓𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲𑀸𑀲 <i>ha</i>	/hn/	opt.3sg. <i>gr̥hēyāti</i> /grihnēyāḍi/ '(s)he may take' < $\sqrt{\text{grah}}$

2.2 Graeco-Bactrian script and Bactrian phonology

2.2.1 The Graeco-Bactrian script and its characteristics

Except for one fragment in an adapted form of the Manichaean script (M 1224), Bactrian is written in the so-called Graeco-Bactrian script, a local derivative of the Greek alphabet. The inventory of letters is more or less the same as in Greek, with two notable deviations: the digraph ξ /ks/ only occurs in its respective numerical value 60,⁷⁸ and one grapheme has been added to the script inventory to write a phoneme unknown to Greek phonology, i.e. þ /š/ (on which see Falk 2022: 155–167). This letter is conventionally put at the end of the alphabet.

Palaeographically, one has to distinguish between two variants of the Graeco-Bactrian script. On the one hand, a “monumental” or “rectangular” variant was used for the inscriptions of the Kuṣāṇa period at Surkh Kotal, Rabatak, and other sites. On the other hand, a “cursive” variant was developed to write administrative documents, letters, literary texts, etc. Due to its distinctive ductus, this cursive script had to be gradually deciphered by modern scholars (cf. Sims-Williams 2006; SCBD: 53–59).

The identification of loanwords from Bactrian into Niya Prakrit requires at least a preliminary idea of the phonological value of the Graeco-Bactrian graphemes (summarised in Table 2, p. 62). For some letters, this is sufficiently straightforward. But for others the situation is more complex because there were more phonemes in Bactrian than there were graphemes in the Graeco-Bactrian alphabet. Three topics in particular will need to be discussed at some length: (i) what does the vowel system of Bactrian look like, and how is /h/ graphically rendered (§2.2.2); (ii) when do <β>, <γ>, and <δ> stand for plosives and when for fricatives (§2.2.3); and (iii) which phonemes do <ζ>, <σ>, and <þ> indicate (§2.2.4)?

In what follows, the evidence used to address these questions will mainly be drawn from Bactrian historical phonology and the orthography of the Manichaean fragment.⁷⁹ Some of the linguistic features of the latter are

⁷⁸ ψ /ps/ does not seem to be attested, also not in its expected numerical value 700.

⁷⁹ This is not the place to give a comprehensive overview of Bactrian historical phonology, so I will only discuss points that are directly relevant to my argumentation. SFBG (31ff.) outlines the main changes but differs in some crucial

typical of Late Bactrian and thus indicative of a late composition of this text.⁸⁰ As a result, one could be inclined to regard also those linguistic features of Manichaean Bactrian not deducible from texts in Graeco-Bactrian orthography, in particular some of the palatalisations treated in §2.2.4, as being of a late nature and hence of little to no value to our understanding of Kuṣāṇa Bactrian phonology. In this study, I adhere to a pragmatic policy: linguistic features observable in the Manichaean fragment are posited for Kuṣāṇa Bactrian (i) when internal evidence (e.g. from the relative chronology of sound changes) proves that these features are indeed not recent innovations, or (ii) when they fit with the loanword data discussed in Chapters 3–4, and counter-evidence against their being old is lacking.

2.2.2 The Bactrian vowel system and the notation of /h/

The phonological system of Bactrian included at least ten vowels: the vowels /a/, /e/, /i/, and /u/ in both a short and a long version; a long /ō/;⁸¹ and a central vowel /ə/ (cf. Sims-Williams 1989b: 233f.).

The notation of long vowels varies. /a/ and /ā/ are both written with <α>, so one must decide on etymological grounds which one is intended. In the word ανδαρζο ‘instruction’, for instance, both alphas most likely stand for short /a/ because the word etymologically derives from **han-darza-*, whereas the etymology of αζαδο ‘noble’ from **āzāta-* suggests that its two alphas stand for long /ā/. The vowels /ē/ and /ō/ have separate symbols, i.e. <η> and <ω>. They occur in words such as ηβ- ‘to dispute’ <*āpaya-, οηλ- ‘to lead’ <*wādaya-, ωζο ‘power’ <*aujah-, and ρωσο ‘day’ <*rauḥah-. In Kuṣāṇa Bactrian, /ī/ and /ū/ could also be distinguished from their short counterparts /i/ and /u/: the digraph <ει> writes /ī/, e.g. in λαδειγο /lādīgə/ ‘righteous’ <*dāt-īya-ka-, and <ου> could, when not standing for /uh/ (cf.

details from the views adopted here. Francesca Michetti is preparing a comprehensive historical phonology of the language. For the Manichaean evidence, I build further on the comments made by Sims-Williams (2011a), whose conclusions are on many, though not all, points the same as mine. In §§4.3.8–4.3.21, I will return to some of the issues involved once the additional evidence of Bactrian loanwords into Niya Prakrit can be considered.

⁸⁰ The exact dating remains uncertain. Sims-Williams (2011a: 168f.) tentatively settles on “the late seventh or early eighth century C.E.” but notes that a still later date is not excluded.

⁸¹ As discussed below, conclusive evidence for a phonemic short /o/ is missing.

infra), spell /ū/, e.g. in (υ)αρουγο / (h)arūgə/ ‘all’ < *harwa-ka-.⁸² In later texts, <ι> and <ο> are the normal way to spell /ī/ and /ū/, as in λιδο /līdə/ ‘seen’ < *dīta- or σοδο /sūdə/ ‘plenty’ < *sūtV-. But for some words, the digraphs <ει> and <ου> can still be used in post-Kuṣāṇa times, sometimes even to write an apparently short vowel, as in σπουριγο /spurīgə/ < *us-pr̥na- + -ιγο < *-iya-ka- (jb 12).

The Graeco-Bactrian script did not have a distinct sign for /ə/. Yet, spelling variations and arguments from historical phonology can often be used to ascertain the presence of a schwa in a given lexeme (see Sims-Williams 1989b: 234). One of the most reliable indications is when a particular word is sometimes spelled with one vowel and sometimes with another, e.g. ναβιχτο next to νοβιχτο /nəvixtə/ (and archaic νιβιχτο /nivixtə/) ‘written’ < *ni-pixšta-. In Anlaut, /ə/ can occur as a prothetic vowel before consonant clusters or as the result of vowel weakening. Examples of the former are αχπονο ‘calendar/regnal year’ < earlier χπονο and αρκαρ- (also ερκαρ-) ‘to chase’ < *škara-; an example of the latter is αζοαστο (also ζοαστο) next to the more archaic οζοαστο ‘brought out, released, issued’ < *uz-wāsta-.

The majority of Bactrian words end in -o (BD II: 40), by the time of the later Bactrian documents probably no more than a graphic device to indicate word end. In Kuṣāṇa Bactrian, word-final -o may still have been pronounced as /ə/ (cf. e.g. Morgenstierne 1970: 126; Schwartz 1974: 409f.; Sims-Williams 1989b: 234), and this is how I will transcribe it.⁸³

GBactr. <o> can additionally be used at the border between a prefix and a root and between two members of a compound, e.g. πιδοβανδο ‘response, connection’ < *pati-banda- next to πιδβηγο ‘revered’ < *pati-baya-ka- (BD II: 254) and ανδαροζαγγο besides ανδαρζαγγο ‘of another kind’ < *antara-zana-ka- (BD II: 192). In many such cases, it is difficult to decide if <o> is only used as a graphic device or if it indicates a schwa (phonemic or not).⁸⁴

⁸² These spelling habits probably find their origin in the Hellenistic Greek pronunciation of <ει> and <ου> (VG³: 69f.; 77f.; Kantor 2023: 516–544; 704–717). For the etymologies of λαδειγο and (υ)αρουγο, see Sims-Williams & Cribb (1996: 90; 92).

⁸³ Jügel (2015: 168 fn. 429) plausibly suggests that “Im Baktrischen könnte -o, das nahezu jedes Wort wie ein Marker des Wortendes abschließt (...), auf den Nominativ oder Akkusativ Singular zurückzuführen sein (*am > *u > ?ə)”. See further Kreidl (2024: 208f.) and Michetti (fthc.: §7).

⁸⁴ When discussing Bactrian loanwords into Niya Prakrit, I will, for reasons of convenience, transcribe <o> in examples of this type with /ə/ when there is a

As already briefly indicated above, GBactr. <o> is additionally used to write /u/ (and /ū/), e.g. in ορλαγνο /urlaynə/ ‘name of a divinity’ < *vr̥θra-gna- or κοδο /kudə/ ‘dog’ < *kutV-. In addition, <o> can represent the semivowel /w/, as shown by instances like οαρο /wārə/ ‘there’ < *awaθra or φρογαοο /frəγāwə/ ‘profit’ < *fra-gāwa-.⁸⁵

A more intricate question is whether <o> is also used for /o/. In view of the existence of a short vowel ε /e/, there may have been a phoneme /o/ as well, but it is not so easy to find a straightforward example of it. Some scholars assume that when <o> indicates the outcome of *u*-umlaut of **a*, it stands for /o/ (so e.g. SFBG: 65; Bichlmeier & Benvenuto 2022ab). Given that *i*-umlaut of **a* results in /i/, e.g. -βιδο /vidə/ < *pati-, I consider it more plausible that *u*-umlaut of **a* yields /u/. According to Sims-Williams (1989b: 234), the first o in βο(o)- ‘to be(come)’ < *bawa- could also be an example of /o/, but it is equally possible that βο(o)- stands for /vuw/ rather than /vow/.⁸⁶ I therefore believe that we can for now do without the postulation of a Bactrian phoneme /o/.

Not being used for /u/, GBactr. <v> instead serves to write the phoneme /h/ (see already Herzfeld 1930: 9f.). Examples of this spelling are υιρζ- ‘to release’ < *hrz- (cf. MBactr. *hyrz-*) and λαυ- ‘to give’ < *daθa- (cf. MBactr. *lh-*).⁸⁷ Most likely, this spelling habit stems from the default aspiration of initial *v*- in Ancient Greek, i.e. υ- /hu/ > Attic and Koiné /hü/; this hypothesis is confirmed by the early Bactrian usage of <v> to write initial /hi/ in the word υνδο ‘India’ (Rab. 4; 7; 19; NPlate 3) and its derivative υνδοοαο ‘in Indian’ (Rab. 10).⁸⁸

corresponding vowel in Niya Prakrit, but assume it to be a dead vowel when there is no Niya correspondent. This practice sometimes results in minor inconsistencies, for which the reader’s indulgence is requested.

⁸⁵ After a vowel, /w/ can also be spelled with double <oo> in texts after 465 AD (SCBD: 62).

⁸⁶ In SCBD (62 fn. 198), Sims-Williams and de Blois also transcribe subj.1sg. βοοαο ‘I will be(come)’ as “[vuwān]”.

⁸⁷ Because of the development of OIr. *θ to Bactr. /h/ in initial and intervocalic positions, instances of <θ> in writing (e.g. ιθαο ‘thus’ < *iθā) are probably historical spellings (cf. BD II: 218; SFBG: 38).

⁸⁸ Sims-Williams (2008c: 59f.) appears to attribute the value /hi/ to the “later” Greek sound change of /ü/ to /i/, but this change is usually assumed not to have occurred before the 10th or 11th century AD (Holton et al. 2019: 11–13; cf. also Kantor 2023: 544–558). Therefore, I deem it more likely that Gr. /ü/ was substituted with Bactr. /i/ as the next closest available sound, in the same way

Starting from the variant spellings $\mu\upsilon\upsilon\omicron$ / $\mu\upsilon\upsilon\omicron$ / $\mu\omicron\omicron\omicron$ ‘Mihir’ < **miθra*- in Kuṣāṇa-period sources, Sims-Williams (2008c: 60) has come up with a hypothesis on how the value of <v> changed from /hi/ to /h/. According to him, <v> could first only be used for word-initial /hi/ since /mihirə/ < **miθra*- with its word-internal /hi/ is written as $\mu\upsilon\upsilon\omicron$ in Rab. 10 and Kuṣāṇa-period coins.⁸⁹ Starting with coins datable to Kaniška’s reign, the Bactrian outcome of **miθra*- can alternatively be written as $\mu\upsilon\upsilon\omicron$, the standard spelling in later times. Assuming that $\mu\upsilon\upsilon\omicron$ likewise stands for /mihirə/, Sims-Williams considers this form to represent the next stage in the development when <v> could also be used for word-internal /hi/. The final step would have been when $\mu\upsilon\upsilon\omicron$ came to be regarded as equivalent to $\mu\omicron\omicron\omicron$ (also found on coins of Kaniška). The latter is transcribed by Sims-Williams as /mihərə/, on the assumption that <o> marks a svarabhakti vowel /ə/ and /h/ is left unwritten.

Although Sims-Williams’ hypothesis seems plausible overall, one may still wonder if the <op> in $\mu\omicron\omicron\omicron$ really writes /hər/ and not simply /hr/. In the case of $\mu\omicron\omicron\omicron$, the variant $\mu\upsilon\upsilon\omicron$ /mihirə/ provides clear evidence that the cluster /hr/ < **θr* was (eventually) broken up by a svarabhakti vowel, but <op> is also used to write the outcome of **-θr*- in words such as $\beta\alpha\omicron\omicron$ ‘kingdom, city’ < **xšaθra*- and $\pi\omicron\omicron\omicron$ ‘son’ < **puθra*- (cf. Lazard, Grenet & de Lamberterie 1984: 222f.).⁹⁰ If, as per Sims-Williams, the cluster /hr/ < **-θr*- was broken up by a schwa also in these words, I find it somewhat surprising that in later Bactrian they are always spelled as $\beta\alpha\upsilon\omicron$ /šahrə/ and $\pi\omicron\upsilon\omicron$ /puhrə/, never as ** $\beta\alpha\upsilon\omicron\omicron$ /šahərə/ or ** $\pi\omicron\upsilon\omicron\omicron$ /puhərə/. I therefore have a slight preference to interpret the digraph <op> as an archaic spelling of /hr/, even though it is admittedly hard to understand why <op> would have been adopted to write /hr/.⁹¹ This potentially contentious point does

that speakers of Coptic approximated Gr. /ü/ as /i/ (Gignac 1976: 266f.). Another instance of the same substitution may be Bactr. $\omicron\beta\omicron\omicron\gamma\gamma\omicron$ (and variant) ‘made from linen or cotton’, an adjective made from * $\omicron\beta\omicron$ ‘linen, cotton’ ← Gr. βύσσος ‘idem’ (Sims-Williams 2002: 228; BD II: 248).

⁸⁹ Cf. also the PN $\mu\omicron\omicron\omicron\zeta\alpha\delta\alpha$ /mihirəzādā/ < **miθra-zāta*- in Ayrtam 6, but note that Michetti (fthc.: Appendix) prefers to read $\mu\omicron\omicron\zeta\alpha\delta\alpha$ with only one iota.

⁹⁰ A further example is obl.sg. $\pi\omicron\omicron\omicron$ ‘father’ < gen.sg. **piθrah* (NPlate 1, Sims-Williams 2015: 256; 259).

⁹¹ Julian Kreidl (p.c.) made the interesting (but speculative) suggestion that <op> could result from a graphic simplification of earlier *<θp> given that <θ> and <o> are palaeographically similar, and **θr* is the most common source of Bactr. /hr/. A word where <op> could be used to write a cluster /hr/ that is not derived from

not affect the arguments about Bactrian loanwords into Niya Prakrit in any significant way, and I will spell /hr/ as <υρ> when reconstructing Bactrian words.

2.2.3 The phonological value of β, γ, and δ

In Greek, the value of <β>, <γ>, and <δ> changed from /b/, /g/, and /d/ to /v/, /γ/, and /δ/ at some undetermined point in time after the classical period, i.e. after the 4th century BC, possibly even much later (VG³: 29–32; Kantor 2023: 94–131). This raises the question which value these graphemes had in Bactrian. Were they used for plosives or fricatives, or were they used for both? If the latter, how can we distinguish when, for instance, <β> stands for /b/ and when for /v/?

2.2.3.1 -δ- /d/

Let us begin with the least complicated letter, i.e. <δ>. In most of its occurrences in inherited words, Bactrian <δ> derives from OIr. **t*. Firstly, **t* lenited to <δ> intervocally, e.g. λαδο ‘law’ < **dāta-*, παδο ‘father’ < **pitā*, nom.sg. of **pitar-*, and καδγο ‘house’ < **kata-ka-*.⁹² This lenition is to be dated before the occasional procope of initial vowels, as demonstrated by, amongst others, δανομανο ‘so-and-so’ < **aitāt-nmāna-*. Secondly, **t* became <δ> when it stood in contact with a (secondarily) voiced consonant. Words belonging to this category are μαρδο ‘man, slave’ < **martiya-*, ανδαρο ‘in between’ < **antara-*, and αλωγδο ‘fully privileged’ < **hada-uxta-*. After a nasal or a voiced sibilant, Bactr. <δ> can alternatively be from OIr. **d*, e.g. βανδαγο ‘servant, slave’ < **banda-ka-* and αζδο ‘knowledge, information’ < **azdā* (cf. also de Blois 2013: 269).⁹³

**θr* is the divine name αρομοζδο < **ahura-mazda-* (Rab. 10); I would transcribe this name as /ahrəmuzdə/, assuming syncope of the **u* in **ahura-*, as also happened in the month name αρηζνο /ahrēznə/ < **ahura-yazniya-* ‘(month) of the worship of the *ahura(s)*’ (BD II: 198).

⁹² When in secondary contact with another **t*, the outcome is τ /t/, e.g. στο ‘and’ < **uta + *uti* or βαταρο ‘happier’ < **čyāta-tara-*. τ /t/ can also represent the outcome of older **-št-*, e.g. αταο ‘eight’ < **aštā / *aštau* (SFBG: 47).

⁹³ In other positions, **d* developed to Bactr. λ /l/. From the 7th century AD onwards, λ from **d* is in some clusters reversed to δ, e.g. λρ and ρλ (SCBD: 60). In late texts, there accordingly are more environments in which Bactr. <δ> can come from **d*.

Unfortunately, it cannot be established with certainty if GBactr. <δ> stood for /d/, /δ/, or both. The Manichaean fragment only uses a grapheme <d>, never <δ>. This could be taken as evidence that there was no phoneme /δ/ in Bactrian, seeing that the Manichaean fragment does distinguish /b/ from <β> /v/ and <g> /g/ from <γ> /γ/ (see below). It is, however, also possible that Manichaean Bactrian simply did not differentiate in writing between /d/ and /δ/, as Manichaean Middle Persian and Parthian do not do so either (cf. Sims-Williams 2011a: 170; SFBG: 34).

By lack of evidence to the contrary,⁹⁴ I follow Morgenstierne (1970: 126), Sims-Williams (1989b: 233), and Gholami (SFBG: 17) in assuming that GBactr. <δ> by default writes /d/ and not /δ/ (cf. Table 2, p. 62). This assumption will not affect the arguments about Bactrian loanwords in Niya Prakrit made in Chapters 3–4 (cf. §4.3.13).

2.2.3.2 -γ- /g/ and /γ/

GBactr. <γ> can, to begin with, represent the outcome of OIr. *k. The latter could undergo intervocalic lenition in Bactrian, as in ωγο ‘one’ <*aiwa-ka- or αγπο ‘ineffective’ <*a-kārya- (SFBG: 35),⁹⁵ and it could be assimilated to an adjacent voiced consonant, as in οισπαργο ‘everything’ <*wisparkā- or αγγιτο ‘received’ <*ham-kašta- (SFBG: 46).

⁹⁴ It is possible, as Sims-Williams (BD II: 39) points out, that in Late Bactrian <Δ> and <δδ> “were adopted as unambiguous ways of indicating [d] at a period when δ in most positions had come to be pronounced as a fricative [ɖ]”. Yet, conclusive evidence in support of this hypothesis is lacking (cf. SFBG: 34), and the implied fricativisation of /d/ to /δ/ would, in any case, be a late change that does not affect the interpretation of Kuṣāṇa Bactrian phonology. Regarding loanwords, a potentially relevant item is the word *wrδn* ‘chariot’ in a multilingual Manichaean calendar from Turfan (U 130). Sims-Williams (2019b: 258f.) persuasively argues that *wrδn* represents Bactr. *οαρδανο < OIr. *wartana-. However, the fact that *wrδn* is written with <rδ> does not necessitate that Bactr. *οαρδανο was pronounced by native speakers as /warδanə/ and not as /wardanə/. One could also say that /warδanə/ was “Bactrian with a Sogdian accent”, seeing that /d/ is only found after nasalised vowels in Sogdian (Sims-Williams 1989a: 178; Yoshida 2009: 286).

⁹⁵ For the reconstruction *a-kārya-, see Sims-Williams (2015: 260). At a morpheme boundary or in the case of the hypocoristic suffix *-k(k)a-, intervocalic *-k- is sometimes preserved, e.g. in νακανδο /nəkandə/ ‘dug’ <*nikanta- or ζαδακο /zādak(k)ə/ ‘child’ <*zāta-k(k)a-.

As the Manichaean Bactrian script consistently differentiates <g> from <γ>, this can help us to decide whether GBactr. <γ> from **k* stands for /g/ or /γ/. In the Manichaean fragment, the voiced outcome of OIr. **k* is always spelled with <g>, as exemplified by, amongst others, *‘sprymygg* ‘flower’ < **sprgma-ka-*, *βrg* ‘fruit’ < **bara-ka-*, and *βyžg* ‘sin’ ~ βιζαγο < **bazdy-a-kǎ-*. These examples prove that **k* probably had nowhere developed further than the plosive /g/ when the Manichaean folio was written (Sims-Williams 2011a: 170). Consequently, the same must be true of older stages of the language.

A second source for GBactr. <γ> is OIr. **g*, be it word-initially, intervocally, or as part of a consonant cluster (SFBG: 36; 44). Words belonging to this category are, for instance, γαμβο ‘damage’ < **gamba-*, λρωγο ‘falsehood’ < **drauga-*, οιγνο ‘famine’ < **waignā-*, and αβυαγγο ‘deduction, levy’ < **apa-θanga-*.

When resulting from **g*, GBactr. <γ> corresponds to MBactr. <γ>, so we can posit a sound change from OIr. **g* to Bactr. /γ/ (Sims-Williams 2011a: 170).⁹⁶ This change was likely inhibited by a preceding nasal, given that OIr. **d* was also continued unchanged after **n* (cf. *supra* and Sims-Williams 1989b: 233).⁹⁷

Relative chronology suggests that the fricativisation of **g* occurred before the start of Bactrian literacy in the 1st century AD. Considering that Bactr. /g/ from **k* apparently did not develop to **/γ/, the change of **g* to Bactr. /γ/ must predate the voicing of **k*, and since this voicing had already been completed in our earliest texts, **g* > /γ/ needs to have happened before

⁹⁶ There are two examples of this correspondence in initial position, i.e. γ’w ~ γαο(ι) ‘cow’ < **gǎw-* and γlyh ~ *γαλινο (earlier γαλιγο) ‘theft’ < **gadya-kǎ-*, and seven instances in non-initial position, i.e. γd ~ αγαδο ‘came’ < **ā-gata-*; wγwt ~ ωγοτο ‘secrecy (?)’ < **awa-gušta-*; *‘sprymygg* ‘flower’ < **sprgma-ka-*; cγwwng ‘as’ ~ *σαγωγο or *σαγογγο (later σογγο) < **čiyāt-gauna-ka-*; frγ’w ~ φρογαοο ‘profit, wealth’ < **fra-gāwa-*; myγdyg ~ *μυγδιο ‘fruit’ < **migda-ka-*; and rwwyn ~ *ρωγγο ‘butter’ < **raugna-*. I leave out r’γγg ‘evil’ (cf. GBactr. ραγο ‘idem’) since its etymology is unknown (BD II: 259; Sims-Williams 2009a: 264).

⁹⁷ Every instance of MBactr. <ng> in words whose etymology is known continues **-nVk-*; cf. the suffix -’ng < **-āna-ka-*; cγwwng ‘as’ < **čiyāt-gauna-ka-*; frwng ‘foreseeing’ < **fra-waina-ka-*; hβyśznng ‘of many kinds’ < hβyś ‘much’ + **zana-ka-*; and the suffix -yng < **-aina-ka-*.

Kuṣāṇa times as well. It is therefore justified to transcribe GBactr. <γ> from **g* as /γ/ in every attested stage of the language.⁹⁸

In case of a cluster -γδ-, GBactr. <γ> can also derive from OIr. **x*, as in e.g. αλωγδο ‘fully privileged’ < **hada-uxta*-. There are no words of this type in the Manichaean fragment;⁹⁹ but seeing that <γ> results here from a fricative, chances are high that -γδ- from *-*xt*- was pronounced as /γd/ and not as **/gd/ (SFBG: 47).¹⁰⁰

In short, to determine the most likely value of GBactr. <γ> in a given word, one can use the following rule of thumb: when occurring after a nasal or representing the outcome of OIr. **k*, <γ> can be assumed to stand for /g/; if the result of OIr. **g* or **x*, <γ> is to be transcribed as /γ/.

2.2.3.3 -β- /b/ and /v/

A first source for GBactr. <β> is OIr. **b*, as can be illustrated by words such as βιζαγο ‘sin’ < **bazdya-kā*-, αβιρ- ‘to obtain’ < **abi-ār(a)ya*-, and λαδοβαρο ‘judge’ < **dāta-bāra*-. In Manichaean orthography, these words are spelled as βγζγ, βγρ-, and λδβρ, so there is proof that OIr. **b* developed to Bactr. /v/. As it is likely that this development occurred simultaneously with the lenition of **g* to /γ/, i.e. before Bactrian literacy started (cf. supra), one can phonologically transcribe GBactr. <β> from **b* as /v/ also in words attested in Kuṣāṇa-period texts.

The only exception concerns the position after a nasal. As briefly discussed under <γ>, a preceding nasal probably prevented the lenition of voiced stops. As a result, one can safely assume that, whatever its

⁹⁸ The chronology of Bactrian lambdacism, i.e. the change of OIr. **d* to Bactr. λ /l/, could provide circumstantial evidence that the change of **g* to /γ/ occurred even much earlier than Kuṣāṇa times. One can approximately date Bactrian lambdacism to the 4th or 3rd century BC (de Blois 2013; Kreidl 2021; see §3.2.2 s.v. *milima*), which would be a terminus ante quem for OIr. **g* becoming a voiced fricative in Bactrian—if we accept as premises that (i) the change of **d* to Bactr. λ passed through an intermediary stage **δ* (so e.g. Morgenstierne 1970: 126; Sims-Williams 1989: 233; 2004a: 542; Kümmel 2007: 78) and (ii) the hypothesised change of **d* to **δ* coincided with the fricativisation of **g* (and **b*, see below).

⁹⁹ The -γδ- in *mydyg* ‘fruit’ < **migda-ka*- comes from *-γλ- < *-gd- and not from *-xt- (Sims-Williams 2009a: 263; 2016b: 278).

¹⁰⁰ In dialectal Bactrian, initial γ- /γ/ can also derive from OIr. **w*-, e.g. γολο /γulə/ < **wadū*-. See §3.2.1 s.v. *guśura*.

etymological origin, -μβ- stood for /mb/ rather than **/mv/ (so also Sims-Williams 1989b: 233; 2011a: 170 *contra* SFBG: 45).¹⁰¹

Two further environments in which <β> may be assumed to stand for /v/ are the clusters -βδ- from *-ft- and -λβ- from *-dw-.¹⁰² Examples of the former are ταβδο ‘sealed’ < *tafta- and πιδοροβδο ‘received’ < *pati-grfta-. The fact that <β> continues a fricative is sufficient reason to assume that -βδ- from *-ft- was realised as /vd/ rather than as **/bd/ (cf. SFBG: 47 and *-xt- > -γδ- /γd/). The change of *-dw- to Bactr. -λβ- can be exemplified by αλβαρο (also αλβαργο in Uv 2f.) ‘court’ < *dwara(-ka)- and the PN βαραλβαγο, possibly from *bara-dwāga- ‘standard bearer’ (BPN: no. 73). In this case, the assumption that -λβ- stands for /lv/ is supported by the parallel development of *-θw- to Bactr. -λφ- /lf/ (Sims-Williams 2004a: 542f.; SFBG: 53).¹⁰³

Besides, GBactr. <β> can stem from OIr. *p. This can be the case when *p stood (originally) in intervocalic position, as in αβαγο ‘waterless’ < *apāpa-ka- (BD II: 181); -δηβγο ‘sealer’ (attested in μολροδηβγο) < *tāpa-ka- × *τηβ- (pret. ταβδο) < *tāpaya- (BD II: 235); or χοαβο ‘dream’ < *hwāpa- (BD II: 245). If procope happened, voicing of *p can also be observed word-initially, e.g. βαμδδγο ‘loan’ < *apāmita-ka-.¹⁰⁴

The change of OIr. *k to Bactr. /g/ and that of OIr. *t to Bactr. /d/ leads one to expect that <β> from *p stands for /b/. Yet, in the Manichaean fragment, the outcome of intervocalic *p is consistently written with <β>; compare, for instance, β ~ αβ(β)ο ‘water’ < *āp-; nβyxytyg ~ ναβιχτιγο ‘written’ < *ni-pixšta-ka-; xw’β ~ χοαβο ‘dream’ < *hwāpa-; and xwβ ~ χοβο ‘one’s own, property’ < *hwa(i)-paθya- (Sims-Williams 2011a: 170). *b < *p thus seems to have progressed further to Bactr. /v/, even though “it is not clear ... whether this development was already complete in the Kushān

¹⁰¹ The only instance of <mb> in the Manichaean folio occurs in a loanword, i.e. in źmbwd’ng ‘wordly, earthly’ < źmbwd* ← Skt. jambudvīpa- (with adaptation) + suffix -’ng < *āna-ka-.

¹⁰² There is no Manichaean evidence for these clusters. A third environment could be -ζβ- from *-zw- in case the sequence εζβαγο in h4 4 means ‘tongue’ from *hizwā-kā- (Sims-Williams 2006: 115).

¹⁰³ The development of *dw- may have been context-sensitive. When followed by *i, *dw- is continued as Bactr. β- in βιδδγο ‘second’ < *dwitīya-ka- and βαυιασπανο ‘messenger’ or a PN < *dwiya-asp-āna- (BPN: no. 66). I find it difficult to decide if in these words β- stands for /b/ or /v/.

¹⁰⁴ See above under <δ> /d/ for the fact that voicing predates the occasional procope of initial vowels.

period” (Sims-Williams 1989b: 233 fn. 25).¹⁰⁵ The Bactrian loanwords in Niya Prakrit are consistent with an early date for this sound change, although they cannot prove it (see §4.3.8). Therefore, I assume—albeit with due caution—that the outcome of postvocalic OIr. **p* was already /v/ in Kuṣāṇa Bactrian.¹⁰⁶

A more tricky question is whether initial GBactr. <β> from **p*, as in βαμδιγο < **apāmita-ka-*, stands for /v/ or /b/. In this case, the value of <β> depends on the chronological order of the relevant sound changes, on which decisive evidence appears to be lacking. If procope preceded the lenition of **b* < **p* to /v/, βαμδιγο would write /bāmdigə/. If the lenition happened first, the phonological realisation would be /vāmdigə/. This uncertainty affects one of the Bactrian loanwords in Niya Prakrit proposed in Chapter 3, i.e. *badho* ‘pledge, mortgage’ ← **βαμδαοο* ← **βαμδο* ‘loaned’ < **apāmita-* + suffix -αο (see §3.2.3 s.v.). This etymology requires the initial β- in **βαμδαοο* to have been a /b/, which is only possible if procope happened before the lenition of **b* < **p* to /v/.¹⁰⁷ Therefore, I have hesitantly chosen to transcribe GBactr. <β> as /b/ when it continues **p* in initial position after procope.

To summarise, I will transcribe <β> as /v/, except when a nasal precedes or when procope happened. In the latter cases, I take <β> to be /b/.

2.2.4 The phonological value of ζ, σ, and þ

With <ζ>, <σ>, and <þ>, one should decide (i) how many sounds they represent in the first place; (ii) whether Bactrian phonology included only sibilants or also affricates; and (iii) if, as suggested by the Manichaean fragment, sibilants and affricates could be affected by processes of palatalisation. I will start the discussion of these questions with the least contentious of the three graphemes, i.e. <þ>.

¹⁰⁵ Morgenstierne (1970: 127) compares the same development of intervocalic **p* to /v/ in neighbouring Munji-Yidgha and Sanglechi-Ishkashimi.

¹⁰⁶ The interchange between -β- and -φ- /f/ seen in the PN σπαλβο / σπαλφο < **spāda-pā-* ‘army-chief, general’ (or shortened from σπαλοβιδο ‘idem’ < **spāda-pati-*, cf. BPN: no. 449) provides indirect evidence that <β> from postvocalic **p* also stands for /v/ when the labial no longer stands in intervocalic position synchronically, due to syncope of the relevant vowel.

¹⁰⁷ Although this does not prove its phonemic status, initial /b/ also occurs in loanwords into Bactrian, e.g. MBactr. *b’gyg* ‘having a share’, most likely a Parthian loanword, and *bwt* ‘Buddha’ ~ βοτο (also βοδδο / βουδο) ← Skt. *buddha-* or Gandh. *budha* (Sims-Williams 2009a: 258; 262).

2.2.4.1 -p- /š/

GBactr. <p> corresponds to the Manichaean grapheme <š>, as exemplified by words such as *rštyg* (cf. Rab. 1 ραπτογο) ‘righteous, just’ < **rašta-ka-* or *pydkšt* ~ πιδοκιπτο ‘restrained, prevented’ < **pati-kṛsta-* (Sims-Williams 2011a: 171). <p> is therefore commonly transliterated as /š/ (cf. e.g. Sims-Williams 1989b: 233; SFBG: 17).¹⁰⁸

When ignoring loanwords and ad hoc assimilations,¹⁰⁹ the etymological sources of Bactr. <p> /š/ can be divided into four categories.

First, <p> is used for the outcome of OIr. *š in intervocalic position and in certain consonant clusters;¹¹⁰ compare, for instance, νοβαλμο /nəšalmə/ (also archaic νιβαλμο) ‘seat’ < **ni-šadma(n)-* or αβιπταδο /avištādə/ ‘master’ < **abi-štāta-*.

Second, <p> can result from a simplified cluster involving *š, i.e. *-xš- and *-rš- (*-rš-). Examples of this category are παυπο /šahrə/ ‘city’ < **xšaθra-*; ιαμπο /yamšə/, divine name < **yama-xšāwan-*; φροχοαβ- /frəxwaš/ ‘to withdraw’ < **fra-xwarša-*; and κιπαγο /kišāgə/ ‘plough-ox’ < **kṛš-āka-*.

A third possibility is that <p> comes from an OIr. *s (< PIr. *č) that was retracted by a neighbouring *r (*r) in clusters such as *-sr-, *-str-, or *-rst-.¹¹¹ This category can be exemplified by words like πουο /šūhə/, a late form of *πογο /šūgə/ ‘fingernail’ < **srū-kā-*; χοοπο /xwušə/ ‘mother-in-law’ < **hwasrū-*; οαπο /wāšə/ ‘hay’ < **wāstra-* (MBactr. wš); and πιδοκιπτο /pidkištə/ ‘restrained, prevented’ < **pati-kṛsta-* (MBactr. pydkšt).

Finally, <p> can stem from *čy, be it initially, e.g. παδο /šādə/ ‘pleased’ < **čyāta-*, or intervocalically, e.g. αβαπο /avāšə/ ‘back, in return’ < **apāčyā-*.

¹⁰⁸ See further §4.3.18, where based on loanword evidence I argue that <p> may have been phonetically realised as a retroflex [ʂ].

¹⁰⁹ For ad hoc assimilations, cf. ζιπτο /žištə/ ‘requested’ < **ḡasta-*, i.e. *s > *š due to assimilation to the preceding *ḡ (BD II: 212), and ναυαπτο /nəhāštə/ ‘settled’ < **ni-šāšta-* < **ni-šāsta-*, i.e. *s > *š due to assimilation to the preceding *š (BD II: 239; Michetti 2024: 175–177).

¹¹⁰ After back vowels, *š develops to Bactr. <u> /h/, e.g. in ασνωυο /əsnōhə/ ‘daughter-in-law’ < **snaušā-* (Michetti 2024). This point is of no concern for the present argument.

¹¹¹ *r only causes retraction of *s in clusters in which *r is lost, not in the case of intervocalic *-rs- (*-rs-); cf. e.g. ταρσο /tarsə/ ‘fear, respect’ < **tarsV-* and πορσ- /purs/ ‘to ask’ < **pṛsa-* (SFBG: 56).

2.2.4.2 -σ- /s/, /ś/, /ts/, and /tś/

The value of GBactr. <σ> depends on the etymological source and phonetic environment of the sound which this letter represents. To begin with, <σ> is used to represent the default outcome of OIr. *s (< Plr. *č) in words such as σαδογιο ‘levelled, flat’ < *sāta-ka-, λασο ‘ten’ < *dasa, and πωστογο ‘document’ < *pawasta-ka-. In such cases, the corresponding grapheme in Manichaean script is <s>, e.g. *srd’nyg* ‘pertaining to years’ ← *srd** ~ σαρδο < *σαρλο ‘year’ < *sardV-. Hence, we can safely conclude that at least in an unconditioned environment, <σ> from *s writes /s/.¹¹²

GBactr. <σ> can also be the result of OIr. *č. Two such examples are σανο ‘pleasure’ < *čanah- and ρωσο ‘day’ < *raučah-. In the Manichaean fragment, the outcome of *č is written as <c> in the following nine examples:¹¹³

- (i) *cyd* (‘*cyyd*; *cyd*) ~ (α)σιδο ‘which’ < *čim + *uti
- (ii) *c’’k’m yg* ‘whosoever’ (cf. MP *čegām-iz* ‘whatever’, *čegāmag* ‘a bit’)
- (iii) *c’sq* ~ (α)σασκο ‘over, upon, against’ < *hačā + *uskād
- (iv) *cγwwng* ~ *σαγωγγο / *σαγογγο (later σογγο) ‘as’ < *čiyāt-gauna-ka-
- (v) *hrc* ~ υαρσο ‘absolutely, at all, just’ < *harwa- + *čim
- (vi) *qyc* ~ κισο ‘anyone’ < *ka- + *čim
- (vii) *pyc* ~ πισο ‘before, in the presence of’ < *patīča
- (viii) *rwc’nyg* ~ *ρωσανιγο ‘pertaining to days’ ← *rwc** ~ ρωσο ‘day’ < *raučah-
- (ix) *-yc* ~ -(ι)σο ‘also, too’ < *čim

At the same time, there is one word in which the result of *č is spelled with MBactr. <s>, i.e. ‘s ~ ασο ‘from’ < *hačā.

The double treatment of *č in the Manichaean folio is helpful to assign a phonological value to MBactr. <c>. This grapheme probably stood for /ts/ because, as Sims-Williams convincingly argues (2011a: 171), the spelling of the proclitic preposition ‘s ~ ασο with <s> is then easily explained as due to a sandhi development of word-final /ts/ to /s/ before consonants.¹¹⁴ In the

¹¹² See below for a possible palatalisation of *s to /ś/ when next to *ī.

¹¹³ Partially preserved and etymologically unclear words are not included.

¹¹⁴ Gholami (SFBG: 36f.; 50) also considers the possibility that <σ> from *č stands for /ts/, but her account of the sibilants and affricates suffers from internal contradictions, as pointed out by Ciancaglini (2016: 269).

case of *c'sq* ~ (α)σασκο < **hačā* + **uskād*, this sandhi development would not have occurred because **hačā* was here followed by a vowel.

An additional argument for the depalatalisation of *č in Bactrian is BSogd. *sxrh* 'wheel', which is most likely a loanword from Bactr. *σαχρο < *čaxra- (Sims-Williams 1979: 133 fn. 7; 1996a: 50).¹¹⁵ The orthography of MBactr. *c'k'myg*, *c'sq*, and *cywwng* suggests that word-initially, /ts/ from *č was not simplified to **/s/. The initial *s-* in BSogd. *sxrh* may therefore be due to a sound substitution of Bactr. /ts/ with Sogd. /s/ caused by the lack of a Sogdian cluster /ts/ in initial position.

Further evidence that /ts/ is one of the values of GBactr. <σ> comes from the observation that the syncopated outcome of OIr. *-tVs- can also be written with <σ>. A few instances of such spellings are πισηβ- 'to slander, to accuse' < **pati-sāpaya-*, ναλοπισαγο 'mutual agreement' < **hada-pati-sākā-*, and πισαγ(α)δο 'agreed' < **pati-saxta-*. The latter has a variant πιδοσαχτο /pid(ə)saxtə/, which makes it plausible that the <σ> in πισαγ(α)δο (and thus also in πισηβ- and ναλοπισαγο) stands for /ts/.

A final piece of evidence that the Bactrian outcome of *č is an affricate /ts/ comes from some recently published birchbark letters (Sims-Williams 2022–23). These new documents employ (not entirely consistently) a slightly different orthography than the one used in the Bactrian text corpus known until now: the outcome of *s is spelled, as normal, with <σ>, but the outcome of *č can be written as <σσ>, e.g. ασσο 'from' < **hačā*, ρωσσο 'day' < **raučah-*, and ναμωσσο 'homage' (Sims-Williams 2022–23: 139).¹¹⁶ This orthographic peculiarity is plausibly explained by Sims-Williams as a way to disambiguate /ts/ from /s/.

So far, we have seen that GBactr. <σ> can correspond to MBactr. <s> and <c>. There is yet a third possibility: some words which in the Graeco-Bactrian script are (or would be) written with <σ> are in Manichaean orthography spelled with <ś>. This grapheme occurs in the following six words:

¹¹⁵ Sogd. *cxr-* 'wheel' is the inherited word.

¹¹⁶ The spelling ασσο suggests that the simplification of /ts/ to /s/ witnessed by MBactr. 's ~ ασο is a later development. The etymology of ναμω(σ)σο (also ναμασσο / ναμοσσο) 'homage' still awaits a definitive solution (see BD II: 238; Albino 2019 for some proposals). Yet, its Middle Persian and Sogdian cognates, i.e. *namāz* and *nm'cyw*, at least confirm that <σσ> / <σ> derives from earlier *č.

- (i) *hβýśznng* ‘of many kinds, manifold’ ← *hβýś* ~ *υαβισο* ‘many, much’¹¹⁷
+ *znng** ~ *ζαγγο* ‘manner, way’ < **zana-ka*-
- (ii) *nyšt* ~ *νιστο* ‘is not’ < **nai(d) asti*
- (iii) *rýmś* ‘blame’ (cf. Sogd. *rymysš*)
- (iv) *śwwh-*, a verb used with the Indian loanword *nrh* ‘hell’ as its direct object and approximately meaning ‘to escape, to avoid’¹¹⁸
- (v) *tyśygyg* ‘emptiness’, an abstract in *-yg* from *tyśyg** ‘empty’ < **tusya-ka-*
- (vi) *wyśp* (*wyś*) ~ *οισπο* (*οισο*) ‘all’ < **wispa-*; also attested in the compound *wyśpz’nyndyg* ‘all-knowing’

Apart from *śwwh-* (see fn. 118), every instance of MBactr. <ś> is found after <y>, which implies that we are probably dealing with a secondary palatalisation of *s to /ś/ after *ī (Sims-Williams 2011a: 171; SFBG: 38).¹¹⁹

Before using these Manichaean data to posit a Bactrian phoneme /ś/, one needs to address two questions: (i) had this palatalisation already been completed in Kuṣāṇa Bactrian, and (ii) from which sound combinations could a phonemic /ś/ have arisen in Bactrian?

Regarding the first question, one has to choose between two approaches. Option one is to emphasise the late date of the Manichaean fragment and put

¹¹⁷ The etymology of this word is debated. Sims-Williams (BD II: 271), building on work by Gershevitch, suggested the following three possibilities (admitting none of them to be obviously correct): (i) from **ha-bai-sah-*, comparable to Khot. *hambīsa-* ‘heap’; (ii) from **ha-bus-ya-*, with NP *ambōh* ‘multitude, much, many, etc.’; and (iii) from **ha-paisa-* ‘variegated > varied > much’. Durkin-Meisterernst (*apud* SFBG: 38f.) proposed to derive *υαβισο* / *hβýś* from **harwa-wispa-* (cf. Khot. *harbiśśa-* ‘all’, DKS: 469). This etymology is phonologically problematic, however. There is no evidence for *-*rw-* becoming -β- / *v*/ (contrast (υ)αρουγο / (h)arūgə/ ‘all’ < **harwa-ka-*), and the assumed simplification of -σπ- to -σ- as in *οισο* < *οισπο* ‘all’ < **wispa-* is not attested before 671 AD (SCBD: 64), whereas *υαβισο* already occurs in doc. ba from about 350 AD (SCBD: 82) and as *αβισοι* ← **αβισο* + enclitic -*οι* < **īm* already in Rab. 21 (3x, cf. Sims-Williams 1998: 87f.).

¹¹⁸ The etymology of MBactr. *śwwh-* is considered unclear by Sims-Williams (2009a: 258; 2011a: 171). In Schoubben (fthc.), I argue that *śwwh-* is a loan from Gandh. **śoh(e)-* < OIA *śodhaya-* ‘purify; remove (something noxious); clear off; exculpate’, but for now this word can be left aside.

¹¹⁹ In the case of *nyšt* ~ *νιστο* ‘is not’ < **nai(d) asti*, the *ī goes back to earlier **ai* (via **ē*). Phonetically, Bactr. /ś/ could, for instance, have been a post-alveolar [ʃ] and /ź/ the respective voiced counterpart [ʒ].

aside the observed palatalisation of *s as a late (or dialectal) feature irrelevant for the phonological interpretation of earlier Bactrian. A second approach would be to highlight the absence of evidence proving these palatalisations to be comparatively recent developments; after all, there would be no problem with assuming GBactr. <σ> to write both /s/ and /ś/.

Two observations favour, in my view, the latter approach. First, there is relatively solid evidence for a triple contrast between /z/, /ž/, and /ǰ/ (see under <ζ> below), making the hypothesis of a corresponding threefold distinction in the voiceless series plausible. In addition, one secure Bactrian loanword into Gāndhārī, i.e. *guśura* ‘prince’ ← *γοσβορο /γυśvūrə/ or γοσοβοργο /γυśvūrgə/ < **wisah-puθra(-ka)*-, corroborates an early palatalisation of *s to /ś/ after *i. To account for the palatal -ś- in *guśura*, one must namely assume that the *-i- in **wisah*- first palatalised the *-s- to /ś/ before itself being coloured to /u/ by the initial *w-. See in more detail §3.2.1 s.v. and §4.3.16.¹²⁰

Was *s also palatalised to /ś/ when *ĩ followed rather than preceded the sibilant, i.e. in words such as σινδ- ‘to wish, be pleased’ < **sandaya*-? Phonologically, such a palatalisation would be sufficiently plausible, and one could even draw a parallel with Sims-Williams’ argument (1999: 197; also BD II: 38f.; SCBD: 60) that the Post-Kuṣāṇa Bactrian use of a geminate <δδ> in front of palatal vowels finds its origin in a sound change of *dĩ over *dyĩ to <δδ> /ddĩ/ (and *dē over *dyē to <δδ> /ddē/).¹²¹ Manichaean evidence is unfortunately lacking, as no relevant word happens to be attested in M 1224.¹²²

¹²⁰ In loanwords from Indic into Bactrian, the Indo-Aryan palatal ś is also regularly substituted with Bactr. <σ> (Michetti 2024: 186f. fn. 84); cf. e.g. βησραμανο ← *Vaiśramaṇa*-, a king of the *yakṣas*; πιασο ← *piśāca*-, a type of demon; and βοδδοσαστρο ← *buddhaśāstra*- ‘teaching of the Buddha’ (TiS 7, Lee & Sims-Williams 2003: 170). This type of sound substitution can, however, not count as compelling evidence for a phonemic value /ś/ of Bactr. <σ>, as one could alternatively hypothesise that IA ś was substituted with the closest sound available, i.e. Bactr. /s/.

¹²¹ See also below for potential evidence in support of a parallel change of *zĩ to /žĩ/. In the loanword corpus of Chapter 3, there is no example to show if *s would also be palatalised by a following *ĩ (or *ē).

¹²² There is one instance of a sequence <sy>, i.e. *c’p’syḥ*. Yet, no conclusions can be based on this etymologically unclear word, whose intervocalic -p- suggests it to be a loanword.

There could be one more input for a Bactrian phoneme /ś/, i.e. *sy, since the Bactrian loss of *y after sibilants, as in σπισ- ‘to serve, to worship’ < *spasya-, conceivably resulted in the palatalisation of the preceding sibilant (cf. Fattori 2022: 388 fn. 25). Yet, decisive evidence is again missing.¹²³ The only potentially relevant form in Manichaean Bactrian is *tyśygy* ‘emptiness’ ← *tyśyg** ‘empty’ < *tusya-ka-, which cannot be used as compelling evidence for a change of *sy to /ś/ given that the <ś> in *tyśyg** is both preceded and followed by <y>.¹²⁴ Thus, it remains uncertain if <ś> directly results from *sy or if the observed palatalisation was rather induced by the neighbouring palatal vowel(s). To confirm conclusively that *sy yielded Bactr. /ś/, we would need a Manichaean example in initial position or in a sequence such as *-ausy-.

If one accepts that *s could be palatalised to /ś/ in Bactrian, it seems conceivable that *tsĩ < *čĩ also yielded /tśĩ/. Indirect support for this hypothesis comes from MBactr. *y’wyd’nzyg* ~ ιασηδανζιγο (kb 1) ‘for ever’ < *yāwaitāna-čiya-ka-, where the voiced counterpart *dzĩ has apparently been palatalised to /dźĩ/ (see below). In a few Bactrian borrowings into Niya Prakrit discussed in subsequent chapters, Bactr. <σι> from *čĩ is moreover rendered as Niya -ci-, i.e. with a palatal affricate (see §4.3.17).¹²⁵ On this admittedly slender basis, I tentatively assume GBactr. <σ> to stand for /tś/ in words such as (α)σιδο ‘which’ < *čim + *uti, αλιχτογο ‘inclined, desirous’ < *hadā-čixšta-ka-, and πησινδ- ‘to approve’ < *pati-sandaya-.¹²⁶

Still, none of the etymologies proposed below crucially depends on the assumption of a phonological value /tś/. Etymologies that require Bactr. <σι>

¹²³ See also under <ζ> for examples such as MBactr. *βyžg* ~ βιζαγο /vižagə/ ‘sin’ < *bazdya-kā-.

¹²⁴ The apparent palatalisation of *u to <y> (perhaps standing for an unlauded /ü/?) may, however, be a quite late development, as there are no traces of such a change in the Graeco-Bactrian materials.

¹²⁵ Indo-Aryan *c* can also be rendered as Bactr. <σ>; cf. e.g. ασαριαριο ← *ācāryārya- ‘reverend doctor’; πιασο ← *piśāca*-, a type of demon; and σανδαροβανο ← *Candrabhānu*-, name of a Buddha. These loanwords are no conclusive proof that <σ> had a phonological value /tś/, given that IA *c* could also have been approximated with Bactr. /ts/. In the Rabatak inscription, the city name *Śrī-Campā* is written in Bactrian as ζιριτ[ι]αμβο (or ζιριτ[ι]αμβο), so here IA -c- would correspond to Bactr. -τ(ι)- /t(y)/ (cf. Sims-Williams 2008c: 61).

¹²⁶ If the interpretation of (α)σιδο ~ MBactr. ‘cyd (also ‘cyyd; cyd) ‘which’ as /([ə)tśidə/ is correct, MBactr. <c> would have two phonological values, i.e. /ts/ and /tś/.

from *čī to be rendered as Niya *ci* also work if one posits an allophonic pronunciation [tsī] or if one accepts that Bactr. /tsī/ was substituted with Niya *-ci-* as the closest sound combination available (§4.3.17).

In summary, GBactr. <σ> from OIr. *s (<PIr. *č) normally indicates /s/, but when preceded by ι /ĩ/, perhaps also when followed by it, a palatalisation to /ś/ may have occurred. When it stems from OIr. *č or *-tVs-, <σ> most likely represents /ts/, although in front of ι /ĩ/, one may again want to reckon with a palatalised counterpart /tś/.

2.2.4.3 -ζ- /z/, /ž/, /ž/, /dz/, and /dž/

According to Sims-Williams (1989b: 233), the Graeco-Bactrian grapheme <ζ> would have three phonological values, i.e. /z/, /ž/, and /dz/ (taken over by SFBG: 17). When later discussing the phonology of the Manichaean fragment, Sims-Williams (2011a: 172–174) observed that <ζ> could also correspond to MBactr. <ž> or <j>, thus supporting an additional phonological value of <ζ> as /ž/. The first part of this section will summarise the conditions in which <ζ> can be assumed to stand for /z/, /ž/, and /dz/ respectively, while at the same time also briefly considering the possibility of an additional value /dž/. The second part will treat the slightly more contentious issue whether and, if so, when <ζ> could represent /ž/.

There is no doubt that GBactr. <ζ> writes /z/ when it represents the default outcome of OIr. *z (<PIr. *j>), as in e.g. ζαμῖγο /zamīgo/ ‘land’ < *zamī-kā-, αζο /azə/ ‘I’ < *azam, γαζνο /γaznə/ ‘treasury’ < *gazna-, or ανδαρζο /andarzə/ ‘instruction’ < *han-darza-. In Manichaean script, the phoneme /z/ is written as <z> in words such as hz’r ~ υαζαρο /hazārə/ ‘thousand’ < *hazahra-, hyrz- ~ υιρζ- /hirz/ ‘to let go’ < *hrz-, or zwwz- ‘to rise’ ~ *(α)ζοαζ- / (ə)zwaz/ < *uz-waza-.

A phonological value /ž/, i.e. the voiced counterpart of /š/,¹²⁷ can be assumed in the following cases. First, <ζ> probably represents /ž/ when it stems from OIr. *ž, as in μoζδοοαβο /muždwanə/ ‘a divinity’ < *miždwan- ‘benevolent’ (Sims-Williams 1997b) or χο(υ)ζο /xūžə/ ‘good’ < *xwrgžu-. Another input for Bactr. /ž/ is provided by clusters whose voiceless counterpart yields /š/. The latter can, for instance, come from *-sr- in ποου

¹²⁷ Given that /š/ was written with <þ>, one could expect there to have been a separate grapheme for /ž/ as well. The absence of such a grapheme is likely due to the low number of instances of /ž/. The rarity of this phoneme may likewise explain why there are no Manichaean data for this phonological value of <ζ>.

/šühə/ < *poyə /šügə/ ‘fingernail’ < *srū-kā- and xooḡə /xwušə/ ‘mother-in-law’ < *hwasrū- (§2.2.4.1). Consequently, *zr- most likely became Bactr. /ž/ in ζovo /žūnə/ ‘Time (as a divinity)’ < *zruwan-.¹²⁸ Another source for Bactr. /š/ is *čy-, e.g. παδο /šādə/ ‘pleased’ < *čyāta-. It therefore seems plausible that also a <ζ> derived from *jy- writes /ž/. One such example would be ζαο(o) / ζαοι /žāwə/ ‘life’ < *jyāwa-. In addition, there is αζανο /žžānə/ ‘worthy’ < *arjyāna-, whose /ž/ is confirmed by its being borrowed with retroflex sibilants; compare Khot. āṣana-, TA āṣām, TB aṣām, and the Niya PN Aṣamna (Weber 1985; Dragoni 2023b: 41).¹²⁹

In at least two types of words, one expects <ζ> to stand for /dz/. First, there is reason to believe that <ζ> from *-tVz- spells /dz/, seeing that the outcome of *-tVs- can be written in Bactrian with <σ> /ts/ (cf. supra). Examples of this kind would be πιζαγγο /pidzāṅgə/ ‘knowledge (?)’ < *patizāna-ka- and (α)σπαζαγγο / (ə)spādzāṅgə/ ‘on bended knee, kneeling’ < *spāta-zānu-ka- (cf. the variant σπαδοζαγγο). A second, slightly more common, source of <ζ> /dz/ is the voicing of <σ> /ts/ < *č after a nasal (Sims-Williams 1989b: 234; SFBG: 46).¹³⁰ This type of voicing occurred in lexemes such as πανζασο /pandzāsə/ ‘fifty’ < *pančāsət-.

Voicing after a nasal also affects the <σ> of the appurtenance suffix -σ(ε)ιγο < *-čiya-ka-, after v /n/ written as -ζ(ε)ιγο (BD II: 263; cf. also §5.2.2). One example of this kind is ιαοηδανζιγο (kb 1) ‘for ever’ < *yāwaitāna-čiya-ka-, a word attested in Manichaean orthography as y’wyd’nžyg (see also under <σ>). The spelling of the latter with <nž> probably points to a palatalisation of *-dz- < *-ts- to /dž/ before *ī (Sims-Williams 2011a: 173). As nothing proves this phonological process to be a late phenomenon,¹³¹ I cautiously posit /dž/ as a further value of GBactr. <ζ>, an

¹²⁸ ζovo is attested in an unpublished inscription (cf. BPN: no. 484). In ζορ(ρ)ιγο ‘time’ < *zrunaka-, an early metathesis to *zurnaka- must have occurred to account for the Kuṣāṇa Bactrian geminate -pp- /rr/. Therefore, the <ζ> in this word probably stands for /z/ (Skjærvø 2005: 314; BD II: 213; BPN: no. 160).

¹²⁹ Another example of this sound substitution is TB koško (later koškīye) ‘pit’ ← *κωζγα /kōžgā/ (later *κωζγο /kōžgə/) < *kaužda-kā- ‘opening, hole’ (Bernard & Chen 2022). Bernard and Chen reconstruct the Bactrian word as *κωβκα /kōškā/ (later *κωβκο /kōškə/), but there is no basis in Bactrian phonology for the devoicing of *-ždg- > *-žg- > *-šk- assumed by them; the devoicing can simply be attributed to Tocharian.

¹³⁰ On the development of *č in Bactrian, see in more detail above under <σ>.

¹³¹ Sims-Williams (2011a: 173) adduces the spelling variation between αστιγανσειγι (SK4M 22) and υαστιγανζειγι (SK4B 25f.) ‘native of Hastilgan’ as

assumption which has no repercussions for the loanwords treated in subsequent chapters.

The Manichaean evidence supports GBactr. <ζ> also to stand for a voiced palatal /ž/, although the existing literature (e.g. SFBG) does not always acknowledge its existence or confuses it with /ž/. The Manichaean Bactrian script includes two graphemes <ž> and <j>, the latter being distinguished from the former by adding two dots on top of the character.¹³² The two letters tend to interchange and may have indicated the same phonological value (cf. Sims-Williams 2011a: 172–174).¹³³

Mostly, MBactr. <ž> and <j> are used for the outcome of OIr. *ǵ, i.e. in *žyn'g* ~ ζιναγο 'body' < *ǵinā-kā- or *ǵayanā-kā- (cf. also *žyn'gyng* 'bodily'); *wjyd* 'killed' < *awa-ǵata-; *wjy'n* (alternatively *wžy'n*) 'killing' < *awa-ǵayana-; and *šyǵg* (alternatively *šyžg*) ~ þιζγο 'good' if < *xšijā-ka-. These examples suggest that *ǵ did not develop into **/dz/, parallel to the change of *č to /ts/, but became /ž/ instead.

As corroborating evidence that *ǵ remained palatal in Bactrian, Sims-Williams (2011a: 173) points to the fronting of *a to -i- /i/ next to *ǵ seen in ζιν- /žin/, pret. ζιδο /židə/ 'to strike' < *ǵan-, pret. *ǵata- and ζιπτο /žištə/ 'requested' < *ǵasta- (cf. Khot. *jista-* 'asked'). The easiest way to account for the -i- /i/ in these words is assuming that *a was palatalised in contact with the preceding ζ- /ž/ < *ǵ.¹³⁴ In the case of ζιπτο, also the observed change of

evidence for a non-palatal affricate in Kuṣāṇa Bactrian, on the assumption that the <σ> in ασιλγανσειγι stands for /ts/. In my view, the <σ> in -σ(ε)ιγο can also stand for /tš/, in which case Sims-Williams' argument loses its force.

¹³² <ž> has alternatively been transliterated as <j> (e.g. Gershevitch 1983: 274) and <j̣> (cf. SFBG: 37 with fn. 28).

¹³³ In the following, I leave aside the unclear sequences *βdyj-* 'to require (?)' and *zβr'j* and the loanwords *j'w* 'tide' (~ Sogd. *c'w* 'idem') ← Chin. *cháo* 潮 ((E)MC *drjew*) and *žmbwd'ng* 'wordly, earthly' < *žmbwd** ← Skt. *jambudvīpa-* (with adaptation) + suffix -'ng < *āna-ka-. I also will not discuss *yyž(y)-* 'to be born'. This verb could be derived from *ā-zāya- (cf. Sogd. *''jy-*) (cf. Sims-Williams 2009a: 262), but the treatment of *ā- to *yy-* would be exceptional and inconsistent with GBactr. αζιυ- 'to be born' < *ā-zāya- (BD II: 189).

¹³⁴ Gholami (SFBG: 65) writes that *a can also develop to *i in front of *n, giving οανινδο /wanində/ 'victorious' < *wananta- as an example. In the case of ζιν- < *ǵan-, *a would also have been followed by *n. Yet, this is probably not the reason for the vowel change, since, as noted by Sims-Williams (2017c: 111), the development of *a to *i is only regular before the clusters -vδ- and -vž- or when there is a palatal vowel or consonant before or after *-an-.

*-st- to -ḥt- /št/ can be attributed to assimilation to the initial palatal (cf. BD II: 212).

Two words whose <ž> / <j> does not derive from *j̥ are *prdyjg* / *prdyžg* ‘orchard’ and *βyžg* ~ *βιζαγο* ‘sin’. *prdyjg* / *prdyžg* derives from **pari-daiza-ka-* (Sims-Williams 2009a: 264; 2011a: 172). This word thus exhibits a palatalisation of *z to /ž/ after /ē/ < *-ai-; and we may assume that *z was also palatalised to /ž/ after /ī/ (cf. supra on *s to /ś/ after /ī/). With *βyžg* ~ *βιζαγο* ‘sin’ < **bazdya-kā-*, one faces the same uncertainty as with *tyšyg** ‘empty’ < **tusya-ka-*. Did *-z(d)y- result directly into /ž/ or did the <y> /i/ from umlauted *a palatalise *z to /ž/?

None of the words attested in Manichaean script tells us whether *z was also palatalised when followed by *ī. This assumption would not be too far-fetched, however, given the parallel afforded by the palatalisation of *dz to /dž/ before *ī in *y’wyd’nžyg* ‘for ever’ < **yāwaitāna-čiya-ka-*. A change from *zī to /žī/ may moreover be witnessed by a few Bactrian loanwords into Niya Prakrit (see §4.3.20; §4.3.26).¹³⁵

I conclude that GBactr. <ž> could represent five phonological values. When <ž> serves to write the outcome of OIr. *z (< Plr. *j̥) in an unconditioned environment, we can be confident that it stands for /z/. Secondly, <ž> can be assumed to represent a voiced palatal /ž/ if from OIr. *j̥, conceivably also from a palatalised *z. A third possibility is that <ž> depicts /ž/, namely when <ž> derives from OIr. *ž or a cluster whose voiceless counterpart is known to yield /š/. In addition, <ž> may spell the affricate /dz/, whose sources are syncope of *-tVz- and voicing of /ts/ after a nasal. Finally, there may also have been a palatalised affricate /dž/, resulting from palatalisation of /dz/ in front of *ī.

¹³⁵ If TA/TB *senik* ‘care, pledge’ is a direct loan from Bactr. *ζηνιγο (attested ζινιγο) < **zainiya-kā-* (cf. §3.2.1 s.v. *jheniga*), this suggests that *ζηνιγο stands for /zēnīgə/ and thus that /ē/ < *-ai- did not palatalise a preceding *z. For the suggestion that Niya *jheniga* is a loan from Bactr. *ζηνιγο, it may not matter much if the <ž> in *ζηνιγο stands for /z/ or /ž/.

TABLE 2 Bactrian phonology

The following table gives a synopsis of the phonological value(s) of the letters of the Graeco-Bactrian alphabet, each value being exemplified by at least one word. The values assumed for β, γ, δ, ζ, σ, and ϐ are justified in §§2.2.3–2.2.4. Letters only used as numbers, i.e. ς' 6, ξ' 60, and ϑ' 90, have been left out.

LETTER	VALUE	EXAMPLE(S)
α	/a/ /ā/ /ə/	ανδαρζο /andarzə/ 'instruction' < *han-darza- αζαδο /āzādə/ 'noble' < *āzāta- αχρобо /əxšunə/ 'calendar/regnal year', earlier χρобо ναβιχτο (νιβιχτο; νοβιχτο) /nəvixtə/ 'written' < *ni-pixšta-
β	/v/ /b/	βαγο /vəgə/ 'lord, god' < *baga- αβαρ- /āvar/ 'to bring' < *ā-bara- αβ(β)ο /āvə/ 'water' < *āp- (MBactr. 'β) αβαβγο /avāvgə/ 'waterless' < *apāpa-ka- βαμδδιγο /bāmddigə/ 'loan' < *apāmita-ka- σταμβο /stambə/ 'injury, ill-treatment' < *stambV-
γ	/g/ /γ/	μαρηγο /marēgə/ 'slave, servant' < *maryaka- γαμβο /gambə/ 'damage' < *gamba- λρωγο /lrōgə/ 'falsehood' < *drauga-
γγ	/ŋg/	ιωναγγο /yōnāŋgə/ 'Greek (adj.)' < *yaun-āna-ka-
δ	/d/	δαρο /dārə/ 'thither (to you)' < *aitaθra πιδο /pidə/ 'father' < nom.sg. *pitā ← *pitar-
ε	/e/ /ə/	ιες- /yes/ 'to take (?)' < *ā-yasa- ερκαρ- (αρκαρ-) /əškar/ 'to chase' < *škara-
ει	/ī/	λαδειγο /lādīgə/ 'righteous' < *dāt-īya-ka-
ζ	/z/ /ž/ /ž/ /dz/ /dž/	ζαμιγο /zamīgə/ 'land' < *zamī-kā- αζο /azə/ 'I' < *azam ζινο /žinə/ 'woman' < *jani- βιζαγο /vižagə/ 'sin' < *bazdya-kā- (MBactr. βyzg) ζοβο /žūnə/ 'Time (a divinity)' < *zruwa(n)- αζανο /āžānə/ 'worthy' < *arjyāna- πιζαγγο /pidzāŋgə/ 'knowledge (?)' < *pati-zāna-ka- πανζασο /pandzāsə/ 'fifty' < *pančāsāt- ιασηδανζιγο /yāwēdāndžīgə/ 'for ever' < yāwaitāna- čiya-ka- (MBactr. y'wyd'nžyg)
η	/ē/	ηβ- /ēv/ 'to dispute' < *āpaya- σηλ- /wēl/ 'to lead' < *wādaya-

θ	/θ/	ιθαο /iθā/ 'thus' < *iθā αθπο /āθšə/ 'fire' < *āθr̥š (exact pre-form debated)
ι	/i/ /ī/ /y/	ιθαο /iθā/ 'thus' < *iθā κίρδο /kirdə/ 'done' < *kṛta- λίδο /līdə/ 'seen' < *dīta- ιωλο /yōlə/ 'warrior' < *yāuda- ν(ι)ιαγο /n(i)yāgə/ 'grandfather' < *niyāka-
κ	/k/	καδγο /kadgə/ 'house' < *kata-ka- ζαδακκο /zādak(k)ə/ 'child' < *zāta-k(k)a-
λ	/l/	λαδο /lādə/ 'given' < *dāta- μορλο /murlə/ 'death' < *mr̥θra-
μ	/m/	μαρο /mārə/ 'here, hither' < *imaθra ναμο /nāmə/ 'name' < *nāman-
ν	/n/	νωγο /nōgə/ 'new' < *nawa-ka- οανινδο /wanində/ 'victorious' < *wananta-
ο	/u/ /ū/ /ə/ /w/	ορλαγνο /urlaynə/ 'name of a divinity' < *vr̥θra-gna- κοδο /kudə/ 'dog' < *kutV- μολο /mulə/ 'wine' < *madu- σοδο /sūdə/ 'plenty' < *sūtV- νοβιχτο /nəvixtə/ 'written' < *ni-pixšta- οαρο /wārə/ 'there' < *awaθra φρογαοο /frəyāwə/ 'profit' < *fra-gāwa-
ου	/ū/	(υ)αρουγο /(h)arūgə/ 'all' < *harwa-ka-
π	/p/	παλαρπο /pālāšnə/ 'exchange gift' < *pāti-dāšinV- βαγοπουρο /vayəpuhrə/ 'god's son' < *baga-puθra-
ρ	/r/	ροζγο /ruzgə/ 'vineyard' < *razu-ka- παρασαρλο /parāsarlə/ 'last year' < *parā-sardV-
σ	/s/ /ś/ /ts/ /tś/	σαδγο /sādgə/ 'levelled, flat' < *sāta-ka- λασο /lasə/ 'ten' < *dasa πωστογο /pōstəgə/ 'document' < *pawasta-ka- οισπο /wiśpə/ 'all' < *wispa- (MBactr. wyśp) μισο /miśə/ 'more(over)' < *masyah σασκο /tsāskə/ 'over, upon, against' < hačā + *uskād (MBactr. c'sq) πισο /pītsə/ 'before, in the presence of' < *patīčā (MBactr. pyc) ρωσο /rōtsə/ 'day' < *raučah- υαλοπισαγο /haləpitsāgə/ 'mutual agreement' < *hada-pati-sākā-

		σιδο /tśidə/ 'which' < *čim + *uti (MBactr. 'cyd) αλσιχτογο /altśixtəgə/ 'inclined, desirous' < *hadā-čixšta-ka- πησινδ- /pētśind/ 'to approve' < *pati-sandaya-
τ	/t/	ταβο /tāvə/ 'seal' < *tāpa- αματο /āmatə/ 'broken' < *āmašta-
υ	/h/	υιρζ- /hirz/ 'to release' < *h_orz- (MBactr. hyrz-) λαυ- /lah/ 'to give' < *daθa- (MBactr. lh-)
φ	/f/	φριυο /friyə/ 'dear' < *friya- σοφορσο /tsufursə/ 'forty' < *čaθw_orsat-
χ	/x/	χανο /xānə/ 'house' < *xānā- ταχμο /taxmə/ 'stream' < *taxman-
ω	/ō/	ωζο /ōžə/ 'power' < *aujah- ρωσο /rōtsə/ 'day' < *raučah-
þ	/š/	þαυπο /šahrə/ 'city' < *xšaθra- οαþο /wāšə/ 'hay' < *wāstra- (MBactr. wš)

CHAPTER 3 Iranian loanwords: The material

This chapter collects evidence for lexical influence of Iranian languages on Niya Prakrit. After some preliminaries (§3.1), the discussion starts with loan etymologies ascribable to Bactrian for phonological, semantic, or other reasons (§3.2). The discussion then moves on to loanwords that could be borrowed from Bactrian but also from one or more other Iranian languages (§3.3). Next follows a brief treatment of some foreign names from the Niya documents that may plausibly be interpreted as Bactrian in origin (§3.4). The chapter continues with loanwords from Iranian languages other than Bactrian (§3.5); borrowings from an unidentified Iranian source (§3.6); and words whose previously proposed Iranian etymology needs to be rejected on formal or other grounds (§3.7).

The data thus collected (see the reference list in §3.8) will form the basis for the more analytical treatment of Iranian loanwords in Niya Prakrit presented in the next chapter. Most of the data analysed there will be taken from §§3.2–3.3, but the names and loanwords discussed in §§3.4–3.6 can be used as supplementary data whenever deemed relevant. For obvious reasons, the rejected etymologies treated in §3.7 will not be investigated further in the remainder of this work.

3.1 Preliminaries

3.1.1 Definitions and terminology

At the start, it seems useful to define a few relevant terms from the field of loanword studies.

The term “loanword” itself is understood here, with Haspelmath (2009: 36), as “a word that at some point in the history of a language entered its lexicon as a result of borrowing (or *transfer*, or *copying*)”.¹³⁶ The language from which the word is copied is the “donor” or “source language”, the language adopting it the “recipient language”. In cases where the direction of borrowing is not immediately obvious, one can try to determine which language is the donor and which the recipient by looking at (i) the morphological analysability of the word (typically only true for the source

¹³⁶ For convenience, I will use “loan” and “borrowing”, the latter in its nominalised sense “borrowed element”, as synonyms.

language); (ii) phonological integration in the recipient language; (iii) occurrence of a cognate in a language historically related to the source language but not in contact with the recipient language; and (iv) semantic arguments (Haspelmath 2009: 45).

There are two types of loanwords, i.e. “adoptions” and “impositions” (or: “interference through shift”). Adoptions are borrowings by native speakers, whereas impositions “are due to non-native speakers unintentionally retaining (= imposing) features of their native language [also lexical items] on a language to which they are shifting” (Haspelmath 2009: 50).¹³⁷ This distinction is less crucial for the etymological analyses conducted in this chapter, but it will become relevant in Chapter 7. There, I argue that scribes whose native language was Bactrian used (the ancestor of) Niya Prakrit as a chancellery language of the Kuṣāṇa empire, which means that at least some of the Bactrian loanwords in Niya Prakrit could be impositions (§7.3).

A second distinction is that between “cultural borrowings”, i.e. loanwords referring to newly imported concepts, and “core borrowings” (or: “replacive borrowings”), i.e. loanwords that duplicate and may eventually replace words referring to already familiar concepts.¹³⁸ It is commonly stated that cultural borrowings are caused by a “need” or a “gap” felt by speakers of the recipient language and that core borrowings are the result of a certain “prestige” enjoyed by the donor language (see e.g. Matras 2020²: 161–163). In practice, both causes of lexical borrowing can operate at the same time (cf. recently Carling et al. 2019). It will become clear that the Iranian loanwords in Niya Prakrit are usually cultural borrowings (see especially §§4.2 and 4.5).

Thirdly, one must distinguish between “loanwords” also used by non-bilingual speakers and “code-switches” (or: “foreignisms”) limited to the speaking and writing of bilinguals.¹³⁹ The most decisive criterion to differentiate between these two is phonological and morphological integration: loanwords tend to be better integrated into the language than code-switches (e.g. Clyne 2003: 142–152). In addition, one can look at how

¹³⁷ On the difference between “adoption” and “imposition”, see e.g. Thomason & Kaufman (1988: 20f.); van Coetsem (2000); and Winford (2005).

¹³⁸ Cf. e.g. Haspelmath (2009: 46–49); Tadmor, Haspelmath & Taylor (2010); and Grant (2015: 431f.).

¹³⁹ For this difference, see e.g. Thomason (2001: 131–136); Myers-Scotton (2006: 253–260); Gardner-Chloros (2009: 30–33); Haspelmath (2009: 40–43); and Matras (2020²: 107–208).

frequently a particular word is used, as loanwords are typically employed with a higher frequency than code-switches (e.g. Clyne 2003: 73).¹⁴⁰

In her work on Latin loanwords in Ancient Greek, Dickey (2018: 9–11; 2023: 7–16) makes a compelling case that studies of lexical borrowings in corpus languages should pay more attention to the linguistically crucial distinction between integrated loanwords and sporadic code-switches. Regarding the Iranian (and other) loanwords in Niya Prakrit, it is only fair to say that one cannot always tell the difference. Due to our limited corpus, quite some foreign words in Niya Prakrit occur only once or twice, which does not necessarily imply that they are code-switches. §§4.3–4.4 will moreover show that at least the (potentially) Bactrian borrowings in Niya Prakrit tend to be well integrated phonologically and morphologically, suggesting that they are loanwords in the strict sense of the word. The reader should nevertheless be aware that some words discussed in this chapter could be code-switches rather than integrated loanwords.

3.1.2 A research history

It is possible to distinguish three stages in the history of research on Iranian loanwords in Niya Prakrit.

The first stage started immediately after the edition of the Niya documents by Boyer et al. (1920–29 = KD) and is closely associated with the work of scholars such as Thomas Burrow and Harold W. Bailey. Burrow's two articles on "Iranian Words in the Kharoṣṭhi Documents from Chinese Turkestan" (1934; 1935a) remain fundamental reading, and he continued to identify additional loanwords in his 1937 grammar of the language (LKD) and his 1940 translation of the Niya documents (TKD). Bailey's primary contribution to the subject was his demonstration that the lion's share of Niya Prakrit loanwords could not have been borrowed from neighbouring Khotanese for phonological and other reasons (1949a: 121–128 *contra* Konow 1936: 232; cf. §4.2.5).¹⁴¹

In a second phase, contributions to the subject of Iranian loans in Niya Prakrit were made on an occasional basis (e.g. Harmatta 1960; 1964ab;

¹⁴⁰ If a foreign word occurs in many different contexts, this could also be an indication that it was well integrated into the language and thus is to be classified as a loanword.

¹⁴¹ Many of Bailey's individual etymologies have not gained wide acceptance in subsequent scholarship because of their phonological and/or semantic problems; see the relevant lemmata.

Schwartz 1974). For a new synthesis, one had to wait until Weber's 1997 article, which significantly improved upon previous work because Weber paid close attention to the various directions of borrowings.

With the increase in the Bactrian text corpus since the 1990s, a third stage of research began. New texts enabled a more detailed understanding of the Bactrian language and this led to the subsequent realisation that some Iranian loans in Niya Prakrit came from this language specifically (cf. §1.1).¹⁴² See, for instance, Tremblay (2001: 24f. fn. 37); Sims-Williams (BD II: 180–286; 2011c); Hitch (2009: 17–19); and Schoubben (2021).

3.1.3 The four aims of this chapter

Although Iranian loanwords in Niya Prakrit have been studied for almost a century, much basic work remains to be done in this area (cf. §1.1). This chapter takes up what I consider to be the four most urgent tasks.

First, this chapter aims to be a comprehensive collection of the previously proposed Iranian loanwords in Niya Prakrit because many etymological proposals lie scattered over various articles that are not always easily accessible.¹⁴³

A second task is to critically assess each proposal in light of the advances made in Indian and Iranian studies since they were first published.

The third objective of this chapter is to find previously unrecognised Iranian loanwords, in particular borrowings from Bactrian. There are still many etymologically obscure words in Niya Prakrit, as well as some lexemes whose currently assumed derivation from OIA hinges on irregular sound changes and/or ad hoc semantic developments. As our knowledge of Bactrian and contemporary Middle Iranian languages has significantly advanced since the 1930s, it seems worth investigating whether more Iranian loanwords are hidden amongst this group of Niya Prakrit words.

The fourth task concerns the identification of the exact provenance of the loanwords. Since “Iranian” is a language family and not a language, one should try to identify the most likely donor form of every individual loanword based on phonological, semantic, and sociohistorical arguments, even if the data do not always permit firm conclusions (cf. Weber 1997).

¹⁴² Harmatta (1960; 1964ab) and Schwartz (1974) anticipated this conclusion based on the evidence provided by the Surkh Kotal inscription.

¹⁴³ Two loans only attested in Khotan Prakrit (CKD 661), i.e. *Suliga* ‘Sogdian’ (§3.2.1 s.v.) and *hinajha* ‘army commander’ (§3.5.1 s.v.), are also included.

Apart from Bactrian, one expects the following Iranian languages to have been in contact with Niya Prakrit or its ancestor for historical reasons: Old Persian, Parthian, Khotanese, and Sogdian (see §1.5). Thus, when trying to identify the donor form of a particular loanword, these languages must be taken into account.¹⁴⁴

3.1.4 The scope of this chapter and its internal division

This chapter contains 131 lemmata in total. 24 are words whose previously proposed Iranian etymology is rejected in this study (§3.7), while 10 are anthroponyms (§3.4). This leaves a collection of 97 words with an Iranian etymology.¹⁴⁵ When studying these, I could determine that 56 of them (~ 57,7%) were most likely borrowed from Bactrian. For another 24 words (~ 24,7%), Bactrian turned out to be a possible donor language.

Because of these statistics, I divide the loanwords into three main categories: “loanwords from Bactrian” (§3.2), “loanwords from Bactrian or another Iranian language” (§3.3), and “loanwords from Iranian languages other than Bactrian” (§3.5). With five words, I could not decide in which category to put them; they can be found under “Iranian loanwords from an unidentified source” (§3.6).

For ease of reference, the lemmata are numbered consecutively from (1.) to (131.). These numbers will be used in Chapter 4.

3.1.5 The content and structure of the lemmata

Inspired by Burrow’s practice in the index of LKD (71–134), the citation form of Niya Prakrit words adopted in the lemmata is normally the most frequent orthographic variant or the one that stays closest to the presumed Iranian donor form.¹⁴⁶ A list of attestations added at the beginning of each lemma gives an overview of other orthographic variants; in the case of nouns,

¹⁴⁴ I consider Middle Persian, Khwarezmian, and Tumshuqese to be unlikely donor languages because (i) they were spoken too far away from Gandhāra and/or the SE part of the Tarim Basin and (ii) speakers of these languages did not have any particular political or cultural influence on these regions. For a more detailed treatment of the various layers of Iranian loans in Niya Prakrit, see §4.2.

¹⁴⁵ Obviously, not all these etymologies are equally reliable; cf. §3.1.7.

¹⁴⁶ In their *Gāndhārī* dictionary (2002a–), Baums and Glass use citation forms in a standardised spelling that is often not attested. I do not follow this practice because I fear that it may lead to the creation of ghost forms.

adjectives, and verbs, I will also mention their inflected forms. Occurrences of the same word as a personal name (PN), derivatives, and compounds (including derivatives from them) are listed separately. Except for some very frequently occurring words, I record all published attestations known to me, also those in other forms of Gāndhārī.¹⁴⁷ For the alphabetical order, see Table 1 (p. 37).

The list of attestations is followed by the actual examination. Unless there is a consensus about a word's exact meaning, the examination typically begins with a semantic analysis before moving on to the etymological discussion. The latter treats, amongst other topics, previously suggested and newly proposed etymologies; arguments to identify the most likely donor language; and the sound correspondences exhibited by a particular loanword. With longer and/or more complex lemmata, a concluding paragraph summarises the main results.

3.1.6 The reconstruction of unattested forms

Two methodological issues must still be addressed, i.e. whether to allow for the reconstruction of unattested forms (discussed in this section) and how to ensure that less reliable loan etymologies do not affect the eventual conclusions on language contact between Niya Prakrit and Iranian languages (discussed in §3.1.7).

As a matter of principle, one suspects that also languages which did not leave any trace in writing may have contributed loanwords¹⁴⁸ and that otherwise known languages lent words which happen not to be attested in the available texts in that language. Yet, one would like to avoid working with these unknowns since the more assumptions one has to posit and the more linguistic reconstruction is needed for a certain etymology, the less secure it becomes.¹⁴⁹

I refrain from postulating loanwords from undocumented Iranian languages because proposals for borrowings of this kind quickly run the risk

¹⁴⁷ Convincing restorations and supplements have likewise been included.

¹⁴⁸ Cf. the previously hypothesised contact with the not directly attested “Indo-Scythian” language mentioned in §1.5.1.

¹⁴⁹ Even when one reconstructs an unrecorded cognate in language X of a particular word in language Y by applying regular and well-established sound changes, there is still a danger of ending up with a word that did not or no longer exists in language X; it could namely have been lost or replaced by a different lexeme.

of unverifiability due to our ignorance of the historical phonology of such languages. The only way to overcome this pitfall is to collect a sufficiently large amount of examples exhibiting regular and phonologically understandable correspondences that necessitate the assumption of borrowing from an otherwise unattested Iranian donor language.¹⁵⁰ The corpus of Iranian loanwords in Niya Prakrit collected here does not meet that criterion, however.

With unattested words in otherwise documented languages, prospects are somewhat better given that the historical phonology of these languages is known (even if not always in every detail). I therefore believe that a strict and cautious application of the comparative method (Campbell 2020⁴: 140–176) can be used to reconstruct additional lexemes if they would be a historically and formally plausible source of a word in a neighbouring language.

Indeed, the discovery of new materials has sometimes confirmed such reconstructions. Many Parthian lexemes had, for instance, been posited as the source of Armenian words before later being discovered in actual Parthian texts (Bolognesi 1990ab; Meyer 2023: 15 fn. 21). Similarly, several Bactrian words reconstructed by Schwartz (1974) based on loanwords in Tarim Basin languages have afterwards been found in Bactrian sources (Sims-Williams 1997a: 23f.). Such examples confirm the methodological validity of working with reconstructed data from (partly) known languages.

In the case of Iranian languages with a large corpus of sufficiently diverse texts, e.g. Sogdian or Khotanese, we tend to be passably well-informed about their lexicon. Consequently, one should exercise additional caution before reconstructing words not attested in these languages (cf. Dragoni 2023b: 24).¹⁵¹ Yet, some other pertinent Iranian languages, most importantly Bactrian and Old Persian, are only documented by way of a small and uniform corpus (administrative texts and/or royal inscriptions). As our knowledge of

¹⁵⁰ See e.g. Bernard (2023), who uses a coherent set of loanwords in Tocharian partially to reconstruct the phonology of an otherwise unknown Old Iranian language, provisionally called “Old Steppe Iranian”.

¹⁵¹ Even in languages with a reasonably large corpus, one can still retrieve unattested lexemes based on loans in neighbouring languages. See e.g. Sims-Williams (2017a), who convincingly argues that Syriac borrowed two otherwise undocumented Middle Persian words, or Dickey’s (2023: 20–502) lexicon of Latin loanwords in Ancient Greek, which contains several entries where the Latin source form is evident but not attested.

the lexicon of such languages is much less advanced, and we can be sure that many basic words are lacking by accident, I will in these cases be somewhat more lenient with reconstructions.

3.1.7 Reliable and less reliable etymologies

Since not every etymology is equally trustworthy, the second methodological concern is to make sure that the eventual conclusions on language contact between Niya Prakrit and Iranian languages rest on as solid an evidential basis as possible.

Therefore, the loan etymologies treated in §§3.2–3.3 and §3.5 are classified into four categories according to their reliability, i.e. “secure”, “plausible”, “arguable”, and “tentative” etymologies.¹⁵² The reliability will be checked with three parameters:

- (i) Attestation of the relevant word in the preferred donor language
- (ii) Semantic correspondence
- (iii) Phonological match

The first parameter is satisfied when the assumed donor form is attested in the correct form or when it is safely deducible from a derivative or a compound, e.g. *λασοβιδο** ‘chief of ten households’ (cf. *λασοβιδιγο* ‘(soldier) belonging to a company of ten’) or *πριγγο** ‘damask’ (cf. *πριγγοοαβγο* ‘weaver of damask’).¹⁵³ If the required donor form is not attested but a phonologically more advanced form of it is, e.g. **ζηνιγο* ‘under the care of’ > *ζινιγο*, the parameter is also satisfied.¹⁵⁴ For a semantic correspondence to be perfect, there are two requirements: (i) the semantics of the pertinent words in Niya Prakrit and the Iranian source language are clear on internal grounds; (ii) their meanings form a close match. An exact phonological match is achieved when all the sound substitutions are phonologically easy to understand and/or paralleled elsewhere.

Only when these three criteria, i.e. attestation, semantic correspondence, and phonological match, have been fully met do etymologies pass the

¹⁵² Sometimes, the etymological analysis of a derivative or a compound is less reliable than that of the base word under which they are discussed. For the sake of simplicity, I refrain from classifying these separately.

¹⁵³ As the examples show, I put an asterisk (*) behind the word in such cases.

¹⁵⁴ This also applies to some unrecorded Old Persian words discussed in §3.5.1 whose Middle Persian descendant is attested.

threshold for inclusion among the “secure etymologies”, the first and most reliable category of loanwords.

“Plausible etymologies” make up the second category. There are two types of them. The first type concerns lexemes whose proposed donor form is attested but where there is a minor semantic or phonological difficulty, e.g. some doubts on the exact semantics of the Niya Prakrit word or a defensible yet not fully secure sound correspondence. The second type involves words whose suggested source is not attested in the preferred donor language but where there exists a sufficiently close parallel in another Iranian language, and there are no notable problems semantically or phonologically.

The third, somewhat less reliable, category is called “arguable etymologies”. Most etymologies included here are words whose presumed donor form does not actually occur and which present us with an additional issue, e.g. the absence of a sufficiently close parallel for the reconstructed form in another Iranian language; the requirement to posit a semantic shift; or a sound substitution not seen elsewhere. Lexemes for which the suggested source is attested are allocated to this category when two phonological or semantic issues weaken the etymology, e.g. uncertain semantics combined with an unparalleled yet conceivable phonological correspondence.

“Tentative etymologies” constitute the fourth and least reliable category. I assign loan etymologies to this group for three reasons: (i) the combination of a reconstructed but paralleled donor form with two semantic or phonological uncertainties; (ii) the cooccurrence of an unattested and insufficiently paralleled source form with a semantic or phonological difficulty; and (iii) heavy reliance on precarious evidence, e.g. the etymological analysis of a toponym or an anthroponym.

Although they differ substantially in how reliable they are, these four types of loan etymologies share a characteristic: none of the phonological, semantic, or other problems seem so severe to be insurmountable. When I believe that previously proposed etymologies do present insuperable obstacles, I relegate them to the “rejected etymologies” in §3.7.

The analyses of the loanwords in Chapter 4 and the conclusions on language contact between Niya Prakrit and Iranian languages drawn from them will only be founded on the most reliable evidence, i.e. the secure and plausible etymologies. I will also point out when data from the arguable etymologies are consistent with the reliable evidence and provide supplementary evidence for a particular conclusion. However, they will not form the basis of any additional hypotheses; the same is *a fortiori* true of the

tentative etymologies, which have only been included as a basis for further research on the relevant words.

3.2 Loanwords from Bactrian

This section presents an overview of already established and newly proposed Iranian loanwords for which Bactrian is the most likely donor language because of their phonological appearance, their semantics, another linguistic argument, or a historical reason. For the classification system, see §3.1.7.

3.2.1 Secure etymologies

1. *aviṃdama* ‘fine, recompense’

Attestations of the base form

DIR.SG. *aviṃdama*: CKD 482 (2x); 639 (2x); 665; 676; 788; 836; 837; *avidama*: CKD 187; 462; *aviṃdhama*: CKD 144 (2x); 345; *avidhama*: CKD 419; *aviṃtama*: CKD 209 (3x); 571; *avitama*: CKD 880

Derivatives

PRET.3SG. *aviṃdamavita* ‘he imposed a fine’: CKD 204

Based on the types of context in which *aviṃdama* is attested, Burrow (LKD: 78 s.v. *aviṃdhama*) could establish that this word means ‘fine, recompense’. Bailey (1937b: 230; 1949a: 123; cf. also TKD: 149) added a comparison with MSogd. *βnd'm* (also *βnt'm*) ‘penalty, punishment’ (DMSB²: 62).¹⁵⁵ Yet, the etymology of both words remained obscure at the time.

Meanwhile, it has become clear that both Niya *aviṃdama* and its Sogdian counterpart are borrowings from Bactr. αβινδαμο ‘fine, penalty’ (BD II: 184). The reason to think so is that αβινδαμο is clearly inherited in Bactrian since, as noted by Sims-Williams (BD II: 184), αβινδαμο is an abstract derived from a verb *αβιν-, an older form of the attested verb βιν- ‘to oblige, to compel’.

¹⁵⁵ In Christian Sogdian, the same word occurs in the variant spellings *bnt'm*, *bnd'm*, and *bnθ'm* (DCS²: 53). Hitch (1990) additionally compares Tumsh. *bandina*, which in his opinion would also mean ‘punishment’ (cf. further Ogihara & Ching 2017: 461), but I am not fully convinced that this word is etymologically related to Niya *aviṃdama* and Sogd. *βnd'm* given the difference in Auslaut (-ama/-'m vs. -ina).

*αβiv- itself is probably denominative to a noun *upa-ayanā-, literally meaning ‘going to’ (BD II: 203).¹⁵⁶

The etymology of αβivδαμο suggests that it phonologically stands for /əvindāmə/, which means that the initial *a-* in Niya *aviṃdama* must be a rendering of the initial schwa in Bactrian. This substitution does not come as a surprise given that the /a/ in Niya Prakrit was probably a central vowel (cf. §2.1.1).¹⁵⁷ Sogd. *βnd'm* (and variants) does not show a trace of an initial vowel. Here, one could either assume that the initial schwa was lost during the borrowing process or that *βnd'm* is a loan from a later Bactrian form *βivδαμο /vindāmə/, with the same loss of initial schwa as in the corresponding verb βiv- ‘to oblige, to compel’ < *αβiv-. The β- in *βnd'm* renders Bactr. -β- /v/.

2. *kṣuna* ‘date, reign, regnal year’

Attestations of the base form

DIR.SG. *kṣuna*: CKD 222; 324 + 328;¹⁵⁸ 345; 420; 436; 577; 588; 652; 678; 788; 898; *kṣuna*: CKD 839; *kṣana*:¹⁵⁹ CKD 889

INS.SG. *kṣuṇeṇa*: CKI 172

LOC.SG. *kṣunaṃmi*: CKD 121; 147; 169; 180 (2x); 195; 203; 204; 209; 222; 298; 318; 321; 322; 324 + 328; 327; 331; 343; 345; 350; 378; 418; 419; 420; 425; 436; 437; 461; 488; 495; 496; 500; 505; 506; 568; 569; 570; 571; 572; 574; 575; 578; 579; 580; 581; 582 (2x); 583; 584; 586; 587; 589; 590; 591; 592; 593; 604; 648; 652; 654; 655; 656; 677; 709; 732; 760; 765; 770; 782; 788; 820; 839; 841; 842; 880; 881; 882; 884; 885; 889; 898; *kṣuṇṇaṃmi*: CKD 401; 415; 478; 573; 576; 577; 588; 600; 715; 879; *kṣunamī*: CKI 161; 225; CKD 661; *kṣunaṃmi*: CKI 152; 153; 155; CKD 369; 422; 808; *kṣuṇṇaṃmi*: CKD

¹⁵⁶ For the semantics, cf. Bactr. αβιδανο ‘obligation; liability’ < *upa-(a)i-tana- (BD II: 184) and MP *abāyēd* ‘it is necessary’ < Plr. *upa + √Hai ‘to go to’ (EDIV: 155).

¹⁵⁷ Otherwise, the sound substitutions do not require much commenting. The Bactrian cluster -vδ- /nd/ dovetails with Niya -ṃd- /nd/. The latter cluster is also spelled as <ṃt> or <ṃdh> (see the list of attestations), because Niya Prakrit did no longer distinguish voiced and unvoiced and aspirated and unaspirated consonants after nasals (cf. §2.1.5). The spelling variants *avitama*, *avidama*, and *avidhama* exemplify the frequent omission of anusvāra in Kharoṣṭhī.

¹⁵⁸ For the idea that CKD 324 and CKD 328 form one document, see Appendix 2 (p. 523).

¹⁵⁹ This variant spelling is probably a writer’s mistake or due to a confusion with Skt./Gandh. *kṣaṇa*- ‘moment’ (Baums 2018b: 64). The same is probably true of the loc.sg. *kṣaṇe* in CKI 242.

801; *kṣuṇami*: CKI 148; 158; 160; 230; 245; 368; 564; *kṣuṇammi*: CKI 154; 367; 466; 830; *kṣonaṃmi*:¹⁶⁰ CKD 838; 898; 891; *kṣaṇe*: CKI 242

Compounds

ADJ. *navakṣuniya* ‘of the 9th year’: CKD 830; *navakṣoniya*: CKD 829

ADJ. *daśakṣoniya* ‘of the 10th year’: CKD 831

kṣuna ‘date, reign, regnal year’ has cognates in most contemporary Tarim Basin languages. In Tocharian B, the same lexeme occurs as *kṣum* ‘regnal year, reign’ (DoT: 261); in Khotanese as *kṣuṇa-* ‘period of time, ruling year’ (DKS: 69); and in Tumshuqese as *χṣana-* ‘idem’ (Konow 1935: 819).¹⁶¹ Since the discovery of the Surkh Kotal inscription, it has become clear that this calendrical term finds its origins in Bactr. *χḡovo* /*xṣunə*/ ‘(calendar/regnal) year’ (Maricq 1958: 364).

Some of the Tarim Basin languages, for instance Tumshuqese, may have adopted this term through an intermediary language. Regarding Niya Prakrit, one can safely conclude that the word was borrowed from Bactrian directly since there is also a South Asian Gāndhārī cognate of *kṣuna* attested in inscriptions of the Kuṣāṇa period (cf. Baums 2018a: 63).¹⁶²

The etymology of *χḡovo* itself is slightly more contentious. Most commonly accepted is Thierfelder’s suggestion (*apud* Humbach 1966–67 I: 24) that *χḡovo* ‘(calendar/regnal) year’ was borrowed from Gr. *χρόνος* ‘time (period)’ (see e.g. Sims-Williams 2002: 228; BD II: 281).¹⁶³ Recently, this etymology has been rejected by Scarborough (2021) because of the difference in Anlaut between Gr. *χρόνος* and Bactr. *χḡovo* /*xṣunə*/ and their slightly diverging semantics.¹⁶⁴ Yet, his counter-arguments are not decisive, as I shall try to show below.

¹⁶⁰ Forms with *kṣo-* are restricted to documents in Kuča Prakrit, a type of Gāndhārī in which the vowels *u* and *o* are hardly distinguishable in the script (Ching 2013a: 62).

¹⁶¹ The deviating vowel of the Tumsh. *χṣana-* may be due to a folk etymological association with *χṣanda-* ‘ruler’, with which *χṣana-* is combined in the dating formulae of Tumshuqese administrative documents. Alternatively, one could invoke the influence of Skt./Gandh. *kṣaṇa-* ‘moment’ (cf. fn. 159).

¹⁶² For the substitution of *xṣ-* with *kṣ-* (also *kṣ-*), cf. §4.3.18.

¹⁶³ Earlier etymological proposals can be found in e.g. Bailey (1948: 328f.; DKS: 69). The phonological problems these suffer from have been discussed by Scarborough (2021: 600–602 with fn. 10), so I will leave them aside here.

¹⁶⁴ Given that Bactrian uses omicron for /u/ and there is no decisive support for a Bactrian phoneme /o/ (cf. §2.2.2), the substitution of Gr. /o/ with Bactr. /u/ needed by Thierfelder’s etymology is easy to understand.

Scarborough's main objection against Thierfelder's etymology is the required substitution of Gr. χρ-, i.e. /kʰr/ or /xr/, with Bactr. χḡ- /xš/. Scarborough (2021: 604–606) finds this substitution hard to accept because there is no parallel in inherited words for a development from OIr. *xr- to Bactr. χḡ- /xš/. Most of the Bactrian evidence for initial *xr- concerns the Plr. root *√xraiH 'to buy' (EDIV: 446f.). This root shows an outcome χḡ- in the case of the verb χḡ-, pret. χḡδο 'to buy' < *xrīnā-, pret. *xrīta- and the nouns χḡρηγο 'purchase' < *xrayaka- and χḡρσο 'purchase' < *xrīti-čī- (BD II: 277f.). Yet, given that χḡρηγο and χḡρσο can have been secondarily influenced by the verb χḡ-, the default development of *xr- may have been to *χρ- /xr/, and then with a prothetic vowel to αχρ- /əxr/. This later stage may be seen in αχρῑανο 'purchasable' and αχρῑνο 'purchase', if from *xrayanā- (so BD II: 199) and not *āxrayanā- (so EDIV: 446).

However, phonetic descriptions of ancient grammarians suggest that the -ρ- /r/ in χρόνος may have been pronounced as a voiceless [ɾ], which is relevant for the etymology of χρονο, as the change of a voiceless liquid to a sibilant is typologically widespread (cf. Kümmel 2007: 162f.). According to grammarians, Gr. -ρ- /r/ was pronounced "aspirated", that is "voiceless", when preceded by a voiceless aspirate (VG³: 41–43; Probert 2010: 91f.; Jatteau 2013: 228).¹⁶⁵ In the Vatican scholia to Dionysius Thrax, one of the example words of this rule is precisely χρόνος:

(3.1) *Grammatici Graeci* i. iii. 143. 20–22 Hilgard

Οἱ δὲ ἀρχαῖοι γραμματικοὶ τὸ μὲν μετὰ ψιλοῦ εὕρισκόμενον ῥ ἐψίλουν, τὸ δὲ μετὰ δασέος ἐδάσυνον· οἷον τὸ Ἀτρεὺς καὶ κάπρος ἐψίλουν, τὸ δὲ χρόνος ἀφρός θρόνος ἐδάσυνον.

"The ancient grammarians used to pronounce a ρ /r/ found adjacent to an unaspirated consonant unaspirated, but aspirated when adjacent to an aspirated consonant. They, for instance, used to pronounce Ἀτρεὺς [name Atreus] and κάπρος [boar] unaspirated, but χρόνος [time (period)], ἀφρός [foam], and θρόνος [throne] aspirated." (tr. mine).¹⁶⁶

¹⁶⁵ The same type of assimilation occurs in some contemporary English dialects where rhotics are devoiced after initial aspirates, e.g. in 'to cry' (VG³: 43 fn. 74; Jatteau 2013: 224 fn. 12).

¹⁶⁶ The same rule, again with χρόνος as an example, is given in Choeroboscus' *Scholia in Theodosium Alexandrinum* (*Grammatici Graeci* iv. i. 257. 33–34; iv. ii. 44. 15–17 Hilgard).

Based on the testimony of these grammarians, one can hypothesise that speakers of Bactrian felt /xš/ to be phonetically closer to the Greek cluster [kʰr̥] (or [xɾ]) than **/xr/.¹⁶⁷

Additional support for the derivation of χῑovo from χρόνος comes from palaeography. In Greek sources from the Indo-Iranian borderlands, the letter rho has been used to write sibilants. On a coin of the Indo-Scythian ruler Śpalirises (ca. 70–60 BC), his name is, for instance, written in Greek script as gen.sg. ΠΙΛΑΙΡΙΣΟΥ. In other words, the cluster /śp/ is spelled with rho and pi. Starting from this example, Falk (2022: 155–167) has been able to trace the origin of the Bactrian letter ɸ to this special use of rho in Greek sources from the region,¹⁶⁸ thereby providing indirect evidence that the -p- in Gr. χρόνος could have developed into the -ɸ- seen in Bactr. χῑovo.

A separate issue is the semantic difference between χρόνος and χῑovo: the Greek word means ‘time (period)’, whereas the Bactrian signifies ‘(calendar/regnal) year’, a meaning which χρόνος only starts to develop after the Hellenistic period, as noted by Scarborough (2021: 600f. fn. 7; 606). This discrepancy should nevertheless not concern us too much, since the Gāndhārī evidence bridges the semantic gap between χρόνος and χῑovo. Gandh. *kṣuna* can not only mean ‘reign’ or ‘regnal year’ but also ‘date’, a polysemy which, as briefly pointed out by Baums (2018a: 61), hints at a semantic specialisation from ‘time’ over ‘date’ to ‘year’.¹⁶⁹

In two administrative formulae, the meaning of Gandh. *kṣuna* is still particularly close to that of χρόνος. The first concerns the loc.sg. *īśa kṣunaṃmi* (and variants) ‘at this date’ used to round off dating formulae.

(3.2) CKD 204 obverse 1

saṃvatsare 4 3 Mahanuavamaharaya jiṭugha Vaṣmana devaputraṣa maṣe 4 1 divaṣe 10 2 īśa kṣunaṃmi ...

“In the 7th year of the great king of great Nuava, the *jiṭugha* Vaṣmana, the son of god, in month 5, day 12, at this date ...” (tr. mine).

¹⁶⁷ Nicholas Sims-Williams (p.c.) points out that if one interprets Bactr. αθῑο ‘(God) Fire’ as a loanword from the Avestan day-name *āθrō*, there would also be an example of a foreign -θr- being substituted as Bactr. -θɸ- /θš/.

¹⁶⁸ For the intermediary stages, see Falk (2022: 167 with figure 5).

¹⁶⁹ χρόνος could already mean ‘date’ in Classical Greek, e.g. ἐκ παλαιῶν χρόνων ‘out of old dates’ or μετενεγκόντα τοὺς χρόνους ‘having transposed the dates’ in Demosthenes *De corona* 225.

In examples such as (3.2), one could almost translate *īśa kṣunaṃmi* as ‘at this time’, a possibility reinforced by the fact that in CKD 120, *īśa kalaṃmi* ‘at this time’ is employed in the same function as *īśa kṣunaṃmi*.¹⁷⁰

The second formula is *aja kṣuna uvadae* (and variants).¹⁷¹ This expression means ‘from this date onwards’, which makes it comparable to Greek expressions such as ἀπ’ ἐκείνου τοῦ χρόνου ‘from that time onwards’ in the Greek translation of Aśoka’s 13th Major Rock Edict.

In my opinion, the semantic development from ‘date’ to ‘reign’ / ‘regnal year’ could have happened in dating formulae because *kṣuna* is sometimes the syntactic host of a genitive complement mentioning the name of the ruling king, as in (3.3).

- (3.3) CKD 572 under-tablet obverse 1
saṃvatsare 20 1 maṣe 4 2 divaṣe 10 3 Mahanuavamaharaya jīṭugha
Aṃgoka devaputraṣa kṣunaṃmi ...
 “In the 21st year, 6th month, 13th day in the reign of the great king of great Nuava, the *jīṭugha* Aṃgoka, the son of god ...” (after TKD: 114).

In this type of context, translating *kṣunaṃmi* as “at the date of king X” does not make much sense, and one can imagine that it was the addition of genitive complements which resulted in a semantic extension of *kṣuna* from ‘date’ to ‘reign’ / ‘regnal year’.

To sum up, Gandh. *kṣuna* ‘date, reign, regnal year’ is a direct loan from Bactr. χρόνο / xšunə / ‘(calendar/regnal) year’. The Bactrian word can, despite Scarborough’s objections, be accounted for as a loanword from Gr. χρόνος ‘time (period)’.

¹⁷⁰ *kṣuna* ‘date, reign, regnal year’ and *kala* ‘time’ are occasionally also juxtaposed in the Niya documents, e.g. *taṃ kālāṃmi īśa kṣunaṃmi* “at that time, at this date” in CKD 209. Note moreover that in Tocharian, where *kṣum* only means ‘regnal year’ and ‘reign’, the loc.sg. *ce_u prekene*, literally ‘at this time’, is used in the same function as Gandh. *īśa kṣunaṃmi*; cf. e.g. THT 4001 a1 *ñu kṣunne trice menne śak-ṣuk[t]ne k_uśiññ-orocepi lānte Sal[a]ri kṣuntsa ce_u prekene ...* “In the year nine, in the third month, on the seventeenth (day) (lit. “on seventeen”), under the rule of the Great Kuchean King Salare*. At this moment ...” (Ching & Ogihara 2013: 103).

¹⁷¹ Attestations: CKD 222 (*uju kṣu<*na> uvadae*); 324 + 328 (*aja kṣuna uvatae*); 345 (*aja kṣuna uvadae*); 420 (*aja kṣuna uvatae*); 436 (*aja kṣuna upadae*); 577 (*aja kṣuṃna uvatae*); 588 (*aja kṣuṃna uvatae*); 652 (*aja kṣuna uvada[e]*); 678 (*aja kṣuna uvadae*); 788 (*aja kṣuna uvataya*); 839 (*aja kṣuna upātaya*); 889 (*aju kṣana uvatae*); 898 (*aja kṣuna uatae*).

3. *guśura* ‘prince’

Attestations of the base form

DIR.SG. *guśura*: CKD 187; 216; 295; 320; 401; 415; 478 (2x); 584 (2x); 654; 696 (2x); 702; 703; 899; *guśuro*: CKD 884; *gośora*: CKD 837 (3x)

GEN.SG. *guśuraṣa*: CKD 696 (2x)

INS.PL. *guśurakehi*: CKI 249

GEN.PL. *guśurana*: CKD 324 + 328; 884 (2x); *guśurane*: CKD 842; *guśuraṇa*: CKI 564;

abbr. *go*: CKD 831 (2x; Strauch *apud* Ching 2013a: 66).

The official title *guśura* (variant *guśuraka**) is attested in Niya Prakrit, South Asian Gāndhārī, and (Epigraphical) Sanskrit.¹⁷² As far as can be seen from the attestations in these languages, the duties of a *guśura* were of a judicial and military character.¹⁷³ *guśura* moreover appears to have been a title carried by the nobility (cf. LKD: 87f. s.v.; Schoubben 2023: 287).

Three different etymologies have been proposed for this title.¹⁷⁴ They all start from the same premise, viz. that *guśura* is borrowed from an Iranian dialect showing fortification of OIr. *w- to *γ- or *g-. This premise is justified, as such strengthening is also occasionally evidenced in Bactrian (cf. γολο ‘wife’ < *wadū- and the PN γοραμβαδο < *wṛθragha-pāta-) and in some Iranian names attested in Gāndhārī (Schoubben 2023: 289–291).

Burrow (1935a: 781f.; LKD: 87f. s.v.) at first suggested *guśura* to be related to Av. *vīčira*- ‘decider (?)’, MP *wizīr* ‘argument, decision’, and NP *wazīr* ‘counsellor, vizier’. However, the semantics of Av. *vīčira*- are uncertain, and there is no guarantee that this word is a cognate of MP *wizīr* and NP *wazīr* in the first place (cf. Ciancaglini 2008: 166). This issue, combined with the absence of an agentive meaning ‘decider’ for MP *wizīr*, casts doubt on Burrow’s suggestion, which, as a result, tends to be no longer accepted in current scholarship.¹⁷⁵

¹⁷² The attested forms in Sanskrit are *guśūra*-, *gośūra*-, *gauśūra*-, *gaśūra*-, now also *giśūra*-. See Falk (2004: 149f. = 2013a: 362f.); Schoubben (2023: 286); Sims-Williams (2022–23: 136).

¹⁷³ See in particular CKI 249 and CKD 478.

¹⁷⁴ I pass over the unconvincing comparisons with the Bactrian royal name Κοζο(υ)λο (e.g. Konow 1916: 819) and the Turkic title *kül čur* (briefly considered by Lüders 1922: 261 = 1940a: 546).

¹⁷⁵ Allon (2019: 24) is one of the few exceptions to this tendency.

A decade later, Burrow conceived of a different etymology for *gušura*, again assuming a change from **wi-* to **gu-* in the Iranian donor language.¹⁷⁶ This time, Burrow compared *gušura* to Av. *visō.puθra-*, MP/Parth. *vispuhr*, Šiṇā *gušpūr*, Burushaski *gušpuhr*, and other witnesses of the Iranian title **wisah puθra-* ‘son of the house > prince’ (on which cf. e.g. Colditz 2000: 328ff.).¹⁷⁷ The source of *gušura* would, according to Bailey (1947: 150), be a “Scythian” dialect, for which he posited the following phonological changes: **wisah puθra-* > **wisē puθra-* > **gusīvura-* > **gusiura-* > *gušura-*.

In Schoubben (2023: 289), I questioned Burrow’s comparison between *gušura* and **wisah puθra-* on semantic and phonological grounds.¹⁷⁸ I further suggested (2023: 292–295) that *gušura* was back-formed from *gušuraka** (cf. infra) and borrowed from **γwazurg* (or: **γwuzurg*; **γuzurg*), a dialect form continuing OIr. **wazrka-* ‘big’ and thus related to OP *wazrka-*, MP/Parth. *wuzurg* (*wazarg*; *wuzarg*), Pāzand *guzurg* (*guzarg*), NP *buzurg*, and Bactr. *οαζορκο* (*οαζορκο*).

Evidence published since the completion of Schoubben (2023) shows my suspicions against Burrow’s etymology to be unfounded and my alternative derivation to be incorrect. The Bactrian birchbark letters recently surveyed by Sims-Williams (2022–23) contain a newly attested form *γοσοβοργο* ‘prince’ < **wisah puθra-ka-*¹⁷⁹ as a dialect variant of the previously known *οισβοργο* ‘idem’, and *gušura* (in the Brāhmī texts also *gušūra* and *gišūra*) appears as the corresponding title in unpublished Indian documents from the same collection (Sims-Williams 2022–23: 136). Consequently, Burrow’s etymology can now be regarded as essentially proven.

Some phonological details still require a separate treatment. The first point concerns the initial of *gušura* (and its variants). In New Iranian languages from the region undergoing the same type of fortification as dialectal Bactrian, the outcome of an initial **w-* is a fricative *γ-* (cf. e.g. Parāčī *yury* ‘wolf’ < OIr. **wṛka-*). It therefore seems most plausible that the <γ> in

¹⁷⁶ Burrow communicated this idea to Bailey, who published it in Bailey (1947: 149f.; 1950a: 391–393). One can find the gist of Burrow’s idea also in a handwritten note added to p. 87 of Burrow’s annotated copy of LKD.

¹⁷⁷ **wisah puθra-* was additionally calqued into Aramaic as *br byt*. On the more recently discovered Bactrian cognates, see below.

¹⁷⁸ I pointed to the lack of “clear evidence for any close connection between the *gušuras* and the royal court”, and I followed von Hinüber (2003: 29f.) in querying the unparalleled phonological changes, particularly the assumed loss of **p*.

¹⁷⁹ For the presence of the *ka*-suffix, one may also compare Khot. *bīsīvira-* ‘of noble birth’ (Skjærvø 2004 II: 317) and Sogd. *wyspδr’k* ‘prince’ (DMSB²: 250).

γoσoβoργo also stands for /γ/ (and not for /g/). In other words, Bactr. initial /γ/ needs to have been substituted with Gandh. *g-* /g/. Why this substitution happened is easy to understand from Gāndhārī phonology: Gandh. /γ/ only occurs in intervocalic position (§2.1.2).¹⁸⁰

The palatal *ś* in *guśura* / *guśuraka** asks for slightly more discussion. Sims-Williams (2022–23: 136) phonologically transcribes γoσoβoργo as “[yusvurg]”. Yet, if this were correct, it would be hard to account for the *ś* in *guśura* / *guśuraka**, given that Gāndhārī keeps its dental and palatal sibilants distinct. I would rather transcribe γoσoβoργo as /γuśvūrgə/.¹⁸¹ When we compare MBactr. *wyś(p)* (~ oioσ(π)o) ‘all’ < **wispa-* and suppose that the palatalisation of **s* after **ĩ* manifested in this and other Manichaean Bactrian words happened early enough (§2.2.4.2), also the **s* in **wisah puθra-ka-* would be expected to yield a palatal /ś/ in Bactrian.¹⁸² If so, the *ś* in *guśura* / *guśuraka** is explained more easily: it would directly correspond to the Bactr. /ś/,¹⁸³ and the only additional assumption needed is that the Bactr. /v/ was lost in front of the back vowel /u/ when speakers of Indic borrowed the word.

The final topic to treat is the co-existence of *guśuraka** and *guśura*. One way to account for this co-existence is to assume that *guśuraka** is more original,¹⁸⁴ given that *guśuraka** can be directly explained from Bactr. γoσoβoργo /γuśvūrgə/.¹⁸⁵ If so, the more frequent variant *guśura* can be interpreted as a back-formation, the final *-ka* of *guśuraka** possibly having been reanalysed as the *ka*-suffix inherited from OIA.

¹⁸⁰ See also §3.3.2 s.v. *gavaśa* and §4.3.10.

¹⁸¹ I transcribe the first <o> in -βoργo as /ũ/ because the loss of **h* < **θ* may have caused compensatory lengthening, and the vowel in question is typically written as <ũ> in Sanskrit.

¹⁸² Another theoretical option is that the *-*ah* in **wisah* first developed to *-*i* (for which cf. §4.2.1 and Khot. *bīsīviraa-*) and that this *-*i* caused palatalisation of the preceding sibilant before disappearing itself.

¹⁸³ As I point out in §4.3.16, the scenario advocated above would imply that the colouring of the **i* in **wisah* to /u/ postdates the palatalisation of **s* to /ś/. Note also that the **i* is still preserved in Bactr. oioσβoργo (and the corresponding oioσλoγδo ‘princess’ < **wisah duxtā*) and in Skt. *giśūra-* (next to *guśūra-*, *gośūra-*, etc.).

¹⁸⁴ It may be relevant in this regard that the ins.pl. *guśurakehi* in CKI 249 is the oldest attestation of the title under discussion.

¹⁸⁵ /rg/ can have been broken up by a *svarabhakti* vowel during the borrowing process.

Such a reanalysis could have been motivated by a folk etymology with *śūra*- ‘warrior, hero’, as would be fitting for a title with military associations. *śūra*- ‘warrior, hero’ is often used as the second part of Sanskrit compounds (e.g. *raṇaśūra*- ‘hero in war’, *śṛṅgāraśūra*- ‘a hero in love-affairs’), and compounded personal names (e.g. *Somaśūra*- or *Samudraśūra*-), whereas **śūraka*- does not seem to exist. Since the *ka*-suffix has a diminutive, sometimes even pejorative, connotation in (Classical) Sanskrit, it may have been avoided for a word meaning ‘hero’ and a military title such as *guśuraka**. From there, it would have been a small step to back-form *guśura* from *guśuraka**.

A second possibility is that the co-existence of *guśuraka** and *guśura* reflects the situation in the donor language. The Bactrian PN οισβοροζινυο ‘in the prince’s charge’ indirectly preserves Bactr. οισβορο* ‘prince’ from **wisah puθra*- without the *ka*-suffix (BPN: no. 350). Thus, instead of being back-formed from *guśuraka** ← γοσοβοργο /γυśvūrgə/, it is also possible that *guśura* is to be traced back to **γοσβορο* /γυśvūrə/, a dialect form of οισβορο*.

To wrap up, the discovery of Bactr. γοσοβοργο in recently published birchbark letters has more or less settled the question of the etymology of the official title *guśura* (variant *guśuraka**). When taking into account the palatalisation of OIr. **s* after **ī* suggested by the Manichaean evidence, *guśuraka** can be derived in a straightforward manner from γοσοβοργο /γυśvūrgə/ < **wisah puθra-ka*-. The more frequent *guśura* could either have been back-formed from *guśuraka** or borrowed from a Bactrian by-form **γοσβορο* /γυśvūrə/ < **wisah puθra*-.

4. *jheniga* ‘in charge of, under the care of’

Attestations of the base form

DIR.SG. *jheniga*: CKD 161; 177; 184; 244; 258; 288; 362; 370 (2x); 372; 373; 585;

644 (2x); 722; 735; 819; 840; *jheniya*: CKD 278 (2x)

DIR.PL. *jheniga*: CKD 152; 164; 271 (2x); 307 (2x); 475; 509; 721 (2x)

jheniga ‘in charge of, under the care of’ has been known to be an Iranian loanword since at least Konow (1932: 80; cf. also 1936: 239).¹⁸⁶ He convincingly compared the Niya word with Khot. *ysīnīya*- (also *ysīnīta*;

¹⁸⁶ For more discussion on the etymology of *jheniga*, see also Burrow (1934: 514; LKD: §1; 93 s.v.) and Bailey (1949a: 132; DKS: 351) *contra* Thomas (1946).

ysīniyā; ysīnī ‘in charge of’ < **zainiya-kā*- and BSogd. *zyn’y* (also *zyny(h); zynyy*) ‘deposit, care’ < **zainiyV*- (cf. Av. *zaēni*- ‘vigilance’ and Skjærvø 1991).

Meanwhile, it has become evident that the same lexeme was also borrowed into other Tarim Basin languages. In Tocharian A/B, the word occurs as *senik* ‘care, pledge’ (Pinault 2002: 272f.; DoT: 764f.; DTTA: 530f.; Dragoni 2023b: 197–199). Skjærvø (1991) further proposed that the sequence *ysenikām* in a Sanskrit manuscript from the Tarim Basin belongs here as well, although it could perhaps also be a proper name, as per Dragoni (2023b: 198).

According to Konow and Burrow (1934: 514; LKD: §1; 93 s.v.), Niya *jheniga* would be a Khotanese loanword. This idea rests on the assumption of a very early borrowing, since *jheniga* must then come from a pre-form of Khot. *ysīniya*- (and variants) which had not yet undergone the development of **-ai-* > Khot. *-ī-*, over **-ē-*. We cannot exactly date this Khotanese sound change, but Khotan Pkt. *hinajha* ‘general’ ← Khot. *hīnāysa*- < **haināza*- ‘army leader’ (§3.5.1 s.v.) indicates that it had already been completed by the first centuries AD. The development of **-ē-* < **-ai-* to Khot. *-ī-* is moreover already found in Pre-Khotanese loanwords into Tocharian, approximately datable to 500 BC–400 AD (Dragoni 2023b: 256). A (Pre-)Khotanese origin of Niya *jheniga* is thus improbable for chronological reasons.¹⁸⁷

It seems more likely that *jheniga* is a Bactrian word instead. The Bactrian cognate of Khot. *ysīniya*- (and variants) is attested as ζινιγο /*zīnīgə*/ ‘under the care of’ (IUr₁ 2; IUr₂; cf. BPN: nos 239; 264).¹⁸⁸ In Bactrian, *-ē-* was raised to *-ī-* in front of a nasal (SFBG: 61f.), and the older and newer form are sometimes attested next to each other, e.g. οιν- < οην- ‘to see’ < **waina*- (BD II: 245). In view of this, I propose to interpret *jheniga* as a loanword from a more archaic Bactrian form *ζηνιγο /*zēnīgə*/ < **zainiya-kā*-, for which one may further compare Bactr. ζηνοβιδο /*zēnəvidə*/ < **zaina-pati*- ‘chief of the armour’ (→ Niya *jenavida*, §3.2.2 s.v.) and the PN ζηνιβο /*zēnīvə*/ < **zaini(ya)-pā*- ‘he who protects what is entrusted (to him)’ (BPN: no. 151).

¹⁸⁷ If Skt. *ysenikām* belongs here too, the spelling with <ys> does not need to point to a Khotanese source either (*pace* Skjærvø); the use of the ligature <ys> to write /z/ is also known from South Asian Brāhmī (Hitch 1984: 190–197) and not necessarily a marker of Khotanese origin.

¹⁸⁸ See additionally BD II (201) on βανοζινιου < *βανοζινιγο ‘royal infant’ < **bānu-zainiya-ka*- ‘in the queen’s charge’ and BPN (nos 350; 472) on the PNs οισβοροζινιου and τοβαζινι (family name τοβαζηνανο).

TA/TB *senik* may have been borrowed from Niya Prakrit (so Dragoni 2023b: 219), but there is no cogent reason to exclude a direct loan from Bactrian.

5. *daśavida* ‘chief of ten households’

Attestations of the base form

DIR.SG. *daśavida*: CKD 41 (7x); 65 (3x); 66 (3x); 80; 93; 105 (3x); 115 (4x); 118; 129 (3x); 146 (3x); 148; 170 (2x); 173 (3x); 174; 181; 199; 204; 210; 221; 266 (3x); 299; 337; 404; 407; 409; 411; 419; 448; 449; 456; 457; 458; 459; 460; 462; 463; 464; 465; 467; 485; 533; 535; 543; 597; 601 (6x); 605; 607; 609; 615; 618; 620; 627; 631; 642; 727; 731; 758; 762 (3x); 763; 774 (6x); 795; 810; 833; *daśavita*: CKD 104 (2x); 108; 146 (4x); 191; 204; 205; 237; 608; 613; 628; 688; 776; 790; *taśavita*: CKD 610; *daśapati*: CKD 838 (2x)

DIR.PL. *daśavite*: CKD 477 (3x)

daśavida is an official title given to people in charge of a fiscal and administrative unit of (approximately) ‘ten households’ known in Niya Prakrit as *daśa* (and variants) (Stein 1936: 766ff.; LKD: 97 s.v. *daśavita*; Padwa 2007: 85–89).

Most likely, *daśavida* is based on a Bactrian compound $\lambda\alpha\sigma\omicron\beta\iota\delta\omicron$ * /lasəvidə/ ‘chief of ten households’ < **dasa-pati*- (so first Harmatta 1960: 209–217).¹⁸⁹ Bactr. $\lambda\alpha\sigma\omicron\beta\iota\delta\omicron$ * can be safely posited based on (i) the attested derivative $\lambda\alpha\sigma\omicron\beta\iota\delta\iota\gamma\omicron$ ‘(soldier) belonging to a company of ten’ (BD II: 226) and (ii) its cognates OP **daθa-pati*- → Elam. *da-sa-bat-ti-iš* and Med. **dasa-pati*- → Elam. *da-šá-bat-ti-iš* (Iranica: §4.4.7.25; §4.4.7.30).

Obviously, there is no one-to-one phonetic correspondence between Niya *daśa*- (and *taśa*- with initial devoicing) and Bactr. $\lambda\alpha\sigma\omicron$ -. One therefore has to assume that *daśavida* is a hybrid compound whereby $\lambda\alpha\sigma\omicron$ - ‘ten’ has been replaced by its Prakrit cognate during the borrowing process.¹⁹⁰

¹⁸⁹ On Bactr. -βιδο /vidə/, see also §3.2.1 s.v. *śadavida* and §3.2.2 s.v. *jenavida*.

¹⁹⁰ Conceivably, $\lambda\alpha\sigma\omicron$ ‘ten’ as the name of the administrative unit $\lambda\alpha\sigma\omicron\beta\iota\delta\omicron$ * was responsible for was first calqued into Niya Prakrit as *daśa* (and variants), from where *daśa* may have been introduced into the official title too. When assuming that the compound *daśavida* was created as such in Niya Prakrit, it would be more difficult to explain why an Indic and a Bactrian element are combined. This inner-Indic approach would furthermore neglect the Achaemenid origin of these administrative divisions implied by the Old Persian and Median evidence cited above (see further Weber 1983: 94f.). There is also a variant form *daśapati* where both elements of the compound are Indic; but this

The dir.pl. of the title under discussion is attested as *daśavite* in CKD 477. This form could merely be an instance of the infrequent plural ending in *-e* sometimes found also in inherited vocabulary (LKD: §60). A Bactrian source for this plural is possible too since the dir.pl. of *-βιδο* would likewise end in *-ε* /*e*/ in Kuṣāṇa times (cf. also §4.4.3).

6. *nokṣari* ‘month of the new year’

Attestations of the base form

DIR.SG. *nokṣari*: CKD 195

Since *nokṣari* occurs behind the loc.sg. *maṣe* ‘in the month’ in the dating formula of CKD 195, this word must be a month name.¹⁹¹ Konow (1924: 121) recognised it to be “the new-year’s month, corresponding to *Nausaryī* in the Khorasmian and *Nausard* in the Sogdian calendar”.¹⁹² In Old Iranian terms, this month name is a compound of **nawa(-ka)-* ‘new’ and **sardV-* ‘year’.

Burrow (1934: 512) saw in *nokṣari* a loanword from Khotanese (“Saka” in his terminology). As this requires the ad hoc assumption that word-final **-rd-* would become *-r-* in Khotanese and not *-l-* as elsewhere, including in *salii-* ‘year’, I concur with Bailey (1949a: 127) that this proposal is unlikely. A Sogdian origin of *nokṣari* is likewise implausible because **-rd-* is continued in this language as *-rδ-*, also in *srδ* ‘year’.

More plausibly, *nokṣari* is a Bactrian loan because then the *-r-* in *nokṣari* can be due to a simplification of the foreign cluster *-ρλ-* /*rl*/ < OIr. **-rd-* (cf. also Harmatta 1960: 206; §4.3.25). The relevant month name is moreover indirectly attested by way of the compound *βιδδιγονωγοσαρλο* ‘second new year’ and the Late Bactrian form *νωγοσαρδο* ‘new year’, which has *-ρδ-* from earlier *-ρλ-* (BD II: 203; 240; SCBD: 89).

A final note is due on the word-final *-i* in *nokṣari*. There is no case ending *-i* in Niya Prakrit, and old *i*-stems were being remade into *a*-stems (LKD: §70), so it seems that the *-i* in *nokṣari* was taken over from the source form. In view of the final *-i* in Arm. *Nawasardi* ‘month of the new year’ and Sims-Williams’ derivation of Khot. nom.sg. *salī* ‘year’ < *salii-* < **sardī-kī-* (1990: 291–294; SVK

form is likely to be a secondary creation given that it only occurs in CKD 838, one of the documents in Kuča Prakrit.

¹⁹¹ Cf. e.g. the month name *Arthamisiya* ← Gr. Ἀρτεμίσιος, which is likewise put behind the loc.sg. *maṣe* (*maṣa*) in CKI 152; 159; 509. I owe this comparison to Stefan Baums (Munich).

¹⁹² See also Burrow (1934: 512); LKD (77 s.v. *are*; 101 s.v. *nokṣari*); TKD (36).

III: 153), Bactr. $\nu\omega\gamma\sigma\alpha\rho\lambda\omicron^*$ may go back to **nawa-ka-sardī-*. I would therefore like to suggest that *nokṣari* is a loan from a Kuṣāṇa Bactrian form ** $\nu\omega\gamma\sigma\alpha\rho\lambda\iota$ /nōgsarī/* with a final **-ī* still preserved.

7. *prigha* ‘(monochrome) damask’

Derivatives

DIR.SG. *prighamaga* ‘made from damask’: CKD 316

Compounds

DIR.SG. *śpetapriḡha* ‘white damask’: CKD 318

In both its attestations, *prigha* refers to the fabric from which a certain textile product is made: *pajhavamta* ‘breastband (?)’ in CKD 316 (cf. §3.3.3 s.v.) and *kaṃculi* ‘jacket’ in CKD 318. The more exact meaning ‘(monochrome) damask’ is suggested by Lüders’ (1936a: 30) discovery of a Sanskrit cognate *prīḡa-* (and variants) which is found under the title *vastranāmāni* ‘textile terminology’ in *Mahāvīyutpatti* 5866 and translated into Tibetan as *dar ri mo can* ‘figured silk’ and into Chinese as *cǎi juàn* 綵絹 ‘coloured silk’.¹⁹³

The Iranian origin of *prigha* and its Sanskrit cognate was pointed out by Henning (1946: 150–157 = 1977 II: 259–266). When Henning published his article, the word for ‘monochrome damask’ was known as *p(i)ring* in Middle Persian (cf. CPD: 69; DMMP: 282) and as *pr̥yng* / *pr’yng* in Sogdian (SD: 281; 296; DMSB²: 175).¹⁹⁴ In recent decades, the evidence has been enlarged further by the Bactrian compound $\pi\rho\iota\gamma\gamma\omicron\alpha\beta\gamma\omicron$ ‘weaver of damask’ (BD II: 258).

Determining the most likely source of Niya *prigha* depends on one’s views on the ultimate etymology of this Iranian word for ‘damask’. In Henning’s

¹⁹³ In view of the nasal in Skt. *prīḡa-*, one could expect the Niya form to have been spelled as ***primgha*. The writing of anusvāra is, however, not always consistent in Kharoṣṭhī, and an akṣara 𑀧 *prim* is never attested in the currently available sources (possibly because a postconsonantal *r* and an anusvāra were difficult to combine). The 𑀧 *pri* in both instances of *prigha* is rather cursively written, the *i-mātrā* and the stem of the underlying 𑀧 *pra* being drawn in one stroke (Stefan Baums p.c.). In a handwritten note added to his personal copy of LKD, Burrow wonders whether *piṃga* (CKD 416) and *piṃgha* (CKD 264) are variants of the same word, but the unclear contexts in which these words occur should leave this option undecided for now. Agrawala (1951: 15–17) suggests to also add Skt. *piṃgā-* (Hcar.) to the dossier.

¹⁹⁴ Henning (1946: 151f. = 1977 II: 260f.) also compared Sogd. *spytyy pr̥yng* ‘white damask’ with the Niya equivalent *śpetapriḡha*.

opinion, it could have been an originally Sogdian word. In this vein, he cautiously derived Sogd. *pryng* from **upa-ringa*- ‘marked, lined’ (cf. also SD: 281), which, if correct, would imply Niya *prigha*, its Sanskrit cognate, and MP *p(i)ring* to all be loanwords from Sogdian. Henning’s etymology is, however, not self-evident given that the postulation of an Iranian word **ringa*- ‘mark, line’ rests on a doubtful comparison with Av. *haptō.iriṅga*-, whose assumed meaning ‘having seven distinguishing marks’ is not entirely sure (Goldman 2015: 185f.). Other options need thus be considered as well.

If we instead assume that the word for damask originated in Bactrian and spread from there to the other languages, a more straightforward etymology presents itself. Bactr. *πριγγο** ‘damask’ could be derived from **pir-aina-ka*- ‘made from the silkworm > damask’. This proto-form would be a derivation from **pirV*- ‘(silk)worm’ and the Iranian material suffix *-*aina-ka*- (= Bactr. -*ηγγο* / -*ιγγο*, cf. BD II: 213). **pirV*- can be reconstructed on the basis of Khot. *pira*- / *pāra*- ‘(silk)worm’, Khwar. *pyryk* ‘silkworm cocoon’, and Sogd. *pyrcyq* ‘silk thread or cloth’, the latter consisting of *pyr** ‘silkworm’ and the adj. suffix -*cyk* (thus Sims-Williams 2005: 182; 2008; 2023: 58).¹⁹⁵ **pir-aina-ka*- would moreover regularly yield Bactr. *πριγγο** /*prīṅgə*/ because of (i) intervocalic lenition of *-*k*- to -*g*- (SFBG: 35); (ii) syncope of the unaccented short vowels *-*i*- and *-*a*- (SFBG: 60f.); and (iii) monophthongisation of *-*ai*- to *-*ē*- with a further development to -*ī*- in front of a nasal (SFBG: 61f.).

In view of this new etymology, the least costly hypothesis would be that Niya *prigha* was borrowed directly from Bactr. *πριγγο**. Theoretically speaking, it is still possible that the word passed through a Sogdian or other intermediary, but there is no evidence in support of this. Opting for such a scenario would thus be a violation of Ockham’s razor.

8. *laṣi* ‘gift’

Attestations of the base form

DIR.SG. *laṣi*: CKD 122; 243 (2x); 380; 415; 677 (2x); 678; 839; 860 (3x); *laṣiya*: CKD 573; *laṣa*: CKD 222 (2x); 690

¹⁹⁵ Even though these East Iranian words closely resemble Skt. *pīlu*-, Tamil *puṟu*, and other Dravidian words for ‘worm’, the ultimate etymology remains unclear (Sims-Williams 2008a). If my etymology of *πριγγο** is accepted, Sims-Williams’ reconstruction of the Iranian word with a long **ī*, as in Sanskrit, seems no longer possible.

In every instance except CKD 690, Niya *laṣi* /lāṣni/ is a complement of the verb *de(na)*- ‘to give’ and in certain formulae this word can be replaced by *prahūḍa* ‘gift’ < OIA *prābhṛta*- (cf. Burrow 1935a: 786; LKD: 115 s.v.); the meaning ‘gift’ is hence secure.

Etymologically, *laṣi* is certainly a borrowing from Bactr. λαῖvo /lāšnə/ ‘gift’, a cognate of MMP/Parth. *dāšin* ‘idem’ (DMMP: 136).¹⁹⁶ Based on a convincing comparison with Skt. *dakṣiṇā*- ‘given by the right hand > priest’s fee, priestly gift’, Schwartz (1974: 400f.) reconstructs the proto-form of the Iranian words as OIr. **dāšinā*-. In view of the final *-i* of Niya *laṣi*, one could also consider to reconstruct **dāšini*, a feminine in **-i* derived from the thematic masculine stem in **-a*. This alternative reconstruction would have the advantage that it allows us to posit an early Kuṣāṇa form **λαῖvi* /lāṣni/, corresponding sound for sound with Niya *laṣi* /lāṣni/. A different option could be that *laṣi* is a loan from an archaic nom.sg. **λαῖvi* with **-i* /i/ < **-ah* as in Sogdian and Khotanese. Yet, this option appears less likely because it is hard to see why *laṣi* would have been borrowed from a more archaic form of Bactrian than the other loanwords, which typically end in *-a* rather than **-i*; see in more detail §4.2.1.

9. *lastana* ‘dispute, lawsuit’

Attestations of the base form

DIR.SG. *lastana*: CKD 298

Niya *lastana* ‘dispute, lawsuit’ and Khot. *lāstana*- ‘quarrel’ are borrowings from Bactr. λαστανο /lāstānə/ ‘litigation, dispute’ (Schwartz 1974; BD II: 226 *pace* Bailey in KT VI: 315–317; DKS: 371).¹⁹⁷ We can be confident that this term originated in Bactrian since λαστανο regularly derives from **dāta-stāna*-, literally ‘the place of law/judgement’ (cf. MP/Parth. *dādestān*), with lambdacism and simplification of **-tst-* to *-στ-* /st/ after syncope.¹⁹⁸

¹⁹⁶ See BD II (227), building further on Burrow (1935a: 786; LKD: 115 s.v.), Schwartz (1974: 400f.), and Weber (1997: 31). The superseded etymologies by Thomas (1934a: 49 fn. 3), from OIA *lakṣya*- ‘aim’ or *lakṣmī*- ‘richness’, and Bailey (KT VI: 315–317), from PIr. **√HraH* ‘to give’, will not be addressed here.

¹⁹⁷ The connection between Niya *lastana* and Khot. *lāstana*- had already been made by Konow (1932: 80); cf. also Burrow (1934: 514). In Niya Prakrit, the default word for ‘dispute, lawsuit’ is *vivada* < OIA *vivāda*-.

¹⁹⁸ Cf. further TA *lāstānk* / TB *lastānk* ‘executioner’s block (?)’, which are probably loans from a related Bactrian word **λασταγγο* /lāstāṅgə/. The latter could be derived from **dāta-stāna-ka*- (Schwartz 1974: 403), or it could be a

In CKD 298, *lastana* is used as part of a light verb construction with pret.3pl. *kritaṃti* ‘they made’. This construction may have been taken over from Bactrian too since λαστανο always pairs together with κῑρ- ‘to make, do’. The Bactrian phrase has itself a parallel in MP *dādestān kun-* ‘to pass judgement, judge’ and Parth. *dādestān kar-* ‘to quarrel’ (DMMP: 133).¹⁹⁹

10. *vaga* ‘rent (paid for the use of land)’

Attestations of the base form

DIR.SG. *vaga*: CKD 574; 815; *vaka*: CKD 496; 498; 559²⁰⁰

Burrow (LKD: 117 s.v. *vaka*) could show that Niya *vaga* refers to the ‘rent’ paid by a tenant to the owner of a piece of land. This rent likely consisted of a certain percentage of the generated harvest, as *vaga* is always paid for with agricultural commodities (*ghrida* ‘ghee’ in CKD 496; *aṃna* ‘corn’ in CKD 559; 574; 815).

Unaware of previous suggestions to etymologise this word, I propose to derive *vaga* from Bactr. βαγο /vāyē/ ‘share, part, portion’ < OIr. **bāga-* (BD II: 200). This Bactrian word occurs in contexts resembling those Niya *vaga* is found in. βαγο combines, for instance, with ιαοιοιαρδαοι ‘grain, corn’ (doc. eg 3–5), comparable to how Niya *vaga* co-occurs with *aṃna*, the functional equivalent of ιαοιοιαρδαοι. The farming contract known as doc. U moreover stipulates that the tenant can keep a υῑρδδιγο βαγο, i.e. a ‘third part’ (U 15 = U 13’), of the harvest produced on a leased vineyard.

Obviously, the spelling *vaga* corresponds phonologically better to Bactr. βαγο /vāyē/ than its alternative spelling *vaka* does. The variant with *-k-* may

substantivised adj. derived from λαστανο with the suffix -αγγο /āṅgə/ < **-āna-ka-* and haplological shortening as in καθγοσταγγο ‘belonging to Kadagstan’ < **kataka-stāna-ka-* < **kataka-stān-āna-ka-* (DoT: 592f.). I slightly prefer the second option since the suffix -αγγο is particularly prone to be attached to nouns (originally) referring to places (BD II: 187). See also §3.2.4 s.v. *ṣvaṭhaṃgha* / *soṭhaṃga*.

¹⁹⁹ Khot. *lāstana-* can also be used in a light verb construction with *yan-* ‘to do’; cf. e.g. inf. *lāstanā* / *lāstanu yanā* ‘to quarrel’ in *Saṅghāṭasūtra* §206.7 (Canevascini 1993: 85).

²⁰⁰ I refrain from including the ambiguous sequences *bhumanavakaamṇa* and ins.sg. *bhumanavakaamṇena* (CKD 165). These can be understood as “corn newly (*navaka*) harvested from the land (*bhuma*)” or as “corn paid as rent (*vaka*) for the lands (gen.pl. *bhumana*)” (see TKD: 32). Either option suits the context and both *vaka aṃna* (cf. infra) and *bhuma navaka* (CKD 599) are otherwise attested.

be attributable to the “nonstandardization and apparently idiosyncratic variation” (Salomon 1999a: 115) so characteristic of Kharoṣṭhī orthography in general. Conceivably, *vaka* was intended as a hypercorrect spelling induced by the general lenition of OIA intervocalic *-k-* to Niya *-g-* /*γ*/ (§2.1.2; cf. further §4.3.10).²⁰¹

On its own, the change of initial OIr. **b-* to *v-* exemplified by βαγο /*vāyə*/ < **bāga-* is not a decisive indicator of a Bactrian loanword. In Sogdian (and the geographically remote Khwarezmian), **b-* also changed to *v-*. Yet, *vaga* is probably not a Sogdian loan because Sogd. β'γ, the cognate of Bactr. βαγο, only means ‘garden’ and not ‘share’ or the like (see DMSB²: 57).²⁰² In all probability, *vaga* thus finds its origin in Bactrian.

11. *valaga* ‘animal keeper’

Attestations of the base word

DIR.SG. *valaga*: CKD 14 (3x); 40; 176; 367; 557; 671; *valagaṃ*: CKD 367 (2x);
valaka: CKD 777 (4x)

INS.SG. *valagena*: CKD 82 (2x); 253

GEN.SG. *valagaša*: CKD 14; 25; 777

Attestations as a PN

GEN.SG. *Valakasa*: CKI 1059

Compounds

DIR.PL. *śeṣavalage* ‘remaining animal keeper’: CKD 788

GEN.PL. *uṭavalagana* ‘camel keeper’: CKD 637

The word *valaga* has previously been translated as ‘keeper’ (TKD: 10; 16; 47; 138) or ‘guard’ (TKD: 3f.; 6; 73), but it more specifically refers to people in charge of animals during embassies to neighbouring kingdoms (Høisæter 2020: 443–449). Accordingly, a more precise translation would be ‘animal keeper’.

In Burrow’s view (LKD: 119 s.v.), *valaga* would come from Skt. *pālaka-* ‘protector’, but this etymology forces him to assume that the otherwise

²⁰¹ Cf. also the PN *Vakamihira* ← Bactr. **βαγομιυρο* /*vagəmi(hi)rə*/ < **baga-miθra-* ‘lord Mithra’ in a Brāhmī inscription from Mathurā (Lüders 1961: 94f.), and the use of 𑀓 *ka* to indicate the spirant /*γ*/ in the *Khotan Dharmapada* (LKD: §16; Brough 1962: 86).

²⁰² In line 56 of Sogdian Tale B (M 135), Henning (1945: 470 = 1977 II: 174) translated β'γ as “allotments” (cf. also SD: 97), but the English word “allotment” can also mean a type of garden, as Nicholas Sims-Williams kindly remarked.

unexpected initial *v-* is adopted from compounds such as *paśuvala* ‘keeper of livestock’ < *paśupāla-*.

Therefore, it seems more attractive to adopt Sims-Williams’ suggestion (*apud* Høisæter 2020: 444f.) that *valaga* is borrowed from Bactr. *οαλαγο*, a hapax legomenon attested in cl 5. The context in which this Bactrian word occurs has to do with the transport of horses, thus allowing us to assume that *οαλαγο*, like Niya *valaga*, approximately meant ‘animal keeper’. Etymologically, *οαλαγο* can be compared to Parth. *wāḍāg* ‘leader, pilot’ (DMMP: 335) and BSogd. *w’δ’kk* ‘leader’ (SD: 396) < **wād-āka-*.²⁰³

Høisæter observes a complementary distribution in the functions of a *valaga* and an *arivaga* (also *ariyaga*).²⁰⁴ While the former looks after pack animals when travelling, the latter guides people (see also Høisæter 2022: 563–565; 2023: 422f.). Although I presently cannot solve the etymology of *arivaga*, I agree with Salomon (2020: 13f. *contra* Falk 2014: 5f.) that also this title is likely Iranian in origin. Given its link with *valaga*, one wonders if *arivaga* could be a Bactrian title ending in *-οαλαγο* /*wālgə*/ ‘leader’ < **-wāda-ka-*, as in the title *αρτοοαλαγο* (BD II: 200).²⁰⁵

12. *śadavida* ‘chief of a hundred households’

Attestations of the base form

DIR.SG. *śadavida*: CKD 86; 216; 569 (2x); 586; 587; 590; 637; 648; 654; 656; 795; 797 (2x); 808; 879; 886; *śadavita*: CKD 159; 247; 436; 586 (2x); 715; *śatavita*: CKD 683; *śatavida*: CKD 422

DIR.PL. *śadavida*: CKD 482 (2x); *śadavide*: CKD 580 (2x)

śadavida ‘chief of a hundred households’ is the title carried by officials who were responsible for the administrative and fiscal unit known as *śada* (also *śata*) ‘(a) hundred (households)’ (Stein 1936: 766ff.; Padwa 2007: 85–89).

Harmatta (1960: 209–217) recognised *śadavida* to be based on a Bactrian title **σαδοβιδο* /*sadəvidə*/ < **sata-pati-*, a cognate of OP **θata-pati-*, the

²⁰³ See §4.3.22 for the correspondence between Bactr. *-o-* /*w-*/ and Niya *-v-* /*v-*/.

²⁰⁴ Attestations: CKI 564 (3x, dir.sg. *arivagi*, gen.sg. *arivagisa*, ins.sg. *arivagiṇa*); CKD 10 (3x); 22; 67; 135 (2x); 244; 251; 253; 388; 438 (3x); 507; 569.

²⁰⁵ A potential problem with this idea is that it assumes Bactr. *-λγ-* /*lg-*/ to be substituted with Niya *-g-*, whereas Bactr. *-λγ-* /*lg-*/ seems to be continued as Niya *-lg-* in some names (§3.4.2 s.vv. *Namilga*; *Palge*). I have no solution for the first part of this title. There is a Niya title *ari*, perhaps ‘Aryan’ (LKD: 76 s.v.), but it is far from certain that this can be equated with the first element of *arivaga* / *ariyaga*.

latter attested via Elam. *sa-ad-da-bat-ti-iš* / *sa-da-bat-ti-iš* (Iranica: §4.4.7.107).²⁰⁶ Bactrian *σαδο- /sadə/ would probably have been rendered as ***sata*- or ***sada*- in Niya Prakrit, so we are not dealing with a one-to-one borrowing. Instead, *σαδο- /sadə/ was replaced by its Niya cognate *śata*-, a process which I discuss in more detail in §3.2.1 s.v. *daśa*vida (see especially fn. 190). The actual Bactrian form *σαδοβιδο may be indirectly preserved as *sadāvida*, a title attested in a colophon of a Gilgit *Saddharmapuṇḍarīka* manuscript (von Hinüber 2017: 137 = 2009–19: 1630).

It has gone unnoticed so far that Niya Prakrit *śadavida* ‘chief of a hundred households’ may, in its turn, have been borrowed into Old Turkic and Sogdian as *šadapīt* and *š’ōpyt*, respectively. OT *šadapīt* occurs as an official title in the Orkhon inscriptions from the 8th century (cf. Kljaštornyj & Livshits 1972: 89 with ref.), and the Sogdian word, also an official title, is attested in the Bugut inscription from the 6th century (revised edition in Yoshida 2019). Since the content of the Bugut inscription is purely Turkic, it seems most likely that Niya *śadavida* was (via some intermediary) first borrowed into Old Turkic as *šadapīt* and thence into Sogdian as *š’ōpyt*.²⁰⁷ I should admit, though, that it is hard to explain why the -v- in Niya *śadavida* was borrowed as Turkic -p- and not simply as ***-v-*.²⁰⁸

In any case, the etymology of OT *šadapīt* and Sogd. *š’ōpyt* does not affect the etymological analysis of *śadavida* itself, which can safely be assumed to come from Bactr. *σαδοβιδο.

13. *śada* ‘pleased, happy’

Attestations of the base form

DIR.SG. *śada*: CKD 157; 305; 307; 317; 390; 399 (2x); 475; 713; *śado*: CKD 247; 714; CKM 274 (2x); *śade*: CKM 274 (7x); *śato*: CKD 164; 385; 541 (2x); 702

INS.SG. *śātena*: CKD 702

GEN.SG. *śadasa*: CKM 267

²⁰⁶ σαδο ‘hundred’ < **sata* and -βιδο ‘lord, chief’ < *-*pāti*- are both attested in Bactrian, but the compound *σαδοβιδο is not. I consider the etymology secure because of the parallel *daśa*vida ‘chief of ten households’ ← λασοβιδο* (§3.2.1 s.v.).

²⁰⁷ For a similar chain of borrowings, cf. §3.2.3 s.v. *tomga*.

²⁰⁸ One option would be to posit a Tocharian intermediary as Indo-Aryan -v- is more often borrowed as -p- in Tocharian (e.g. *sintāp* ‘rock-salt’ ← *saindhava*-); but the absence of the relevant word in Tocharian seems to speak against this scenario.

Derivatives

INS.SG. *ṣadimeṇa* ‘pleased, happy’: CKM 274 (2x)

PRES.1SG. *ṣademi* ‘I am happy’: CKD 139; 259; 302; 305; 307; 390; 819; 840;
ṣatosmi: CKD 399

PRES.1PL. *ṣadama* ‘we are happy’: CKD 399; 721; *ṣadema*: CKD 690; *ṣatama*: CKD 797

Most likely, Niya *ṣada* ‘pleased, happy’ is a loanword from Bactr. *ḡādo* /šādə/ ‘idem’ < *čyāta-.²⁰⁹ This etymology is strongly supported by the exact match between Niya 1sg. *ṣademi* ‘I am happy’ and Bactr. 1sg. *ḡādēma* /šādēmə/ ‘idem’, both forms being used in nearly identical contexts in (3.4) and (3.5).

(3.4) CKD 139 obverse 3f.

tena ṣademi tahi paride aroga śrudemi

“I am pleased because I have heard from you that you are in good health”
 (TKD: 25)

(3.5) ba 2f.

[oto]μo ναγατο σιδo λρογηιο ταδο ḡαδημo

“[And] (since) I have heard that you are healthy, therefore I am happy”
 (BD II: 52).

This parallel is the reason that I take Bactrian to be the most likely donor language, even though Parth. *š’d* ‘happy, joyful, serene’ (DMMP: 313) and Sogd. *š’t* ‘happy, rich’ (SD: 370) would in theory also work as a source of Niya *ṣada*.²¹⁰

14. *Suliga* ‘Sogdian’

Attestations of the base form

DIR.SG. *Suliga*: CKD 661

²⁰⁹ Cf. BD II (283) and Hitch (2009: 18), building further on KD (373) and Burrow (1934: 514; LKD: 126 s.v.). Schlosser (2022: 84; 193) considers *ṣada* to be an inherited word related to BHS *śāta*- (Pāli *sāta*-) ‘pleasant, agreeable’ (BHSD: 525). Yet, she does not explain how to account for the initial retroflex in the Gāndhārī form.

²¹⁰ Note that the attestation of a South Asian Gāndhārī cognate of Niya *ṣada* in manuscripts from Bajaur, i.e. at the border between present-day Pakistan and Afghanistan, also speaks in favour of a Bactrian origin for the word. Khot. *tsāta*- cannot have been the source of Niya *ṣada* because of the different initial and because the Khotanese word only means ‘rich’ (DKS: 146).

Suliga is an epithet carried by a certain *Vagiti Vadhaga*, the purchaser of a camel figuring in the Khotan Prakrit document CKD 661. It most likely means ‘Sogdian’, as Konow (1932: 74 with fn. 2) convincingly suggested; compare Sogd. *swγδyk* ‘idem’ and other forms cited below.²¹¹

A forceful argument in support of Konow’s interpretation is the Sogdian origin of the PN *Vagiti Vadhaga*, whose second element is almost certainly to be identified with the common Sogdian name component *βntk* ‘servant’ < **banda-ka-* (for which cf. e.g. Lurje 2010: no. 295).²¹² There is moreover at least one other Sogdian name mentioned in CKD 661, i.e. *Nani Vadhaga* ← Sogd. *nyyβntk* (Brough 1965: 594 = 1996: 289; Lurje 2010: no. 787).

In order to account for the presence of a sound *l* in *Suliga*, we must look at how other languages from the region refer to the Sogdians. This survey will show that Khotan Pkt. *Suliga* is all but a unique form.

With regard to languages from the Tarim Basin, both Tocharian and Khotanese provide relevant evidence.²¹³ The ethnonym for ‘Sogdian’ has not yet turned up in Tocharian texts proper, but the Tocharian gloss *Suklyī[ka]* in the Sanskrit manuscript SHT 2030 (a fragment of the *Mahāmāyūrīvidyārājñī*) is probably an indirect witness to such an ethnonym (cf. K. T. Schmidt *apud* SHT IX: 58f.; Ching 2013b: 346); further evidence comes from the Tocharian B name *Suklyike* (Ching 2013b: 346; 365–368). The Khotanese form *sūliya-* (*sūlya-*) ‘Sogdian, merchant’ resembles *Suliga* even more closely (KT VII: 76–78; Emmerick *apud* SVK II: 148f.).

²¹¹ Following a suggestion by F. W. Thomas, it was originally thought that *Suliga* corresponds to Tib. *shu lig* ‘native of Kashgar’ (cf. KI: 378; Noble 1931: 446; 453; Thomas 1945: 525f.). Yet, if this were true, one would expect initial *ś-* or *ṣ-* in the Prakrit form because the Chinese name for Kashgar, i.e. *shū lè* 疏勒, was pronounced in (Early) Middle Chinese as *srjo lok* (<sr> stands for [s] in Baxter and Sagart’s reconstructions). See Konow (1932: 74). Thomas (1945: 526) furthermore proposed to recognise the name of the Sogdians in the expression gen.sg. *sokhaliga sarthaṣa* ‘of the *sokhaliga* caravan’ in CKD 665 (so also Høisæter 2020: 412). Although conceivable, this proposal is hard to verify because of the bad preservation of the document in which *sokhaliga* occurs.

²¹² The element *Vagiti* may, as argued by Sims-Williams, stand for Sogd. *βγγšty* ‘of the gods’ (Grenet, Sims-Williams & de la Vaissière 2001: 102 fn. 3; differently Lurje 2010: no. 290).

²¹³ Tumsh. *sud₁ana-* (= *sudana-*) ‘Sogdian’ (Konow 1947: 189) is a ghost word. The relevant instances are better read as *sud₁ata-*, a PN (Maue 2009; Ogihara 2021: 154 fn. 21).

Forms with *l* in languages spoken outside the Tarim Basin have been collected by Bailey (KT VII: 77f.) and Tremblay (2004: 133). The following can be cited here:

- (i) ZMP *sūlīg* (*Greater Bundahišn* B 205,11). Cf. also *sūlīg mānišn* as a gloss of Av. *suγδō.šayana*- ‘where the Sogdians live’ (AIW: 1582).
- (ii) MMP *suylī* in the tune name *ēn pad suylī zgar* ‘this (one) to the Sogdian melody’ (BBB 462; cf. DMMP: 310; 381; Sims-Williams, Sheldon & Gulácsi 2022: 59 fn. 87).
- (iii) Skt. *śūlika*- (variant *sūlika*-) ‘Sogdian’ (MW: 1087; 1244).²¹⁴

On the Chinese evidence, see Kumamoto (1982: 193ff.).

What is the most likely source of these forms with *l*, including Khotan Pkt. *Suliga*? In light of Henning’s (1939 = 1977 I: 639–652) hypothesis of an unattested Sogdian dialect with lambdacism, one could imagine them to be borrowed from a dialect form of Sogd. *swγδyk* ‘Sogdian’ < **sugdiya-ka*- in which *-δ-* < **-d-* had been lenited to **-l-* (cf. e.g. Kumamoto 1982: 196 on the Khotanese evidence). Yet, the recent refutation of Henning’s hypothesis by Lurje and Yakubovich (2017) invites one to look for a different scenario. In line with Dragoni’s (2023a; 2023b: 47f.) proposal that the name of Khotan passed through a Bactrian intermediary before being adopted in Niya Prakrit and languages like Sogdian (§3.2.2 s.v. *Khotamna*), I would therefore argue that Khotan Pkt. *Suliga* and its congeners are borrowings from Bactrian (so also Baums and Sims-Williams *apud* Høisæter 2020: 412).

For this argument, the following Bactrian words are of relevance:

- (i) the personal name *σoγδοκανο*, a patronymic in *-ανο* from *σoγδοκο** /*suγdək(k)ə*/ ‘Sogdian’.
- (ii) the toponym *βονοσoγoλιγο*, which probably means ‘Sogdian estate’ (cf. BPN: nos 249; 441, adopting a suggestion by Pavel Lurje).

σoγδοκανο is, as pointed out in Sims-Williams (2016b: 277f.), probably a late form in which **-γλ-* /*γl*/ < **-gd-* has been reversed to *-γδ-* /*γd*/. The earlier Bactrian designation for ‘Sogdian’ would be *σoγλιγο** /*suγlīgə*/ < **sugdiya-ka-*, as can be safely posited on the basis of the attested compound *βονοσoγoλιγο* ‘Sogdian estate’ (with an additional *-o-* /*ə*/ between *-γ-* /*γ*/ and *-λ-* /*l*/).

²¹⁴ The initial *ś-* is hypercorrect.

Interpreting *Suliga* as a loan from Bactr. $\sigma\omicron\gamma\lambda\iota\gamma\omicron^*$ / $\text{su}\gamma\lambda\iota\gamma\omicron$ / merely requires the assumption that the foreign cluster $-\gamma\lambda-$ / $\gamma\lambda$ / was simplified during the borrowing process.²¹⁵ The same simplification would be needed in the case of Khot. *sūliya-* (*sūlya-*), ZMP *sūlig*, and Skt. *śūlika-* (variant *sūlika-*), whereas MMP *suylī* and TB *Suklyike* (also *Suklyī[ka]*) can be seen to preserve the Bactrian cluster more faithfully.

Because of Bactrian's prestige in the region (cf. §1.4.3), it is also historically understandable that the Bactrian word for 'Sogdian', rather than the Sogdian one itself, was borrowed into languages like Prakrit and Khotanese. Considering the close political and historical ties between Bactria and Sogdiana since Achaemenid times (for which cf. Lurje & Yakubovich 2017: 328), it is not unexpected either that the Bactrian designation for "Sogdian" was taken over by Sanskrit and (some forms of) Persian.

In sum, Khotan Pkt. *Suliga* 'Sogdian' can be safely regarded as a loan from Bactr. $\sigma\omicron\gamma\lambda\iota\gamma\omicron^*$ / $\text{su}\gamma\lambda\iota\gamma\omicron$ / 'idem' < **sugdiya-ka-* (cf. the attested $\beta\omicron\upsilon\omicron\sigma\omicron\gamma\lambda\iota\gamma\omicron$ 'Sogdian estate') with simplification of the foreign cluster $-\gamma\lambda-$ / $\gamma\lambda$ / to Pkt. *-l-*. Bactr. $\sigma\omicron\gamma\lambda\iota\gamma\omicron^*$ probably also lies at the origin of, amongst others, Khot. *sūliya* 'Sogdian, merchant'; the TB name *Suklyike* and the gloss *Suklyī[ka]*; and Skt. *śūlika-* (variant *sūlika-*) 'Sogdian'.

15. *stora* 'large animal, horse, camel'

Attestations of the base form

DIR.SG. *stora*: CKD 25; 123; 125; 188; 272; 333 (3x); 367; 435; 634; 743 (2x); 842

INS.SG. *storena*: CKD 135; 139; 164; 381

GEN.SG. *storaṣa*: CKD 283; 292; 305; 361; 841; *storasya*: CKD 159

DIR.PL. *storaṃca*: CKD 13

Derivatives

DIR.SG. *storaga* 'large animal, horse, camel' < **staure-ka-*: CKD 306; *storaē*: CKD 84

Compounds

DIR.SG. *storabala* 'animal flock': CKD 164; 376; 721

DIR.SG. *storavara* 'horse driver': CKD 84; 119

DIR.SG. *storvana* 'groom': CKD 399

INS.SG. *storvanena* 'idem': CKD 399

²¹⁵ For Bactrian suffixal $-\gamma-$ / g / → Pkt. $-\gamma-$ / g /, see §4.3.11. In case Niya *sokhaliga* were also connected (on which see fn. 211), Bactr. $-\gamma\lambda-$ / $\gamma\lambda$ / would be substituted with Niya *-khal-* and Bactr. $-o-$ / u / as Niya *-o-*.

GEN.SG. *storvanaṣa* ‘idem’: CKD 399

The Niya Prakrit word *stora* has both a general meaning ‘large animal’, and more concrete meanings such as ‘horse’ or ‘camel’. A Sanskrit cognate of this word, i.e. *sthora*- ‘pack animal’, is attested three times in the *Divyāvadāna* (BHSD: 611; Schoubben 2022b: 343–346).²¹⁶

Burrow (1934: 514; LKD: 132 s.v.) was undoubtedly correct to relate *stora* (and BSkt. *sthora*-) to Av. *staora*- ‘large animal’ and its cognates < **staūra*- (cf. also Bailey 1949a: 122; Agrawala 1956–57: 112). The question remains from which Iranian language Niya Prakrit adopted this word. Bactr. *στωρο* /*stōrə*/ (later *αστωρο*, cf. BD II: 266) would be a fitting source, but what about the other Middle Iranian languages? Khotanese can be excluded since the vocalism of Niya *stora* differs from that of Khot. *stūra*- (DKS: 434). Yet, MP *stōr* (CPD: 77), Parth. *istōr* (DMMP: 91), and Sogd. *stwr* (SD: 363; DCS²: 174) would all work phonologically, so one has to decide on different grounds.

The phraseology of Skt. *sthora*- counts as an indirect argument to consider Niya *stora* a Bactrian loanword. The Sanskrit word consistently combines with the verb *lardayati*, explainable as denominative to OIA **lārda*- ‘load, cargo’ ← Bactr. **λῑρτο* < OIr. **dr̥šta*- (Schoubben 2022b). Given this Bactrian etymology of *lardayati*, one expects Skt. *sthora*- and, by implication, Niya *stora* also to have been borrowed from Bactrian.

An additional reason to interpret *stora* as a loanword from Bactrian is the Niya compound *storabala*. Baums and Glass (2002a– s.v.) consider *storabala* to be made up of *stora* ‘animal’ and *bala* ‘force, army’.²¹⁷ Their assumed meaning ‘horse power, cavalry horses’ fits only the occurrence in CKD 376, where Burrow (TKD: 75) indeed translates the word with ‘cavalry attack’. In the other two instances (here cited as (3.6) and (3.7), a different meaning seems required, as Burrow’s translations make clear.

(3.6) CKD 164 obverse 7
storabala laṃcaga parivalidavya

²¹⁶ Falk (2004: 150 fn. 14 = 2013a: 363 fn. 14) suggests that the Gāndhārī official title *sturaka** (attested via the ins.pl. *sturakehi* in CKI 249) would also be connected to Niya *stora*. *sturaka** is, however, more easily explained as a borrowing from Bactr. *στοπογο* ‘strong’ or its homonym meaning ‘vassal’ (cf. Schoubben 2023: 292 with further ref.).

²¹⁷ *-bala*- would function here like in the OIA compound *caturaṅgabala*- ‘the force of the fourfold limbs > the entire army’.

“the stock of beasts (*storabala*) is to be properly looked after.” (TKD: 31).

(3.7) CKD 721 obverse 5

eṣa Danutreya atra viṣajidama stora[bala] paśaṃnae

“We have sent this Danutreya there to inspect the stock of draught animals (*storabala*).” (TKD: 144).

I propose that in these two cases *storabala* is to be compared to the attested Bactrian word *στωροβαλο* /*stōrəbalə*/ (or /*stōrəvalə*/) ‘animal’. Bactr. *στωροβαλο* is a compound of *στωρο* ‘animal’ and *παλο* ‘family’ < **pada-* (cf. also Sogd. *’st’wṛpδ’k* ‘animal’ and BD II: 266). The original meaning of *στωροβαλο* is accordingly ‘the stock of beasts/animals’, which is precisely how Burrow translates Niya *storabala*.²¹⁸

Needless to say, this explanation of *storabala* only works with Bactrian as the donor language; otherwise, the *l* would remain unaccounted for. As it would be uneconomic to assume that the compound *storabala* came from Bactrian but *stora* itself from another language, I therefore deem it most likely that Bactr. *στωρο* /*stōrə*/ was the immediate source of Niya *stora*.

Two further compounds containing the element *stora* could be Bactrian loanwords too. The first is *storavara* ‘horse driver’ which could have been borrowed in its entirety from an unattested Bactr. **στωροβαρο* /*stōrəvārə*/ < **staura-bāra-*. The second, i.e. *storvana*, has so far remained unnoticed due to a misreading in CKD 399.

The scribe of this document distinguishes <vaṃ> from <rva> by the length of the vertical stroke of 7 *va*. For <vaṃ>, this stroke is longer, and the anusvāra curl is added at the very bottom of the akṣara (e.g. *evaṃ* reverse tablet A 2), whereas for <rva>, this stroke is shorter and the curl indicating the preconsonantal *r* is added higher up (e.g. *śarva* reverse tablet A 2). Given this distinction between the two akṣaras, Boyer et al.’s (KD: 143) transliterations *stovaṃna*, *stovaṃnena*, and *stovaṃnaṣa* (reverse tablet A 2–3) should be corrected to *storvana*, *storvanena*, and *storvanaṣa*, respectively the dir.sg., ins.sg., and gen.sg. of an underlying word *storvana*.

As the context is about taking care for a camel, assigning the meaning ‘groom’ to *storvana* would fit the relevant part of CKD 399 (~ (3.8)) particularly well.

²¹⁸ Normally, Bactrian intervocalic β from **p* is rendered as Niya *v*. Yet, in the present case, the morpheme boundary between the two parts of the compound may have prevented the lenition of /b/ to /v/ from happening, either in Bactrian itself or after the word was borrowed into Niya Prakrit. See in more detail §4.3.8.

(3.8) CKD 399 reverse A2f.

tasmartha itani eta storvanena atra viṣajita uṭa prichamṇaye yahi eṣa storvana atra eṣati lekha vacitu tomi storvanaṣa haste uṭa iṣa prahadavya
 “For that reason this groom has been sent there to demand the camel.
 When this groom arrives there, you should read the letter and the camel
 is to be sent in the hand of the groom.” (after TKD: 81).

I would therefore argue Niya *storvana* to be etymologically connected to OIr. **staura-pāna-* ‘groom’, a compound attested through MP **stwrp’n* (CPD: 77).²¹⁹ The immediate source of the Niya Prakrit word could be Bactr. **στωροβανο* /*stōrvānə*/. This word is not yet attested as such in Bactrian, but its existence is made plausible by *χοβανο* /*xuvānə*/ ‘shepherd’ from OIr. **ṣu-pāna-* (BD II: 279).

To summarise, Niya *stora* ‘large animal, horse, camel’ is most probably a loanword from Bactr. *στωρο* ‘idem’. Indirect proof that *stora* is a Bactrian borrowing and not a loanword from another Iranian language comes from (i) the observation that Skt. *sthora-* occurs together with an etymologically Bactrian verb and (ii) the derivation of the Niya compound *storabala* ‘animal flock’ from Bactr. *στωροβαλο* < **staura-pada-*.

16. *śpara* / *śpura* ‘full, completely’

Attestations of the base word

ADV. *śpara*: CKD 42 (2x); 57; 59; 272; 275; 333; 374; 387 (2x); 796 (3x); 797 (2x); 817; *śpura*:²²⁰ CKD 158; 165 (2x); 211; 329; 414; 517; 714 (2x); 725

śpara and *śpura* are used indiscriminately with the meaning ‘full, completely’. Observe, for example, the similar contexts in which *śpara* and *śpura* occur in (3.9) and (3.10).

(3.9) CKD 59 reverse 1f.

*[palíi] lihidaga sarva śpara cavala yatma Motge ageta Angi Tsoṃgoṣa ca hastami iṣa (*vi)ṣajidavo.*

²¹⁹ According to Bailey (DKS: 434), a Khotanese cognate *sturapāna-* would also be attested once, but see Skjærvø (2002: 108) for a different interpretation of the relevant passage.

²²⁰ I follow LKD (133 s.v. *śpora*) in reading *śpura* also where Boyer et al. (KD) read *śpora*, viz. in CKD 165 (2x); 211; 329.

“The tax has been written down and it is to be sent all complete (*sarva śpara*) in the hand of the *yatma* Motge and the *agetas* Angi and Tsoṃgo.” (after TKD: 13).

(3.10) CKD 714 obverse 4

yaṃ ca aṃṇa paḷī śarva śpara ageta Līpeya Tsugetaśa ca haṣṭaṃmi cavaḷa iśa viśajidavo.

“The rest of the tax is quickly to be sent here all complete (*śarva śpara*) in the hand of the *ageta* Līpeya and Tsugeta.” (after TKD: 143).

Burrow (1935a: 787f.; LKD: 132 s.v.) convincingly explained *śpara* / *śpara* as an Iranian loanword by comparing it to OIr. **us-pr̥na-* ‘full, complete’. Some of the latter’s reflexes are MMP/Parth. *ispurr* ‘full, complete, perfect’ (DMMP: 87); Sogd. *‘spwrn-* ‘idem’ (also *‘spwrn-*; *spwrn-*; SD: 65f.; DMSB²: 53); Khot. *uspurra-* ‘full, completed’ (DKS: 43); and Bactr. σπορο /*spurə*/, later ασπορο /*əspurə*/ ‘complete, completely, in full’ (BD II: 197).²²¹

An additional argument in support of Burrow’s etymology comes from phraseology. As can be seen from the quotations above, *śpara* / *śpara* can form a pair with *sarva* ‘all’, the combination of the two meaning ‘all complete’. This phraseology is closely paralleled in Iranian languages given that outcomes of **us-pr̥na-* can likewise be combined with a word meaning ‘all’. A Bactrian phrase οισπο ασπορο ‘all complete’ is, for instance, attested in J 16 ~ J 23’ (BD I²: 48ff.), while Khot. *biśśu* (*bāśśu*) *uspurro* ‘all complete’ is used to translate Skt. *sakalasamāptam* in the *Saṅghāṭasūtra* (Canevascini 1993: 257). The combination of *śpara* / *śpara* with *sarva* ‘all’ in Niya Prakrit may hence be calqued on this Iranian idiom.

In the donor language of Niya *śpara* / *śpara*, the initial **u-* of **us-pr̥na-* must have been lost and the **-n-* assimilated to the preceding **-r-*. The first requirement excludes Khot. *uspurra-* as the source of Niya *śpara* / *śpara*, while the second excludes Sogd. *‘spwrn-* (and variants). Bactr. σπορο /*spurə*/, on the other hand, meets both requirements, making it plausible that Niya *śpara* / *śpara* is a Bactrian loanword.

Still, the immediate source of Niya *śpara* / *śpara* was probably not the attested σπορο /*spurə*/ but a more archaic form **σπορρο* /*spurrə*/ with a geminate *-pp-* /*rr-*/. The fact that the Bactrian outcome of OIr. **farnah-* is attested in the Kuṣāṇa period as φαρρο /*farrə*/ and in later times as φαρο

²²¹ In Achaemenid times, **us-pr̥na-* was also loaned into Aramaic and Elamite as *‘sprn* / *‘šprn*’ and *ú-iš-bar-na-iš-be* (pl.) / *ú-iš-pír-na-iš-be* (pl.), respectively (Iranica: §4.4.2.21; ADAB: 55; 116; 270).

/fārə/ (BD II: 274) allows for the conclusion that *-rn- first developed to a geminate -pp- /rr/ before being simplified to single -p- /r/ in post-Kuṣāṇa times. Since there are both historical and linguistic reasons to think that the Bactrian loanwords in Niya Prakrit were adopted in the Kuṣāṇa period (§4.2.1), a Kuṣāṇa form *σπορρο /spurrə/ thus seems the most likely source form of Niya *śpara* / *śpura*, even though the Kharoṣṭhī script does not indicate geminate consonants and /rr/ was probably absent from Niya Prakrit phonotactics in any case (cf. Table 1, p. 37).

The initial σπ- /sp/ of Bactr. *σπορρο corresponds to Niya *śp-*, the element *ś* being a way to write a fricative close to /v/, perhaps /f/ (cf. §2.1.6). The observed fricativisation can, as Burrow (1935a: 787f.) already noted, be ascribed to Niya Prakrit itself, as the same development occurs in an inherited word like *parosśara* ‘one another’ < *paraspara*-.²²²

A more tricky question is how to account for the different vowels -a- and -u- in *śpara* / *śpura*. In this regard, Burrow (1935a: 787) pointed to a few other forms made from the same root as *us-*pr̥na-*, but which contain a vowel -a-, i.e. NP *sipari* ‘complete, exhausted’ and Arm. *spaṛ* ‘completeness’ (cf. Olsen 1999: 907). Yet, there is so far no evidence for an alternative Bactrian form *σπαρρο or the like, and the fact that *śpara* and *śpura* are used interchangeably suggests that they were borrowed from one and the same source. That said, it is likewise difficult to attribute the difference in vocalism between *śpara* and *śpura* to a phonological process in Niya Prakrit. The closest parallel available seems to be the word *kamaṃta* / *kamuṃta*, which is not very useful as neither its meaning nor its etymology is clear (§3.7.2 s.v.). Therefore, I would tentatively go for a third option, viz. that the variation between *śpara* and *śpura* is to be ascribed to the phonetics of the -o- /u/ in Bactr. *σπορρο /spurrə/ (later (α)σπορο). Since the -o- /u/ in this word results from the vocalisation of OIr. *-r̥- in a labial environment (SFBG: 60), it is conceivable that its phonetic realisation was as a central vowel that speakers of Niya Prakrit could approximately render as either -u- or -a-, the latter probably being a schwa (Baums 2009: 112 fn. 26). See further §4.3.7.²²³

²²² For another Iranian loanword starting with *śp-*, see §3.3.1 s.v. *śpaśa*.

²²³ Unfortunately, there is no other instance among the Bactrian loanwords in Niya Prakrit containing a vowel o /u/ derived from OIr. *-r̥- to check whether this double treatment was standard or not. My proposal also raises questions to what extent *śpara* / *śpura* was integrated into the language.

Despite this uncertainty about the best way to explain the difference in vocalism between *sp̄ara* and *sp̄ura* ‘full, completely’, one can safely conclude that we are dealing with a loan from Bactr. *σπορρο /spurrə/ (later (α)σπορο) ‘complete, completely, in full’ < OIr. *us-pr̄na-.

3.2.2 Plausible etymologies

17. *aṃtagi* ‘belonging to the district’

Attestations of the base form

ADJ. *aṃtagi*: CKD 64; 135 (2x); 213; 223;²²⁴ 743 (2x)

How exactly to translate the Niya adjective *aṃtagi* cannot be deduced from the available contexts. The attestations have in common that *aṃtagi* modifies animal names, namely *aśpa* ‘horse’ (CKD 213; 223), *uṭa* ‘camel’ (CKD 64; 135), and *stora* ‘large animal’ (CKD 743).

Burrow (1935a: 779f.; LKD: 73 s.v.) etymologised *aṃtagi* as OIr. **han-tāka*- ‘swift, express’, from **ham* + *√*tač* ‘to run’ (EDIV: 372ff.).²²⁵ However, the consistent spelling with final *-i* poses a problem. A suffix *-i* typically derives adjectives from nouns in Niya Prakrit (§6.4.3), which means that Burrow’s postulated **han-tāka*- would have been a noun. But how should we understand the derivation process in that case? Would **han-tāka*- have meant ‘swiftness’ and *aṃtagi* ‘connected with swiftness’, whence ‘quick’? As this scenario seems rather complicated, I hesitate to accept Burrow’s etymology.²²⁶

In fact, a close reading of CKD 135 seems to suggest that *aṃtagi* has a different meaning. The relevant context is here cited as (3.11).

(3.11) CKD 135 under-tablet obverse 1–5

ahuno cuṃalayina Vhurmaṣevaṣa Khotamnammi dutiyae gaṃdavo huda
... *edaṣa Apitaṣa dudi ? gaṃdavo cuṃalayina Vhurmaṣevena ṣadha*

²²⁴ It seems to have gone unnoticed that the contents of CKD 213 and 223 complement each other.

²²⁵ For the combination of preverb and root, cf. e.g. CSogd. *’ntxs* (also *nt’xs* in Sogdian script) ‘to flee, take refuge’ (DCS²: 29).

²²⁶ Burrow’s etymology has been endorsed by, amongst others, Bailey (1958b: 532; KT VI: 386). Bailey’s further comparison with the second part of Arm. *sowrhandak* ‘runner’ is not compelling, as this Armenian word can be more easily explained as a participial derivation from *sowrham* ‘to run’ (Olsen 1999: 304; 907).

Khotamnammi gamtavo huda yo cuyalayina Vhurmaṣevaṣa amtagi uṭa 2 dadavo yo etaṣa Apita[ṣa] amtagi uṭa 1 dadavo avi arivaga maṃnuṣa aḥhovaga 1 dadavo ... etaṣa arivagaṣa tanu storena gamtavo.

“Now the *cuyalayina* Vhurmaṣeva had to go on a mission to Khotan. ... this Apita must go on the mission, and the *cuyalayina* Vhurmaṣeva must go with him to Khotan. The two *amtagi* camels (destined for) the *cuyalayina* Vhurmaṣeva must be given (to him), (likewise) the one *amtagi* camel (destined for) Apita must be given (to him). Also a suitable man is to be given them as a guide (*arivaga*) ... This guide must go on his own animal (*tanu storena*)” (after TKD: 24).

This document informs us that three people will go on a mission, viz. Vhurmaṣeva, Apita, and an unnamed guide. Since the latter has to make use of his own animal (*tanu storena*), whereas Vhurmaṣeva and Apita are given *amtagi* camels, it seems tempting to infer a contrast between *amtagi* and *tanu* ‘own’. In other words, the local government may have provided the *amtagi* camels for Vhurmaṣeva and Apita since they do not have to use their own.

This interpretation finds further support when the attestations of *amtagi* in other documents are taken into account. One, for instance, observes that both the *kori* and *klaseṃci* official, i.e. the animal keepers of the Shanshan kingdom,²²⁷ are responsible for these *amtagi* animals (see CKD 64; 213; 223; 743). In CKD 223, it is moreover explicitly stated that an *amtagi* horse is provided by the state (abl.sg. *rajade*).

Based on this different semantic analysis, I propose to compare *amtagi* to Bactr. *ανδαγο* /andāgə/ (or /andāgə/) ‘subdistrict of a city’ (BD II: 191). As also shown by the existence of a bureaucratic title *ανδαγοβιδο* ‘chief of the district’, this Bactrian word probably denoted an administrative unit (Miyamoto 2019: 171).

If the comparison is correct, Niya Prakrit *amtagi* can be interpreted as an adjective meaning ‘belonging to the district’. This proposal would also solve the problem of the final *-i* in *amtagi*, as the assumed basis *amtaga** ‘district’ ← *ανδαγο* would, as required, be a noun in this scenario. One can further draw a parallel between *amtagi stora* ‘animal belonging to the district’ (CKD 743) and gen.sg. *avaṃci storaṣa* ‘of the animal belonging to the village’ (CKD 841). *avaṃci* is a derivation with the *ci*-suffix from *ayana* ‘village’ (§3.3.2 s.v.),

²²⁷ Cf. LKD (84f. s.vv. *kori*; *klaseṃci*), Atwood (1991: 176; 178; 181; 194), and Høisæter (2020: 591; 595).

in the same way as *aṃtagi* would, in my interpretation, be a derivative with the essentially synonymous *i*-suffix from *aṃtaga** ‘district’.

A potential problem for my etymology (and the reason I did not include it among the secure etymologies of §3.2.1) is the lack of evidence for the use of *aṃtaga** as an administrative unit in the Niya documents. It would, however, not seem impossible that one of the inherited denominations for administrative units, e.g. *pradeśa* / *pradeja* ‘district’, was considered equivalent to *aṃtaga** and therefore used instead.

Bactr. *avḍayo* lacks cognates in the other Middle Iranian languages.²²⁸ On this ground, I consider donor languages other than Bactrian less likely.

18. *are* ‘a half’

Attestations of the base form

DIR.SG. *are*: CKD 2 (9x); *ara*: CKD 176

The Niya Prakrit word *are* occurs in lists modifying the unit of measurement *khi* (on which see Appendix 1 s.v.). Based on this observation, Burrow (LKD: 77 s.v.) made the plausible suggestion that *are* comes from an outcome of OIr. **arda-ka-* ‘half’, although **arda-* ‘idem’ (as in e.g. Av. *arəda-*) could work too (see just below).²²⁹

²²⁸ The etymology of *avḍayo* is debated. Sims-Williams (BD II: 191) hesitatingly derives the word from **anta-ka-* ‘border’. This derivation would be semantically plausible, as a development from ‘border’ to ‘territory (e.g. land, city)’ occurs in other languages (cf. Buck 1949: 1305). Yet, a drawback to Sims-Williams’ etymology is that there is no other Iranian evidence for **anta-ka-*, which is mainly based on a comparison with Skt. *anta-* ‘border’. As such, the alternative etymology from OIr. **han-tāka-* independently proposed by Humbach (2002: 417) and Tremblay (2003: 124 fn. 13) remains worth considering. Semantically, this idea is admittedly somewhat unclear, but it still has the advantage to compare *avḍayo* with the semantically close *ωḍayo* ‘district’, for which a derivation from **awa-tāka-* can hardly be doubted (cf. BD II: 281). As my proposal on Niya *aṃtagi* is independent of the ultimate etymology of *avḍayo*, I nonetheless prefer to leave the issue undecided for now.

²²⁹ Meanwhile, Falk (2001: 312f. = 2013a: 51f.) also discovered a Kharoṣṭhī numerical symbol for ½ (the discussion of this symbol in Fan 2020 should be corrected in view of Falk’s argument). The symbol ½ is normally written after the unit of measurement it modifies (cf. e.g. *khi* ½ in CKD 131), whereas *are* is put in front of *khi*. This discrepancy is due to a general tendency in Niya Prakrit to write numerical symbols after the nouns they modify. This “typical accounting usage” also occurs in Iranian languages (Sims-Williams 2023: 90) and may, in my

One can eliminate most of the relevant Middle Iranian languages as the source of Niya *are* for phonological reasons. Because of the *-l-* in *hala-* ‘half’ < **arda-* (DKS: 470), Khotanese cannot be the donor language, while Parthian and Sogdian are excluded since in these languages the cluster **-rd-* is either preserved as such (Parthian) or continued as *-rδ-* (Sogdian).

Seeing that none of the known Middle Iranian languages develops **-rd-* into ***-r-*, it seems most plausible that the *-r-* in *are* ‘half’ results from a simplification of the Bactrian cluster *-ρλ-* /*rl*/ < **-rd-* (see further §4.3.25). If we follow Burrow in opting for OIr. **arda-ka-*, one can reconstruct the Bactrian source of *are* as **αρλαγο* /*arləgə*/ ‘half’. In this case, the final *-e* in *are* can be the result of a lenition process from **araga* > **arae* > *are* (cf. LKD: §16; §74). Alternatively, *are* could be borrowed from an obl.sg. or dir.pl. **αρλε* /*arle*/ ‘halve(s)’ ← **αρλο* /*arlə*/ < **arda-*, for which see the discussion in §4.4.3. For the phonological development, compare the attested Bactrian word *αρλο* ‘side, bank (of a ditch)’ < **arda-*.

19. *aspista* ‘lucerne’

Attestations of the base form

DIR.SG. *aspista*: CKD 214 (2x); 272

Niya *aspista* is mentioned as part of a horse’s provisions (CKD 214 *aspaša ... parivanae*) and as a type of fodder (CKD 272 *ghaša*). It is therefore highly likely, as Burrow (TKD: 40) was the first to note, that *aspista* is an Iranian loanword connected to, amongst others, MP *aspast* ‘clover, lucerne’ (CPD: 12), NP *aspist* / *supust* ‘trefoil, clover’ (CPED: 48; 652), and Psht. *špešta* ‘lucerne’ (EDP: 80).²³⁰ For Old Iranian, this word for ‘lucerne’ can be reconstructed as **aspa-sti-*, a compound of **aspa-* ‘horse’ < PIr. **ácwa-* and **sti-* ‘food’ < PIr. **Hsti-* < PIE **h₁d-ti-* (Mayrhofer 1985).²³¹

view, have originated in Aramaic, where numeral signs are also written after the noun; cf. e.g. the “lists of supplies and labels” in ADAB (174ff.).

²³⁰ This Iranian word for ‘lucerne’ was also transmitted to Elamite and various Semitic languages, including Syriac (Iranica: §4.2.144; §4.2.162; §4.4.20.2; Ciancaglini 2008: 112).

²³¹ Since PIr. **ácwa-* ‘horse’ is continued as OP *asa-* and not as ***aspa-*, MP *aspast* < OP **aspa-sti-* should be a loan from another Iranian language (possibly “Median” seeing that “lucerne” is called μηδική ‘Median plant’ in Greek). Because of the initial laryngeal of PIr. **Hsti-* ‘food’, the short medial **-a-* in **aspa-sti-* is somewhat peculiar. Mayrhofer therefore argues that the creation of the compound is to be dated after the loss of the initial laryngeal (1985: 169 fn. 20).

Concerning the identification of the donor language of Niya *āspista*, Bailey (1949a: 121f.; 1949b: 167; 1960: 82; DKS: 12) could already exclude Khotanese since this language has a slightly different word for ‘lucerne’, i.e. *āspara*-. I should like to add that the vowel *-i-* in *āspista* renders several other languages unlikely donors too, for it seems that in the source of *āspista* the word-internal **-a-* in **aspa-sti-* has been raised to **-i-*. Such raising did not happen in MP *aspast*, which only later developed into NP *aspist* (and variants), nor would one expect such raising in Parthian or Sogdian.²³² I therefore concur with Harmatta (1960: 206f.) that *āspista* is probably a Bactrian loanword. Although the word for ‘lucerne’ is not attested in this language, *i*-umlaut (SFBG: 65) leads one to expect Bactr. **ασπιστο* ‘lucerne’ < **aspa-sti*-,²³³ a form which fits well with the vocalism of Niya *āspista*.

If, as I tentatively assume (§2.2.4.2), the type of palatalisation observable in MBactr. *wyś(p) ~ οισ(π)ο* ‘all’ < **wispa-* was already current in Kuṣāṇa Bactrian, **ασπιστο* would be phonologically /aspistə/. Consequently, the Bactrian cluster *-στ-* /št/ in **ασπιστο* would have to correspond to a non-palatal *-st-* in Niya *āspista*. This correspondence is entirely understandable as ***-št-* is a phonotactically prohibited cluster in Niya Prakrit (cf. §3.2.2 s.v. *saste*). The cluster *-śp-* in *āspista* has probably nothing to do with the pronunciation of Bactr. **ασπιστο* since it finds a straightforward explanation in a folk etymological influence from the Niya word for horse, i.e. *āśpa*.²³⁴

One final note: the Bactrian origin of Niya *āspista* also dovetails with the documented spread of lucerne cultivation from the Iranian world to both China and India in antiquity (Laufer 1919: 208–219).

Alternatively, the compound may have been folk etymologically adapted to **aspa-* (Sasha Lubotsky p.c.).

²³² The Sogdian name *‘spst* cited in DMMP (55) should rather be read as *‘spstyy* (DMSB²: 28) and is probably not related to the word for ‘lucerne’ (see Colditz 2018: no. 158).

²³³ Alternatively, one could compare the raising of **-a-* to Bactr. *-ι-* /i/ in *λιστο* ‘hand’ < **dasta-*. Since the exact reason behind this change is, however, unclear (cf. §3.2.4 s.v. *lastuga*), it is difficult to use *λιστο* as a parallel for the reconstructed **ασπιστο*.

²³⁴ Note nevertheless that the *σπ-* /sp/ in Bactr. *σπαλο** ‘army’ < **spāda-* is also rendered as *śp-* in Gāndhārī (e.g. CKI 230 gen.sg. *śpalasakarita(*sa)* ‘worshipped by an army’), without there being any reason to suspect a folk etymology.

20. *Khotamṇa* ‘Khotan’

Attestations of the base form

ABL.SG. *Khotamṇade*: CKD 248; 272 (3x); 283; 289; 291; 329; 333; 341; 349; 351; 357; 358; 362 (2x); 368; 379; 400; 403; 578; 584; 637
 LOC.SG. *Khotamṇammi*: CKD 14 (2x); 22; 135 (2x); 214; 223; 248; 251; 253; 362 (2x); 367; 400; 403; 584; 637 (2x); *Khotamṇami*: CKD 14 (2x); *Khotanammi*: CKD 388

Derivatives

ADJ.DIR.SG. *Khotamṇi* ‘Khotanese’: CKD 36; 180 (2x); 216 (2x); 296; 322 (2x); 335; 438; 517 (2x); 583; 622; 823; *Khotani*: CKD 30 (2x); 592; *Khotamṇiya*: CKD 330; *Khotaniya*: CKD 549
 ADJ.DIR.PL. *Khotamṇiye* ‘idem’: CKD 86; 333; 625; 881; *Khotaniye*: CKD 376; 415 (3x); *Khodani*: CKD 686
 ADJ.GEN.PL. *Khotamṇiyana* ‘idem’: CKD 471; 494 (2x); 735; *Khotaniyana*: CKD 516; *Khotamṇiyāna*: CKD 399

Compounds

DIR.SG. *Khotanamaharaya* ‘great king of Khotan’: CKD 661
 GEN.SG. *Khotamṇamaharayaṣa* ‘idem’: CKD 214
 LOC.SG. *Khothanaramjiyami* ‘kingdom of Khotan’: CKD 895

Recently, Dragoni (2023a: 293f.; 304; 2023b: 48f.) noted that the Niya Prakrit designation for neighbouring Khotan was probably not borrowed from the Khotanese endonym *hvatana*- ‘Khotan(ese)’ directly, as the rendering of Khot. *hva*- (phonetically approximately [h^wa]) with Niya *kho*- would be unexpected. Observing the close connections between Khotan and Bactria in Kuṣāṇa times evidenced by the Sino-Kharoṣṭhī coins, Dragoni plausibly argues that Niya *Khotamṇa* was instead borrowed via Bactrian.²³⁵

One can debate how to reconstruct the Bactrian donor form of Niya *Khotamṇa*, and Dragoni (2023a: 294; 2023b: 49) lists the following possibilities: *χο/ωτανο, *χο/ωδανο, *χοατανο, or *χοαδανο. Out of these, the last two seem most plausible to me, because of the lack of good parallels for an early Bactrian development of χοα- /xwa/ to χω- /xō/ or χο- /xu/. The only assumption needed is that the sequence *-wa- in *χοαδανο /xwadanə/ (or *χοατανο /xwatanə/) is rendered as -o- in Niya Prakrit. Parallels for this sound substitution are given in §4.3.1 (cf. also LKD: §7).

²³⁵ The plausibility of Dragoni’s proposal is further enhanced by the fact that Khotan Pkt. *Suliga* ‘Sogdian’ was probably borrowed via Bactrian too (§3.2.1 s.v.).

21. *jenavida* ‘chief of the armour’

Attestations of the base form

DIR.SG. *jenavida*: CKD 506

Niya *jenavida* is a hapax legomenon; but given that this word stands in front of the combination of an official title and a personal name (*caṃkura Kuviṇeya*), it is likely to be another title, even if its more precise meaning cannot be established based on the Niya evidence alone.

Harmatta (1960: 217–219; 1964b: 376) convincingly suggested that *jenavida* is a loan from Bactr. ζηνοβιδο /zēnəvidə/, a title occurring in the Palamedes inscription and an obvious cognate of Inscriptional MP *zynpt* and Inscriptional Parth. *zynpty* < **zaina-pati*- ‘chief of the armour’ (cf. also Henning 1960: 50 fn. 9 = 1977 II: 548 fn. 9).²³⁶

The sound correspondences between *jenavida* and ζηνοβιδο /zēnəvidə/ do not need to be commented on, except to remark that the foreign *z* is here apparently substituted with *j* and not with *jh*, as is more common; §2.1.7.1 and §4.3.19 treat this substitution in more detail.

22. *nihaṃñ-* ‘to deposit, to put down’

Attestations of the base form

PRET.3PL. *nihañitaṃti*: CKD 746

GERV. *nihaṃñitavo*: CKD 283; *nihaṃñitavya*: CKD 291

INF. *nihaṃñanae*: CKD 331

The meaning of the verb *nihaṃñ-* is most clearly visible from its occurrence in CKD 291, where it is stipulated that corn (*aṃna*) should be deposited (*nihaṃñitavya*) in a place called Piṣali.²³⁷ See (3.12).

(3.12) CKD 291 obverse 4f.

*yahi eda anadilekha atra eṣati praṭha sã aṃna cavala saṃgalitavo dui
bhaga juṭhi eka bhaga sahini uṭa 20 20 tre tre milima nadha kartavo dui
vara Piṣaliyaṃmi nihaṃñitavya*

“When this letter of command reaches you, forthwith that corn is quickly to be collected. Forty camels are to be given loads of three *milima* each

²³⁶ Two more Bactrian titles ending in -βιδο were borrowed into Niya Prakrit; see §3.2.1 s.vv. *daśavida* and *śadavida*.

²³⁷ In CKD 331, *nihaṃñ-* is used for the abandonment of a child. The attestations in CKD 283; 746 unfortunately occur in a badly preserved context.

(each load consisting) of two parts *juṭhi* and one part *sahini*. (The remaining) two loads are to be deposited at Piṣali.” (after TKD: 52; for the translation of *dui vara* as two loads, see §3.3.3 s.v. *vara*).

It has proved more challenging to find a convincing etymology. Burrow (LKD: 101 s.v. *nihañ*) hesitatingly suggested that *nihaṃñ-* is a cognate of OIA *ni* + $\sqrt{khan}$. The latter means, however, ‘to dig’, so Burrow’s suggestion is semantically not entirely attractive. Formally, it is not either, as Burrow is forced to explain the constant palatal *-ñ-* in *nihaṃñ-* as “due to native phonetic tendencies” (cf. also Burrow 1935b: 671). Baums and Glass (2002a–s.v.) try to solve the latter problem by deriving *nihaṃñ-* from the passive stem *nikhanya-* ‘to be dug’, but this proposal is rendered unlikely by the fact that passive stems have largely been lost in Niya Prakrit (cf. LKD: §94). For the same reason, Baums and Glass’ (2002a–s.v.) alternative derivation from *nihanya-* ‘to be hit’ is implausible too; they moreover attribute a meaning ‘to implant’ to *nihanya-* which is not easily derived from the literal meaning ‘to be hit’ and does not fit well with the occurrences of Niya *nihaṃñ-*.

My proposal is that *nihaṃñ-* is borrowed from Bactr. $\ast\nu\alpha\nu\zeta-$ /*nihanž-* / < $\ast ni-\theta an\check{ja}-$ ‘to hold back > to deposit, to put down’ (cf. EDIV: 391f.).²³⁸ The reconstruction of this Bactrian verb can be supported by the existence of (i) a corresponding noun $\nu\alpha\nu\gamma\gamma o$ < $\ast ni-\theta anga-$ ‘adjacent, environs’ (BD II: 239) and (ii) cognate verbs in other Middle Iranian languages, e.g. Khot. *nuhaṃj-* ‘to hold back > open’ (SGS: 59f.), MMP *nihenz-* ‘to hold back > refrain’, and Parth. *nihenj-* ‘idem’ (DMMP: 242). The reason to consider *nihaṃñ-* a loanword from Bactrian is that the vocalism of *nihaṃñ-* fits better with $\ast\nu\alpha\nu\zeta-$ /*nihanž-* / than with the cognates in the other languages.²³⁹

My etymology requires that the Bactrian verb was originally borrowed into Gāndhārī as $\ast nihaṃj-$ or the like and underwent a subsequent loss of the voiced consonant as in Gandh. *kuñaru* ‘elephant’ < *kuñjara-* (DhP^K 123; 132, cf. §2.1.5). Since more (potentially) Bactrian loanwords into Niya Prakrit seem to have still undergone this sound change (see §4.3.29), this requirement is not too much of a problem.

²³⁸ For the phonology, cf. Bactr. $\alpha\lambda\phi\alpha\nu\zeta-$ /*əlfanz-* / < $\ast\lambda\phi\alpha\nu\zeta-$ (cf. pret. $\lambda\phi\alpha\chi\tau o$ in DN₁ 6f.) ‘to acquire’ < $\ast\theta wan\check{ja}-$ (BD II: 190). The preverb $\ast ni-$ often develops to $\nu\alpha-$ or $vo-$ /*nə-* / in Bactrian, but in texts before 380 AD a more archaic form $\nu i-$ /*ni-* / < $\ast ni-$ can still be found (SCBD: 63, see also §3.2.3 s.v. *nihala*).

²³⁹ *nuhaṃj-* is already attested in Old Khotanese (SGS: 59f.), but I must admit that we do not know exactly when $\ast ni-$ developed to *nu-* in Khotanese.

23. *picara* ‘(mark of) honour’

Attestations of the base form

DIR.SG. *picara*: CKD 107; 206; 247;²⁴⁰ 288; 377; 395; 756; CKM 267

The lexeme *picara* seems to have a positive connotation. To begin with, *picara* occurs in the compound *picaradivyaṣaśatayupramaṇna* ‘(with) a life span of a 100 divine and *picara* years’,²⁴¹ one of the wishes the author of a letter can extend to his addressee. In addition, the word *picara* can occur in the context of gift giving. In (3.13), the writers of the document reassure their correspondent that they will send him a present which they consider *picara*, evidently something positive.

(3.13) CKD 288 cover-tablet reverse 2–4

*pačadara Dharmapriyaṣa hastammi lekha prahuḍa preṣiṣama yo tehi picara syati*²⁴² *Yiliyaṣa paride raju 1 Namilgaae paride lastuga 1*

“Later we will send a letter and present in the hand of Dharmapriya, which will be (a) *picara* for you—from Yili one rope, and from Namilga one *lastuga*.” (after TKD: 52).

Further confirmation that *picara* refers to a positive characteristic comes from the verbs with which the word occurs in its sole attestation in a South Asian Gāndhārī text, here cited as (3.14).

(3.14) BC 4 verso 1f.

*yaṣabhuda picara ahiva<*di>da[va] codidava ca ṣaṣidava ca*

“according to [their] *picara* [they] should be saluted and exhorted and commended.” (after Schlosser 2022: 129).

Thomas (1934a: 66 fn. 9; 1936a: 792f.), Burrow (LKD: 104f. s.v.; TKD: 52; 76), and Schlosser (2022: 129; 187f.; 307) translate *picara* as ‘worthy’, ‘merit’, or ‘desert’. These translations are partially based on a supposed etymological connection with Skt. *pratyaṣham* ‘worthily’ (attested via *yathāpratyaṣham* ‘according to merit’; MW: 842). As noted in LKD (104f. s.v.), this etymology is phonologically problematic since, depending on how far

²⁴⁰ Read in this document *picara* and not *pimcara* (as per KD: 94). The relevant akṣara seems to be a 𑀧 *pi* with a footmark type 1 (Glass 2000: 24).

²⁴¹ The compound occurs (with insignificant spelling variants) in CKD 107; 206; 247; 395.

²⁴² Note the parallel *picara siyati* in the fragmentarily preserved CKD 377.

lenition has gone, *prati-* by default develops to Gandh. *paṭi-* / *paḍi-* / *paḍi-* and not to ***pic-* (cf. Baums 2009: 141f.).²⁴³

I would propose to equate *picara* with Bactr. *πιδοφαρο* /*pidfarə*/ ‘(mark of) honour’ (BD II: 256), a word which was also borrowed into Sogdian as *ptfr-* ‘honour’ (also *pδfr-*; *pδβr-*; cf. Sims-Williams 2004a: 541 fn. 8; DMSB²: 180f.). In an attempt to prove that their semantics resemble each other closely, I will first compare the usage of *picara* and *πιδοφαρο*. The phonological details of the etymology will be dealt with below.

A first type of context *πιδοφαρο* is used in are openings to letters; (3.15) is an example of this kind.

(3.15) xm 4–8

μισιδο αλσιχτογιμο αζο μαρηγο μαρδο σαγονδο το χοηο ταιο λορηγιο
στο ασιδουανο βαγανο αβηζαρηιο αλο αργαο αλο πιδοφαρο σαγονδο το
χοηο αζανο ταδομο το χοηο πιδο χοβο βιζαο ναβισο στο βαδο βοανο.

“Moreover, I, (your) serving man, am desirous that your lordship there should be healthy, and should be free from annoyance from the lords, with respect (and) with honour (αλο πιδοφαρο), as your lordship deserves. So your lordship in your goodness should write to me, and I shall be happy.” (BD II: 156f.).

Although Bactr. αλο πιδοφαρο ‘with honour’ in the above sentence is not precisely parallel to the compound *picaradivyaṇavarṣaśatayupramāṇa* ‘with a life span of a 100 divine and *picara* years’ in Niya Prakrit, the overall sense is the same: the author of the letter wishes *picara* / *πιδοφαρο*, i.e. ‘honour’, for his addressee.²⁴⁴

Secondly, *πιδοφαρο* occurs in the context of gift giving in (3.16).

²⁴³ Mindful of this problem, Thomas (1936a: 792f.) argued in favour of a regressive dissimilation of the first *r* in *pratyarha-*, but even this ad hoc account leaves the vowel *i* in *picara* still unexplained. In addition, Thomas’ etymology presupposes OIA *-rh-* to have become Niya *-r-*, even though elsewhere *-rh-* is broken up by a *svarabhakti* vowel (LKD §10) or continued as *-h-* (*yahi* ‘if’ < OIA *yarhi* ‘when’; Schlosser 2022: 225f.; 258; 311).

²⁴⁴ For a comparable example, cf. ch 7f.: *τακαλδανο ασο το χοηο λορηγοασταγο νιγαυαγο οδο πιδοφαρο ταδο χοζο βαδο βοοαγο* ‘If I should hear from your lordship (of your) health and honour, then I should be well pleased’ (BD II: 82f.). One should moreover note that both in this passage and xm 4–8 *πιδοφαρο* co-occurs with *βαδο βο(ο)ανο* ‘I will be pleased’ similar to how *picara* pairs together with *śadosmi* ‘I am pleased’ (§3.2.1 s.v. *śada*) in the opening of CKD 247.

(3.16) al 17–19

στομο λ[αδο] φαρo οριβτομιβο ι χοη[οι] ναμωσογανo οδο πιδοφα[ρο]
διναρο β'

“And I [gave], (as) an offering and (mark of) ho[nour] (πιδοφαρο) for
Wirishtnish the lord, two dinars.” (BD I²: 164f.).

If read and interpreted correctly, (3.16) is similar to the Niya example (3.13) discussed above, where the relative clause *yo tehi picara syati* can also be translated as “which will be a (mark of) honour for you”.²⁴⁵

Now that the semantic overlap between *picara* and πιδοφαρο has been illustrated, it remains to clarify the phonological details of the proposed equation. It would namely be unexpected that Bactr. πιδοφαρο /pidfarə/ were borrowed as *picara* and not as ***pitvara* or something similar.

A glance at the etymology of πιδοφαρο helps to remedy this problem. πιδοφαρο is, as observed by Sims-Williams (BD II: 256), cognate with MMP *padixšar* ‘honour, dignity, rank’ and Parth. *padišfar* ‘honour’ (DMMP: 273f.), and thus to be derived from OIr. **pati-fšarV-*.²⁴⁶ I therefore propose that *picara* was borrowed from a dialect form **πιδοφαρο* /pidšarə/, in which the cluster **-fš-* in **pati-fšarV-* was simplified to *-p- /š-/* and not to *-φ- /f-/* as in the attested πιδοφαρο. This proposal would be closely paralleled by the idea that there were two dialectal outcomes of OIr. **xšāθriya-* in Bactrian, i.e. χαρο /xārə/ ‘khar, ruler’ with **xš-* > *χ-* /x/ and **ḫro* /šērə/ ‘idem’ → Arabic *šyr* /š’r with **xš-* > **p- /š-/* (Sims-Williams 1997a: 15f.; BD II: 277; Khan 2007: 16f.). It also solves the problem of the *-c-* in *picara* as there are two potential parallels for the assumed correspondence between Bactr. *-doḫ-* /dš/ and Gandh. *-c-* (see §3.2.3 s.vv. *aco*; *picav-* and §4.3.18).²⁴⁷

In brief, the semantic match between Gandh. *picara* and Bactr. πιδοφαρο makes it likely that the two are etymologically related. Yet, in light of the uncertainty about the reconstruction of the exact donor form, including *picara* with the secure etymologies of §3.2.1 is still not merited.

²⁴⁵ The meaning ‘honour’ also fits the occurrence of *picara* in BC 4 cited supra.

²⁴⁶ For the phonological development of **fš* in Middle Persian and Parthian, cf. MP *šārs-* < **xšārs-* and Parth. *šfars-* ‘to be ashamed’ < **fšars-* (DMMP: 315; EDIV: 92).

²⁴⁷ Another, in my opinion less likely, option would be to assume that *picara* was borrowed from a more archaic form that still preserved the cluster **-fš-* in **pati-fšarV-* or had metathesised it to **-šf-* as in Parth. *padišfar*.

24. *maḱa* ‘bean’

Attestations of the base form

DIR.SG. *maḱa*: CKD 401;²⁴⁸ 505; 713 (2x); 714

The semantics and etymology of *maḱa* have been treated in Schoubben (2021: 50–52), so a summary of the conclusions reached in that article will suffice here.

Semantically, the attestations of *maḱa* point to the conclusion that this word refers to a food product that can be preserved relatively well, as it is, for instance, given as provisions for a long journey through the desert (cf. CKD 401; 505).

The previously proposed etymologies for *maḱa* do not stand closer scrutiny. Burrow (1935b: 673; LKD: 110 s.v.) used this word as an argument for his “Tocharian C” hypothesis by comparing TA *malke* ‘milk’ (DTTA: 332). This etymology requires, however, an unlikely substitution of TA *-lk-* with Niya *-ḱ-*, the latter representing the combination of a sibilant and *-k-* (§2.1.6). Taking account of the default value of Niya 𐰽 *ka*, Bailey (1946a: 796f.) made an alternative comparison with Sogd. *m’škh* (and variants). Yet, seeing that the basic meaning of *m’škh* is ‘substance, matter, capital’ and not ‘meat’ as claimed by Bailey (SD: 208f.; DMSB²: 129), this idea is unconvincing for semantic reasons.

In the article, I proposed that *maḱa* is a loanword from an unattested Bactrian word *𐰣𐰆𐰽𐰾 /*māškə*/ < **māša-kǎ-* ‘bean’, a cognate of, amongst others, Pers. *māš* ‘bean’ < **māša-* (see Kümmel 2017: 284). The required syncope of the internal **-a-* in **māša-kǎ-* fits a Bactrian source, and Sogdian is excluded as the donor because its word for ‘bean’, i.e. *mwškh*, has a different vocalism in its first syllable, continuing **muša-kǎ-* (a typically East Iranian form). The etymology furthermore dovetails with the historically documented spread of bean cultivation to China from Iranian-speaking regions more to the west (cf. Laufer 1919: 305–308), and the amount of linguistic reconstruction needed for it is minimal.²⁴⁹ Therefore, I include it among the plausible etymologies.

²⁴⁸ As pointed out in Schoubben (2021: 50), there is no reason to read *maḱe* instead of *maḱa* in CKD 401 (KD: 144 fn. 2 ad locum; TKD: 82).

²⁴⁹ Nicholas Sims-Williams (p.c.) wondered whether the unexplained word 𐰣𐰆𐰽𐰾 in df 5, denoting some commodity (BD II: 232), could be a misreading of *𐰣𐰆𐰽𐰾. Yet, doc. df is unfortunately badly readable at this crucial point.

25. *milima*, a unit of measure

Attestations of the base form

DIR.SG. *milima*:²⁵⁰ CKD 131 (2x); 142; 151 (2x); 154 (5x); 168 (2x); 175; 207; 225 (5x); 282; 329 (2x); 345 (10x); 387; 456; 460 (2x); 465; 467; 476; 495; 536 (6x); 547 (2x); 574 (3x); 579; 580; 581; 608; 637 (7x); 648; 655; 662; 718; 762 (3x); 763; 774 (2x); 801; 828; 868

DIR.PL. *milima*: CKD 60; 67 (6x); 89 (2x); 93 (2x); 94 (5x); 98; 104; 108; 121 (2x); 122; 131 (8x); 140; 146 (4x); 154 (3x); 181; 200 (3x); 207 (5x); 225 (4x); 282; 291 (2x); 292; 309; 345 (2x); 349; 463; 468 (2x); 477 (3x); 478 (2x); 505 (2x); 527 (4x); 530; 536; 539 (2x); 547 (8x); 549 (2x); 567; 575 (2x); 585; 603; 634; 637 (5x); 659; 668; 703 (4x); 740; 762; 765; 776; 795; 796; 797 (2x); 839; 868 (3x); 869 (2x); 882; 897 (3x); *milimaṃ*: CKD 25 (3x)

GEN.PL. *milimana*: CKD 595

Derivatives

ADJ.DIR.SG. *milimi* ‘with a capacity of X *milima*’: CKD 422; 496; 580 (2x); 652; 654; 677; 678; 715; 782; 805 (?); *milimī*: CKD 422; *milimiye*: CKD 808.

milima is a unit employed in the Niya documents for measuring commodities such as corn and wine. It corresponds to 20 *khi*, another unit of measure (on which cf. Appendix 1 s.v.).

It is generally accepted that *milima* goes back to the Ancient Greek measure μέδιμος, as first pointed out by Thomas (*apud* KD: 363). Because of the correspondence between Gr. -δ- (either /d/ or /δ/) and Niya -l-, an unattested Bactrian intermediary should probably be posited,²⁵¹ even though other Greek loanwords in Bactrian were admittedly no longer affected by lambdacism (*d > λ /l/).²⁵² Potentially, μέδιμος was borrowed

²⁵⁰ The instances of *milima* classified as dir.sg. are those followed by the numerical sign “1” and those for which it is contextually clear that a singular is intended. All other instances, including debatable cases, have been placed under the heading dir.pl. (which for this word is more frequent than dir.sg.).

²⁵¹ Cf. Tremblay (2001: 25 fn. 37) and Sims-Williams (2002: 229; BD II: 232), building further on Burrow (1935a: 785; LKD: 111 s.v.) and Lüders (1936b: 640f.). As discussed in Lurje & Yakubovich (2017), there is no decisive evidence favouring a Sogdian dialect with lambdacism. I further agree with Tremblay (*ibid.*) that the Sogdian unit of measure *myδ'mβn*, also borrowed from μέδιμος, need not have passed through a Bactrian intermediary, as its form is difficult to reconcile with that of Niya *milima*.

²⁵² The relevant examples are the month name *δηματριγανο* / *δ(δ)ρηματριγανο* which is based on Gr. Δημήτηρ, *δ(δ)ιναρο* / *Διναρο* ‘dinar’ ← Gr. δηνάριον ← Latin *denarius*, and *Δραχμο* / *δδραχμο* ‘dirham, drachma’ ← Gr. δραχμή.

slightly earlier, at a time when lambdacism had not yet stopped operating entirely.²⁵³

The sound correspondence between the -ε- /e/ in Gr. μέδιμνος and the first -i- in Niya *milima* is not necessarily due to the hypothesised Bactrian intermediary. Gr. -ε- /e/ could namely also be rendered as -i- in Gāndhārī names of Greek origin for which no Bactrian intermediary should be posited, e.g. *Alikasudara* (SHĀH XIII; MĀN XIII) ← Ἀλέξανδρος and *Telipha* (CKC 121; 122) ← Τήλεφος (cf. VG³: 64). Yet, one still cannot exclude that the vowel raising did happen in Bactrian. Gr. -ε- /e/ could, for instance, have been substituted with Bactr. -i- /i/, parallel to the rendering of Gr. -ο- /o/ as Bactr. -o- /u/ in χρονο /xšunə/ ‘(calendar/regnal) year’ ← χρόνος (§3.2.1 s.v.). If this were the case, the immediate source of *milima* is to be reconstructed as *μιλιμνο /milimnə/ rather than *μελιμνο /melimnə/ (cf. also §4.3.3).

As can be seen from these reconstructions, I believe that the Greek cluster -μν- /mn/ was preserved unchanged when μέδιμνος was borrowed into Bactrian. I think so because the phrase οβεινα ζαμνα ‘at that time’ (Ayrtaṃ 5) and the conjunction κιζαμνιδο ‘as soon as’ (BD II: 222) show -μν- /mn/ to be a phonotactically permissible cluster in Bactrian. Consequently, Bactr. -μν- /mn/ should have been simplified to -m- in Niya Prakrit, which seems plausible, as -mn- probably was not a standard cluster in Niya Prakrit. The only word to contain such a cluster is the dis legomenon *ṣamnera* ‘novice’ (CKD 415, 2x), an exceptional form secondarily syncopated from the better-attested *ṣamanera* < OIA *śrāmaṇera*-.²⁵⁴

In short, deriving *milima* via Bactr. *μελιμνο / *μιλιμνο out of Gr. μέδιμνος is both formally and semantically convincing, but since *μελιμνο / *μιλιμνο is not attested in Bactrian, I did not include it among the secure etymologies.

²⁵³ On the chronology of Bactrian lambdacism, see de Blois (2013: 269f.), who dates lambdacism to the Late Achaemenid period based on loanword evidence (cf. also Kreidl 2021: 176f.). In view of *milima* (not taken into consideration by de Blois), lambdacism may still have been operative at the beginning of the Hellenistic period, when contact with Greek increased.

²⁵⁴ Cf. CKD 288 *ṣama(m)nera* (2x); 358 *śramanera*; 466 *Ṣamanera*; 535 *Ṣamanera* (2x); 569 *Ṣamaṃnera* (3x); 727 *Ṣamanera*. The capitalised occurrences are personal names. In other forms of Gāndhārī, a cluster -mn- is never found.

26. *yatma* ‘measurer of rations’

Attestations of the base form

DIR.SG. *yatma*: CKD 23; 37; 59; 146 (2x); 272; 275; 291; 305; 307 (2x); 326; 374 (3x); 428; 430 (3x); 439; 444 (2x); 546; 571; 581 (2x); 582; 586; 587; 589 (2x); 590; 599; 640; 715; 765; 797 (2x); 817 (4x); 880; 881 (3x)

DIR.PL. *yatma*: CKD 590

GEN.PL. *yatmana*: CKD 714²⁵⁵

It has been evident since Burrow (LKD: 113 s.v.) that the *yatma* is an official whose duties primarily involve collecting and conveying taxes (cf. also Atwood 1991; Høisæter 2020: 599). The *yatma* was in particular responsible for measuring out the correct amount of tax to be paid, as is said explicitly in (3.17) (note the gerv. *mavidavya* ‘to be measured’).

(3.17) CKD 146 obverse B3b–B4b

yatma Pogeyaṣa aṃṇa pruchidavya ... sarva piṃḍa milima 20 4 ma[v]idavya

“The corn had to be asked by the *yatma* Pogeya. ... The total to be measured (*mavidavya*) is 24 *milima*.” (tr. mine).

A comparable example is (3.18), where a *yatma* and an *aḡeta*, another type of tax collector (see §3.3.3 s.v.), should make sure that a sufficient amount of corn and wine is collected.

(3.18) CKD 307 obverse 5–7

yo ca adehi paḷyī saṃgalitaga hotu yaṃ ca aṃṇa masuṇena krinidavya siyaṃti taha krinidavya yatma aḡetaṣa piḍita maṃtra dadavya ma iṃ ci omaga siyati.

“Whatever tax (there is) from there, let it be collected. Also what corn had to be bought by (a payment of) wine, so let it be bought. Particular instructions must be given to the *yatma* and the *aḡeta* that nothing must be short.” (after TKD: 55).

As regards etymology, Harmatta (1960: 213) suggested that *yatma* is a *man*-derivative from the OIA root $\sqrt{yat}$ ‘to arrange’. Such a form is, however,

²⁵⁵ It remains unclear whether the word *yatmi* in CKD 349 is connected to the official title *yatma*. The relevant context runs as follows: *sā aṃṇa saṃgalidavo eda aṃṇaṣa aṃṇa pajeka yatmi kartavo*, translated by Burrow (TKD: 67) as “This corn is to be collected. Of this corn another *yatmi* is to be made.” Could we translate *yatmi* e.g. as ‘measurement’ and assume that *yatmi* is a derivation of *yatma* with the *i*-suffix (so already Lüders 1940b: 43 fn. 1)?

nowhere attested, and *man*-derivatives are typically abstracts rather than agent nouns (cf. AiG II.2: 754–768).

Seeing that most bureaucratic titles in Niya Prakrit are loanwords and a *yatma* had to measure the ratio of taxes, I would rather propose that this title ultimately derives from an Old Iranian compound **yāta-mā-* ‘measurer of rations’ of the type **xšaθra-pā-* ‘satrap’. My reconstruction **yāta-mā-* finds a close parallel in OIr. **yāta-kara-* ‘assigner of rations’, indirectly attested through Aram. *ytkr*’ (Iranica: §4.4.7.134). *yāta-* on its own is attested twice in the Avesta (A 3.11; Vd 19.29), in both cases translated in Pahlavi as *bahr* ‘portion, share’ (Hintze 2007: 126f.). Middle Iranian cognates of **yāta-* are MP *yād* (CPD: 46) and Bactr. *ιαδο* /yādə/ (BD II: 215), both meaning ‘share, ration’.

yatma would have to represent an outcome of **yāta-mā-* that has undergone syncope. Therefore, Bactrian appears to be the most plausible source language of the Niya word. *yatma* could either come from an early Bactrian form **ιαδμα* /yādmā/, with final -α still preserved as in e.g. *λογδα* ‘daughter’ < **duxtā-* or *ιοδβα* ‘PN or title’ < **čyuta-pā-* ‘person responsible for the expenditures’ (BPN: no. 557), or it could have been borrowed from a later form **ιαδμο* /yādmə/.²⁵⁶

In brief, the Niya title *yatma* seems to continue a Bactrian compound **ιαδμα* /yādmā/ (later **ιαδμο* /yādmə/) < **yāta-mā-* ‘measurer of rations’. This compound is admittedly not attested elsewhere in precisely this form. Yet, given that (i) **yāta-kara-* can count as a close parallel, (ii) *ιαδο* ‘share, ration’ < **yāta-* is attested in Bactrian, and (iii) *yatma* can be the (logical) subject of the Niya Prakrit cognate of PIr. **√maH* ‘to measure’, I conclude that this etymology is sufficiently plausible to warrant inclusion in the present category of loanwords.

27. *vaše* ‘garments’

Attestations of the base form

DIR.PL. *vaše*: CKD 534 (*vaše* 4 ‘4 garments’).

The exact semantics of the Niya hapax *vaše* cannot be deduced from the context. Yet, the fact that *vaše* occurs in a list of (mostly) textile products

²⁵⁶ The rendering of Bactr. -δμ- /dm/ as Niya -*tm-* and not as ***dm-* is probably orthographic in nature; cf. §4.3.13. The root **√maH* ‘to measure’ is continued in Bactrian in the verb *φορμου-*, pret. *φορμαδο* ‘to order’ < **fra-māya-*, pret. **fra-māta-* and its derivatives (EDIV: 256).

makes Maggi's (2017: 157; 2022b: 152) comparison with the newly discovered Khotanese phrase 6 *baše* 'six garments' (90-YKC-40) sufficiently attractive.

The most likely source of Niya *vaše* and Khot. *baše*, Maggi argues, is Bactr. **oap̥e* /*waše*/, dir.pl. of **oap̥o* /*wašə*/ 'garment' < **wastra-* (cf. Av. *vastra-*).²⁵⁷ The reconstruction of a dir.pl. would account for the final -*e* in Niya *vaše* / Khot. *baše*, and it fits with both words being used with a number higher than one (see above, cf. also §4.4.3).

28. *saste* 'day, elapsed'

Attestations of the base form

LOC.SG. *saste*: CKI 245; 328; 368; *sasteyam̐mi*:²⁵⁸ CKD 329; 403; *ṣasteyam̐mi*: CKD 153

INS.PL. *sasteḥi*: CKI 152; 155; 159; 225; 245; 509; CKD 422; 656; 808.

The word *saste* 'day, elapsed' is found in the Niya documents and in inscriptions in South Asian Gāndhārī. In both types of texts, *saste* mainly occurs in dating formulae as in (3.19).²⁵⁹

(3.19) CKD 422 obverse 1f.

*saṃvatsaraye 3 maṣ(*e) 4 3 sast(*e)hi 4 4 maharajaṣa rajatirajaṣa mah.
... ṣa Mahanuavaraja Tajaka devaputraṣa asti kṣunam̐mi ...*

"In the 3rd year, 7th month, when 8 days had passed (*sast(*e)hi 4 4*) of the great king, the king of kings [...], Tajaka, the king of great Nuava, the son of heaven — it is in his reign." (after TKD: 86).

According to Konow (1916: 809; 1924: 124; KI: 152; 167), *saste* would have been borrowed from an "Indo-Scythian" cognate of Khot. *sasta-*, the verbal adj. of *sad-* 'to appear' (SGS: 130f.). Yet, despite its having been accepted by

²⁵⁷ For the phonology, cf. *oap̥o* (MBactr. *wš*) 'hay' < **wāstra-*. For the rendering of Bactr. *o-* /*w*/ as Niya *v-*, see §4.3.22.

²⁵⁸ It is on the basis of the loc.sg. *sasteyam̐mi* (*ṣasteyam̐mi*) that the dir.sg. is generally set up as *saste**.

²⁵⁹ It seems to have escaped notice that the ins.pl. *sasteḥi* (on which see below) is only used in dating formulae mentioning one of the three earliest kings of the Shanshan kingdom referred to in the Niya documents, i.e. Tajaka (CKD 422), Ro(m)graka (CKD 808), and Pepiya (CKD 656). In the other documents, the inherited word *divasa* (with orthographic variants) is the standard word for 'day', also in dating formulae. For the relative chronology of the kings mentioned in the Niya documents, see Høisæter (2020: 96).

Burrow (1934: 514; LKD: 130 s.v. *sastehi*), Salomon (2003: 76 fn. 5), and others, Konow's etymology suffers from a few drawbacks. To begin with, the meaning 'day' is nowhere attested for Khot. *sasta-*, a point already made by Bailey (1949a: 127); *sasta-* instead means 'appeared, looked good', and the default word for 'day' in Khotanese is *haḍāa-* (DKS: 418f.; 447).²⁶⁰ The chronological and geographical distribution of *saste* moreover suggests that this word for 'day' was not borrowed from the Indo-Scythians (Indic Śakas) but from the Kuṣāṇas: *saste* occurs almost exclusively in inscriptions from the Kuṣāṇa kings Kaniška and Huviška (Salomon 2003: 76f.; Baums 2018a: 63), and it is widespread in Kharoṣṭhī inscriptions from Afghanistan, i.e. in texts from the heartland of the Kuṣāṇa empire (Falk 2003: 73 = 2013a: 66).

Because of the connection between *saste* and the Kuṣāṇa empire, it seems worthwhile to investigate the possibility of a Bactrian origin of *saste*. A plausible donor form would be Bactr. σαχτο 'day, elapsed', the earliest occurrence of which is cited below as (3.20). Etymologically, σαχτο derives from **saxta-*, the verbal adj. of the root **√sač* 'to pass' (cf. EDIV: 324f.; BD II: 263; SCBD: 21).²⁶¹

(3.20) NPlate 5–6

καλδι κανηρκι βαο αμο ρηβο αγαδο πιδο ι λαφο χρονα νεισανε μαε
λασσο σαχτε

"When king Kanishka brought it to Wesh (it was) in the year ten, the month Nisan, the tenth day (λασσο σαχτε)." (Sims-Williams 2015: 257).

(3.20) shows that Bactr. σαχτο is used in the same type of dating formula as Gandh. *saste*.²⁶² Note, for instance, that σαχτο occurs side by side with χρονο

²⁶⁰ Aware of this problem, Burrow (LKD: 130 s.v. *sastehi*) drew a parallel with the semantic shift from 'that which shines' to 'day' undergone by OIr. **raučah-*. This parallel is, however, not quite exact given that the outcomes of **√sand*, including Khot. *sad-*, do not mean 'to shine' (EDIV: 332).

²⁶¹ σαχτο instead of expected ***σαγδο* could be due to influence from the present stem σαχσ- < **sax-sa-* or σαχτο could be a dialect form. Given that the word already occurs in Kuṣāṇa times (see (3.20)), Gholami's suggestion (SFBG: 47) that σαχτο is a loanword from MP/Parth. *saxt* appears unlikely to me.

²⁶² Outcomes of the Iranian root **√sač* 'to pass' are more generally used in dating formulae (cf. e.g. SD: 353; Yoshida 1996: 72 on Sogd. *syty* 'passed, elapsed'). Konow (KI: 152) incidentally remarked on the similar usage of Gandh. *saste* and the derivatives of **√sač*. Yet, he did not infer an etymological relationship between the two from his observation.

‘calendar/regnal year’,²⁶³ in the same way that *saste* tends to co-occur with *kṣuna* ← χῑνο (also in (3.19)). The derivation of *saste* from σαχτο thus receives support from phraseology.

My etymology requires Bactr. -χτ- /xt/ to have been rendered as Gandh. -st-. An exact parallel for this sound correspondence is lacking. Yet, one of the previously identified Iranian loanwords, i.e. Niya *načira* /našcīra/ ‘hunting’ ← **naxčīr* (§3.6 s.v., cf. also Epigraphical Skt. *naścīrapati-*), at least shows that /x/ could be substituted with a sibilant to accommodate foreign clusters to Gāndhārī phonotactics. In the case of *načira* /našcīra/, /x/ became a palatal sibilant, hence one might expect σαχτο to have become ***sašte*. But a cluster **-št- is phonotactically inadmissible in Gāndhārī, so this could be a reason why σαχτο was instead approximated as *saste* (see further §4.3.27).²⁶⁴

Finally, deriving *saste* from σαχτο could account for the use of the form *sastehi* in dating formulae (including the one cited above). Although there seems to be no other option than to take *sastehi* as an ins.pl.,²⁶⁵ Burrow (LKD: 130 s.v.) still hesitated to accept this morphological analysis because he considered the syntax of *sastehi* to be “by no means clear”. In my view, the polysemy of Bactr. σαχτο helps to clarify the syntax. Since σαχτο means not only ‘day’ but also ‘elapsed’, the same could be applicable to *saste*. If so, *sastehi* may be an abbreviation for something like **divasehi sastehi* “with (X) days (*divasehi*) having elapsed (*sastehi*)”, comparable to Bactr. σαχτο Αβαμοχοινο ρωσο “the day (ρωσο) Abamukhwin having elapsed (σαχτο)” (doc. A 1).²⁶⁶

In brief, the derivation of *saste* from Bactr. σαχτο ‘day, elapsed’ instead of from an “Indo-Scythian” cognate of Khot. *sasta-* ‘appeared, looked good’ is preferable for both historical and linguistic reasons: *saste* is a word that is strongly associated with Kuṣāṇa sources; there is an exact semantic match

²⁶³ The same can be said about the two other attestations of σαχτο in A 1 and R 1 (where χῑνο occurs in the later spelling αχῑνο).

²⁶⁴ For a possible explanation of the final -e in this word, see §4.4.3.

²⁶⁵ Note moreover the combination of *sastehi* with the ins. *daśahi* ‘ten’ in CKI 155.

²⁶⁶ One is further reminded of the Old Persian formula *X raučabiš θakatā āha* “X days have passed”, where the ins.pl. *raučabiš* appears to be the subject of the sentence (cf. Konow 1938a: 155). As *θak-* is the Old Persian outcome of **√sač*, there may be some historical connection, but the details remain unclear. Michaël Peyrot and Federico Dragoni (p.c.) have further reminded me of a similar use of the ins.pl. in Tumshuqese dating formulae, as in *bistyo patsyo* “with 25 (days passed)” (contract 4, line 2, cited from Dragoni 2020: 216).

between *saste* and σαχτο; and this new etymology of *saste* may explain the syntax of the ins.pl. *sastehi* employed in dating formulae.

3.2.3 Arguable etymologies

29. *ambukaya*, a title

Attestations of the base form

DIR.SG. *ambukaya*: CKD 251 (2x)

The title *ambukaya* only occurs in CKD 251, and its precise meaning cannot be established from the context (LKD: 75 s.v.; TKD: 46). Given the phonetic similarity, it seems tempting to consider *ambukaya* to be the same word as Bactr. αμβουκαιο /ambūkā(y)ə/ (?), a title held by the famous Kuṣāṇa official Nukunzuk in NPlate 1 (Sims-Williams 2015: 259).²⁶⁷ This proposal should be treated with caution, though, since neither the exact meaning nor the etymology of αμβουκαιο has as of yet been determined.²⁶⁸

30. *aco* ‘frontier, border post’

Attestations of the base form

ABL.SG. *acode*: CKD 152

LOC.SG. *acovaṃmi*: CKD 125²⁶⁹

Attestations as a PN

GEN.SG. *Acoṣa*: CKD 374 (2x); *Acoṣa*: CKD 374

Derivatives

DIR.SG. *acoviṃna* ‘border official’: CKD 125; 133 (2x); 323; 563; *acovina*: CKD 139 (2x); 152

²⁶⁷ The assumed correspondence between Bactr. -μ- /m/ and anusvāra would be due to the absence of a cluster ****mb-** in Niya Prakrit. The -y- in Niya *ambukaya* remains puzzling.

²⁶⁸ By the time of the Surkh Kotal inscription, Nukunzuk had been promoted to the rank of καραλαγγο ‘margrave’, so it is conceivable that αμβουκαιο was a military title too. In view of the intervocalic -κ- /k/, one may want to posit a morpheme boundary between αμβου- and -καιο (the latter perhaps from **kawi-* ‘prince, giant, hero’?).

²⁶⁹ Loukota (2024: 77) cautiously suggests resegmenting the sequence *Acokisgiya devataṣa* “of the deity Acokisgiya” in CKD 361 to *aco Kisgiya devataṣa*, in which case we would also have an attestation of the dir.sg. *aco*.

Compounds

LOC.SG. *Acomenaṃmi*, place name: CKD 637 (2x)

The semantic analysis of *aco* depends to some extent on that of the better-attested derivative *acoviṃṇa*. This derivative quite clearly denotes an official whose duty it was to look after border posts and report imminent danger (cf. e.g. CKD 139). On this basis, *aco* has been interpreted either as an ‘errand’ (Thomas 1935: 57–61) or as a ‘frontier’ or ‘border post’ (Burrow in LKD: 72 s.v.; TKD: 22). Since the attestations of *aco* leave little doubt that this noun refers to a physical place, the latter interpretation is preferable.²⁷⁰

In Thomas’ opinion, *aco* would be an inherited word derived from a reconstructed OIA noun **ājava-* ← the preverb *ā* + *√jū* ‘to hurry’, but this etymology requires, as already remarked in LKD (72 s.v.), the implausible premise of intervocalic *-j-* being devoiced to *-c-*. In Niya Prakrit (not in other types of Gāndhārī), final *-o* is moreover a marker of loanwords, and seeing that the semantically closely related word *piro* ‘military post, fort’ has been argued to be borrowed from Bactrian (§3.2.3 s.v.), it seems worth investigating whether *aco* could also come from this language.

In my view, Niya *aco* ‘frontier, border post’ points to a so far unattested Bactrian noun **αδοπαοο* /adšāwə/ < **ati-čyāwa-* ‘the place where one crosses/enters’ (cf. *παο-* ‘to go’ < **čyawa-*, BD II: 283).²⁷¹ I am not aware of other Old or Middle Iranian words derived from **ati-čyāwa-*, which is the reason not to include *aco* among the plausible etymologies of §3.2.2. Yet, there is at least evidence for the underlying root **ati* + **√čyaw* in the form of the Khotanese verb *ttātsu-* (*ttātsa-*) ‘to cross’ (SGS: 38; EDIV: 40–42), and the nominal formation **ati-čyāwa-* would be closely paralleled by **ati-gāma-*, the source of Sogd. *ty’m* ‘the place where one enters/crosses > ford’ and Bactr. *αδογαμο* ‘income (in a financial sense)’ (SD: 386; Sims-Williams 2013: 195). The reconstruction of a Bactrian noun **αδοπαοο* would thus not be too far-fetched.

Two substitutions are necessary to derive Niya Prakrit *aco* from **αδοπαοο* /adšāwə/, both of which can be paralleled. First, Bactr. *-δοπ-* /dš/,

²⁷⁰ CKD 125 obverse 2: *ari Apemṇaṣa uṭa acovaṃmi ukasidavya* ‘The *ari* Apemṇa has to ride out on a camel to the *aco*’ (TKD: 22). CKD 152 cover-tablet reverse 1: *itu uyutaya acovina acoade tura nikhalidavo* ‘From now on (this) *acovina* ... is to be removed from the *aco*’ (TKD: 27).

²⁷¹ I opt for a Bactrian source because in no other known Middle Iranian language would we have at the same time preservation of the initial **a*, syncope of the internal **i*, and a development of **čy* to /š/.

phonetically conceivably [tʃ], would correspond here to the Niya voiceless palatal *-c-*, as in *picav-* ‘to hand over’ ← *πιδοραιο- < **pati-čyawa-* (§3.2.3 s.v. and see also §4.3.18). Second, the Bactrian final *-αοο* /āwə/ needs to have been rendered in Niya Prakrit as *-o(va)*, due to a colouring of /ā/ next to /w/. A potential parallel for this sound substitution is *badho* ‘pledge, mortgage’ ← *βαμδαοο /bāmdāwə/ ← *βαμδο ‘loaned’ < **apāmita-* + suffix *-αο* (see §3.2.3 s.v. and §4.3.1).

acoviṇṇa ‘border official’ is derived from *aco* with an adjectival suffix *-ina* ‘related to’ that occurs more often in Niya Prakrit loanwords (cf. Burrow 1935b: 672; LKD: §77). This suffix will be treated in more detail in §6.4.1.

It seems plausible that the word *aco* ‘frontier, border post’ is also found in a place name mentioned twice in (3.21).

(3.21) CKD 637 obverse 3f.

*taṃ kalaṃmi Aco<*me>naṃmi²⁷² aṃna nikhasta milima 1 khi 10 masu
Acomenaṃmi khi 3 nikasta*

“At that time the expenditure of corn was 1 *milima* 10 *khi* in Aco<*me>na, and of wine 3 *khi* in Acomena.” (after TKD: 132).

If this is correct, it is tempting to identify the second element *-mena* as Bactr. *μηναο /mēhanə/ < OIr. **maiθana-* ‘dwelling’, a common element in Iranian place names.²⁷³ The literal meaning of *Acomena* could be ‘dwelling located at the border’. Deriving *-mena* from *μηναο /mēhanə/ would require the loss of intervocalic *h* and subsequent vowel contraction during the borrowing process; for this, see §4.3.23.

In the same vein, another place name ending in *-mena*, i.e. *Remena*, could perhaps come from *ρη(ο)μηναο /rē(w)mēhanə/ < **raiwa-maiθana-*, literally ‘rich dwelling’. In this case, a comparison can be drawn with the attested Bactrian place name ρη(ο)γαο /rē(w)ganə/, as the latter likely also contains **raiwa-* ‘rich’ as its first part (BD II: 260; BPN: no. 394).

²⁷² So tentatively emended by me, in view of the spelling *Acomenaṃmi* later. It seems clear that the same place is meant twice.

²⁷³ Cf. e.g. Bab. *Ú-ra-zu-me-ta-nu* ← OIr. **warāza-maiθana-* ‘dwelling of the boars’ (Iranica: §4.3.242) and Parth. *brzmytn* /barzmēthan/ (Diakonoff & Livshits 1977–2001: 189). For *Acomena*, Thomas (1935: 60) considers a different connection with Chin. *mén* 門 ‘gate’, in (Early) Middle Chinese *mwon* (cf. Baxter & Sagart 2014: 63; 284; 288; 352). If I am correct that *aco* is a Bactrian word (cf. supra), it seems best to assume the same for *-mena*.

Coming back to *aco*, it can, with due caution, be concluded that it is a loanword from Bactr. *αδοπαοο /adšāwə/ < *ati-čyāwa- ‘the place where one crosses/enters’.

31. *aḍini* ‘(broomcorn) millet’

Attestations of the base form

DIR.SG. *aḍini*: CKD 222 (2x); 579; *aḍimni*: CKD 83; *aḍina*: CKD 722 (2x); *aḍim*: CKD 140

It has been known since at least Burrow (LKD: 73 s.v.) that *aḍini*, whose *-ḍ-* stands for /r/ (§§2.1.2; 2.1.6), refers to a certain crop. Further progress was made by Bailey (1948: 332), who could assign the meaning ‘(broomcorn) millet’ to *aḍini* by comparing it to Dardic forms of the same meaning, i.e. Pashai *aṛín* and Dameli *ärín* (cf. CDIAL: no. 195 for more forms).²⁷⁴

According to Morgenstierne (1942: 156) and Turner (CDIAL), Niya *aḍini* and its Dardic cognates would go back to OIA **aṇuni-*, a hypothetical derivative of the attested word *aṇu-* ‘millet’. The main problem with this etymology is that it requires an ad hoc dissimilation of **-ṇ-* to **-ḍ-* supposedly induced by the **-n-* later in the word. In addition, the vowel *-i-* in the second syllable of Niya *aḍini* is not so easily explained in this way.

Given these issues, it seems better to build further on Morgenstierne’s later suggestion (1973: 258) that we are dealing with an Iranian loanword. Indeed, Niya *aḍini* and its Dardic cognates resemble a word for ‘(broomcorn) millet’ found in various Iranian languages, e.g. MP *arzan* (Parth. (?) LW), LKhot. *ā’ysam*, Psht. *ğdān*, Yidgha *yurzun*, Sanglechi *wuḏdān*, and Wakhi *yirzn* (CPD: 11; DKS: 20; EDP: 29; Morgenstierne 1938: 273; 421; 554).

The main challenge with the hypothesis of an Iranian loanword is to find a historically plausible donor language that can account for the sequence *-ḍi-/ri/* in Niya *aḍini*. Below, I will argue in favour of a Bactrian donor, but some of the steps in my argument are admittedly hypothetical.

My first point concerns the pre-form of the Iranian word for ‘(broomcorn) millet’. This word is traditionally reconstructed as an *a*-stem, i.e. **arzana-* (cf. e.g. Kümmel 2017: 283f.; 2020: 258, who uses the notation *(*h*)*arjana-*). The newly discovered Tumshuqese acc.sg. *arzanu* ‘millet’ must indeed come from an *a*-stem **arzana-* (Ogihara & Ching 2024: 313–315), but most of the

²⁷⁴ For the Niya evidence, see recently also Høisæter (2020: 155f.).

attested forms could also go back to an *i*-stem **arzani*.²⁷⁵ From the perspective of Niya *aḍini*, it would be good if we could posit such an *i*-stem for a pre-stage of Bactrian. In that case, *i*-umlaut (SFBG: 65) would namely permit one to reconstruct a Bactrian form **ap̣ziwo*, which, like Niya *aḍini*, has a vowel *-i-* /*i*/ in its middle syllable.²⁷⁶

Since it is cross-linguistically common for words referring to cereals to influence each other analogically,²⁷⁷ a preform **arzani-* could conceivably be due to analogy with an *i*-stem of similar meaning, e.g. **dāsi-*, a term for ‘oats’ that may have existed in (Pre-)Bactrian, as it is well-attested in the neighbouring Pamir languages (e.g. Munji *lisok*; cf. Kümmel 2017: 282).

If Niya *aḍini* indeed goes back to a Bactrian word **ap̣ziwo* < **arzani-*, the presence of a phoneme *-ḍ-* /*ṛ*/ in *aḍini* may be explained as the result of a sound substitution. In **ap̣ziwo*, the cluster *-p̣z-* < **-rz-* stands in front of *-i-* /*i*/, meaning that it may have been palatalised to /*r̥z̥*/ (cf. §2.2.4.3). Such a cluster, consisting of a rhotic and a palatalised voiced sibilant, is alien to Gāndhārī phonology. One may therefore hypothesise that *-ḍ-* /*ṛ*/, phonetically most likely a retroflex flap [ɾ] (§2.1.6), was the closest sound available to render such a foreign cluster in loanwords. As discussed in §3.2.3 s.v. *oḍ-* and §4.3.26, there may indeed be another example of this correspondence between Bactr. *-p̣z-* /*r̥z̥*/ and Niya *-ḍ-* /*ṛ*/.

A closing remark is due on the word-final *-i* in *aḍini*. If the hypothesis of a Pre-Bactrian preform **arzani-* is correct, *aḍini* may reflect Early Bactrian **ap̣ziwi* /*ar̥zini*/ with final **-i* preserved, in which case the variant spellings *aḍina* and *aḍim* could be the result of the weakening of final vowels in Niya Prakrit (cf. LKD: §13). But there is a second, perhaps preferable, option. Bactr. *-βiḍo* < **-pati-* is never rendered in Niya Prakrit with a final ***i* (see §3.2.1 s.vv. *daśavida*; *śadavida*; §3.2.2 s.v. *jenavida*), suggesting that word-final **-i* causing umlaut of a preceding vowel may already have been weakened to *-ə* (or *-Ø*) at the time of the Bactrian borrowings into Niya

²⁷⁵ Parth. **arzan*, for example, the most likely source of MP *arzan*, could be derived from either **arzana-* or **arzani-* (cf. *žan* ‘woman’ < **jani-*).

²⁷⁶ Cf. *ziwo* /*žinə*/ ‘woman’ < **jani-* (BD II: 212), where one can, however, not be sure if the raising of **-a-* to *-i-* /*i*/ was caused by *i*-umlaut or by the preceding palatal. Out of **arzana-*, one would anticipate Bactr. **ap̣zavo* (cf. *ζαγγο* /*zangə*/ ‘manner, way’ < **zana-ka-*).

²⁷⁷ Two examples: (i) Dutch *gierst* ‘millet’ < Middle Dutch *herse* received its initial *g-* due to analogy with *gerst* ‘barley’ (Philippa et al. 2005–9 II: 275) and (ii) MP *ālum* ‘millet’ goes, by way of OP **arduma-*, back to a blend of **arzana-* ‘millet’ and **ganduma-* ‘wheat’ (Kümmel 2017: 283f.).

Prakrit. In this case, *aḍina* and *aḍim* could be a faithful reflection of Bactr. *αρζινο /aržinə/ and *aḍini* a secondary form of the same type as the semantically related dir.sg. *yavi* ‘barley’ < *yava-* and dir.sg. *gohomi* ‘wheat’ < *godhūma-* (both CKD 83).

32. *atga* ‘additional, complementary’

Attestations of the base form

DIR.SG. *atga*: CKD 327; 571; 580; 591; 592

Since *atga* is “always used in connection with *muli* ‘price, payment’” and generally refers to a second payment to be made, Burrow (LKD: 72 s.v. *aṅga*) plausibly inferred this adjective to mean something like ‘additional, complementary’ (cf. also Høisæter 2020: 194).

I propose to trace *atga* back to a Bactrian adjective *αδγο /adgə/ < **ati-ka-* ‘which is beyond > additional, complementary’ ← OIr. **ati* ‘over, beyond’ and the *ka*-suffix.²⁷⁸ An exact parallel for this formation is admittedly lacking. Yet, the derivation of adjectives from preverbs/prepositions such as **ati* is well-attested in ancient Indo-Iranian languages (Bailey 1985). Two Avestan examples with the adj. suffix *-na-* are the superlative *apanō.təma-* ‘farthest’ < **apana-* ← OIr. **apa* ‘away’ and *paitina-* ‘different, single, each’ ← OIr. **pati* ‘towards, against, etc.’ (AIW: 75; 833). The postulated **ati-ka-* finds its closest parallel, formally and semantically, in OIA *adhika-* ‘additional’ ← *adhi* ‘above, over’ and the *ka*-suffix.

The reason to ascribe *atga* to a Bactrian source is the syncope of the vowel **i* which my etymology from **ati-ka-* requires. As a preverb, **ati-* is well-attested in Bactrian, examples including αδβηγο ‘disrespect’ < **ati-baya-ka-* (BD II: 187) and αδογαμο ‘income’ < **ati-gāma-* (Sims-Williams 2013: 194f.).

In short, the derivation of Niya *atga* ‘additional’ from Bactr. *αδγο /adgə/ < **ati-ka-* works fine. As the reconstruction of this Bactrian word cannot be backed up by an exact parallel from another Iranian language, caution is still called for.

33. *avalika* ‘swaddle’

Attestations of the base form

DIR.SG. *avalika*: CKD 575 (2x)

²⁷⁸ For the presumed rendering of Bactr. -δγ- /dg/ as Niya -tg-, see §4.3.13.

The dis legomenon *avalika* is mentioned side by side with *košava* ‘rug, blanket’ and *namata* ‘felt’ and most likely refers to a similar type of textile product (LKD: 78 s.v.).

Based on an etymological comparison with Psht. *blēḡ-* ‘to wrap, swaddle’ < **upa-darzaya-* (EDP: 14; EDIV: 63), I have argued (Schoubben 2021: 53f.) that *avalika* means ‘swaddle’ and is borrowed from an unattested Bactrian word **αβαλιsko* /əvališkə/ < **upa-dṛštaka-*.²⁷⁹ For the development of **upa-*, one can compare, amongst other examples, *αβαστανο* /əvastānə/ ‘support’ < **upa-stāna-* (BD II: 181). The development of **-dṛštaka-* to **-λιsko* would be regular because of (i) lambdacism (SFBG: 35f.); (ii) the vocalisation of **-r-* to *-ir-* in a non-labial context (SFBG: 59f.); (iii) the loss of **r* in front of **š* (SFBG: 56); and (iv) the syncope and simplification of **-štak-* to *-šk-* as in *υαsko* ‘pupil’ < **hāwišta-ka-* (BD II: 272; SFBG: 50).

Alternatively, *avalika* could be a loan from **αβολισko* /avəliškə/ ‘swaddle’, a hypothetical Bactrian cognate of Sogd. *βδ’γštk* ‘swaddled’ < **abi-dṛštaka-* (MacKenzie 1970: 39; SD: 100). For this option, see Schoubben (2022b: 352 fn. 23).

34. *ašgara* ‘herald (?)’

Attestations of the base form

DIR.SG. *ašgara*: CKD 80; 104; 118; 483; 525; 604²⁸⁰

Attestations as a PN

ADJ. *Ašgarani* ‘the son of Ašgara’: CKD 110; 536

ašgara is a title of otherwise unknown semantics also used as a personal name. I cautiously propose to connect it with the Bactrian PN *αζγαρακο*, a diminutive in *-ko* < **-k(k)a-* from an underlying **αζγαρο*.

The etymology of **αζγαρο* is debated. According to Sims-Williams (BPN: no. 13), **αζγαρο* could be compared with the Avestan name *Ziγri-* and the Sogdian name *’zγr* (cf. also Lurje 2010: no. 265) or with Sogd. *jγ’r* ‘cry’. He also records a proposal by Rüdiger Schmitt, according to whom **αζγαρο*

²⁷⁹ For the correspondence between Bactr. *-ḡk-* /šk/ and Niya *-ḡ-*, cf. §2.1.6; §4.3.18.

²⁸⁰ I wonder whether the hapax legomenon *ašga* in CKD 584 could be a mistake for *ašga* < **ra*> so that we could read and interpret the relevant passage as *yaṃ kala Kutreya ašga* < **ra*> *huati taṃ kalaṃmi Raṃšotsaša samana anitaṃti* ‘When Kutreya was a herald (?), at that time they took a gift of honour to Raṃšotsa’ (after TKD: 122).

would be the Bactrian outcome of OIr. **azdā-kara-* ‘herald’ (Aram. *ʾzdkr*; Bab. *az-da-kar-ri*; MP/Parth. *azdēgar*; cf. Bactr. *αζδο κῑρ-* ‘to give notice’). If one accepts **αζγαρο* to be the source of *ašgara*, it must have been a title in origin. I therefore prefer Schmitt’s etymology.

To arrive at **αζγαρο* from **azdā-kara-*, one should probably posit an intermediary pre-form **azda-kara-* since a long **ā* would typically not be syncopated.²⁸¹ Contrast, for instance, *ζῑγαβαργο* ‘destructive’ < **z(i)yakā-bāra-ka-*, with preservation of the **ā* in **z(i)yakā-* as <α>. **azda-kara-*, with a short **a*, would regularly yield **azdgarə* with syncope in between **-zd-* and **-g-* < **-k-*. Subsequently, the heavy cluster **-zdg-* in **azdgarə* could have been simplified to the attested *-zg-*, parallel to the simplification of **-štk-* to *-šk-* presupposed by *υαῖκo* /hāškə/ ‘pupil’ < **hāwišta-ka-* (SFBG: 50).

By implication, **αζγαρο* would write /azgarə/, meaning that Bactr. *-ζγ-/zg/* would need to have been substituted with *-sg-* in Niya Prakrit. This substitution, which could be due to the absence of a cluster ***/zg/* in Niya Prakrit, will receive a more detailed treatment in §4.3.19.

In summary, the Niya official title *ašgara* may be a loan from Bactr. **αζγαρο*, as indirectly attested in the PN *αζγαπακο*. If **αζγαρο* results from **azda-kara-* < **azdā-kara-*, the meaning of *ašgara* would be ‘herald’.

35. *oḍ-* ‘to let go’

Attestations of the base form

PRES.2SG. *oḍesi*: CKD 317

PRES.3SG. *oḍeti*: CKD 18

PRES.3PL. *oḍemti*: CKD 482

PRET.1SG. *oḍidemi*: CKD 153; 417; 450; 546

PRET.3SG. *oḍita*: CKD 52; 292; 324 + 328; 345; 425; 527; 577; 667; 788 (3x);²⁸²
889; *oḍida*: CKD 236; 437; 574; 889 (2x)

²⁸¹ As Sasha Lubotsky (p.c.) suggests, one could assume that in the syntagm **azdā* + *√kar* ‘to give notice’ (cf. Bactr. *αζδο κῑρ-*), the final *-ā* was shortened and from there introduced into the compound.

²⁸² One should read *oḍita* (3x) instead of Wu’s (2020: 151) *oḍita*. Her translation (2020: 153) of the relevant passage of CKD 788 (under-tablet obverse 9f.) can also be refined. Wu translates *Caṃpīra uthita ima Paṃcapriyae dura oḍita yo tatra jaṃṇātriyaṃmi nikastaga taha sarva dura oḍita* as “Caṃpīra arose, he sent Paṃcapriya away. He who went away in the marriage, also sent everything away.” In my view, the latter part rather means “those things which had been acquired during the period of lawful marriage, he all let go”. Or, to put it differently, the bridegroom must return the property his wife acquired during

PRET.3PL. *oḍitaṃti*: CKD 1; 9; 212; 386

PST.PTCP. *oḍitaḡa*: CKD 198; 206; 320; *oḍidaga*: CKD 198; 236

FUT.3SG. *oḍiṣyati*: CKD 358

FUT.2PL. *oḍiṣatu*: CKD 546; *oḍiṣaṃtu*: CKD 159; 633; *oḍiṣyatu*: CKD 125; 157; 320

GERV. *oḍidavo*: CKD 77; 109; 152; 197; 198; 212; 358 (2x); 506; 743; *oḍidavya*: CKD 272; 320; 362; 381; 430 (2x); 639 (2x); 665

Derivatives

GERV. *praḍḍidave*: CKM 267 (3x)

In spite of the general agreement that the verbal root *oḍ-* means ‘to let go’ (cf. Baums & Glass 2002a– s.v.), there is so far no consensus on its etymology.

Burrow (LKD: 81 s.v.) hesitatingly compared the Pāli verb *oḍḍeti* (also *uḍḍeti*), which he translated as ‘to throw away, reject’ and ‘to set or lay a snare’. This comparison is semantically and formally unconvincing: ‘to set or lay a snare’ is not what Niya *oḍ-* means, and Burrow’s alternative translation of Pāli *oḍḍeti* (*uḍḍeti*) as ‘to throw away, reject’ is based on a wrong reading.²⁸³ In fact, the basic meaning of Pāli *oḍḍeti* (*uḍḍeti*) is rather ‘to fly up’ (cf. Cone 2001– I: 406; 565; Oberlies 2019² I: 368). It would moreover be exceptional that a geminate *-ḍḍ-* developed to Niya *-ḍ-* /*ṛ-*/, this type of lenition generally being restricted to single intervocalic retroflexes.

Proceeding from a newly attested gerundive *praḍḍidave* ‘it should be let gone, rejected’ in South Asian Gāndhārī (Bajaur fragment 4 = CKM 267), Schlosser (2022: 171; 307) has recently proposed an alternative etymology. According to her, *praḍḍ-* would derive from an otherwise unattested combination of the preverb *pra-* and the BHS verb *chorayati* ‘to abandon, to leave’ (BHSD: 236f.). Although semantically plausible, this etymology suffers from the lack of parallels for the loss of intervocalic *-ch-* in Gāndhārī (and MIA in general). In addition, Schlosser does not explain how the prefix-less form *oḍ-* would have arisen.

their marriage. The same legal procedure is stipulated in the Sogdian marriage contract: “But if it should occur to Ot-tegin that he will not have Čat as a wife [any more], but *send her away, he will release her with [her] inherited and acquired property*, [as well as] with the gifts received, without compensation, ...” (Yakubovich 2006: 312; emph. mine).

²⁸³ To justify his translation ‘to throw away, reject’, Burrow referred to *diṭṭhiṃ uḍḍayāmi* (Burrow o-) ‘*chaḍḍayāmi*’ in *Petavatthu-aṭṭhakathā* 256 (ed. Hardy 1894); but instead of *uḍḍayāmi*, one better reads *ucchaḍḍayāmi* ‘I vomit, eject’ with the Burmese, Sri Lankan, and Thai editions (see Cone 2001– I: 406).

Since *oḡ-* lacks an obvious etymon within Indo-Aryan and it is attested both in a Gāndhārī text hailing from the border between Afghanistan and Pakistan (Bajaur) and in the Niya documents, it could alternatively be a loan from Bactrian. In this language, the notion ‘to let go’ is normally expressed as *uipz-* < OIr. **hrz-* to **√harz* (BD II: 272f.; EDIV: 132f.). My suggestion is that *oḡeti* was borrowed from a synonymous verb **ωuipz-* < OIr. **awa-hrz-* as in the Avestan pres.1sg. *auuaṇhərəzāmi* ‘I let go’ (Y 10.15).

This new etymology is not only semantically straightforward; it may also receive support from phraseology. In §3.3.1 s.v. *ajhate*, I argue that the syntagm *ajhatu oḡidavo* in CKD 152 means ‘to be let free’ and that the adverb *ajhatu* is a borrowing from an Iranian language in which OIr. **āzātam* became **āzātu* or **āzādu*. The importance of this argument for the etymology of *oḡ-* is that OIr. **āzātam* is known to form a collocation with the root **√harz* ‘to let go’: compare Aram. *ʾzt šbq*, a calque of OP **āzātam hrz-*, MP *āzād hil-*, and Bactr. *αζαδο uipz-*, all of them meaning ‘to let free’. The derivation of *oḡ-* from **ωuipz-* < OIr. **awa-hrz-* would thus allow for the attractive conclusion that *ajhatu oḡ-* is another witness of the Iranian collocation of **āzāta-* ‘free’ + **√harz* ‘to let go’, though one must acknowledge that the preverb **awa-* is missing in the parallels.²⁸⁴

On the formal side, my etymology would need two sound substitutions, viz. (i) loss of intervocalic *-h-* and (ii) rendering of Bactr. *-pž-* as Niya *-ḡ-* /*ṛ-*. Because of them, one cannot be entirely confident that the derivation of *oḡ-* from **ωuipz-* < OIr. **awa-hrz-* is indeed correct. Yet, I intend to show below that both substitutions are understandable.

To begin with, my etymology requires that the intervocalic *-u-* /*h-* in **ωuipz-* was lost during (or after) the borrowing process with subsequent contraction of the vowels. Inherited words such as *goma* ‘wheat’ < *gohoma* (CKD 795) < Skt. *godhūma-* provide a parallel for this development, and /*h-* was generally an unstable phoneme in Niya Prakrit (LKD: §28). Hence, this is not too much of a problem.²⁸⁵

²⁸⁴ A possible option to justify the presence of the preverb would be to assume that the Aramaic formula *ʾzt šbq* had been back-translated into Bactrian with both *uipz-* and **ωuipz-* (Federico Dragoni p.c.).

²⁸⁵ At the same time, the (potentially) Bactrian loanwords collected in this chapter do not show a consistent picture (cf. §4.3.23): there are other words where intervocalic *-h-* seems to have disappeared, but in the case of *nihaṃñ-* ‘to deposit, to put down’ ← **νιυανζ-* /*nihanz-* (§3.2.2 s.v.) and *nihala* ‘settlement, agreement’ ← **νιυαλο-* /*nihālə-* (§3.2.3 s.v.), the *-h-* seems to be preserved.

How to account for the rendering of Bactr. -ρζ- as Niya -*ḡ*- /r/ is a more intricate question. Yet, there may be a way to explain it when one assumes that, as I argue for different reasons in §4.4.4, speakers of Niya Prakrit borrowed Bactrian verbs in their 3sg. forms. In the case of *ωυρζ-, its 3sg. can be more or less confidently reconstructed as *ωυρζιδο based on the attested 3sg. υρζιδο (xl 10f.). In this form, the cluster -ρζ- would be immediately in front of the vowel -ι- /i/, thus allowing for a palatalisation of *rz to /rʒ/.²⁸⁶ If so, *oḡ*- could be a second example of the sound substitution which I cautiously proposed §3.2.3 s.v. *aḡini*, whereby the non-Indic cluster /rʒ/ was approximated with the closest sound at hand, i.e. -*ḡ*- /r/. The phonetic details behind this hypothesis will be discussed in more detail in §4.3.26.

Summary: Niya *oḡ*- ‘to let go’ has arguably been borrowed from Bactr. *ωυρζ- /ōhirz/ ‘idem’ < *awa-hrz-; more specifically, its source may have been a 3sg. *ωυρζιδο in which *rz could have been palatalised so as to result in Niya -*ḡ*- /r/.

36. *caṃkura* ‘imposer of penalties’

Attestations of the base form

DIR.SG. *caṃkura*: CKD 16; 64; 236; 297; 318; 345; 437 (4x); 506; 532 (2x); 582 (2x); 584 (2x); 732; 788; 796; 815; 842; 884

GEN.SG. *caṃkuraṣa*: CKD 437

The officials called *caṃkura* were entrusted with various administrative duties, and they often acted as judges.²⁸⁷ *caṃkuras* were, in other words, an integral part of the civil administration of the Shanshan kingdom (cf. also LKD: 88 s.v.; Padwa 2007: 281).

The same title is known in Tibetan and Sogdian. In the later Tibetan administrative documents from Xinjiang, it occurs as *cang khyu(r)* (also *cang khyir*) (Thomas 1934a: 68ff.; 1935: 72ff.), most likely because the Tibetans took over this existing title when conquering parts of the Tarim Basin in the 7th century AD (so Burrow in LKD: 88 s.v.). Based on the contexts in which it appears, Thomas plausibly argued that the functions of a *cang khyu(r)*

²⁸⁶ As not all the forms in the paradigm would have allowed for such a palatalisation, it may only have been subphonemic in this specific case. Cf. also the Manichaean Bactrian opt.3sg. *hyrzyh* ~ *υρζηιο, which shows no trace of palatalisation in the script.

²⁸⁷ Cf. CKD 318; 506; 582; 584; 732; 815; 842; 884.

correspond approximately to those of a *nagararakṣaka*- or *nāgaraka*- in the Indian tradition, “a city official who also acted as chief of the police”. He furthermore noted that in a Tibetan-Chinese bilingual Tib. *cang khyu(r)* is translated as Chin. *shǒu hùn* 守護 ‘protector’, and used for the person in charge of a *stūpa*. This translation does, however, not necessarily entail that the etymological meaning of *caṃkura* was ‘protector’. In a Sogdian document from Lóulán, the title under discussion occurs as *cnkwr*, presumably also a loan from Niya Prakrit (Sims-Williams 1996a: 49; 2020: 24; 2023: 75). This Sogdian attestation is unfortunately largely uninformative on the duties of a *caṃkura*.

According to Brough (1970b: 85 = 1996: 362), *caṃkura* would be one of the few Chinese loanwords in Niya Prakrit. He argued to identify *caṃkura* with the Chinese title *jiāng jūn* 將軍 ‘bring + army’ > ‘general, high-ranking military officer’, in (Early) Middle Chinese approximately *tsjang + kjun*.²⁸⁸

I find Brough’s idea not entirely convincing phonologically. (E)MC *tsjang + kjun* comes close to *caṃkura*, but some uncertainty remains whether this etymology can explain the *-r* in *caṃkura* satisfactorily. Aware of this issue, Brough referred to the well-attested substitution of a foreign final *-r* with *-n* in Chinese. This correspondence is, however, due to the lack of word-final *-r* in (Early) Middle Chinese, and not the same as Brough has to assume for Niya Prakrit.²⁸⁹ Perhaps more relevant in this regard is Starostin’s (1989: 399–401) proposal that final **-r* still existed in Old Chinese and that the word for ‘army’, i.e. *jūn* 軍, can be reconstructed as OC **[k]wər*. Yet, by the time of Middle Chinese, this **-r* had gone in the majority of dialects to *-n* (Baxter & Sagart 2014: 252–255; Hill 2019: 187). Accordingly, this phonological issue remains a weak point of Brough’s etymology, even if one could theoretically argue that *caṃkura* was borrowed from a more archaic form of Chinese where **-r* was preserved until the first centuries AD.

On the semantic side, there is hardly any evidence that *caṃkuras* played a significant role in the army of the Shanshan kingdom, as no *caṃkura* is mentioned among the military officers listed in CKD 478. Consequently, Brough (1970b: 85 = 1996: 362) had to speculate that a *caṃkura* was not so much “a general of the highest rank, but presumably a local military

²⁸⁸ Cf. also Høisæter (2020: 593), who wrongly attributes the etymology to Yoshida (1996: 70 fn. 3).

²⁸⁹ Unlike Chinese, Niya Prakrit lacks any relevant phonotactic constraints on *n* and *r*. One should also contrast the later borrowing of the same Chinese title into Sogdian/Turkic as *sanjun*, where the expected *-n* is found.

commandant". Further, if *caṃkura* comes from *jiāng jūn* 將軍, it is somewhat unexpected that Tib. *cang khyu(r)* is translated with Chin. *shǒu hùn* 守護 'protector' instead. All in all, I would therefore caution against Brough's etymology.

As *caṃkuras* appear to have a judicial rather than a military function (cf. supra), I deem it more likely that *caṃkura* should be compared with the Bactrian legal formula ζιανο κῑρ- 'to impose a penalty' < OIr. **ziyāni*- 'penalty, punishment' (e.g. Av. *ziiāni*; MP *zyān*) + *√*kar* 'to do' (BD II: 212). Based on this expression, it seems safe to reconstruct a corresponding nominal compound **ziyāni-kara-*, which would regularly yield Bactr. *ζιαγγαρο 'imposer of penalties' because of syncope of the **i* in between **n* and **k*. I propose that this hypothetical Bactrian title *ζιαγγαρο is the direct source of Niya Pkt. *caṃkura*:²⁹⁰ the interpretation of *caṃkura* as 'imposer of penalties' fits semantically well with their acting as judges in a lawsuit, and it also is not far removed from Thomas' proposal to draw a parallel between the functions of a *caṃkura* and a *nagararakṣaka-* / *nāgaraka-* 'chief of the police'.

How does *caṃkura* relate phonologically to *ζιαγγαρο? If one accepts the premise that **z* could be palatalised to Bactr. /*ž*/ in front of **i* (§2.2.4.3), ζιανο would stand for /*ž*(i)yānə/ and *ζιαγγαρο for /*ž*(i)yāṅgarə/. Since voiceless consonants became voiced after nasals in Niya Prakrit (§2.1.5), the sequence <ṃk> in *caṃkura* is one of the ways to write /ṅg/ in Kharoṣṭhī script, hence an exact correspondent of the cluster /ṅg/ in *ζιαγγαρο /*ž*(i)yāṅgarə/.

Two other substitutions require more discussion, viz. the apparent devoicing of Bactr. ζ- /*ž*/ to Niya *c-* and the rendering of Bactr. -αρ- /ar/ as Niya -ur-. Unfortunately, both are not exactly paralleled in one of the other (potential) Bactrian loanwords in Niya Prakrit.²⁹¹ Yet, I hope to demonstrate below that neither of them is so implausible as to present an insuperable obstacle against my etymology (see also §4.3.1; §4.3.28).

Concerning the initial *c-* in *caṃkura*, the first thing to note is that there is no exact counterpart in Niya Prakrit of the initial /*ž*/ in *ζιαγγαρο /*ž*(i)yāṅgarə/. There is, of course, a phoneme /*ž*/ in Niya Prakrit, but this only occurs in intervocalic position due to the lenition of OIA -*c-*, -*j-*, and -*ś-* (§2.1.2). Consequently, Bactr. ζ- /*ž*/ had to be approximated in one way or another. Given that Indic initial *j-* is rendered as MBactr. *ž-* in the case of *žmbwd'ng* 'worldly, earthly' < *žmbwd** ← *jambudvīpa-* (with adaptation) +

²⁹⁰ The syncope excludes donor languages other than Bactrian.

²⁹¹ For this reason, I did not include *caṃkura* among the plausible Bactrian loanwords collected in §3.2.2.

adjective suffix *-’ng* < **āna-ka-*, one may expect **ζιαγγαρο /ž(i)yāṅgarə/* to have been approximated as ***jaṃkura*. If this is true, the attested form *caṃkura* could be due to the occasional process of initial devoicing which also affected inherited words in Niya Prakrit, e.g. *ciyanae* ‘to live’ (CKD 703) from *√jiv*. Although it is still peculiar that only *caṃkura* is attested, the apparent substitution of Bactr. ζ- /ž/ with Niya *c-* is thus understandable from within Niya Prakrit (see also §4.3.28).

Finally, a few comments are to be made about the apparent rendering of Bactr. -αρ- /ar/ as Niya *-ur-*, which contrasts with the default substitution of Bactr. -α- /a/ with Niya *-a-*, including when before *-r-* (see §4.3.1). I do not have a conclusive explanation for this phonological peculiarity, but it reminds me of the spelling variation between Bactr. παρο- and πορο- < **pari-*, as in παρογατο next to πορογατο ‘observed’ < **pari-kašta-* and similar examples (on which cf. also Lazard, Grenet & de Lamberterie 1984: 221). In my view, this interchange between <α> and <ο> suggests that Bactr. -ρ- /r/ may have caused subphonemic rounding of a preceding **a*, a hypothesis which may also explain why, in contrast to πιδο- < **pati-*, **pari-* did not undergo *i*-umlaut to result in ***πιπο-*.²⁹² If acceptable, the same hypothesis may also account for the apparent substitution of Bactr. -αρ- /ar/ with Niya *-ur-* presupposed by my etymology of *caṃkura*. It should be admitted, however, that there is no evidence for a graphic alternation between <α> and <ο> in the case of the Bactrian outcome of **(-)kara-*.

To summarise, Brough’s idea to interpret Niya *caṃkura* as a loan from Chin. *jiāng jūn* 將軍 ‘general, high-ranking military officer’, (E)MC *tsjang* + *kjun*, faces phonological and semantic issues. Although these are insufficient to prove Brough wrong, it seems more plausible that *caṃkura* was borrowed from Bactr. **ζιαγγαρο /ž(i)yāṅgarə/* < **ziyāni-kara-* ‘imposer of penalties’ (cf. the attested phrase ζιανο κip-). This proposal requires two unparalleled but understandable substitutions, i.e. Bactr. ζ- /ž/ → Niya *c-* and Bactr. -αρ- /ar/ → Niya *-ur-*.

²⁹² The absence of *i*-umlaut in γαρο /garə/ ‘mountain’ < **gari-* (and αριαο ‘in Bactrian’ if from **arya-* with a short vowel + suffix -αο) could be explained in the same way. One may also compare Benvenuto and Bichlmeier’s idea (2022a: 100; cf. also 2022b: 25) that Bactr. ρ /r/ was phonetically realised “in a similar way to how it is pronounced in Standard English, *thus furthering any potential rounding*” (emph. mine).

37. *tim-* ‘to be concerned about, to be angry’

Attestations of the base form

GERV. *timidavo*: CKD 109; 152; 184; 499; 840; *timidavya*: CKD 91; *timitavya*: CKD 335; *dimidavo*: CKD 159; 288; 424

Superseding an earlier interpretation by Thomas (1934a: 64; 66 fn. 6), Burrow (LKD: 94f. s.v. *timitavya*) could prove that Niya *tim-*²⁹³ is a synonym of the phrasal verb *manyu kar-* ‘to be concerned about, to be angry’.

Finding a plausible etymology for this Niya verb is more complex. Skt. *tāmyati* ‘to be distressed, etc.’ would provide a semantically attractive etymon, but this derivation would, as conceded by Burrow, leave the vocalism of *tim-* unaccounted for.²⁹⁴ As another option, Burrow conceived of a connection with NP *tīmār* ‘care for somebody > worry, sorrow’. Since this Persian word lacks a convincing etymology itself (Hasandust 2015: 935), using it as an explanation for Niya *tim-* would, however, be a case of *obscurum per obscurius*.

I propose to derive *tim-* from a so far unattested Bactrian cognate of Plr. $\sqrt{tamH}$ ‘to faint, to be tired’, a verbal root continued in most Middle Iranian languages.²⁹⁵ In light of the parallel provided by κμ- /*kīm*/ ‘to want’ < **kāmaya-* (BD II: 223), the presumed Bactrian source of Niya *tim-* can be reconstructed as Bactr. $\sqrt{tim}$ - /*tīm*/ < **tāmya-*, the same *ya*-present as in Khot. *pātem-* ‘to confound’ < **pati-tāmya-* and Skt. *tāmyati* (cf. EDIV: 376; Emmerick in SGS: 83 reconstructs **pati-tāmaya-* as the etymon of *pātem-*).²⁹⁶

Semantically, my etymology hinges on the additional assumption that Bactr. $\sqrt{tim}$ - shared the same type of development from ‘to faint, to be tired’ to ‘to be concerned about, to be angry’ as Skt. *tāmyati*. Verifying this additional step will require an actual attestation of the hypothesised verb

²⁹³ I follow Burrow in assuming that the form with initial *t-* is original. The variant *dim-* can be the result of the frequent interchange between *t-* and *d-* in Niya Kharoṣṭhī (LKD: §§14f.).

²⁹⁴ Burrow’s suggestion that “we may have a special treatment of an original **tīmyeti*” does not carry conviction.

²⁹⁵ Cf. e.g. Parth. *tām-* ‘to choke’, Sogd. *ṭ’s’δ* ‘tired’, Khot. *ttāma-* ‘fatigue’, and the other forms cited in EDIV (376f.).

²⁹⁶ Since κμ- ‘to want’ is already attested in doc. xp, a text datable before 380 AD (SCBD: 82), the raising of **-ā-* to *-i-* /*ī*/ in front of **-m-* will have been sufficiently early. This sound change is moreover typical for Bactrian, meaning that if the etymology of Niya *tim-* proposed here is correct, one can exclude other donor languages.

* $\tau\iota\mu$ -, so this new etymology of Niya *tim*- has to be treated with caution for now.

38. *tomga*, a title

Attestations of the base form

DIR.SG. *tomga*: CKD 3 (2x); 11 (2x); 23; 28; 37 (2x); 42 (2x); 45 (2x); 46; 49 (2x); 72 (2x); 124; 138; 180; 189; 208; 224; 226; 236 (2x); 272; 375; 427; 451 (2x); 468 (2x); 470; 481 (2x); 516; 524 (2x); 540 (2x); 561 (2x); 568; 720; 729; 746; *tomgha*: CKD 78; 82; 85; 103; 115; 123; 131; 132; 137; 151; 216; 431 = 432 (2x); 571 (2x); 572; 587; 589; 590; 656; 820; 839; *togha*: CKD 436; 579; 589; 654; 880

GEN.SG. *tomgaṣa*: CKD 105

DIR.PL. *tomga*: CKD 357; 387; 796; *tomgha*: CKD 96 (9x); 622

INS.PL. *tomgehi*: CKD 165²⁹⁷

GEN.PL. *tomgana*: CKD 165; *tomghana*: CKD 387

Attestations as a PN

GEN.SG. *Tomgaṣa*: CKD 494

Compounds

DIR.SG. *sruvatomga*:²⁹⁸ CKD 509

DIR.PL. *survatomga*: CKD 524; *survatomge*: CKD 524

Officials carrying the title *tomga* are often mentioned together with *cojhbos* (CKD 3; 11; 23 *et passim*), and one of their duties may have been the transportation of goods and animals (CKD 165; 357; 431 = 432; 622; cf. also LKD: 95f. s.v.). In CKD 494, *tomga* is used as a name (gen.sg. *Tomgaṣa*).

In Thomas' view (1934b: 255; 1935: 52–54), *tomga* would be etymologically related to Tib. *stong dpon* 'chief of a thousand' (~ Skt. *sahasrapati*-). Yet, the latter title is best kept apart from *tomga*, as the

²⁹⁷ Based on a suggestion by Meng Xiaoqiang (Leiden), I propose that the unclear hapax *tommihi* (LKD: 96 s.v.) in CKD 165 is a misreading for ins.pl. *tomgehi*. A glance at the available images makes clear that the reading 𑀮 ge is preferable over 𑀮 mi because of the leftward orientation of the tail of the relevant akṣara (cf. also the gen.pl. *tomgana* in line 8 of the obverse). The resulting translation "Also in Peta-aṃana the arrears of last year's tax and the tax of this year is to be sent here all complete with the *tomgas* (*tomgehi*)."²⁹⁸ (after TKD: 32) is one other indication that *tomgas* were responsible for transportation (for which cf. *infra*).

²⁹⁸ On the compound *sruvatomga* (variant *surva*-), the first element of which is obscure, see TKD (99f.).

phonetic resemblance is only superficial, and their duties differ (cf. again LKD: 95f. s.v.).

Burrow (LKD: 96) more convincingly suggested that *tomga* is related to OIr. **tuwāna-ka-* ‘strong’ ← **√tauH* ‘to be able, strong’ (cf. e.g. MMP *tuwān* ‘mighty, powerful’ < OIr. **tuwāna-*; DMMP: 330; EDIV: 386f.).²⁹⁹ If this etymology is correct, the Niya cluster *-m̐g(h)-* /*ṃg/* presupposes that the **a* in between **n* and **k* in **tuwāna-ka-* underwent syncope. As Bactrian is the only known Middle Iranian language in which this type of syncope is regular,³⁰⁰ *tomga* would most likely be a loanword from an unattested Kuṣāṇa title **τ(o)οαγγο* /*t(u)wāṃgə*/ < **tuwāna-ka-*.³⁰¹

Building further on a suggestion by Pinault (*apud* Ching & Ogihara 2012: 92 with fn. 28), I propose that once this hypothesised Bactrian title was borrowed by Niya Prakrit, it spread to other languages of the region. One piece of evidence for this hypothesis is the Tocharian B PN *Tonkā* (Ot.12 a9; see Ching & Ogihara 2012: 81; 83 and DoT: 327).³⁰² Another potential witness is OT *toṇa* ‘hero, outstanding warrior’, a word also used as a personal name and a title. *toṇa*, which already occurs in the Kül Tegin and Bilge Khagan inscriptions (dated to respectively 732 and 735 AD),³⁰³ lacks an inner-Turkic etymology and is probably a loanword (Clauson 1972: 515; cf. also HWA: 731). If indeed connected to Niya *tomga*, its meaning ‘hero, outstanding warrior’ would find a straightforward explanation in Burrow’s derivation of *tomga* from **tuwāna-ka-* ‘strong’.³⁰⁴

²⁹⁹ Bailey’s (1982: 98 n. 7) alternative suggestion to derive Niya *tomga* from the root **√tauṣ* ‘to (re)pay, pay back, expiate’ (EDIV: 388) does not carry conviction, as the nominal formation **tauga-* continued in Khwar. *twy* and Bactr. *τωγ(γ)ο* (BD II: 270) refers to the tax paid and not to the person to whom taxes are paid.

³⁰⁰ Contrast e.g. *-ṃγγο* /*ēṃgə*/ (later *-γγο* /*īṃgə*/), the Bactrian outcome of the material suffix **-aina-ka-*, with its cognates Sogd. *-ynyy* /*ēnē*/, Khot. *-īnaa-*, and MP/Parth. *-ēnag* (Degener 1989: 133; BD II: 213).

³⁰¹ This reconstructed form would regularly result in Niya *tomga* with the default substitution of *-wā-* with *-o-* (§4.3.1).

³⁰² It remains in doubt whether the Tocharian A female name *Tonkitsā* is also connected; cf. DTTA (219).

³⁰³ Cf. *toṇa* : *teg(i)n* ‘prince Toṇa’ in line 7 of the north side of Kül Tegin and line 31 of the east side of Bilge Khagan. See recently Rykin & Telitsin (2020: 295 with fnn. 60f.).

³⁰⁴ *Pace* Bailey (KT IV: 34; DKS: 219), there is no Khotanese evidence to consider. See Zhang (2016: 122), a reference I owe to Federico Dragoni.

Given the contacts with Kuča reported in the Niya documents (Høisæter 2020: 367–369), TB *Toṅkā* potentially represents a direct borrowing from Niya *tomga*. As *Toṅkā* is attested only once as a personal name, it cannot be decided whether it was also used as an official title in Tocharian; this seems, however, conceivable.

Subsequently, Old Turkic may have borrowed the word under review as *toṅa*. At the time of the first Turkic qaghanate (552–603 AD), there probably was already contact between the (northern part of) Tarim Basin and the Turkic populations in the steppes northeast of Turfan. This contact is, for instance, testified by the spread of the Brāhmī script to the Mongolian steppes witnessed by the inscriptions from Bugut (584–587 AD) and Khüis Tolgoi (604–620 AD). Independent of one's idea about the language used in these inscriptions (Maue 2018; 2019; Vovin 2018; 2019), the script most likely spread to Mongolia from Turfan, and the same could apply to official titles.

Thereupon, the word can, together with the various Turkic populations, have spread over a large area of the Eurasian steppes. By the second half of the 8th century, OT *toṅa* must have been in use in the western part of Inner Asia since in the Bactrian doc. Y, datable to 771/772 AD (SCBD: 84), OT *toṅa* is rendered as τογγαυο (cf. BD II: 222; 275; BPN: no. 211).³⁰⁵

To sum up, if the etymological and historical scenario suggested above is correct, this means that a Kuṣāṇa Bactrian title *τ(ο)οαγγο /t(u)wāṅgə/ was borrowed at the beginning of the first millennium into Niya Prakrit as *tomga*. Once adopted in Niya Prakrit, the title may have become current also in the north of the Tarim Basin, as suggested by the Tocharian B PN *Toṅkā*. In the form *toṅa*, the title could subsequently spread further to the Turkic groups on the steppes before eventually being reborrowed into Bactrian as τογγαυο.

39. *nihala* 'settlement, agreement'

Attestations of the base form

DIR.SG. *nihala*: CKD 788

³⁰⁵ An additional witness to this spread is the PN *twṅk' rsl'n* /toṅa arslan/ in a Sogdian administrative document from the 9th–10th century (Pelliot Chinois 3134 ll. 11; 24; cf. Lurje 2010: no. 1260; Sims-Williams & Hamilton 2015: 28f.; 109).

The lexeme *nihala* is a hapax from CKD 788, a document registering the divorce between a man Caṃpira and his wife Paṃcapriya. The relevant context is cited below:

(3.22) CKD 788 under-tablet obverse 7–9

*edaṣa*³⁰⁶ *stri Paṃcapriyae Caṃpiraṣa vaṃti nihala krita tena vidhanena ede Caṃpira Paṃcapriyae ca priti[ṣehe]na sarajitaṃti*

“His wife Paṃcapriya made a *nihala* with Caṃpira. In this way, this Caṃpira and Paṃcapriya came to an agreement in love and affection.”
(tr. mine).

In her edition of this text, Wu (2020: 153–155) translates *nihala krita* as “was expelled”, maintaining this verb phrase to correspond to an OIA *cvi*-construction *niṣkalī* + $\sqrt{kr}$ ‘to expel’. This interpretation is, apart from resulting in an illogical sequence of events, questionable on phonological grounds. The corresponding verb *niṣ* + $\sqrt{kal}$ ‘to drive out’ yields Niya *nikhal-* with a geminate /kk^h/ (LKD: 101 s.v.; CDIAL: no. 7484), and a subsequent development to ***nihal-* would be hard to explain.

Given that Caṃpira and Paṃcapriya eventually agree on a divorce by mutual consent, it would make more sense if the sentence with *nihala* meant something like “his wife Paṃcapriya made a settlement with Caṃpira”.³⁰⁷

This translation can now be strengthened with a Bactrian etymology for *nihala*. In lines 19–20 of the Rabatak inscription, the opt.pres.3sg. $\nu\alpha\alpha\lambda\iota\omicron$ points to a present stem $\nu\alpha\alpha\lambda-$, whose preterite is attested as $\nu\alpha\alpha\lambda\tau\omicron$ /*nəhāštə*/ (BD II: 239). This verb derives, with Bactrian’s typical lambdacism, from **ni-šādaya-*, pret. **ni-šāšta-* < **ni-šāsta-* and means ‘to fix, to settle, to pacify’ < **ni* + **√had* ‘to sit down’ (EDIV: 125f.).³⁰⁸ Intervocalic /h/ is not written in the Rabatak inscription (Sims-Williams 2008c: 60), so the basic form of the present stem can be set up as **νααλ-* /*nəhāl-*. In

³⁰⁶ I adopt Lin’s (1990: 284) reading *edaṣa*, gen.sg. of the demonstrative pronoun, instead of Wu’s (2020: 151; 154) new reading *eda ṣā*. The form of the akṣara does not necessitate the assumption of a length stroke and Wu’s reading results in a syntactically awkward sentence. In line 5 of the cover-tablet, Lin’s reading *siyaṃti* is also preferable over Wu’s *siyati*.

³⁰⁷ If this interpretation is correct, *nihala* would be a synonym of *samaga* < OIA *samaya-* ‘settlement, agreement’ in CKD 588 under-tablet obverse 3f.: *ahuno Pitga divira Suḡaṃtaṣa ca saṃti samaga kritaṃti sarajitaṃti* “Now Pitga and the scribe Suḡaṃta have made a settlement (*samaga kritaṃti*); they have agreed.” (TKD: 125).

³⁰⁸ On the -v- in $\nu\alpha\alpha\lambda\tau\omicron$, see now Michetti (2024: 175–177).

Bactrian documents from before 380 AD, there are moreover some words in which the vowel **i* in the preverb **ni-* has not yet been weakened to a schwa (SCBD: 63; cf. also §3.2.2 s.v. *nihamñ-*).³⁰⁹ Consequently, **ναυαλ-* /*nəhāl-*/ may in turn come from **νιυαλ-* /*nihāl-*/, pret. **νιυαλτο* /*nihāštə*/.

Against this background, my suggestion is that Niya *nihala* is borrowed from a Bactrian noun **νιυαλο* /*nihālə*/ ‘settlement, agreement’ derived from the verb under discussion. A seemingly later variant of **νιυαλο*, i.e. *ναυαλο* /*nəhālə*/, is attested in Bactrian (Tt 12; 14; 19), perhaps denoting a type of text (BD II: 239); and Sims-Williams (2008c: 66) has cautiously suggested that Bactr. **νιυαλο* / *ναυαλο* may also be the source of Pers. *nihāl* ‘young plant, shoot, sucker, transplanted cutting; cushion, mattress’ and of Sogd. *nx''δδ* ‘cushion’ (translating Parth. *brz*).³¹⁰

One final point on the phonology: in the case of some other Bactrian loanwords into Niya Prakrit, one can observe a tendency for intervocalic *h* to be lost with subsequent contraction of the vowels (see §4.3.23). With *nihala*, the morpheme boundary between *ni-* and *-hala* may have blocked such contraction. For this, one may compare Niya *nihamñ-* ‘to deposit, to put down’ ← **νιυανζ-* /*nihanz-*/ < **ni-θanʒa-* (§3.2.2 s.v.).

In short, this new etymology for *nihala* can be said to be formally and semantically straightforward. Nevertheless, the meaning assigned to the hapax *nihala* is at least partially based on etymology. The threshold for inclusion among the plausible etymologies of §3.2.2 has accordingly not been met.

40. *paḱe* ‘allotment, share’

Attestations of the base form

DIR.SG. *paḱe*:³¹¹ CKD 66 (3x); CKD 75 (54x); 79 (19x); 87 (34x); 95 (8x); 116 (5x); 191 (2x); 204 (12x); 242 (12x); 313 (4x); 398 (2x); 446 (9x); 449 (3x); 453: 462; 619 (8x); *phaḱe*: CKD 204 (9x)

ABL.SG. *paḱayade*: CKD 608

³⁰⁹ Examples include *νιβαγο* /*nivāgə*/ next to *ναβαγο* /*nəvāgə*/ ‘pawn, pledge’ < **ni-pāka-* and the aforementioned *νιβαλμο* /*nišālmə*/ besides *ναβαλμο*; *νοβαλμο* /*nəšālmə*/ ‘seat, throne’ < **ni-šadma(n)-*.

³¹⁰ For a further cognate, cf. Parth. *nš'l* ‘draff, dregs, lees (in wine)’, on which see Durkin-Meisterernst (2013: 98f.).

³¹¹ Whenever it is ambiguous whether *paḱe* is dir.sg. or dir.pl., I list the attestation under dir.sg.

DIR.PL. *paḳe*: CKD 66; 147; 313; 614 (2x); *paṃḳe*: CKD 68; *paḳeyu*: CKD 75 (2x); 87; 116 (2x); 619

The Niya word *paḳe* ‘allotment, share’ has been compared since Burrow (LKD: 102 s.v.) with TB *pāke* ‘parcel, share’, itself most likely a loanword from OIr. **bāga-* (see now Bernard 2023: 41–43). This etymology fails to account for the consistent spelling of *paḳe* with <ḳa>, which otherwise represents the combination of a sibilant and *k* (cf. §2.1.6).

The spelling with <ḳa> would, as I argue in more detail in Schoubben (2021: 52f.), be explained more easily when deriving *paḳe* from an unattested Bactrian noun **παῖκο* /pəṣkə/ < **pišta-ka-*, the verbal adj. of **√paiš*. In most Iranian languages, the outcomes of **√paiš* mean ‘to crush, to grind’ (EDIV: 292f.). Yet, in Pashto, the probably related root *peḡ-* means ‘to cut’ (EDP: 61), so if we are allowed to postulate the same semantic development for Bactrian, **παῖκο* could have developed a meaning ‘share’ out of ‘that which is cut’.³¹²

Phonologically, **pišta-ka-* would regularly result in **παῖκο* /pəṣkə/ due to (i) a change of **-i-* > *-α-* /ə/ in front of **št* as in e.g. *κισατο* ‘youngest’ < **kasišta-* (BD II: 224); (ii) syncope of the unaccented medial **a* (SFBG: 60f.); and (iii) a simplification of **-štk-* to *-ḱk-* /ṣk/ as in *υαῖκο* ‘pupil’ < **hāwišta-ka-* (BD II: 272; SFBG: 50). This combination of sound changes moreover exclude the possibility that *paḳe* would have been borrowed from another Iranian language.

Given that Niya *a* was most likely pronounced as a schwa (cf. §2.1.1), Bactr. **παῖκο* /pəṣkə/ corresponds sound for sound with Niya *paḳe*. The final *-e* in *paḳe* may be accounted for by assuming that *paḳe* was borrowed from a dir.pl. **παῖκε* ‘shares’, as argued in §4.4.3.

The form *paḳeyu* is a separate issue. This is a plural or possibly a collective which always occurs at the beginning or end of lists of allotments.³¹³

³¹² The reconstruction of **παῖκο* enables us to explain at the same time NP *pišk* ‘lot, share’ and Kurd. *pəšk* ‘idem’ as Bactrian loanwords (for earlier ideas on the etymology of these words, cf. Hasandust 2015: 702). Contrary to what I wrote in Schoubben (2021: 53 fn. 31), I am no longer sure that MP *pistag* ‘pistachio’ and related forms < **pištaka-* are a direct cognate of **παῖκο*. As pointed out by Rasmus Björn (p.c.), pistachios do not need to be crushed to eat them, as one only has to peel off their outer skin. In view of pistachios being native to Central Asia (cf. Spengler 2019: 225f.), Björn reasonably suggests that the word for pistachio is instead a BMAC word.

³¹³ *paḳeyu* can co-occur with numerals higher than one (CKD 87; 116); the dir.pl. *ede* ‘these’ (CKD 87; 116); and plural verb forms (CKD 116; 619).

According to Burrow, the ending *-u* in *paḳeyu* would be comparable to the Tocharian A plural in *-u* found in words such as *cmolu* ‘births’ ← *cmol* or *kālmeyu* ‘directions’ ← *kālyme* (TG: 93). Burrow’s comparison is not compelling, though, seeing that TA *-u* is an extremely rare and unproductive plural ending—not to speak of the fact that *paḳe(yu)* is probably not a Tocharian word in the first place (cf. also §6.4.5).

That said, I am myself unable to explain the morphology of *paḳeyu*, and this point, combined with the semantic shift of PIr. **√paiš* from ‘to crush, to grind’ to ‘to cut’ required by my Bactrian etymology, prevents me from including *paḳe* amongst the plausible etymologies of §3.2.2.

41. *picav-* ‘to hand over’

Attestations of the base form

PRES.2SG. *picavesi*: CKD 553

PRES.2PL. *picavetu*: CKD 439

PRET.1SG. *picavidemi*: CKD 152; 272; 519

PRET.2SG. *picavidesi*: CKD 552

PRET.3SG. *picavita*: CKD 889; *picavida*: CKD 16; 42; 506 (2x)

PRET.2PL. *picavidetha*: CKD 375

PRET.3PL. *picavitamti*: CKD 322

FUT.3SG. *picaviṣyati*: CKD 735

PST.PTCP. *picavitaḡa*: CKD 248

GERV. *picavitavo*: CKD 296; 403; *picavitavya*: CKD 788; *picavidavo*: CKD 46; 143; 159; 198; 235; 366; 439; 440; 532; 546; 562; 706; 719; 734; 735; *picavidavya*: CKD 46; 310; 439; 545; 703

INF. *picavaṃnae*: CKD 152; 375; 506

picavi///: CKD 292

The contexts in which *picav-* occurs make it evident that the general meaning of this verb is ‘to hand over’ (LKD: 105 s.v.). Note, for instance, (3.23), where the gen.sg. *Caṣṣgeyaṣa* (PN) fulfils the syntactic role of the recipient.

(3.23) CKD 532 cover-tablet reverse 2–4

*yatra eda manuṣa Vusmeka karmavidae siyati ṣadha parikrayena
Caṣṣgeyaṣa picavidavo ṣadha śramanehi*

“Wherever this man Vusmeka has been employed, he is to be handed over (*picavidavo*) to *Caṣṣgeya* along with the hire, along with the monks.” (TKD: 105).

The etymologies previously proposed for this word are unconvincing. Boyer (1905: 467; cf. also KD: 355; Thomas 1934a: 66 fn. 9) compared *picav-* to the

OIA causative of *prati* + $\sqrt{r}$, i.e. *pratyarpayati* ‘to give back, to restore’. Yet, this etymology is to be rejected for phonological reasons (cf. LKD: 105 s.v. *pace* Schlosser 2022: 187f.):³¹⁴ a derivation of *picav-* from *pratyarp-* would not correspond to the normal development of *prati-* to *paṭi-* / *paḍi-* / *paḍi-* (see also §3.2.2 s.v. *picara*), and there is no parallel for a change from OIA *-rp-* to Niya *-v-*.

Burrow (LKD: 105 s.v.) briefly considered deriving *picav-* from a reconstructed OIA verb **pi-cyāvayati* ‘to cause to go to > to hand over’ instead. This somewhat hypothetical solution is hampered by the lack of clear evidence in favour of a preverb **pi-*.³¹⁵

In my view, *picav-* is rather a Bactrian loanword, possibly from **πιδοῖαο-* /*pidšaw-* ‘to go towards > to hand over’ from OIr. **pati-čyawa-*.³¹⁶ **πιδοῖαο-* is admittedly not attested as such in Bactrian, but the base verb *ῖαο-* /*šaw-* ‘to go’ < **čyawa-* frequently occurs (BD II: 283), and Khot. *patāts-* ‘to let go, to abandon’ would provide a parallel for the combination of the root $\sqrt{čyaw}$ with the preverb **pati-* (SGS: 67; EDIV: 41).

The meaning of **πιδοῖαο-* would be different from that of Khot. *patāts-*. Yet, a semantic development from ‘to go to’ to ‘to hand over’ is understandable because handing over an object or a person implies a movement in the recipient’s direction. The semantics would be even more straightforward when we could reconstruct a causative **pati-čyāwaya-* ‘to cause to go towards > to hand over’ of the same type as Av. 3sg. *frašāuuaiieiti* ‘to send to’ < **fra-čyāwaya-ti*. Since, however, Bactrian **ā* is palatalised to *ṛ* /*ē*/ when followed by **y* (e.g. *ληρ-* /*lē-* ‘to have, hold’ < **dāraya-*), **pati-čyāwaya-* may have yielded **πιδοῖῃο-* /*pidšēw-* instead. In this case,

³¹⁴ Semantically, the comparison with *pratyarpayati* would be fine, as this verb can also mean ‘to deliver’ (cf. Thomas 1936a: 793 *contra* LKD: 105 s.v.).

³¹⁵ In LKD (§20; 106 s.v.), Burrow proposed to derive *pivaṃṇaṃṇae* in CKD 581 from **pi-bandhanāya*, thus with this same preverb. Yet, this form is more likely a dittography for *pivaṃṇae* ‘to drink’ (TKD: 150).

³¹⁶ The *i*-umlaut undergone by the preverb **pati-* is only found in Bactrian, thereby excluding *picav-* to have been borrowed from another Iranian language. For the sound substitutions Bactr. *-ḍoḥ-* /*dš-* → Niya *-c-* and Bactr. *-o-* /*w-* → Niya *-v-*, see respectively §4.3.18 and §4.3.22. The adoption of *picav-* into the Niya Prakrit conjugation class in *-eti* is discussed in §4.4.4.

the phonological comparison with Niya *picav-* would no longer be as neat, so I still prefer to reconstruct *πιδοῖῃο- < *pati-čyawa- instead.³¹⁷

To sum up, the reconstruction of a Bactrian verb *πιδοῖῃο- < *pati-čyawa- would provide Niya *picav-* ‘to hand over’ with a semantically and formally plausible source. As only the base verb ῃο- ‘to go’ is attested in Bactrian, and one has to postulate a semantic shift from ‘to go towards’ to ‘to hand over’, one still needs to exercise some caution.

42. *piro* ‘military post, fort’

Attestations of the base form

DIR.SG. *piro*: CKD 639 (2x); *pirova*: CKD 120; 376; *piroya*: CKD 188; 246; 310; 333

INS.SG. *pirovena*: CKD 665

GEN.SG. *pirovaša*: CKD 639

LOC.SG. *pirovami*: CKD 157 (2x)

Derivatives

ADJ. *pirovi* ‘of the fort’: CKD 639

Compounds

LOC.SG. *Parconapirovaṃmi* ‘Parcona fort’: CKD 122

DIR.SG. *pirovala* ‘fort keeper’: CKD 154; *piroyala*: CKD 765

DIR.PL. *piropa(*la)ye* ‘idem’: CKD 188

A close reading of all instances of the word *piro* suggests that this word refers to a ‘military post’ or ‘fort’ at the boundaries of the Shanshan kingdom (cf. Ching 2017: 27 fn. 32 and Høisæter 2020: 424–434 with ex.).³¹⁸

piro is not the only attested dir.sg. form of this word; there are also the longer variants *piroya* (4x) and *pirova* (2x, cf. further ins.sg. *pirovena*; gen.sg. *pirovaša*; loc.sg. *pirova(ṃ)mi*). Most likely, *piroya* / *pirova* was shortened to *piro* by sound law, parallel to the development of word-final *-iya* > *-i* seen in words such as *muli* ‘price’ < *muliya* < OIA *mūlya-* (cf. LKD: §9).

Semantically attractive comparanda for *piro* are Khot. *prūva-* ‘military post, fort’; MSogd. *ptrwp* (in Sogdian script *ptr’wp*) ‘fort, castle’; and Oss. I. *byru*, D. *buru* ‘enclosure, castle’ (cf. Bailey 1951a: 920–926; DKS: 256; 1982:

³¹⁷ Occasional transitive uses of ῃο- < *čyawa- (see BD II: 283 for the meanings ‘to use’ and ‘to spend’) also suggest that there is no need to reconstruct a causative for *πιδοῖῃο- to mean ‘to hand over’.

³¹⁸ The compound *pirovala* (and variants) ‘fort keeper’ can be explained as an inner-Indic formation, consisting of *piro* ‘military post, fort’ and *-vala-* < Skt. *-pāla-* ‘protector’.

28; 46).³¹⁹ The Sogdian form unambiguously points to a reconstruction **pati-raupa-*, but Sims-Williams (2011c: 194) observed that Khot. *prūva-* cannot be directly derived from **pati-raupa-*, because in Khotanese **patir-* yields first *patār-* and later *pār-* (cf. SGS: 236). The Ossetic forms with their initial *b-* must be loanwords too, given that OIr. **p-* develops into Oss. *f-* and not ***b-* (cf. Weber 1997: 36).

Based on these observations, Sims-Williams plausibly suggested that Niya *piro* < earlier *pirova* / *piroya*, Khot. *prūva-*, and Oss. I. *byru*, D. *buru* are all borrowed from Bactrian (in the case of Ossetic necessarily via a no longer identifiable intermediary language). **pati-raupa-* is expected to yield Bactr. **πιδρωβο* /*pidrōvə*/ with the characteristically Bactrian change of **pati-* to *πιδ(ο)-*, whence a simplified form **πιρωβο* /*pirōvə*/ would need to be assumed.³²⁰

Unfortunately, there is no good parallel for the simplification of Bactr. /*dr*/ to /*r*/ Sims-Williams needs to hypothesise. In his article, Sims-Williams compared the variation between Bactr. *πιδρτο* and *πιδορττο* ‘ancestral estate’, but the more recent discovery of Bactr. obl.pl. *πιδρττειγανο* /*pihrištīgānə*/ ‘belonging to the father’ has made it clear that instead of being a more archaic form than *πιδρτο*, *πιδορττο* may have been analogically influenced by dir.sg. *πιδα* ‘father’, later *πιδο* (see Sims-Williams 2015: 259 with fn. 16).

It is due to this lack of a good parallel for the postulated simplification of **πιδρωβο* /*pidrōvə*/ to **πιρωβο* /*pirōvə*/ that I classify this etymology one category below the plausible etymologies.

43. *badho* ‘pledge, mortgage’

Attestations of the base form

DIR.SG. *badho*: CKD 587; 590; 591; 592; *baṃdhava*: CKD 473 (3x); 492; *baṃdhova*: CKD 678; *baṃthova*: CKD 569³²¹

³¹⁹ There have been other etymological proposals for Niya *piro*, i.e. from a thematicised cognate **pṛ̥θwa-ka-* of Av. *pəṛətu-* ‘bridge’ and MP *pwhl* /*puhl*/ ‘idem’ (Burrow 1935a: 784f.; LKD: 105f. s.v.) or from Skt. *prapā-* ‘cistern, well’ (Thomas 1945: 536–539). As these etymologies are no longer accepted in current scholarship (cf. Weber 1997: 36), I will not discuss them.

³²⁰ There seems to be no good reason why ***pitro* or ***pidro* would have been simplified to the attested *piro* within Prakrit.

³²¹ In CKD 331, *ba vothavidavo* is probably a misspelled form of the word under discussion.

The various forms of the word *badho* ‘pledge, mortgage’ are always used as a complement of either *thav-* ‘to place, to put’ (CKD 473; 492; 569; 591; 678) or *de(na)-* ‘to give’ (CKD 587; 590; 592); in both cases, the meaning of the verbal phrase is ‘to pledge’ or ‘to mortgage’ (see LKD: 108f. s.v.).

The etymological analysis of this legal term has remained unclear. Burrow (LKD: 109) observed that OIA *bāndhavaka-* would be a phonologically plausible source, but given that *bāndhavaka-* only means ‘kinsman’, this etymology is semantically not quite attractive (as Burrow duly admitted). A second option which Burrow considered was to compare *badho* (and variants) with OIA *bandha-* ‘bond’ or *baddha-* ‘bound’ (cf. also Lüders 1940b: 46 who opts for acc.sg. *baddham*). Although semantically a better match, this etymology is to be rejected as well since it would not account for the variation between *-o(va)* and *-ava* at the end of the word. All in all, we may thus want to consider the possibility that Niya Prakrit *badho* is rather a loanword, an option also favoured by its final *-o* (cf. §3.2.3 s.v. *aco*).

My proposal is that *badho* derives from Bactr. *βαμδαοο /bāmdāwə/ ‘pledge, mortgage’. This reconstructed form would be an abstract noun in *-αο* /āwə/ (BD II: 193), derived from a past stem *βαμδο /bāmdə/ ‘loaned’ < **apā-mita-*, which is indirectly attested by Bactr. βαμδδιγο /bāmddigə/ ‘loan’ < **apā-mita-ka-* (BD II: 201).³²² The same combination of a past stem with the abstract suffix *-αο* is found in MBactr. βwrđ’w ‘suffering’ ← *βwrđ* ~ βopδο /vurdə/ < **bṛta-* ‘carried’ and wmwrt’w ‘destruction’ ← *wmwrt* ~ *οιμορτο (or the like) /wimurtə/ < **wi-mṛšta-* ‘destroyed’ (Sims-Williams 2009a: 262; 264).

On top of fitting well semantically, the derivation of *badho* from *βαμδαοο /bāmdāwə/ is also plausible phonologically: Bactrian final *-αο* /āwə/ would nicely account for the variation within Niya Prakrit between *-ava* and *-o(va)* (cf. also §4.3.1) and Bactr. *-μδ-* /md/ is a cluster which lacks an exact counterpart in Niya Prakrit, so *-ṁth-* (in *baṁthova*) and *-(ṁ)dh-* (in *badho*; *baṁdhava*; *baṁdhova*) would be sufficiently close approximations.³²³

The main point of concern with my etymology is that it requires procopé to have happened before the change of **b* from OIr. **p* to Bactr. /v/ (cf.

³²² βαμδδιγο exemplifies the gemination of δ /d/ in front of a palatal vowel typical of later Bactrian texts (BD II: 38).

³²³ Cf. also the rendering of Bactr. *-μβ-* /mb/ as Niya *-ṁb-*, if the title *ambukaya* is indeed a loanword from Bactr. αμβουκαο (§3.2.3 s.v.). The aspiration seen in *-ṁth-*/*-(ṁ)dh-* could be unetymological (cf. §2.1.3), in this particular case perhaps caused by a folk etymology with derivatives of √*bandh* ‘to bind’.

§2.2.3.3 and §4.3.9). Otherwise, *βαμδαοο would have been pronounced as /vāmdāwə/, making the phonetic comparison with Niya *badho* (and variants) less neat. Because of this uncertainty, *badho* does not meet the threshold to be included among the plausible etymologies in §3.2.2.

44. *muṣḍhaṣi*, woman exchanged within exogamous marriage practices

Attestations of the base form

DIR.SG. *muṣḍhaṣi*: CKD 573

The hapax *muṣḍhaṣi* (CKD 573) occurs in the context of exogamous marriage practices whereby two women from different families are exchanged (cf. LKD: 115–117 s.v. *lote*; Padwa 2007: 233). In contrast to the contexts in which the closely related term *mukāṣi* occurs (see §3.7.2 s.v.), the women mentioned in CKD 573 are not exchanged simultaneously, and one is seen as “more valuable” than the other.

Proceeding from this observation, I proposed in Schoubben (2021: 55f.) to interpret *muṣḍhaṣi* as a loan from an archaic Bactrian compound *μoζδοϑι /muždəšī/ < **mižda-strī* ‘reward woman’. Since *muṣḍhaṣi* is attested only once, this etymological proposal cannot be more than a hypothesis for the time being. Yet, it would at least account for the fact that a *muṣḍhaṣi* is seen as “more valuable” than a *mukāṣi*; and Bactr. μoζδο* ‘reward’ is indirectly attested in the PNs βοδδομoζδο ‘reward (bestowed by) the Buddha’ and λαδομoζδο ‘of whom the reward has been given’ (BPN: nos. 93; 228).³²⁴

According to Nicholas Sims-Williams (p.c.), one may rather want to derive *muṣḍhaṣi* from Bactr. *μoζδοϑι < **miždušī* ‘gnädige (Frau)’. In contrast to **mižda-strī*, the pre-form **miždušī* is easily paralleled: the Elamite divine name *Mi-iš-du-ši(-iš)* is clearly a rendering of an Old Iranian nom.fem.sg. **miždušīs* (Iranica: §4.1.4), and Khot. *mājṣai* ‘woman’ can be etymologised as **miždušakī* (Sims-Williams *apud* SVK III: 123f.). Because of these cognates, I would indeed be happy to accept Sims-Williams’ etymology. Since, however,

³²⁴ Bactr. μoζδο* ‘reward’ may also be attested as an independent word in the meaning ‘spoils’ in NPlate 4, but this is not certain (see Sims-Williams 2015: 261). If my etymology of Niya *muṣḍhaṣi* is correct, the elements pointing to Bactrian as the donor language are the change of *-str- > -p- /š/ (SFBG: 52) and the colouring of *-i- to -o- /u/ in μoζδο* < **mižda*-. Regarding the latter, it seems most likely that *-i- first developed to *-ə- in front of *-žd- parallel to the weakening of *-i- to *-ə- in front of *-št- as in κισατο ‘youngest’ < **kasišta*- before being coloured to -o- /u/ because of the preceding *m-.

muṣḍhaṣi is a technical term which must have a more specific meaning than ‘gracious woman’ or the like (cf. *supra*), I still would not entirely exclude the derivation from **mižda-strī*- ‘reward woman’.

45. *leṣ-* ‘to dispatch, to conduct’

Attestations of the base form

PRET.3SG. *liṣita*: CKD 52

PRET.1PL. *leṣitama*: CKD 392

FUT.3SG. *leṣiṣyati*: CKD 624

FUT.3PL. *leṣiṣamti*: CKD 367

The etymological analysis of the Niya verb *leṣ-* ‘to dispatch, to conduct’, phonologically probably /lēz/ (see §2.1.2), has not yet been conclusively settled. Thomas (1934a: 51 fn. 1), followed in this by Burrow (LKD: 115 s.v.), assumed a connection with the OIA root $\sqrt{\text{śliṣ}}$ ‘to embrace, to cling to’. To account for the meaning of the Niya verb, they hypothesised *leṣ-* to continue the causative *śleṣayati*, arguing for a semantic development from ‘to bring into contact with’ to ‘to conduct’. This etymology results in a phonological problem since one expects OIA *śl-* to yield Gandh. *śil-* and not *l-*; compare, for instance, the ins.sg. *śilogano* ‘verse’ from OIA *śloka-* in Av^{L6} recto 25 (Lenz 2003: 265) and the parallel development in Pāli *siloka-* and Pkt. *siloya-* (and minor variants, cf. CDIAL: no. 12748). A different etymological proposal for *leṣ-* thus seems in order.

I cautiously propose that *leṣ-* is a loanword from a so far unattested Bactrian cognate of Psht. *leḡ-* ‘to dispatch, to send, to load a beast’ < **darzaya-* to the root * $\sqrt{\text{darz}}$ ‘to attach, to fasten, to load, to sew’ (EDP: 42f.; EDIV: 62f.).³²⁵

At a Pre-Bactrian stage, lambdacism, syncope, and the umlaut of *-a- to *-i- caused by a following *-y- would have changed **darzaya-* into **lirzya-* (cf. SFBG: 35f.; 60f.; 65), out of which Bactr. * $\lambda\iota\zeta-$ /liž/ may have developed eventually (cf. *infra*). * $\lambda\iota\zeta-$ /liž/ would be a possible source of *leṣ-* given that -i- and -e- can occasionally interchange in Niya Prakrit, including in the verb under discussion (cf. pret.3sg. *liṣita* in CKD 52 next to the forms with -e-). It should be noted, though, that this interchange is rare in Niya

³²⁵ The pronunciation of the letter *ḡ* differs among the various dialects of Pashto. In southern dialects, *ḡ* is normally pronounced as a voiced sibilant (EDP: viif.). Some of the attested cognates of Psht. *leḡ-* are Av. *darəzaiia-* ‘to attach’, Khot. *dalś-* ‘to make firm, to fasten, to load’, and Khwar. *ḍžy-* ‘to (up)load’.

Prakrit (cf. LKD: §§1; 3), and that in the case of other loanwords, Bactr. -l- /ĩ/ is rendered quite consistently with Niya -i-, not with *-e- (cf. §4.3.5).

The other option would be to reconstruct a Bactrian form *ληζ- /lēž/ as the source of Niya *leš-*. *ληζ- /lēž/ would probably not be the regular outcome of **darzaya-*. Still, one could assume that *ληζ- /liž/ < **darzaya-* was remade into *ληζ- /lēž/ due to analogy with the similarly sounding and semantically comparable ληρ- ‘to have, to hold, etc.’ < **dāraya-* (BD II: 226f.); or that an earlier analogy with **dāraya-* caused **darzaya-* to be remade into **dārzaya-*, whence Bactr. *ληζ- /lēž/ with umlaut of **ā* to -η- /ē/ (SFBG: 65). Analogical influence from ληρ- < **dāraya-* would indeed be plausible, given that ληρ- has a suppletive preterite stem λριγδο < **dṛxta-* to the root *√*dra(n)j* ‘to fix, to fasten, to hold’, and the latter has been thought to be etymologically related to *√*darz* ‘to attach, to fasten, to load, to sew’ (cf. EWAia I: 706f.; EDIV: 62f.; 76).

Irrespective of whether one opts for *ληζ- /liž/ or for *ληζ- /lēž/, my etymology rests on the assumption of a Bactrian sound change from *-rzy- to -ζ- /ž/. Because none of the currently attested Bactrian words shows us the outcome of *-rzy-, the correctness of this sound change can unfortunately not be independently verified.³²⁶ Yet, there is at least some circumstantial support for *-rzy- becoming -ζ- /ž/. Between vowels, *-rz- is by default preserved in Bactrian, e.g. in ανδαρζο /andarzə/ ‘instruction’ < **han-darza-*. But the change of the cluster *-rjy- to Bactr. -ζ- /ž/ observable in **arjyāna-* > αζανο /āžānə/ ‘worthy’ indicates that *-rzy- may still have become /ž/. Another indication of this possibility is the capacity of **r* to retract a neighbouring **s* to /š/ and **z* to /ž/ in certain contexts (for which see §2.2.4).³²⁷

If one accepts this new etymology of *leš-*, it may be worthwhile to reconsider the translation of pret.3sg. *liṣita* in (3.24). Burrow translated this verb form, in line with the other attestations of *leš-*, as ‘he dispatched’.

(3.24) CKD 52 under-tablet obverse 2

ahono iśa Līṣipeya viṃñayeti yatha eṣa iśa klasenadharmena mahi maharayaṣa uṭa liṣita taṣa nadha coritaga hoati

³²⁶ For this reason, I did not include *leš-* among the plausible etymologies in §3.2.2.

³²⁷ It is not necessarily a problem that *-VrzV- would develop differently from *-Vrzy-; the same is, for instance, true of *-Vzdi- and *-Vzdy-, as shown by comparing वोर्ज्दिगो /nəzdīgə/ < **nazdiya-ka-* ‘close, intimate, friend’ with βιζαγο (MBactr. βυζγ) /vižagə/ ‘sin’ < **bazdya-kā-*.

“Lýipeya reports that he dispatched (*liṣita*) a camel to me the great king according to the *klasena* arrangements, and its load was stolen.” (TKD: 12; cf. also Ching 2017: 24).

In case Bactr. *λιζ- /liž/ or *ληζ- /lēž/ would have the same semantic range as Psht. *leḡ-*, i.e. ‘to dispatch, to send, to load a beast’, one may wish to translate *uṭa liṣita* instead as ‘he loaded a camel for me’. This translation would namely fit well with the statement in the next sentence that the camel’s load (*nadha*) has been stolen.

One final point: the preterite of *λιζ- / *ληζ- would presumably have been *λιρτο /lirtə/ < *dṛṣṭa-, argued in Schoubben (2022b) to be the source of Skt. **lārda-* ‘load, cargo’, whence *lardayati* ‘to load’. In other words, Niya Prakrit may indirectly preserve the present stem of the Bactrian outcome of *√darz ‘to load’, and Sanskrit the past stem.

46. *vaṣḍhiga*, festival on the mountain

Attestations of the base form

DIR.SG. *vaṣḍhiga*: CKD 622; 634; 637

LOC.SG. *vaṣḍhikaṃmi*: CKD 637

Derivatives

ADJ. *vaṣḍhigaīm* ‘relating to the *vaṣḍhiga*’: CKD 140 (2x)

The noun *vaṣḍhiga* is attested in contexts that closely resemble each other, all of them mentioning wine (*masu*) and a mountainous area around Caḍota (*parvata*):

(3.25) CKD 622 obverse 2f.

*yaṃ ca atra masu aṃamici tatra cavala saṃghalidavo eṣa masu
parvataṃmi giṃnidavo vaṣḍhiga kartavo*

“The wine which is on loan there is to be quickly collected. This wine is to be taken to the mountain and *vaṣḍhiga* is to be made.” (TKD: 129f.).³²⁸

(3.26) CKD 634 obverse 4f.

*tuo masu milima 4 2 nikhalidavo Cgito Cakuyala ta[hi] ṣadha parvataṃmi
gaṃtavo vaṣḍhiga karaṃnaya*

“... You have to provide six *milima* of wine. Cgito and Cakuyala have to go with you to the mountain to make *vaṣḍhiga*.” (TKD: 131).

³²⁸ Later in the document, it is said that tax (*palýi*) should also be brought.

(3.27) CKD 637 obverse 2–5

*taṃ kalaṃ kāla Kirtēya iśa agata Caḍotaṃmi parvataṃmi vaṣḍhiga kṛta
cojhbo Somjaka kalaṃmi taṃ kalaṃmi vyaga nikasta masu potgoṇēna
parvataṃmi milima 1 khi 4 aṃña dirpira aṃna milima 2 khi 10 aṭa milima
1 khi 4 1 ... aṃña parvatade kala Kirtēya nivartita taṃ kalaṃmi
Caḍotaṃmi vaṣḍhikaṃmi masu khi 4 3 nikhasta*

“... at that time the *kāla* Kirtēya came here to Caḍota and made *vaṣḍhiga* in the mountain, in the time of the *cojhbo* Somjaka. At that time (the following) expenditure was incurred: Wine *potgoṇēna* in the mountain 1 *milima* 4 *khi*; further, *dirpira* corn 2 *milima* 10 *khi*, and flour (*aṭa*) 1 *milima* 5 *khi* ... Further, the *kāla* Kirtēya returned from the mountain, and at that time the expenditure of wine in Caḍota, in [during?] the *vaṣḍhika*, was 7 *khi*.” (TKD: 131).

In addition, an adjectival derivative *vaṣḍhigaiṃ* occurs twice in CKD 140 modifying *aṃna* ‘corn’.³²⁹

Because of its co-occurring with *masu* ‘wine’, and *parvata* ‘mountain’, Burrow (LKD: 120 s.v.) advanced the hypothesis that *vaṣḍhiga* refers to “some kind of regular festival held on the mountain, at which wine was consumed”. As observed by Nicholas Sims-Williams (p.c.), this hypothesis has gained in plausibility now that the Kuṣāṇa Bactrian inscription DN₁, located on the ridge of Mount Qarabayu (4320 m), has been interpreted as recording precisely such a festival (see Halfmann et al. 2024: 33–45; note especially ι μολο χοαρδο ‘he drank wine’ in line 13). Since *vaṣḍhiga* also co-occurs with *aṃna* ‘corn’ (see CKD 140; 637)—like *masu* ‘wine’, a prototypical tax product in the Niya documents—part of the festival may have consisted of sacrificing to the gods a portion of the commodities collected as tax.³³⁰

The etymology of *vaṣḍhiga* has so far remained obscure. I like to propose that it is a loan from an unattested Bactrian word *βαγδιγο /vaydīgə/, a derivative of the verbal adj. βαγδο /vaydə/ ‘given away, distributed’ < **baxta-* with the frequent suffix -ιγο /īgə/ < *-iya-ka- (BD II: 200; 217).³³¹

³²⁹ For the suffix *-iṃ* (shortened from *-ina*), see §6.4.1. In its second occurrence, *aṃna vaṣḍhigaiṃ* is contrasted with *aṃna kriṣide* ‘corn from the field’; but unfortunately this does not tell us much about the semantics of *vaṣḍhiga*.

³³⁰ Interestingly, CKD 622 and 634 mention that the *vaṣḍhiga* must be organised by a *vasu*, a type of official known to be involved in the collecting of taxes (LKD: 120 s.v.; Høisæter 2020: 598f.).

³³¹ Because gemination of -δ- /d/ to -δδ- /dd/ before -η- /ē/ and -ι- /ĩ/ only occurs in post-Kuṣāṇa Bactrian (cf. SCBD: 60), I reconstruct the proposed source

*βαγδιyo could have meant something like ‘tribute’, which would fit well with the idea that offerings to the gods were made during a *vaṣḍhiga*. Its morphological formation would be comparable to that of the Middle Persian legal term *baxtiḡih* ‘distribution of the inheritance’ (Macuch 1993: 694), an abstract in *-ih* < **-iya-θwa-* derived from **baxtiḡ* ← *baxt* ‘distributed’ < **baxta-* + suffix *-īg* < **-iya-ka-*.³³²

Phonologically, my etymology requires that the foreign cluster *-γδ-* /*γd*/ was borrowed as Niya *-ṣḍh-*.³³³ For this substitution, one may compare the proposal that Bactr. σαχτο ‘day, elapsed’ was borrowed into Gāndhārī as *saste* (§3.2.2 s.v.). For this word, I argue that the un-Indic cluster *-χτ-* /*xt*/ was substituted with *-st-* through an intermediary **-št-* that violated Gāndhārī phonotactics. In a similar vein, I would hypothesise that *-γδ-* /*γd*/ was perceived as **-zd-*, which, given that neither this cluster nor **-zd-* are allowed by Gāndhārī phonotactics, was rendered with the best option at hand, i.e. the retroflex cluster *-ṣḍh-* /*ṣḍ^(h)*/.³³⁴

If Niya *vaṣḍhiga* can indeed be traced back to Ir. **baxt-ya-ka-*, other potential donor languages are impossible or at least less plausible than Bactrian. In Khotanese, **baxta-* became *būta-* ‘distributed’ (SGS: 103), which is clearly incompatible with *vaṣḍhiga*, and in Parthian and Middle Persian, initial **b-* and the cluster **-xt-* are preserved. For Sogdian, one could reconstruct **βytyk* (cf. attested pret. *βyt* ‘give, divide’ < **baxta-*), which, in theory, could still be a possible source of *vaṣḍhiga*. Yet, one would have to make the extra assumption that the /*t*/ in *-γt-* was first voiced before the whole cluster was rendered as *-ṣḍh-* /*ṣḍ^(h)*/ in the same way as argued above for Bactrian. Overall, the hypothesis of a Bactrian loanword therefore seems the least costly option.

of Niya *vaṣḍhiga* as Bactr. **βαγδιyo* and not as **βαγδδιyo*. If it existed, the latter form would have been a homonym of Late Bactr. **βαγδδιyo* ‘Bactrian’, which has been plausibly reconstructed by Sims-Williams (2016b: 279) as a later development of **βαχλιyo* ‘Bactrian’ ← *βαχλο* ‘Bactria’.

³³² Cf. also MMP *baxtagīh* ‘opposition, division, conflict’ and MParth. *baxtagift* ‘oppositeness, split, conflict’ < **baxta-k-ya-θwa-* (DMMP: 119).

³³³ The assumed rendering of Bactr. *-ιyo* /*īgə*/ as Niya *-iga* /*īya*/ is regular (cf. §4.3.11), and the variant *vaṣḍhika** (attested through loc.sg. *vaṣḍhikaṃmi*) can be accounted for as a hypercorrect spelling inspired by the OIA suffix *-ika-*.

³³⁴ For a more detailed treatment of this argument, see §4.3.27.

47. *yapga* ‘weaver’

Attestations of the base form

DIR.SG. *yapga*: CKD 174

Attestations as a PN

DIR.SG. *Yapga*: CKD 797;³³⁵ *Vapga*: CKD 821

GEN.SG. *Yapgaasa*: CKD 797 (3x)

The word *yapga* is used in parallel with *takšana* ‘carpenter’ in CKD 174, suggesting that *yapga* also denotes a profession. It therefore seems conceivable that we are dealing with a loanword from Bactr. $\alpha\beta\gamma o^*$ ‘weaver’ < **wāba-ka-*, the latter attested as the second member of the compound $\pi\rho\iota\gamma\gamma o\alpha\beta\gamma o$ ‘weaver of damask’ (BD II: 258).³³⁶ The syncope which made **wāba-ka-* into $\alpha\beta\gamma o^*$ is typically Bactrian, meaning that, if my etymology holds true, other Middle Iranian languages do not qualify as the source of *yapga*.³³⁷

In view of its etymology, Bactr. $\alpha\beta\gamma o^*$ was most likely pronounced as /wāvgə/ (cf. §2.2.3.3), thus requiring the assumption that Bactr. $-\beta\gamma-$ /vg/ was borrowed as Niya *-pg-*. I discuss this apparent fortition in more detail in §4.3.8.³³⁸

48. *sujinakirta* ‘needlework, embroidery’

Attestations of the base form

DIR.SG. *sujinakirta*: CKD 318 (2x)

The word *sujinakirta* occurs twice in a list of stolen textile products, so it is semantically attractive to assume borrowing from a cognate of NP *sōzankard*

³³⁵ Read in under-tablet obverse line 5 *tuo Yapga na lamcaga kareši* ‘you, Yapga, do not do rightly’ with Hasuiké (1996: 307) against Lin’s (1999: 230) *t(*e)na yapgana lamcaga kareši*. For *na* ‘not’ + *lamcaga* ‘right’ + *kare-* ‘to do’, cf. CKD 272; 399 (2x); 538; 562.

³³⁶ Bactr. $\pi\rho\iota\gamma\gamma o^*$ ‘damask’ was also borrowed into Niya Prakrit; see §3.2.1 s.v. *prigha*.

³³⁷ The nominal formation **wāba-ka-* seems moreover unattested outside Bactrian. Most Middle Iranian languages continue the allomorph of the root for ‘to weave’ with **f* (on which cf. EDIV: 402; Kümmel 2018: 165); cf. e.g. MSogd. *wʼf* (DMSB²: 233).

³³⁸ See also §4.3.22 for the substitution of Bactr. *o-* /w/ with Niya *y-* /w/.

‘needlework, embroidery’ < OIr. **saučanya-kṛta-* (so first Lüders 1936a: 31f.; cf. also Bailey 1936: 578; 1966: 34f.; 1982: 16; LKD: 131 s.v.).

According to Lüders (followed in this by Bailey 1936: 578), Niya Prakrit borrowed *sujinakirta* from a pre-stage of Khotanese. This suggestion could work for the second part of the compound. Yet, it hinges on the assumption that **-kṛta-* had only developed as far as **-kāṛda-* (or **-gāṛda-*) and not yet into the historically attested *-gāḍa-* / *-yāḍa-* when Pre-Khotanese came into contact with Niya Prakrit (SGS: 110–112; Maggi 2022b: 154).³³⁹ More severely, it would be hard to interpret Niya *sujina-* as a loan from Khot. *sumjsaṇu-* / *saujsaṇa-* ‘needle’ (DKS: 427; 429): there is no trace of a vowel *-i-* in *sumjsaṇu-* / *saujsaṇa-*, nor does the palatal *-ñ-* in Khotanese correspond well to the non-palatal *-n-* in Niya Prakrit.³⁴⁰

In my view, it is more likely that *sujinakirta* is a Bactrian loanword. The element *-kirta* can be explained without any additional assumptions from the attested Bactr. κῖρδο /kirdə/ ‘made’ < OIr. **kṛta-* (BD II: 223).³⁴¹ In addition, Bactrian would seem the only relevant Middle Iranian language providing a straightforward explanation of the vowel *-i-* in Niya *sujinakirta*.³⁴² As shown by κῖνο /kinə/ ‘ditch’ < **kanyā-* and λρουμῖνο /lruhminə/ ‘enemy’ < **dušmanyu-* (BD II: 223; 228f.), OIr. **-any-* became *-iv-* /*in-*/ in Bactrian. Therefore, the outcome of OIr. **saučanya-* may be reconstructed as Bactr. **σωσῖνο*, out of which it would be easy to explain the *-i-* in Niya *sujinakirta*.

³³⁹ One would have to assume that the Khotanese mid vowel *ā* was rendered as Niya *i* since the confusion between *ā* and *i* within Khotanese only occurred after the first written attestations of this language (cf. Emmerick 1970: xix–xxi). The voicing of Plr. **-rt-* to **-rd-* had probably already happened in Proto-Tumshuqese-Khotanese (Peyrot 2018b: 273; Dragoni 2023b: 39), but I do not know of good evidence to tell when **-rd-* < **-rt-* developed further to Khot. *-ḍ-*.

³⁴⁰ Although not inconceivable, substituting Khot. *-js-* /*dz-*/ as Niya *-j-* /*ž-*/ would be likewise unparalleled.

³⁴¹ As the second member of a compound and after preverbs, the κ /k/ of κῖρδο is voiced to -γ- /g/ in the case of λῖσθηγῖρδο ‘estate; ward, dependant’ < **dastay(ā)-kṛta-* and φρογῖρδο ‘constructed’ < **fra-kṛta-*. Yet, this voicing process was probably not consistently applied in light of MBactr. βῡζg-qyrdg’nyg ~ GBactr. **βῡζαγοκῖρδογανῖγο* ‘wrong-doing, (guilty) of evil deeds’ < **bazdya-kā-* + **kṛta-k-āna-ka-* (Sims-Williams 2009a: 262). There is thus no problem with assuming Niya *sujinakirta* to have been borrowed from a Bactrian compound ending in -κῖρδο /kirdə/ rather than -γῖρδο /girdə/.

³⁴² Alanic probably also had an *-i-* in the word for ‘needle’ (cf. Oss. I. *sūzīn*), but this is a geographically and historically unlikely donor language.

In line with my argument that GBactr. <σ> from OIr. *č stands for /tś/ in front of ι /i/ (§2.2.4.2), I take *σωσivo to stand for /sōtśinə/. From this, it follows that Bactr. -σ- /tś/ would correspond to the -j- /ž/ in Niya *suĵinakirta*. This substitution is explainable when assuming that -σ- /tś/ was borrowed as Niya -c- (cf. §4.3.17), for the latter could subsequently have been lenited to the attested -j- /ž/ (cf. §2.1.2).

One peculiarity remains: the -ω- /ō/ in *σωσivo does not square well with the -u- in *suĵinakirta*, -ω- /ō/ normally being borrowed as -o- (cf. §4.3.6).³⁴³ To account for this point, some options can be considered, although all are subject to doubt. One could, for instance, hypothesise that -o- and -u- were confused in this word since alternations between these vowels are encountered more often in Kharoṣṭhī sources. These alternations are, however, rare in Niya Prakrit (LKD: §2; §4). Another option would be to assume a folk etymological contamination with Niya *suĵi ‘needle’ as the outcome of Skt. *sūcī*-. Yet, the drawback to this explanation is that *suĵi is so far not attested in Niya Prakrit.

Up to now, my argumentation has been based on the assumption that the Bactrian word for ‘needle’ would derive from OIr. *saučanya-. Yet, two dialect forms in Pashto, i.e. Bangash *stana* ‘needle’ and Wanetsi *sanĵān* ‘idem’, provide tentative evidence for an OIr. variant form *sūčanya- with the same vocalism as YAv. *sūkā*- ‘needle’.³⁴⁴ In the hypothetical case that the Bactrian word for ‘needle’ also continued *sūčanya- instead of *saučanya-, one could reconstruct it as *σσοσivo /sūtśinə/. Then, the -u- in Niya *suĵinakirta* would be a faithful rendering of the corresponding vowel in Bactrian.

In summary, Lüders’ comparison between Niya *suĵinakirta* and NP *sōzankard* ‘needlework, embroidery’ < *saučanya-krta- is convincing. His argument that *suĵinakirta* is a loanword from Khotanese seems unlikely. In

³⁴³ That the first akṣara of *suĵinakirta* is 𑀲 *su* and not 𑀲 *so* is beyond doubt. Occasionally, Bactr. -ω- /ō/ < *-au- is raised to -o- /ū/, as e.g. in σαγονδο < σαγωνδο ‘as, like, etc.’ < *čiyāt-gauna- + -δο < *-uti. The form σαγονδο does, however, not occur in texts before 430 AD (SCBD: 61f.) and seems an isolated feature in the historical grammar of Bactrian, so it appears doubtful whether one could assume raising from *σωσivo to *σσοσivo in Bactrian itself. Note nevertheless that raising of *-au- to -ū- has also occurred in some modern Iranian languages, including the Iron dialect of Ossetic (Cheung 2002: 17), where the word for ‘needle’ occurs as *sūzīn* (cf. Abaev 1958–89 III: 164f.; Lubotsky 2001: 306).

³⁴⁴ See Morgenstierne (EDP: 76), who reconstructs *sūčānī-, and Cheung (2011: 175), who has *sučānya-.

view of the *-i-* in *suĵinakirta*, I would argue that a more plausible source is Bactrian, for which the relevant word can, with due caution, be reconstructed as *σωσινοκιρδο /sōtsinəkirdə/. The vowel *-u-* in *suĵinakirta* remains a moot point, unless the Bactrian source form was rather *σοσινοκιρδο /sōtsinəkirdə/ < *sūčanya-kr̥ta-.

3.2.4 Tentative etymologies

49. *apcira*, a unit of measure (for vineyards)

Attestations of the base form

LOC.SG. *apciraṃmi*: CKD 655

DIR.PL. *apcira*: CKD 419; *apacira*: CKD 655; *avacira*: CKD 581

apcira is a measurement of vineyards (*masušaḍa*) that are sold. When discussing this term, Burrow (LKD: 74 s.v. *apacira*) noted that agricultural land was by default “measured not by area but by the amount of seed which was sown on it”, as e.g. in CKD 715 *bhuma ... tre milimi bhijapayati* “a land with a capacity of three *milima*”.³⁴⁵ On this basis, Burrow deduced that *apcira* likewise does not refer to an area, hypothesising that it may instead have been “a row of standard length in which vines were planted”. In my view, the parallel with *bhijapayati* ‘capacity of seed’ suggests that *apcira* may more specifically have been a type of unit (e.g. a row of vines) whose cultivation required a fixed amount of seed.

In case *apcira* is indeed connected with seed, it appears conceivable that the element *-cira* is etymologically related to OIr. **čīθra-* ‘seed, origin’. This word is, for instance, continued in Middle Persian and Parthian as *čīhr* (CPD: 22; DMMP: 132) and indirectly attested in Bactrian by way of the PNs σιροχομαρο ← *σιρο < *σιυρο < **čīθra-* + *χομαρο ‘consolation’ < **wahu-manθra-* and σιπραζαδο < **čīθrāzātā-* ‘noble in respect of (her) lineage’ (BPN: nos. 434; 438).

Regarding the first part of *apcira*, a comparison could be drawn with the Bactrian phrase αββο ζαμυγο, literally meaning ‘water (and) land’, whence its more technical sense ‘irrigated land’ (BD II: 182).³⁴⁶ More specifically, I would like to suggest that *apcira* is a loan from a parallel Bactrian syntagm

³⁴⁵ There is a parallel for this in the Linear B documents, where plots of land are also measured by the amount of seed (*pe-ma* / *pe-mo* ~ σπέρμα) required to sow them (cf. Duhoux 2008: 306–308).

³⁴⁶ In N 18 ~ N 9’, αββο ζαμυγο contrasts with ροζγανο ‘vineyards’.

*αβο σι(υ)πο /āvə tsi(h)rə/ < *āp- + *čiθra-.³⁴⁷ The latter's literal meaning would be 'water (and) seed', but one may tentatively presume a more specialised meaning 'irrigated unit of a vineyard'.³⁴⁸ Although caution remains due because of the uncertain semantics, this etymological proposal receives some support from Niya *udagabhiśa* < **udakabīja*- 'water and seed' (CKD 160; 6x), a compound which is structurally equivalent to the hypothesised Bactr. *αβο σι(υ)πο and like Niya *apcira* referenced in an agricultural context.³⁴⁹

If one accepts this etymology, the variant spelling *avacira* (CKD 581) corresponds sound for sound to Bactr. *αβο σι(υ)πο /āvə tsi(h)rə/.³⁵⁰ The -p- in *apcira* (also *apacira*) could be due to influence from Skt. *āp-* 'water' or to fortition of an inadmissible cluster *-vc- to -pc-, similar to what may have happened in the case of Niya *yapga* 'weaver' ← οαβγο* /wāvgə/ (§3.2.3 s.v.; §4.3.8).

I will now move on to a discussion of a passage (3.28), where *apcira* (dir.pl. *apacira*; loc.sg. *apciraṃmi*) co-occurs with a word which, according to Boyer et al. (KD: 246f.), could be read as either *veda* or *reda*³⁵¹ and which Burrow left untranslated.

(3.28) CKD 655 under-tablet obverse 5f.

*masuśaḍa tatra masu vuta apacira 10 3 tatra yu [cha] ka pi ta [c]. [10] ??
?? + + ? [ve]da (or [re]da) sujada aṃña apciraṃmi veda (or [re]da) 4 2.*

³⁴⁷ I write *αβο σι(υ)πο instead of *αββο σι(υ)πο since the spelling αββο 'water' is typical of post-Kuṣāṇa Bactrian and the contact between Bactrian and Niya Prakrit should date back to Kuṣāṇa times (§4.2.1). The reason the word for 'water' came to be written as αββο was to distinguish it from the very frequent preposition αβο 'to' < **abi* (Sims-Williams 2017b: 450).

³⁴⁸ For artificial irrigation techniques in the Shanshan kingdom, also concerning vineyards, cf. Bertrand (2012).

³⁴⁹ In CKD 160, the successful cultivation of a strip of land is said to depend on *udagabhiśa* 'water and seed'.

³⁵⁰ For the rendering of Bactr. -σι- /tśi/ as Niya -ci-, cf. §4.3.17. As implied by the brackets in σι(υ)πο, Bactr. /hr/ < *-θr- could already have been simplified to /r/ in Bactrian. Yet, it is also possible that the /h/ was lost during the borrowing process (cf. §4.3.23).

³⁵¹ Boyer et al.'s indeterminacy results from the fact that 𑀧 *ve* and 𑀧 *re* can be difficult to distinguish in (Niya) Kharoṣṭhī. Unfortunately, no image of CKD 655 is available to check the reading.

“Also a vineyard. There thirteen *apacira* of vines are planted. [.
 ..]³⁵² In another *apcira*, six *veda* (*reda*).” (TKD: 136).

Although the somewhat fragmentary nature of (3.28) complicates its comprehension, it is reasonably clear that *veda* / *reda* is something planted inside an *apcira*.

Given the co-occurrence of *veda* / *reda* with *apcira*, it seems worth examining if perhaps this word could be explained as a borrowing from Bactrian as well. With the transliteration *reda*, there is at least a tentative possibility to do so. Reading *reda* would namely allow us to compare the Niya word with Bactr. ρηδο* /*rēdə*/ as attested in the personal name ρηδοφαρο. Sims-Williams (BPN: no. 393) interprets ρηδοφαρο as a synonym of the Old Iranian name **čiθra-farnah*- ‘glorious by his seed/descent’, assuming ρηδο* to mean ‘seed’ as a cognate of Skt. *retas*- ‘idem’.³⁵³ Since ‘seed’ or ‘sprout’ would also fit the context of CKD 655, I find it tempting to read *reda*, and see in this word a loan from Bactr. ρηδο* ‘seed, sprout’ < **raita(s)*-.³⁵⁴ But obviously, this remains mere conjecture.

Summary: in order to measure vineyards, the technical term *apcira* (also *apacira*; *avacira*) is used in the Niya documents. As agricultural land is typically measured according to its seed-capacity, I cautiously propose that *apcira* is an irrigated unit of a vineyard requiring a certain amount of seed. Etymologically, I believe that *apcira* may be a loan from a Bactrian asyndetic binominal phrase *αβο σι(υ)ρο /*āvə tsi(h)rə*/ ‘water (and) seed’, which would be comparable to Bactr. αββο ζαμυο ‘water (and) land > irrigated land’ and Niya *udagabhiśa* < **udakabīja*- ‘water and seed’. In CKD 655, it is said that *veda* / *reda* is planted inside an *apcira*. If we read this word as *reda*,

³⁵² The part from *tatra* until *sujada* is incomprehensible. *sujada* recurs in a similar context in CKD 586 under-tablet obverse 2 *masuśaḍo śadha vṛkṣēna sujada paṃcadaśa matra* “a vineyard along with the trees consisting of fifteen *sujada*”. There is no obvious etymological connection between *sujada* and Skt. *sujāta*- ‘well-born’.

³⁵³ There have not been discovered any other Iranian cognates of *retas*- with the meaning ‘seed’. It is, however, possible that words such as MP *rēdag* ‘lad, page’ (CPD: 71) and Bactr. dir.pl. ρηδγε ‘attendants’ (Rab. 21) are built from the same stem. Cf. also EWAia (II: 459f.).

³⁵⁴ Although phonologically possible, it seems less likely that the presumed Niya *reda* would be inherited from Skt. *retas*- as this type of technical, agricultural word tends not to be inherited in Niya Prakrit.

it could perhaps be a borrowing from ρηδο* ‘seed, sprout’ < **raita(s)*- as possibly attested in the PN ρηδοφαρο.

50. *kilme* ‘family estate’

Attestations of the base form

DIR.SG. *kilme*: CKD 422; 598 (?); 795

ABL.SG. *kilmeyade*: CKD 358; 817; 884; *kilmiyade*: CKD 358

LOC.SG. *kilmeyaymmi*: CKD 256; 482; 859; *kilmeyami*: CKD 817 (2x)

Derivatives

ADJ. *kilmi* ‘concerning the family estate’: CKD 46

ADJ.DIR.SG. *kilmeci* ‘belonging to the family estate’: CKD 209; 278; 279 (2x); 297; 331; 358; 437 (2x); 474 (2x); 495; 519; 581; 585 (2x); 621 (2x); 806 (3x); 884 (2x); *kilmeciya*: CKD 381; 393; 532; 806

ADJ.DIR.PL. *kilmeci* ‘idem’: CKD 632; *kilmeci*: CKD 639; *kilmeciye*: CKD 152; 271 (2x); 279; 307; 338; 468 (2x); 817; *kilmeciye*: CKD 713

ADJ.GEN.PL. *kilmeciya* ‘idem’: CKD 16; 254; 338; 374; 468 (4x); 734; 819; 848; *kilmiciya*: CKD 261; 358

ADJ. *kilme[c]*. ‘idem’: CKD 257

Compounds

ADJ. *vegakilme* ‘outside (?) the family estate’: CKD 211; 481; *vegakilme*: CKD 714; *vegakilmi*: CKD 165

DIR.SG. *kilmerakšana* ‘guard of the family estate’: CKD 808

LOC.SG. *Petaayanakilmeyaymmi* ‘family estate (located) in *Peta* village’: CKD 32

GEN.PL. *Yayekilmeciya* ‘belonging to the *Yaye* family estate’: CKD 431 = 432 (*Yave-*)

kilme is closely connected to the word *ayana* ‘village, territory of a clan’ (§3.3.2 s.v.) and has been translated as ‘district’ (cf. Burrow 1935b: 674f.; LKD: 83 s.v.). Its meaning is nevertheless likely to have been somewhat more precise.

According to some researchers (e.g. Thomas 1935: 63f.; Atwood 1991), *kilme* and its derivative *kilmeci* ‘belonging to a *kilme*’³⁵⁵ would need to be interpreted within a feudal framework, viz. *kilme* would refer to an estate whose lands were possessed by a landowner, but whose cultivation was in the hands of serfs or tenants, called *kilmeci*.

Padwa (2007: 204–211) has cogently refuted this interpretation (cf. also Høisæter 2020: 142–144). He assembled evidence that the word *kilme* has

³⁵⁵ *kilmeci* is derived from *kilme* with the appurtenance suffix *-ci* (on which cf. §5.2.2). *kilmi* in CKD 46 is formed by adding the adj. suffix *-i* (§6.4.3) to *kilme*.

more to do with kinship groups. There are, for instance, indications for exogamous marriage practices between different *kilmes* / *ayanas* (§3.2.3 s.v. *muşḍhaşi*; §3.7.2 s.v. *muḳaşi*). Even more crucial is the testimony provided by CKD 437, where *kilmeci* occurs in a list of kinship terms (see Padwa 2007: 208).

Nonetheless, there is still room for disagreement with Padwa's interpretation, especially on his view on the distinction between *kilme* and *ayana*. According to Padwa (2007: 209),

"it seems hard to escape the conclusion that *kilme* refers to groups allied by marriage, and *ayana* to the territorial residence groups at least partly coterminous with the spatial extent of those groups."

Yet, Padwa neglects the fact that *kilme* already refers to the territory of a kinship group rather than to the kinship group as an abstract concept.³⁵⁶ Otherwise, it would be difficult to account for a passus as (3.29), where it is said that land has been taken in Śakā's *kilme*.

(3.29) CKD 482 under-tablet obverse 2

Śakā garahati yatha edaṣa kilmeyaṃmi Molýina bhuma ladhaye

"Śakā complains that Molýina has received land in his estate (*kilmeyaṃmi*)."³⁵⁷ (TKD: 94).

On this basis, I propose to take *kilme* as an estate of a family consisting of different households or farms (cf. *infra*) and *kilmeci* as an inhabitant of such a family estate. *ayana*, on the other hand, refers to a larger territory, as a *kilme* is often located inside an *ayana* (e.g. CKD 32 *Petaayanakilmeyaṃmi* 'in a family estate (located) in *Peta* village'). One could thus interpret *ayana* as a small village consisting of different estates, possibly still linked to one another by tribal connections.

Besides, I would argue that a third term should be included in this hierarchy, i.e. *Niya goṭha* 'farm, household' < Skt. *goṣṭha* 'cow-stable'. *goṭha* and *kilme* regularly occur in similar contexts, and both appear to count as administrative units from where to provide taxes.³⁵⁷ Yet, the two words are still not entirely synonymous, as becomes clear from (3.30).

³⁵⁶ As I learn from the summary in Jiang (2020: 145f.), Duan & Tshelotar (2016: 43) have voiced similar objections against Padwa's analysis.

³⁵⁷ For *kilme* as an administrative unit taxes are paid from, cf. CKD 165; 211; 261 (?); 374; 468; 481; 714; 819, and for *goṭha*, cf. CKD 147; 165; 211; 373; 713; 714. As concerns *ayana* 'village, territory of a clan', cf. *ayanemci palýi* 'village tax' in

(3.30) CKD 358 obverse 7

avi atra Sudarśanaṣa atra kilmeci goṭha 2

“also there are two households (*goṭha*) which belong there to the estate (*kilmeci*) of Sudarśana” (tr. mine).

It seems likely that a family estate (*kilme*) is instead made up of different farms/households (*goṭha*) in the same way that a village (*ayana*) consists of various estates (*kilme*). This makes me assume a threefold hierarchy: *goṭha* ‘farm, household’ < *kilme* ‘family estate’ < *ayana* ‘village, territory of a clan’.

This renewed understanding of the semantics of *kilme* allows us to re-evaluate the etymologies hitherto proposed. According to Burrow (1935b: 674f.; LKD: 83 s.v.), *kilme* would be one of the key arguments supporting his “Tocharian C” hypothesis. He compared *kilme* to TA *kälyme* and TB *kälymiye* ‘region, direction’ (DTTA: 131f.; DoT: 186f.). While formally acceptable, Burrow’s etymology is not entirely satisfactory from the semantic point of view. TA *kälyme* and TB *kälymiye* refer to the cardinal points and large regions, being used to calque and translate Skt. *diś*-.³⁵⁸ *kilme*, by contrast, denotes only a small territory. In addition, *kilme* pairs with *ayana*, an Iranian loanword from **ā-wahana*- ‘dwelling’ (§3.3.2 s.v.). Hence, it seems more logical that also *kilme* was borrowed from an Iranian language. The frequent combination of *kilme* with the appurtenance suffix *-ci* suggests the same scenario, given that the suffix *-ci* is most likely Bactrian in origin (see §5.5.2).

As far as this last point is concerned, Thomas’ (1944: 61f.) idea to derive Niya *kilme* from Gr. κλίμα would seem more promising, as the Greek word can have passed through an Iranian language such as Bactrian (cf. also Hitch 2009: 22 fn. 73). If so, one could argue that the initial sequence κλ- was metathesised to something like *κίλμο /kilmə/ because of the absence of an initial cluster κλ- in Bactrian.³⁵⁹ Still, there is again a semantic objection to be made since the basic meaning of κλίμα is ‘slope of a mountain’. κλίμα can also mean ‘region’, but when it has this meaning, the word refers, like TA *kälyme*

CKD 713. Ching (2013a: 73) already suspected *goṭha* to be an administrative unit, and she compared some technical usages of Khot. *bisā*- ‘house’. One can additionally draw a parallel with Bactr. καθγο ‘household, estate’, which is also used as an administrative unit taxes are paid from (see doc. J).

³⁵⁸ Cf. e.g. TA *himavant śulyiṃ kälymeyac* “towards the mountainous region of the Himavant” (A 77 = THT 710 b3).

³⁵⁹ κλ- would have to come from a phonotactically impossible Old Iranian cluster **kd*-. The cluster -λμ- /lm/ is allowed in Bactrian, as proved by νιβαλμο ‘seat’ < **ni-šadma(n)*-.

and TB *kälymiye*, to large-scale territories, something which is difficult to reconcile with the semantics of Niya *kilme* (Banti 2000: 6).³⁶⁰

Seeing that neither Burrow's Tocharian nor Thomas' Greek etymology is compelling and in view of the indications that we are instead dealing with an Iranian loanword, I cautiously suggest that *kilme* may be borrowed from Bactr. *γῖρλομηνο /γῖρilmēhə/, the expected outcome of a hypothetical Old Iranian compound **gr̥da-maiθa-* 'dwelling of a household'.³⁶¹ The default Iranian word for 'dwelling' is admittedly **maiθana-* (e.g. MP *mēhan* 'home'), but a variant **maiθa-* 'dwelling' has also been proposed for the PNs Elam. *Ra-da-me-sa* and Gr. Παδαμασις ← OIr. **rāda-maiθa-* 'readying the home' (Iranica: §4.2.1323) and Tumsh. *bimex₆a-* 'lodger' < **wi-maiθa-* 'dwelling' (Dragoni 2020: 219f.).³⁶²

The main advantage of my etymology is semantic, as the meaning of **gr̥da-maiθa-* neatly matches that of *kilme*. Formally, there are some potential drawbacks, though I would argue that none is so severe as to be insuperable.

The first drawback is the lack of further evidence to support the reconstruction of an Old Iranian compound **gr̥da-maiθa-*. Yet, at least three Indo-Iranian compounds are structurally comparable in that their first part means 'house' and their second 'place, dwelling'. To begin with, Arm. *gerdastan* 'household, body of servants' allows us to reconstruct an Old Iranian compound **gr̥da-stāna-* 'place of the house' (Olsen 1999: 872; Schwartz 2023: 188). Secondly, there is the Bactrian place name καθγοστανο, a transparent compound of καθγο 'house' < **kata-ka-* and στανο 'place' < **stāna-* (BD II: 220). A third parallel is Skt. *gr̥hāvāsa-* / Pāli *gharāvāsa-* 'dwelling of the house'. This compound occurs as *gr̥havaśa* (also *gr̥havaśa*; *grihavaśa*) in the Niya documents too, where it consistently pairs with *goṭha* 'farm, household' (cf. 47; 62; 292; 326 (7x)), similar to how *kilme* and *goṭha* are semantically connected (cf. *supra*).

³⁶⁰ Cf. e.g. τὰ πρὸς μεσημβρίαν κλίματα τῆς Μηδίας 'the southern regions of Media' in Polybius 5.44.6, with Montanari (2015: 1139).

³⁶¹ As the etymology requires lambdacism to have happened, donor languages other than Bactrian can be excluded. For the phonological development of the first part of the compound, cf. γῖρλ- /γῖρl/ 'to call, to name' < **gr̥da-* (BD II: 207); the change of intervocalic *-θ- to Bactr. -υ- /h/ is evidenced by, amongst others, παυαγγο /pahangə/ 'plate' < **paθana-ka-* 'broad' (Sims-Williams 2013: 194). On the evidence for OIr. **gr̥da-* 'house(hold)', see now Bernard (2023: 120f.).

³⁶² Cf. also Khot. *parmiha-* 'village' < **pari-miθā-*, with zero grade of the root.

The other issue with my etymology is that it presupposes two phonetic substitutions which, though conceivable, are not paralleled elsewhere.³⁶³ First, one needs to assume that the foreign cluster /rlm/ in *γῑρλομηυο /γῑrlmēhə/ was simplified to -lm- during the borrowing process, even though the Bactrian liquid cluster -ρλ- /rl/ seems in more secure loanwords to be substituted with Niya -r-. All instances of the latter substitution concern, however, intervocalic -ρλ- /rl/, so it is not unthinkable that /rlm/ would be treated differently (see further §4.3.25). Second, my etymology necessitates the assumption that expected ***gilme* was devoiced to the attested *kilme*. On this devoicing, see §4.3.28.

Niya *kilme* also occurs in the compound phrase *vegakilme* (once *vega-*), which is always used in the context of a particular form of taxation. Interestingly, this tax should be paid by women, even though family estates were usually in the hands of males.

Because of this connection with women, Burrow (LKD: 123 s.v.) suggested *vega* to be related to MP *wēwag* and NP *bewa* ‘widow’ < **widawa-kā-*. This etymology is formally unattractive. In no known Middle Iranian language would one expect to have a form **wēg* (or the like) out of **widawa-kā-* and postulating a contraction of *-*ēwa-* (cf. MP *wēwag*) to Niya -e- would also be without close parallels.³⁶⁴

I propose that *vega-* (once *vega-*) is instead a loanword from Bactr. βῑγο /vēgə/ or βῑκο /vēkə/ < **bai(d)-ka-* ‘outside, except, rather than’ (BD II: 202). On top of being formally straightforward, this etymology is potentially supported by the fact that Bactr. βῑγο (βῑκο) can, like Niya *vega-*, be used as the first element of a compound (cf. βῑγοτωγο ‘exempt from taxation’, BD II: 183).³⁶⁵ As there is, however, insufficient evidence to determine which type

³⁶³ Otherwise, the phonological correspondences work fine. Given that intervocalic *h* is liable to be lost in Niya Prakrit (§4.3.23), a derivation from *γῑρλομηυο /γῑrlmēhə/ would nicely account for the final -e in Niya *kilme*.

³⁶⁴ Thomas’ (1935: 63; 1944: 61) proposal to see in *vega* an inherited word out of Skt. *vega-* ‘stream, flood’ is implausible for semantic reasons.

³⁶⁵ Variation between *v* /v/ and *y* /w/ occurs in inherited words too (cf. §4.3.22), and the substitution of Bactrian intervocalic -γ- /g/ with Niya -g- /γ/ is regular (cf. §4.3.11). The Sogdian cognate of βῑγο (βῑκο), i.e. *βyk* (also *βyq*; CSogd. *byq*, cf. DCS²: 57; DMSB²: 70), is also found as the first member of compounds (e.g. *βyknγwδn* ‘outer garment’). If one assumes lenition of intervocalic -k- to -g- /γ/ after the word was borrowed, Sogd. *βyk* could also be the source of Niya *vega-*. Yet, if it is true that *kilme* is a Bactrian loanword, it would seem better to derive the element *vega-* from the same source.

of legal context could lie behind an expression ‘outside the family estate’,³⁶⁶ this etymology must be considered tentative.

To sum up, *kilme* denotes a family estate consisting of different farms/households. Based on these semantics, I propose to derive *kilme* out of Bactr. *γῖρλομηνο /γῖρλmēhə/ < *gr̥da-maiθa- ‘dwelling of a household’. While admittedly conjectural, this etymological proposal may account more easily for the semantics of *kilme* than connecting the Niya word to TA *kālyme* and TB *kālymiye* ‘direction, (large) region’ or Gr. κλίμα ‘slope of a mountain, (large) region’.

51. *taravara* ‘sword’

Attestations of the base form

INS.SG. *taravarena*: CKD 585

Since the ins.sg. *taravarena* in CKD 585 is used parallel to the ins.sg. *śastrena* ‘with a knife’, the underlying word *taravara* is probably cognate with Hindi *tarwār* / *talwār*, Bengali *taroyāl*, and other NIA words meaning ‘sword’ (cf. Thomas 1935: 80; TKD: 123). In Sanskrit, the same word occurs in the meaning ‘one-edged sword’ as *taravāri*- (e.g. Hcar.), fem. *taravālikā*- (in lexical sources), and *talavāraṇa*- (Kir. 14.29) (cf. MW: 438; 440).

Mayrhofer (KEWA: 482; EWAia III: 237) argues that we are dealing with a *Kulturwort* without ascertainable etymology. One of his reasons for thinking so is that two Nuristani cognates and one NIA form are not easily reconciled with the Sanskrit prototype. This point concerns Kati *tərwōč* (aberrant č), Prasun *trāž* (aberrant ž),³⁶⁷ and Odiya *tarāri* (aberrant r). As the vast majority of NIA cognates are still regularly derived from **taravārV*- (see CDIAL: no. 5706), a specialist in the relevant languages should investigate whether the Kati, Prasun, and Odiya forms could not be explained as secondary. Until then, the alternative proposal made below must be regarded as tentative.

³⁶⁶ In light of the exogamous marriage practices evidenced in the Niya documents (cf. §3.2.3 s.v. *mušdhaši*; §3.7.2 s.v. *muḳaši*), one could conjecture that women who had married into a different family, i.e. were living “outside their (original) family estate”, but who were nonetheless legally bound to the family they were born in (e.g. because not all the legal requirements for marriage had been met), still had to contribute to the taxes which her original family was supposed to pay.

³⁶⁷ *trāž* is the spelling of the Prasun word used by Mayrhofer (in KEWA) and Turner (in CDIAL). Buddruss & Degener (2015: 809) record as dialect forms *tərw’až* / *terw’až* and *tərw’až*.

Given that several words for military equipment in Indo-Aryan languages are Iranian loanwords (Burrow 1973³: 389; Ollett 2024: 96),³⁶⁸ and words for ‘sword’ often derive from verbs meaning ‘to cut’ (Buck 1949: 1392f.),³⁶⁹ I hesitantly propose that Niya *taravara* and its cognates are borrowed from a hypothetical Bactrian word **ταρλοβαρο* /*tarlōvārə*/ < **tarda-bāra*- ‘splitter > sword’. The underlying verbal root would be **√tard* ‘to pierce, to split’ (EDIV: 380), and **-bāra*- could have agentive meaning, as more often in this type of compound (cf. BD II: 202 for Bactr. -*βαρο* in this function).

Were this etymology on the right track, the change from **-rd-* to *-rl-* would unambiguously point in the direction of Bactrian as the most likely donor language. Other loanwords secure the assumed correspondence between Bactrian intervocalic -*ρλ-* /*rl*/ and Niya *-r-* (see §4.3.25), and the foreignness of the cluster -*ρλ-* /*rl*/ could have motivated the observed variation between *-l-* and *-r-* in the Sanskrit cognates (*taravāri-*; *taravālikā-*; *talavāraṇa-*) and NIA forms such as Hindi *tarwār* / *talwār*.³⁷⁰

The adoption of a Bactrian word meaning ‘sword’ into Indo-Aryan languages other than Gāndhārī could be due to the military expansion of the Kuṣāṇa empire over large parts of northern India (see e.g. lines 4–7 in the Rabatak inscription and cf. §7.2).³⁷¹

52. *reda* ‘seed, sprout (?)’

Attestations of the base form

DIR.PL. *reda*: CKD 655

As I argue §3.2.4 s.v. *apcira*, Niya *reda* may be a loan from Bactr. *ρηδο** ‘seed, sprout’ < **raitā(s)-* as possibly attested in the PN *ρηδοφαρο*. Yet, this etymology remains highly uncertain as *reda* has alternatively been read as *veda* and the existence of Bactr. *ρηδο** hinges on the etymological interpretation of a personal name.

³⁶⁸ More generally, words denoting “sharp cutting implements” are cross-linguistically borrowed quite often (see e.g. Carling 2020: 129–131; 135).

³⁶⁹ Cf. e.g. Av. *karata*- ‘knife, sword’ from **√kart* ‘to cut’ (EDIV: 243f.).

³⁷⁰ Liquid dissimilation could have been a contributing factor.

³⁷¹ For additional notes on the historical context in which Bactrian words can have been adopted by the local vernaculars of northern India, see Schoubben (2022b: 352–354).

53. *Remena*, place name

Attestations of the base form

DIR.SG. *Remena*: CKD 518

LOC.SG. *Remenami*: CKD 214; 251; 376

§3.2.3 s.v. *aco* advances the hypothesis that the place name *Remena* is borrowed from a Bactrian compound **ρη(ο)μηναο* /rē(w)mēhanə/ < **raiwa-maiθana-*, literally ‘rich dwelling’. Support for this idea comes from the parallel formation of the attested Bactrian toponym *ρη(ο)γαο* and the use of **-maiθana-* as the second element of place names in other Iranian languages. As etymologies of toponyms are tricky to prove, the proposal must still be regarded as tentative.

54. *laṭhana* ‘plain, open land (?)’

Attestations of the base form

LOC.SG. *laṭhanami*: CKD 392

The context in which *laṭhana* occurs renders it likely that this hapax refers to a type of land (Burrow 1935a: 786; LKD: 114 s.v. *laṭhanami*).³⁷² Burrow’s cautious comparison with MP *daštān* ‘menstruating, menstruation’ (CPD: 25) has therefore little to recommend itself from a semantic point of view. A semantically better fit is Burrow’s alternative proposal to compare *laṭhana* to MP *dašt* ‘plain, open ground’ (CPD: 25) and Sogd. *δxšt-* (also CSogd. *dxšt-*) ‘plain, desert’ (DMSB²: 89; DCS²: 72) < OIr. **daxštā-*.³⁷³

If there exists an etymological relationship between **daxštā-* ‘plain, desert’ and Niya *laṭhana*, the latter should be a Bactrian loanword in view of its initial *l-*. As it happens, a Bactrian cognate of MP *dašt* and Sogd. *δxšt-* seems to be attested as *λαχβτα* ‘desert’ in line 4 of the Ayrtaṃ inscription (Sims-Williams fthc.).³⁷⁴ In addition, a later form *λαχβτο* /laxštə/ may be attested

³⁷² It remains unclear to what extent *laṭhaya*, an adjective used in CKD 298 to define *kriṣivatra* ‘cultivation’, is connected.

³⁷³ It is unknown if there is any etymological connection between this noun and the verbal adj. **da(x)šta-* ‘burnt’, for MP *dašt* and Sogd. *δxšt-* seem “to signify ‘plain’ or ‘open, uninhabited place’ rather than ‘scorched land’” (Greenfield & Shaked 1972: 39). Burrow’s (TKD: 80) conjectural translation of the loc.sg. *laṭhanami* as “to the open lands” is presumably based on his etymological proposal.

³⁷⁴ Sims-Williams (fthc.) reads and translates line 4 of the Ayrtaṃ inscription as follows: []α[c. 18]δi λαχβτα σταδο αβαβσα τιδι βοδβαα δι ι••νο κανδο α[“...

in the Hephthalite fragment h₈, but unfortunately in a badly understandable context (Sims-Williams 2004b: 331).

Bactrian $\lambda\alpha\chi\beta\tau\alpha$ (later $\lambda\alpha\chi\beta\tau\omicron$) can, however, not be the direct source of Niya *laṭhana*, as this would leave the sequence *-ana* unaccounted for. One way out of this conundrum would be to interpret *laṭhana* as a loan from Bactr. $\ast\lambda\alpha\chi\beta\tau\alpha\nu\omicron$ /*laṣṣṭānə*/ < $\ast d\alpha\check{s}tana-$, a form safely reconstructable based on the attested $\lambda\alpha\chi\beta\tau\alpha\nu\iota\gamma\omicron$ ‘cremation place’ (BD II: 226 *contra* Humbach 2002: 417). Being a derivative from $\ast\sqrt{daj}$ ‘to burn’, $\ast\lambda\alpha\chi\beta\tau\alpha\nu\omicron$ is, however, expected to mean ‘burning’, a translation which does not suit the attestation of Niya *laṭhana*. Therefore, it may be preferable to assume that *laṭhana* is borrowed from Bactr. $\ast\lambda\alpha\chi\beta\tau\alpha\nu\omicron$ /*laṣṣṭānə*/, possibly an adjectival derivative in *-انو* < $\ast\text{-āna-}$ from $\lambda\alpha\chi\beta\tau\alpha$ (later $\lambda\alpha\chi\beta\tau\omicron$) ‘desert, plain’ < $\ast d\alpha\check{s}tā-$. In case $\ast\lambda\alpha\chi\beta\tau\alpha\nu\omicron$ was substantivised, as adjectives in *-انو* < $\ast\text{-āna-}$ often do (BD II: 193), *laṭhana* could then still mean something like ‘open land’ or ‘plain’.³⁷⁵

Phonologically, Bactr. $\ast\lambda\alpha\chi\beta\tau\alpha\nu\omicron$ /*laṣṣṭānə*/ would be a straightforward source of Niya *laṭhana*. The only assumption needed is that the Bactrian cluster $-\chi\beta\tau-$ /*xšt*/ was simplified to Niya $-\th-$ /*ṣṭ*^(h)/ during the borrowing process. This simplification could even have something to do with the substitution of Bactr. $-\chi-$ /*x*/ with a sibilant observable in some other Bactrian loanwords in Niya Prakrit (cf. §4.15).

To sum up, Niya *laṭhana* could be a loan from Bactr. $\ast\lambda\alpha\chi\beta\tau\alpha\nu\omicron$ /*laṣṣṭānə*/, a derivative in *-انو* from $\lambda\alpha\chi\beta\tau\alpha$ (later $\lambda\alpha\chi\beta\tau\omicron$) ‘plain, open land’ < $\ast d\alpha\check{s}tā-$. As, however, the semantics attributed to *laṭhana* are conjectural and the reconstruction and morphological analysis of $\ast\lambda\alpha\chi\beta\tau\alpha\nu\omicron$ uncertain, this etymology can only be tentative at the present stage of research.

55. *lastuga*, textile product

Attestations of the base form

DIR.SG. *lastuga*: CKD 161; 184; 288; 566; 585; 728; *lastuka*: CKD 416

was (?) a desert, without water, then the *shudva* dug the ...”. The apparent preservation of $\ast\text{-xšt-}$ in Bactrian is unusual, as this cluster is by default simplified to $-\chi\tau-$ /*xt*/, e.g. $\sigma\pi\alpha\chi\tau\omicron$ /*spaxtə*/ ‘service’ < $\ast spax\check{s}ti-$.

³⁷⁵ As a third option, one could speculate that *laṭhana* was borrowed from an obl.pl. in *-انو* < $\ast\text{-ānām}$ of $\lambda\alpha\chi\beta\tau\alpha$ (later $\lambda\alpha\chi\beta\tau\omicron$) ‘desert, plain’. Yet, if so, *laṭhana* would be the only Bactrian loanword in Niya Prakrit where the obl.pl. was borrowed.

The word *lastuga* refers to a textile product, as is clear from CKD 566, where a *lastuga* is said to be made from polychrome silk (*citrapaṭamae*). In addition, we know that a *lastuga* could be up to seven “hands” long (CKD 728: *hasta* 4 3); that it was not of great value (CKD 184: *lahu manasigara matra*); and that it was frequently sent as a gift (cf. CKD 161; 184; 288; 585; 728). See Burrow (1935a: 786; LKD: 115 s.v.).

Scholars have made various proposals on what type of textile product could be meant, but no definitive conclusions have been reached: Thomas (1934a: 66 fn. 11) thought of a ‘shawl’; Lüders (1936a: 29 fn. 2) of a ‘turban’; and recently Høisæter (2020: 259) suggested that *lastuga* “could be equated with something like the small bags holding mirrors or combs found in both grave M3 and M5” (cf. also Høisæter 2023: 412f.). Given that a *lastuga* was measured in “hands” (cf. *supra*), I consider it also possible that it was simply an unprocessed strip of cloth.

Etymologically, Burrow (1935a: 786) compared NP *dastār* ‘towel, handkerchief, napkin, sash, turban’ (CPED: 521), a comparison which made him to assume that *lastuga* is, like NP *dastār*, derived from OIr. **dasta-* ‘hand’, but “with a different suffix”.³⁷⁶

Although it is certainly conceivable that a textile term is based on a word meaning ‘hand’,³⁷⁷ there are some formal issues with Burrow’s etymology. The first point concerns the vowel *-a-* in *lastuga*. Unless one is willing to posit a loan from an otherwise unattested Iranian language, the change of **d-* to **l-* presupposed by Burrow’s etymology implies that *lastuga* is a Bactrian loanword. Yet, the Bactrian outcome of OIr. **dasta-* ‘hand’ is by now well attested as λιστο (BD II: 227f.; SFBG: 65), including in compounds and derivatives such as λιστηγυρδο ‘estate, ward, dependant’, λιστοβανδιγο ‘bracelet’, ουλιστο ‘disappeared (?)’, and χολιστο ‘with one’s own hands > acting personally’ (BD II: 227; 246; 281). In other words, the **a* in OIr. **dasta-* developed to Bactr. *-l-* /*i-*.³⁷⁸

³⁷⁶ Burrow’s etymology has been accepted by e.g. Schwartz (1974: 400) and Weber (1997: 31). Bailey’s (KT VI: 317) alternative comparison with ZMP *lystkl*, transliterated by him as “*rastak, ristak*” and wrongly interpreted as a textile, has been cogently refuted by MacKenzie (1969: 400) and Schwartz (1974: 400).

³⁷⁷ Cf. e.g. English “handkerchief”, Dutch *handdoek* ‘towel’, and NP *dast-māl* ‘handkerchief, napkin’. In addition, it seems worth comparing the similar formation of Oss. I. *fadyg*, D. *fadug* ‘piece of cloth, stripe’ (quoted from EDIV: 305), an adjectival derivation from *fad* ‘foot’.

³⁷⁸ The reason for this vowel raising is not entirely clear. Gholami (SFBG: 65) attributes it to the following sibilant, but **-a-* is normally preserved in this

Burrow's etymology consequently requires that the -ι- /i/ in Bactr. λιστο /lištə/ was substituted with Niya -a-.³⁷⁹ Such a substitution is not impossible if one posits a scenario whereby Bactr. -ι- /i/ was phonetically realised as a central vowel (e.g. [ɨ] or [ɪ]) and therefore rendered as Niya -a-, itself also a type of schwa (§2.1.1). One could even draw a parallel with my argument that Bactr. *λιρτο /lirtə/ 'load, cargo' < *dṛšta- was borrowed into Sanskrit as *lārda- 'idem', whence *lādayati* 'to load' (Schoubben 2022, see especially pp. 350f.).³⁸⁰ However, Bactr. -ι- is otherwise always rendered with Niya -i- (see §4.2.2),³⁸¹ so the required substitution could still be a problem for Burrow's etymology.

In addition, one should ask exactly what type of formation lies behind *lastuga*. Weber (1997: 31) reconstructed the Old Iranian pre-form as *dastuka-, presumably to account for the vowel -u- in Niya *lastuga*. This reconstruction is nonetheless morphologically implausible, as *dasta- 'hand' is not a *u*-stem, and there is hardly any evidence supporting an Iranian suffix *-ukā-.³⁸² A morphologically more attractive reconstruction would be OIr. *dasta-ka- as in MP *dastag* 'bunch, bundle, group' (CPD: 25) and the

position; cf. e.g. αβαστανο /əvastānə/ 'support' < *upa-stāna-; αστο /astə/ 'home, household' < *asta-; and pret. βαστο /vastə/ 'to bind' < *basta- (BD II: 181; 198; 202). In the case of ζιρτο /žištə/ 'requested' < *jasta-, *-a- was raised to -ι- /i/ because of the preceding palatal (BD II: 212). Since OIr. *dasta- goes back to Plr. *jasta- (with *j ~ [dʒ]; see Klingenschmitt 2000: 200f. fn. 30), one could also consider that the raising is due to the preceding affricate. This may be chronologically difficult, however, as it places the vowel raising—a sound change peculiar to Bactrian—before the Common Iranian dissimilation of *j- [dʒ] to *d- in the word for 'hand'. Sims-Williams (p.c.) cautiously suggests that the -ι- of λιστο was generalised from the loc.sg. *dastayā, which will have been in common use and may survive as the first element of λιστηγίρδο 'estate; ward, dependant' < *dastay(ā)-kṛta- (cf. further Khot. loc.sg. *dīšta*, as pointed out by Federico Dragoni).

³⁷⁹ I transcribe λιστο as /lištə/ because of the arguments regarding palatalisation made in §2.2.4.2. It is phonologically understandable that Bactr. -στ- /št/ would be rendered as Niya -st-; see §3.2.2 s.vv. *āspista*; *saste* and §4.3.16.

³⁸⁰ Cf. further TB (→ TA) *pārmañk* /pərməñk/ 'hope' ← Bactr. φρομυγγο < *fra-manyu-ka-, where Bactr. -ι- /i/ is substituted with an accented schwa in Tocharian.

³⁸¹ In case Niya *avalīka* means 'swaddle' and is a loan from Bactr. *αβαλιρκο /əvališkə/ < *upa-dṛšta-ka- or *αβολιρκο /avəliškə/ < *abi-dṛšta-ka- (§3.2.3 s.v.), this would also be true of the sequence -λι- /li/.

³⁸² The hypocoristic suffix -uka- potentially seen in Old Iranian anthroponyms (Iranica: 573) is probably irrelevant for the morphological analysis of *lastuga*.

loanwords Arm. *dastak* ‘palm of the hand’ (Olsen 1999: 876) and Syr. *dstq* ‘handle, hilt’ (Ciancaglini 2008: 155).

In the latter case, the *-u-* in Niya *lastuga* may form a problem. **dasta-ka-* could yield Bactr. **λιστογο*, with the same development of **-a-ka-* as in e.g. *πωστογο* ‘document, letter, contract’ < **pawasta-ka-* (BD II: 258f.). Yet, the <ο> in *πωστογο* and, by implication, **λιστογο* probably stands for /ə/ and not for /u/ (cf. the variant spellings of *πωστογο* in *-αγο* and *-ιγο*). Deriving *lastuga* out of **λιστογο* /*lišṭəgə*/ < **dasta-ka-* accordingly requires one to posit a rendering of Bactr. *-o-* /ə/ as Niya *-u-*. While such a substitution should not be regarded as impossible (cf. 3.4.2 s.v. *Vhurmajheva*), it adds still another complication.

Because of the formal issues discussed above and the uncertainty on the exact semantics, I conclude that the derivation of Niya *lastuga* from Bactr. **λιστογο* /*lišṭəgə*/ < **dasta-ka-* is merely tentative.

56. *ṣvaṭhaṃgha* / *ṣoṭhaṃga* ‘finance officer’

Attestations of the base form

DIR.SG. *ṣvaṭhaṃgha*: CKD 11; 33; 713; *ṣoṭhaṃga*:³⁸³ CKD 7 (2x); 12 (2x); 14 (2x); 19; 35; 37 (2x); 38; 54; 64; 70 (2x); 71 (2x); 91; 123; 134; 142 (2x); 155; 156; 158; 165; 182 (2x); 192; 206; 208; 230; 265; 310; 341; 344; 358; 400; 403 (2x); 413; 422; 427; 433 (2x); 439 (2x); 461; 469; 474 (2x); 484 (2x); 494 (2x); 497; 502; 503; 504; 509 (2x); 520; 521; 524 (2x); 548; 555; 567 (4x); 582; 592; 598; 636 (2x); 638; 641; 657; 686; 716; 721; 723; 734; 735; 744; 745; 795; 796; 808; 821; 859; 887; 888 (2x); 897; 899; *ṣoṭhaṃgha*: CKD 19; 21; 22; 34; 83 (2x); 85; 86 (2x); 90; 97; 107; 110; 135 (2x); 140 (2x); 143 (2x); 152 (2x); 157; 159; 162 (2x); 165; 203; 206 (2x); 220; 243; 327; 330; 340; 453; 454; 498; 507; 541 (2x); 547; 552; 569; 572; 575; 576 (2x); 577; 580 (5x); 582 (2x); 586; 587 (3x); 589; 593; 604; 648; 767; 769; 771; 787; 816 (2x); 817 (2x); 839

GEN.SG. *ṣoṭhaṃghaṣa*: CKD 656

DIR.PL. *ṣoṭhaṃga*: CKD 272

GEN.PL. *ṣoṭhaṃgana*: CKD 198; 567

³⁸³ For some documents (CKD 35; 265; 400; 887; 897), the available editions have *ṣoṭhaṃga*. Yet, in all cases where I could check the reading, the expected *ṣoṭhaṃga* is visible on the images, so I assume for convenience that everywhere ʔ *ṭha* and not ʔ *tha* must be read. I likewise assume that KD’s (48) reading *ṣoṭhaṃgha* in CKD 123 is a typo for *ṣoṭhaṃgha* with an initial retroflex. In CKD 422 (obverse 10) and 821, read *ṣoṭhaṃga* instead of *ṣoṭhaga*.

Compounds

ABL.SG. *ṣvaṭhaṃgadharma* ‘the office of a finance officer’: CKD 567

The official called *ṣvaṭhaṃgha* / *ṣoṭhaṃga*³⁸⁴ in Niya Prakrit was in charge of collecting taxes and, even more so, preparing account lists and administering the offices where these tax products were stored (cf. LKD: 127f. s.v.; Høisæter 2020: 169; 597); hence the approximate translation as ‘finance officer’ (so Atwood 1991: 194 *et passim*).

Niya *ṣvaṭhaṃgha* / *ṣoṭhaṃga* has a cognate in TA *ṣoṣṭānk** (LKD: ix; 128; Bailey 1937a: 905 with fn. 3; 1947: 149; 1949a: 124; DTTA: 497f.). This Tocharian word is attested through its nom.pl. *ṣoṣṭānkāñ* in the syntagm *lāñc āmāsāñ ṣoṣṭānkāñ* ‘kings, ministers, and finance officers’ (A 222 a2 = THT 855 a2); it does not occur in administrative documents.

More recently, it has been argued that also the Bactrian title *σωταγγο* is connected to the words under discussion (BD II: 266; Hitch 2009: 18). I doubt the correctness of this argument. The dis legomenon *σωταγγο* only occurs in contexts that do not allow to determine its precise meaning, and one is forced to resort to ad hoc assumptions for the comparison with *ṣvaṭhaṃgha* / *ṣoṭhaṃga* to work phonologically. To begin with, the initial *ṣ-* of *ṣvaṭhaṃgha* / *ṣoṭhaṃga* does not correspond to any known phonological value of Bactr. <σ>, i.e. /s/, /ś/, /ts/, and /tś/ (§2.2.4.2). Aware of this issue, Sims-Williams (BD II: 266) conjectured that “the initial consonant of one form or the other” was “affected by dissimilation or assimilation”, but this cannot be proved as long as the ultimate etymology of *σωταγγο* remains unknown. A second problem is the discrepancy between Bactr. -τ- /t/ and Niya -ṭh- /ṣṭ/. To be clear, Bactr. -τ- /t/ can derive from earlier *-ṣt-, e.g. in *αταο* /atā/ ‘eight’ < **aṣtā*, but this sound change had already been completed by the time of the earliest Bactrian inscriptions.³⁸⁵ If one wants to connect *ṣvaṭhaṃgha* / *ṣoṭhaṃga* to *σωταγγο*, one thus either has to assume a very early borrowing or a dialect variant with -ḫt- /ṣṭ/ preserved. As neither option is particularly plausible, I prefer to leave Bactr. *σωταγγο* aside for now.

None of the previously proposed etymologies for *ṣvaṭhaṃgha* / *ṣoṭhaṃga* carries full conviction. Thomas (1926b: 51) hypothesised this title to be borrowed from Tib. *so tham* ‘chief of the military guards’, but this proposal is semantically unconvincing, as the duties of a *ṣvaṭhaṃgha* / *ṣoṭhaṃga* are of

³⁸⁴ -ṭh- stands for /ṣṭ/, cf. §2.1.6.

³⁸⁵ Cf. e.g. Sims-Williams (1985) on the evidence from the Surkh Kotal inscription.

a financial rather than a military character (cf. *supra*). In addition, the phonological correspondence is weak.³⁸⁶

Bailey (1949a: 123–126) reconstructed the ultimate source of *ṣvaṭhaṃgha* / *ṣoṭhaṃga* as OIr. **fra-waxš-tana-ka-* ‘seller’, a nominal derivative of the verbal root **fra* + **√waxš* seen in e.g. MMP *frawaxš-* (or *frōxš-*) ‘to sell’ (so also van Windekens 1976: 640; Isebaert 1980: 57f.). This suggestion is not compelling either. A *ṣvaṭhaṃgha* / *ṣoṭhaṃga* was not a merchant but somebody collecting and storing taxes, and formally, Bailey had to posit ad hoc sound changes that cannot be ascribed to any known Middle Iranian language: **fra-waxš-tana-ka-* > **frōxštanaka-* > **šōštanaka-* > **šōštanka-*.³⁸⁷

According to Tremblay (2001: 35 fn. 54), *ṣvaṭhaṃgha* / *ṣoṭhaṃga* would come from Skt. *śodhanaka-* ‘a kind of official or servant in a judge’s court’. This derivation is phonologically impossible, as Skt. *-dh-* cannot become Niya *-ṭh-* / *-ṣṭ/*.

Pinault (*apud* Carling 2005: 57) traced *ṣvaṭhaṃgha* / *ṣoṭhaṃga* back to a Chinese combination *shōu cáng* 收藏 ‘receive, accept, gather, harvest’ + ‘conceal, store’. From the semantic point of view, Pinault’s etymology is attractive, but his idea still suffers from some drawbacks. First of all, there seems to be no trace of an official named *shōu cáng* 收藏 in the contemporary Chinese documents from the Tarim Basin.³⁸⁸ Pinault’s proposal is moreover phonologically not self-evident. In (Early) Middle Chinese, *shōu cáng* 收藏 would have been pronounced as *syuw dzang* (Baxter and Sagart’s notation). This is, however, only superficially similar to *ṣvaṭhaṃgha* or *ṣoṭhaṃga*, as it is, for instance, counterintuitive that Chin. *-dz-* would be rendered as *-ṣṭ/* in Niya Prakrit and Tocharian.³⁸⁹ Consequently, this etymology is not fully convincing either.

Most recently, Pinault (in DTTA: 497f.) has proposed to interpret Niya *ṣvaṭhaṃgha* / *ṣoṭhaṃga* and TA *ṣoṣṭaṅk** as a hybrid compound with a

³⁸⁶ The dental sibilant in Tibetan does not correspond to the retroflex in Niya, and there is no reason why Tib. *-th-* would be substituted with Niya *-ṭh-* / *-ṣṭ/*.

³⁸⁷ The relative chronology assumed here is *exempli gratia*.

³⁸⁸ Chavannes (1913); Maspero (1953); Hou & Yang (1999); Trombert (2000). I thank Meng Xiaoqiang (Leiden) for checking the Chinese evidence for me.

³⁸⁹ Observe also the different treatment of (E)MC *uw* shown by Niya *jīṭu(m)g(h)a* ‘palace attendant’ ← Chin. *shì zhōng* 侍中 ‘serve, wait upon’ + ‘centre’, (E)MC *dzyiH trjuwng*. In this word, (E)MC *uw* is rendered as Niya *u* and not as *va* or *o*, as is assumed in Pinault’s etymology of *ṣvaṭhaṃgha* / *ṣoṭhaṃga*.

Chinese first member and an Indic second member. Based on Burrow's (LKD: 128) observation of a close relationship between the office of a *ṣvaṭhaṃgha* / *ṣoṭhaṃga* and that of a *divira* 'scribe' (§3.5.1 s.v.), he regards *ṣo-* as a loan from either Chin. *shū* 書 'write, written document', (E)MC *syo*, or Chin. *xiě* 寫 'depict, write', (E)MC *sjaeX*.³⁹⁰ The element *-ṭhaṃg(h)a* would, in his opinion, be cognate with Skt. *sthānika-*, an "officer ... in charge of record of towns and villages, and of the census of the households" mentioned a couple of times in Kauṭilya's *Arthaśāstra* (DTTA: 497, referencing MW: 1263; Kangle 1965: 195–198).³⁹¹ Leaving aside the question of how a Chinese word for 'to write' would have been compounded with an Indic official title, I find this etymology unlikely for phonological reasons. The Niya outcome of Skt. *sthānika-* should namely have been written with 𑀓 *ṭha* and not with 𑀔 *ṭha* / *ṣṭ*/ (cf. Niya *vaṭhayaga* 'attendant' < Skt. *upasthāyaka-*; §2.1.6), and the assumed syncope of the *-i-* in *sthānika-* would be at odds with the normal development of Skt. *-ika-* to Niya *-iga* > *-iya* > *-i* (LKD: §75).

Previous etymologies commonly neglect the alternative form *ṣvaṭhaṃgha*. Yet, even though it is attested much less frequently than *ṣoṭhaṃga*, *ṣvaṭhaṃgha* still deserves due attention as a development of *ṣvaṭhaṃgha* > *ṣoṭhaṃga* is more easily motivated than the other way around and paralleled by *Aṃgvaga* (and variants) > *Aṃgoka* (*Aṃgoka*) 'name of a king' (LKD: §7). Therefore, I take *ṣvaṭhaṃgha* to be the more original form.

In what follows, I hope to make it plausible that *ṣvaṭhaṃgha* represents a borrowing from an as yet unattested Bactrian title **αζβαρσταγγο* / *əzvarstāṅgə*/ < **uz-bara-stāna-ka-* < **uz-bara-stān-āna-ka-*, literally 'the person in charge of the place (office) tax products are stored'.³⁹² The discussion will focus on (i) evidence from Bactrian and other Iranian languages to back up the reconstruction of **uz-bara-stān-āna-ka-*; (ii) the semantics and morphological formation of this pre-form; and (iii) the

³⁹⁰ Phonologically, the first of these options seems preferable, though it would still be peculiar that (E)MC **sy-* would be borrowed with a retroflex *ṣ-* and not with a palatal **ś-*.

³⁹¹ For this official's involvement with taxes, cf. *Arthaśāstra* 2.35.7 *gopasthānikasthāneṣu pradeṣṭāraḥ kāryakaraṇaṃ balipragrahaṃ ca kuryuḥ* "In the offices of the Revenue Officers and County Supervisors, Magistrates should carry out their duties and the collection of tributes." (Olivelle 2013: 174).

³⁹² In view of the syncope of **-āna-ka-* to *-αγγο* / *āṅgə*/, the etymology suggested here is only possible with Bactrian as the donor language.

phonological substitutions that have to be assumed to derive *ṣvaṭhaṃgha* / *ṣoṭhaṃga* out of **αζβαρσταγγο* / *əzvarstāṅgə*/.

The reconstructed **uz-bara-stān-āna-ka-* would be an adjectival derivation in **-āna-ka-* (treated below) from **uz-bara-stāna-* ‘the place (office) tax products are stored’. **uz-bara-* is a nominal derivative from **uz + *√bar* (EDIV: 6–10), a root continued in Bactrian as *αζβαρ-* / *əzvar-* ‘to bring forth, produce, disburse’ (BD II: 188).³⁹³ This Bactrian verb has a suppletive preterite *αζγαδο* / *əzyadə*/ < **uz-gata-*, to which the noun *αζγαμο* / *əzyāmə*/ ‘disbursement, allocation’ corresponds (cf. also Sims-Williams 2008b: 530).³⁹⁴ *αζγαμο* is derived from OIr. **uz-gāma-*, which literally means ‘coming out’ (cf. Parth. *izyām* ‘exit, passing away’, Sogd. *zγ’m* ‘end’), but is already used in the meaning ‘disbursement, allocation’ in the Aramaic documents from Bactria (ADAB: 55; 206).

Data from other languages support the hypothesis that there additionally was a Bactrian noun **αζβαρο* / *əzvarə*/ < **uz-bara-*, possibly meaning ‘tax product, disbursement’. One piece of evidence for this is Bab. *uz-ba-ra* (also *uz-ba-ri*; *uz-bar-ra*; *uz-bar-ri*) ‘crown land’ ← OIr. **uz-bara-* ‘the land which produces crops, etc.’ (Iranica: §4.4.12.11). A still more important witness is Parth. *‘wzbry* (also *‘wzbry*; *‘wzbr*), an adjectival derivation from **uz-bara-* used in the Nisa documents to denote a type of vineyard that is ‘liable to taxation’ (Diakonoff & Livshits 1977–2001: 187). In other words, Parth. *‘wzbry* refers to vineyards from which a part of the harvest should be disbursed as tax to the government.³⁹⁵

My hypothesis is that **αζβαρστανο* / *əzvarstānə*/ ‘the place (office) tax products are stored’ < **uz-bara-stāna-* would be the technical term used to denote the financial departments a *ṣvaṭhaṃgha* / *ṣoṭhaṃga* was responsible for (cf. supra).³⁹⁶ If this is correct, **αζβαρσταγγο* / *əzvarstāṅgə*/ could, as hinted at above, be a derivative of **αζβαρστανο* with the adj. suffix *-αγγο* < **-āna-ka-* ‘connected with’ often added to nouns indicating a location (BD II: 187).

³⁹³ Variant spellings *αζαβαρ-*; *αζοβαρ-*; later *εζβαρ-*.

³⁹⁴ See also doc. am, which is a list of such disbursements.

³⁹⁵ Parth. *‘wzbry* was, in the meaning ‘vineyard’, eventually borrowed into Georgian as *zvari* (Bielmeier 2008).

³⁹⁶ For the preservation of the cluster *-ρστ-* / *-rst-* at a compound boundary, cf. *Τοχοαρ(α)στανο* / *tuxwar(ə)stānə*/ ‘Tocharistan’ (BD II: 270; Sims-Williams 2015: 261) and *ἡαυροστανο* / *šahr(ə)stānə*/ ‘capital city’ < **xšaθra-stāna-* (hs 5; Sims-Williams 2006: 112).

There are two potential parallels for this type of derivation and the haplological shortening required by it. First, Sims-Williams & de Blois (SCBD: 131, correcting BD II: 220) have noted that Bactr. *καδοσταγγο* /kadgəstāṅgə/ (doc. de) may be derived with the suffix *-αγγο* from the commonly attested place name *καδοστανο*, literally meaning ‘the place of the household’. Put differently, *καδοσταγγο* would come from **kataka-stāna-ka-* < **kataka-stān-āna-ka-*. Second, a Bactrian noun **λασταγγο* /lāstāṅgə/ has been plausibly reconstructed as the source of TB *lastāṅk* ‘executioner’s block (?)’ → TA *lāstāṅk* ‘idem (?)’ (DoT: 592f.; DTTA: 398 with literature). **λασταγγο* is a derivative from *λαστανο* /lāstānə/ ‘litigation, dispute’ < **dāta-stāna-* ‘the place of law/judgement’ (cf. §3.2.1 s.v. *lastana*), and may, by way of **dāta-stāna-ka-*, ultimately derive from **dāta-stān-āna-ka-* (cf. also §3.2.1 s.v. *lastana* fn. 198).

If I am correct that *ṣvaṭhaṃgha* / *ṣoṭhaṃga* is a loanword from **αζβαρσταγγο* /əzvarstāṅgə/, two phonological substitutions need to have taken place.

First, one has to assume that Niya *ṣv-* (possibly /ʒv/) corresponds to Bactr. *αζβ-* /əzv/. While the loss of an initial unaccented schwa does not need to be commented on, there is, unfortunately, no other loanword that could confirm how Iranian **zv* would be borrowed. However, as **zv* is, in any case, a cluster foreign to Gāndhārī phonology, it seems at least conceivable that speakers would render **zv* as <ṣv>. See the more detailed argumentation in §4.3.19.

Second, Niya Prakrit needs to have rendered Bactrian *-ρστ-* /rst/ as *-ṭh-* /ṣṭ/ (cf. also §4.3.24). Such a substitution is understandable, as a cluster ***rst-* violates the phonotactics of both OIA and MIA,³⁹⁷ and clusters of preconsonantal *r* and dentals often result in a retroflex in Gāndhārī, as in MIA in general (cf. von Hinüber 2001²: §256).³⁹⁸ One can moreover draw a parallel with Maggi’s (2022a) recent argument that Skt. *hapuṣā-* (also *habuṣā-*; *havuṣā-*) ‘juniper’ is borrowed through a Gāndhārī intermediary **havuṣa* from “East Iranian” **havursā-* < OIr. **hapr̥sā-* ‘juniper’ (cf. Av.

³⁹⁷ A sequence <rst> is twice attested in Central Asian Gāndhārī, but once in a foreign PN, i.e. *Tsagirsta* (CKD 419), which does not need to comply with the same phonotactic constraints as integrated loanwords, and once in an incomprehensible passage in the Kuča Prakrit document CKD 834.

³⁹⁸ A Niya example is *parivaṭ-* /parivaṭṭ/ ‘to exchange’ < *parivart-*.

haparāsī).³⁹⁹ He assumes (2022a: 6f.) that **-rs-* is rendered as Gandh. *-ṣ-*, comparable to how I suppose **-rst-* to be substituted with *-ṭh-* /*ṣṭ-* /.

In order to get rid of its un-Indic initial cluster, *ṣvaṭhaṃgha* can, as alluded to above, have developed further to *ṣoṭhaṃga*. I therefore hypothesise that Tocharian A borrowed this bureaucratic title through a Prakrit intermediary, a scenario already considered in Carling (2005: 57). Otherwise, the initial *ṣo-* in TA *ṣoṣṭaṅk** would not be accounted for.

In sum, a so far unattested Bactrian title **αζβαρσταγγο* /*əzvarstāngə*/ < **uz-bara-stāna-ka-* < **uz-bara-stān-āna-ka-* ‘the person in charge of the place (office) tax products are stored’ may first have been borrowed into Niya Prakrit in the form *ṣvaṭhaṃgha*, before developing further to *ṣoṭhaṃga*. Subsequently, the latter form may have been borrowed as *ṣoṣṭaṅk** by speakers of Tocharian A. Semantically, this proposal would seem superior over previous suggestions, but it must be acknowledged that it requires a considerable amount of reconstruction and the unparalleled assumption that foreign **zv* is substituted with Niya <*ṣv*>.

3.3 Loanwords from Bactrian or another Iranian language

The preceding section dealt with Iranian loanwords in Niya Prakrit for which I consider there to be a decisive phonological, semantic, or other argument supporting Bactrian as the donor language. In addition, there are Iranian loanwords whose phonology permits the assumption of a Bactrian donor while also allowing one to posit a different source language, e.g. Parthian or Sogdian. Such loanwords are treated in the present section, which again uses the classification system introduced in §3.1.7.

³⁹⁹ I have slightly adapted Maggi’s orthography to make it consistent with the spelling used in the present work. Given that one of the natural habitats of juniper trees is Afghanistan (see Maggi 2022a: 5), it seems possible that the source language of Gandh. **havuṣa* → Skt. *hapuṣā-* (*habuṣā-*; *havuṣā-*) can be identified more precisely as (Early) Kuṣāṇa Bactr. **υαβορσα* /*havursā*/ < **hapṛsā-* (cf. *λογδα* /*luydā*/ < **duxtā-*).

3.3.1 Secure etymologies

57. *ajhate* ‘free, noble’

Attestations of the base form

DIR.PL. *ajhate*: CKD 272; 588; 889; *ajhade*: CKD 120 (2x); 507; 593; ⁴⁰⁰ *ajhati*: CKD 576; *asade*: CKD 436

GEN.PL. *ajhateyana*: CKD 242

Derivatives

ADV. *ajhatu*: CKD 152

Burrow (1934: 509; LKD: 73 s.v.) convincingly argued *ajhate* to be a loanword from a Middle Iranian derivative of OIr. **āzāta*- ‘noble, free’.⁴⁰¹ Bactr. αζαδο /*āzādə*/ (BD II: 188) would be a likely source, but the lack of distinctive phonological features renders it difficult to exclude MP/Parth. *āzād* (DMMP: 84), Sogd. *”zty* (also *”zt’y*; *”z’ty*; DMSB²: 51), or Khot. *āysāta*- (DKS: 20f.). The ending *-e* in *ajhate* will be examined in §4.4.3.

More discussion is needed on the seemingly adverbial form *ajhatu* in (3.31).

(3.31) CKD 152 under-tablet obverse 4f.

ahuno atra rayaka uṭiyana viṣajidemi tatra trevarṣaga uṭa 1 eṣa bhuya rajyami ajhatu oḍidavo

“Now I have sent some royal camels there. Among them there is a three-year-old camel. This is to be again sent back to the kingdom.” (TKD: 27)

Based on the idea that *ajhatu* “seems to have nothing to do with *ajhate*” (LKD: 73 s.v.), Burrow translates *ajhatu oḍ-* as ‘to send back’. The latter meaning is, however, customarily expressed by *patama oḍ-* (CKD 1; 9; 386); so, it would seem counter-intuitive not to translate *ajhatu oḍ-* as ‘to let free’, a translation which fits the context of (3.31) equally well. If correct, the final *-u* in *ajhatu* could conceivably represent the outcome of an adverbial neuter in *-*am* in the Iranian source language (see just below).

As discussed in more detail elsewhere (§3.2.3 s.v. *oḍ-*), an additional argument supporting this interpretation of *ajhatu oḍ-* comes from

⁴⁰⁰ The form *ajhade* is also attested in the unpublished loan contract in Bajaur fragment 15 (CKM 278).

⁴⁰¹ For the semantics of this Iranian word, see de Blois (1985) and Colditz (2000: 53–107).

phraseology. Aram. *ʾzt šbq*, a calque of OP **āzātām hrd-*, MP *āzād hil-*, and Bactr. *αζαδο υιρζ-* allow for the reconstruction of an Old Iranian collocation **āzātām + *√harz* ‘to let free’.⁴⁰² If my argument that the verb *ođ-* is derived from Bactr. **ωυιρζ-* < **awa-hrz-* is correct (for which see §3.2.3 s.v.), Niya Prakrit would preserve an indirect witness to the same Iranian collocation.

58. *śpaśa* ‘watching, guarding’

Attestations of the base form

DIR.SG. *śpaśa*: CKD 123; 133; 272;⁴⁰³ 283; 291; 329; 340; 341; 349; 351 (2x); 357; 358; 362; 368; 379; 387; 541 (2x); 578

Compounds

DIR.SG. *śpaśavaṃna* ‘guard, watchman’: CKD 178; 518 (2x); *śpaśavaṃnaga* (< **spāsa-pāna-ka-*): CKD 507; 515; 541 (2x); *śpaśavaṃni*: CKD 84; *śpaśavaṃne*: CKD 126

DIR.PL. *śpaśavaṃne* ‘idem’: CKD 88; *śpaśavaṃne*: CKD 119; *śpaśavaṃneya*: CKD 522; *śvaśavaṃniye*: CKD 471

GEN.PL. *śpaśavaṃnanna* ‘idem’: CKD 71 (3x); *śpaśavaṃnana*: CKD 297; *śpaśavaniyana*: CKD 471

ADJ. *śpaśavaṃni* ‘of the watchman’: CKD 520 (3x)

The meaning and etymology of *śpaśa* and the compound *śpaśavaṃna* have been elucidated by Thomas (1934a: 44f. fn. 7) and Burrow (1934: 512f.; LKD: 132 s.v.; *pace* Lévi *apud* Bloch 1937: 52). While *śpaśavaṃna* ‘guard, watchman’ refers to the persons responsible for watching after the outer borders of the kingdom, the base form *śpaśa* refers to the act of ‘watching, guarding’ itself. Etymologically, *śpaśa* is probably a loan from a descendant of OIr. **spāsa-*, a noun made from the verbal root **√spas* ‘to see, to watch > to attend to, to serve’ (EDIV: 353f.). The compound *śpaśavaṃna* can be traced back to OIr. **spāsa-pāna-* ‘the one in charge of watching’.

The initial cluster *śp-*, also once *sp-* and once *sv-*, probably stands for something like /sf/ (cf. §2.1.6). This phonological feature should not be assigned to the donor language, since *sp* likewise develops to *śp* in inherited

⁴⁰² For Aram. *ʾzt šbq*, see Benveniste (1954: 299) and Gershevitch (1954: 126 = 1985: 164), and on MP *āzād hil-*, cf. Colditz (2000: 82–86). The Bactrian syntagm is attested in documents F 8~F 7’, F 16~F 14’f., and P 17’.

⁴⁰³ Based on the photograph, I read *śpaśa* in this document and not *śpāsa* as per Boyer et al. (1920–29: 102).

words such as *parospāra* ‘one another’ < *paraspara*-.⁴⁰⁴ The word-internal voiced sibilant -ṣ- /z/ is also explainable from within Niya Prakrit since all intervocalic sibilants were voiced in this language (cf. §2.1.2).

OIr. **spāsa-* has descendants in the following Middle Iranian forms: MP/Parth. *(i)spās* (→ Arm. *spas*) ‘service, gratitude, thanks’ (CPD: 75; DMMP: 86; Olsen 1999: 907); Bactr. (α)σπασο / (ə)spāsə/ ‘service’ (BD II: 265); and Sogd. *sp*’s ‘service, office’ (SD: 358; DCS²: 171f.). In other words, **spāsa-* has undergone a semantic development from ‘watching’ to ‘service’ in Middle Iranian times.

To me, this development seems insufficient a reason to exclude languages like Bactrian or Sogdian as the donor of Niya *spāsa*, as it seems possible that the absence of the etymologically older meaning ‘watching, guarding’ in these Iranian languages is due to their limited documentation. Two observations are worth making in this regard. First, the hypothesised compound **spāsa-pāna-* ‘the one in charge of watching’ may have contributed to the preservation of the older meaning of the simplex **spāsa-*. Second, the meaning ‘service’ may also have left a trace in Niya Prakrit; as Burrow (1934a: 513) already remarked, a meaning such as ‘duty’ or ‘service’ would namely suit well in the formulaic phrase *avi spāsa jivīdāparicagena anada rakṣīdavya* ‘also your duty is to be kept even at the expense of your life’.⁴⁰⁵

To my knowledge, the compound **spāsa-pāna-* is not so far attested in an Iranian language, but it could easily have been formed. If we are dealing with a Bactrian loanword, the source of *spāsavamṇa* would be reconstructable as **σπασοβανο* /spāsəvānə/.⁴⁰⁶

⁴⁰⁴ For another Iranian loanword starting in *sp-*, cf. §3.2.1 s.v. *spāra* / *spūra* ‘full, completely’. On the phonological development, see also §4.3.14.

⁴⁰⁵ This phrase is attested with minor variations in CKD 283; 291; 329; 341; 349; 351; 357; 358; 362; 368; 379; 387 (all documents written on leather).

⁴⁰⁶ Currently, two other Bactrian compounds in -βανο < **pāna-* are known, i.e. χοβανο ‘shepherd’ < **fšu-pāna-* (BD II: 279) and ρανοβανο* ‘robber’ < **rātha-pāna-* → ρανοβαναιο ‘robbery’ (BD II: 259). See furthermore §3.2.1 s.v. *stora*, where I argue that Niya *storvana* is a loan from Bactr. **στωροβανο* ‘groom’ < **staura-pāna-*.

59. *harga* ‘dues, tax’

Attestations of the base form

DIR.SG. *harga*: CKD 141; 206; 285; 295; 677; 696

Although *harga* is only rarely attested, it is not in serious doubt that this word refers to a kind of tax. Its relationship to *palyi*, the default word for ‘tax’, has yet to be fully clarified (Burrow 1935a: 788; LKD: 133 s.v.; Høisæter 2020: 172–174).

As discovered by Bailey (*apud* Burrow), *harga* must be compared with, amongst others, MP *harg* (also *xarg*) ‘duty, tribute’ (CPD: 43; DMMP: 182; 364) and Parth. → Arm. *hark* ‘tax’ (Olsen 1999: 890f.).⁴⁰⁷ These Iranian forms go, by way of OP **harkā-*, probably back to an Ancient Near Eastern administrative term reflected in Bab. *ilku* ‘land tax’ (Henning 1935 = 1977 I: 355–357; Sims-Williams 2002: 227; *pace* e.g. Burrow 1935a: 788; EDIV: 131f.).

The question remains from which language Niya Prakrit borrowed the word *harga*. Bactrian is a likely possibility, as the term in question occurs in this language as *ϰαρυο* /*hargə*/ (BD II: 272).⁴⁰⁸ This scenario would probably work best if, contrary to what has been claimed by Schwartz (2008: 144), *ϰαρυο* is not “borrowed from Sasanian MPers. economic terminology”, but a word already used in Kuṣāṇa times (despite there being no attestation from this period). Else, it may be chronologically difficult for *ϰαρυο* to still have been borrowed into Niya Prakrit (cf. §4.2.1).

Schwartz’s main argument to regard *ϰαρυο* as a borrowing from Middle Persian seems to be the preservation of the initial *h-*. This is, however, not a diagnostic feature of a Middle Persian loanword. While *h-* can indeed disappear in Bactrian (SFBG: 39), there are also native words where it generally stays, e.g. in *ϰιρζ-* /*hirz*/ ‘to let go’ < **hrza-*.

Therefore, I am more inclined to agree with Sims-Williams (2002: 227), according to whom *ϰαρυο* was borrowed from OP **harkā-* and thus belonged to the Achaemenid heritage in Bactrian. In this case, the word would have existed early enough in Bactrian for this to be the source language of Niya *harga*.

⁴⁰⁷ For more forms, see Schwartz (2007: 26; 2008: 143f.).

⁴⁰⁸ Note in passing the resemblance between the Bactrian syntagm *ϰοηαρυο ϰαρυο* ‘dues of the lord’ (doc. Nn) and Niya *raya[ka] harga* ‘dues from the king’ (CKD 696; cf. perhaps also *raja harga* in CKD 285).

Due to the lack of phonological indications that could prove a Bactrian origin of *harga*, other scenarios are not to be excluded *a priori*, even if they are historically less likely. One theoretical option is that *harga* is a loanword from Parth. *hark* hailing back to the Indo-Parthian conquest of Gandhāra.⁴⁰⁹ Another possibility is an Old Persian loanword into pre-Gāndhārī. Since there are more examples of Gāndhārī administrative terms dating back to the Achaemenid conquest of the region (§4.2.2), it is not unthinkable that OP **harkā-* was borrowed into pre-Gāndhārī and from there continued into Niya Prakrit. Yet, the absence of any trace of the word in Sanskrit may warn against this scenario because the Old Persian words in Gāndhārī tend to have a cognate in Sanskrit (cf. again §4.2.2).

3.3.2 Plausible etymologies

60. *aṭa* ‘flour’

Attestations of the base form

DIR.SG. *aṭa*: CKD 358; 637; 797;⁴¹⁰ 854 (?)

Niya *aṭa* /*āṭṭa*/⁴¹¹ ‘flour’ has been convincingly compared to Skt. *aṭṭa-* ‘food’, Hindi *āṭā* ‘flour, meal’, and various other NIA words of the same meaning (Thomas 1935: 67; LKD: 73 s.v.; CDIAL: no. 1338). While so much is clear, the etymology has been a continuous topic of debate. The most widely held opinion states that Niya *aṭa* and the other Indic forms are inherited words cognate with, amongst others, MP *ārd* ‘flour’ (CPD: 11); Bactr. *αρδο* /*ārdə*/ (BD II: 193f.); Tumsh. *ārda-** (acc.sg. *ārdu*; Ogihara & Ching 2024: 315); and

⁴⁰⁹ The assumption of a Parthian borrowing would require voicing of the velar stop after *r* in Prakrit. Such voicing would be unremarkable, as the clusters *-rk-* and *-rg-* are not kept distinct in Niya (LKD: §36).

⁴¹⁰ Basing myself on the hand copy of CKD 797 in Hasuiké (1996: 307), I consider Hasuiké’s reading *aṭa namdha* in line 1 of the reverse of the cover-tablet preferable over Lin’s (1999: 231) incomprehensible *ayanaṃ ca. aṭa namdha* can be translated as ‘a load of flour’ and compared with *aṃna nadha* ‘a load of corn’ in CKD 68; 200; 468 and loc.sg. *kuyana nadhammi* ‘a load of *kuyana* (corn)’ in CKD 435.

⁴¹¹ Cf. §2.1.2 (fn. 42) for the fact that intervocalic *-ṭ-* stands for a geminate /*ṭṭ*/ in Niya Prakrit.

Khot. *āḍa-* (DKS: 17) < **ārta-* ← PIr. **arta-* < PIIr. **HrHtá-* < PIE **h₂lh₁tó-* ‘ground’ (root **√h₂elh₁* ‘to grind’ as in Gr. ἀλέω ‘idem’).⁴¹²

The ensuing observations make me doubt this idea. To begin with, no Indo-Aryan derivative from the PIIr. root **√HarH* ‘to grind’ has been securely identified so far.⁴¹³ In light of Ved. *írṣyant-* ‘jealous’ ~ Av. *arəšiiant-* ‘idem’ < PIIr. **HrHšiant-*, I would moreover anticipate the verbal adj. **HrHtá-* to yield OIA **īrta-*, whose vocalism does not fit that of the attested forms. Finally, Skt. *aṭṭa-* ‘food’ is only attested in the *Medinīkośa*, a lexicon of the 14th century AD, which makes that Niya *aṭa* (3rd–4th century AD) is the first attestation of this term for ‘flour’ in an Indo-Aryan language. Given this chronology, it does not seem too likely that we are dealing with an inherited word (cf. also Emeneau 1966: 135).

These problems do not pose themselves when one regards Niya *aṭa* as an Iranian loanword: (i) **ārta-* ‘flour’ is widely attested in Iranian languages; (ii) its vocalism fits with that of Niya *aṭa* and its cognates; and (iii) the assumption of a borrowing makes it more easily understandable why the word is not attested in Indic earlier than the Niya documents.⁴¹⁴ The main issue with the assumption of an Iranian loan is the presence of a retroflex in Niya *aṭa*.

The first option one could think of is that *aṭa* /*āṭṭa*/ were a loan from Khot. *āḍa-*. Because devoicing can happen in Niya Prakrit (§2.1.4), the substitution of Khot. -*ḍ-* with Niya -*ṭ-* /*ṭṭ-*/ required by this idea would phonologically not be inconceivable. Yet, a Khotanese origin for Niya *aṭa* is still unlikely for geographical reasons in view of the cognates of Niya *aṭa* in other Indo-Aryan languages.

⁴¹² See e.g. Scheller (1965) and Burrow (1972: 539; 1973³: 47). The geminate -*ṭṭ-* of Skt. *aṭṭa-* would point to Prakrit origin.

⁴¹³ Burrow (1979–83: 81–83) has argued that Ved. *aráṇi-* / *aráṇī-* ‘piece of wood used to kindle fire by attrition’ should be analysed as an agent noun of the type *caḁśāṇi-* ‘looking’ from **√HarH* ‘to grind’. In my opinion, *aráṇi-* / *aráṇī-* more likely comes from the widely attested root **√ar* ‘to move, to rouse’ (so Grassmann 1873: 102), as it is the constant moving of the sticks against one another that causes the kindling of the fire. The Sogdian hapax *l’n*, perhaps ‘flint’, is probably unconnected to the Vedic word (Benkato 2017: 68f.).

⁴¹⁴ That Niya *aṭa* and its cognates may be Iranian loanwords seems not to have been seriously considered in previous scholarship. Yet, Mayrhofer (EWAia III: 8) mentions a personal communication from Chlodwig Werba, saying that the hypothesis of an Iranian loanword would be “lautlich einfacher”.

A geographically more attractive option is to see in Niya *aṭa* a loan from Bactr. $\alpha\rho\delta o$ /ārdə/. Then, one can hypothesise that this word for ‘flour’ was borrowed into South Asian Gāndhārī as **āṭṭa*- and transmitted in this form to the Prakrit vernaculars of northern India via the trade routes that were under the control of the Kuṣāṇa dynasty (Neelis 2011: 132–144; 186–204).⁴¹⁵ The example of Niya *suṣṇakirta* ‘needlework, embroidery’ suggests that the - $\rho\delta$ - /rd/ in Bactr. - $\kappa\rho\delta o$ could be rendered as -*rt*- in Gāndhārī (§3.2.3 s.v.). If we assume the same sound substitution for $\alpha\rho\delta o$, this could yield Gandh. **ārta*-. -*rt*- can furthermore develop to -*ṭ*- /ṭṭ/ in Niya Prakrit and Gāndhārī at large, e.g. *kaṭavo* ‘to be done’ next to *kartavo* < *kartavyah*; so, **ārta*- ← $\alpha\rho\delta o$ could have yielded Gandh. **āṭṭa*-, whence Niya *aṭa*.⁴¹⁶

Still, the absence of any decisive phonological arguments makes it difficult to be sure that Bactr. $\alpha\rho\delta o$ /ārdə/ is the source of Niya *aṭa* and its cognates. Gandh. **āṭṭa*- < **ārta*- could also have been borrowed from another Iranian language used in the region in which the word for ‘flour’ had the form **ārd(ə)*, e.g. Parthian. It is even possible that **ārta*- (> **āṭṭa*-) was borrowed from an older form **art(ə)* < **arta*-, comparable to Sogd. *’rtk* (’*rt*’*k*) ‘flour’ < **arta-ka*- (Livshits 2015: 173).

61. *ayana* ‘village, territory of a clan’

Attestations of the base form

ABL.SG. *ayanade*: CKD 334; 696

LOC.SG. *ayanaṃmi*: CKD 46; 334 (4x); 549; 629; 823; *avanaṃmi*: CKD 295

Derivatives

ADJ. DIR.SG. *ayanemci* ‘belonging to the village’: CKD 713 (2x)

Compounds

LOC.SG. *Aṃtuayanammi* (alternatively *Vaṃtu*-) ‘*Aṃtu* (*Vaṃtu*) village’:⁴¹⁷ CKD 296 (3x); 859; 884

ADJ. DIR.SG. *Aṃtuayanemci* ‘belonging to *Aṃtu* (*Vaṃtu*) village’: CKD 496

ADJ. DIR.PL. *Aṃtuayanemci* ‘idem’: CKD 296

ABL.SG. *Ajiyamaayanade* ‘*Ajiyama* village’: CKD 573; 817 (2x);

⁴¹⁵ See also §3.2.4 s.v. *taravara* for this type of borrowing chain.

⁴¹⁶ For this sound development, cf. also §4.3.24.

⁴¹⁷ For the uncertainty whether to read *Aṃtu*- or *Vaṃtu*-, see Ching (2012: 28). In CKD 884, I propose to restore *aṃ* ? *ayanaṃmi* (the reading of Duan 2016b) as *Aṃ(*tu)ayanaṃmi* (or *Vaṃ(*tu)*-).

- LOC.SG. *Ajiyamaaṽanaṁmi* 'idem': CKD 105; 181; 199; 275 (2x); 279 (2x); 389; 422; 713;⁴¹⁸ 714 (2x); 817; *Ajhiyamaaṽanaṁmi*: CKD 207
- ADJ. GEN.PL. *Ayiamaaṽanaṁciyana* 'belonging to *Ajiyama* village': CKD 817
- LOC.SG. *Ajiyamaaṽanakilmeyami* 'family estate (located) in *Ajiyama* village': CKD 817
- LOC.SG. *Catiṣadeviayaṁmi* 'Queen *Catiṣa* village': CKD 496
- ADJ. DIR.SG. *Catiṣadeviavanemci* 'belonging to Queen *Catiṣa* village': CKD 476
- LOC.SG. *Traṣaayaṁmi* '*Traṣa* village': CKD 70; 326; 393 (2x)
- ADJ. DIR.PL. *Traṣaayaṁciyana* 'belonging to *Traṣa* village': CKD 326 (2x)
- LOC.SG. *Navagaayaṁmi* '*Navaga* village': CKD 366; *Nayakaayaṁmi*: CKD 193
- ADJ. GEN.PL. *Navagaayaṁciyana* 'belonging to *Navaga* village': CKD 366
- LOC.SG. *Paginaayaṁmi* '*Pagina* village': CKD 750
- DIR.SG. *Petaavana* '*Peta* village': CKD 16 (2x)
- LOC.SG. *Petaayaṁmi* 'idem': CKD 42 (3x); 46 (2x); 121; 136 (2x); 137; 165; 494; 628; *Petaavanaṁmi*: CKD 10; 105; 808
- ADJ. DIR.SG. *Petaayaṁci* 'belonging to *Peta* village': CKD 32; 46; 124
- ADJ. DIR.PL. *Petaayaṁci* 'idem': CKD 124; *Petaayaṁciye*: CKD 164
- ADJ. GEN.PL. *Petaayaṁciyana* 'idem': CKD 839; *Petaavaṁciyana*: CKD 162; *Petaayaṁciyana*: CKD 110
- LOC.SG. *Petaayaṁnakilmeyami* 'family estate (located) in *Peta* village': CKD 32
- LOC.SG. *Yayeayaṁmi* '*Yaye* village': CKD 121; 254; 279 (4x); 431 = 432; 439; 468; 481; 495; 497; 532 (3x); 621 (2x); 632; 884 (2x); *Yayeavanaṁmi*: CKD 254; *Yayeayaṁnaṁmi*: CKD 581
- ADJ. DIR.SG. *Yayeayaṁci* 'belonging to *Yaye* village': CKD 532; 740; *Yave-avanemci*: CKD 474
- ADJ. DIR.PL. *Yayeayaṁciya* 'idem': CKD 37; *Yaveavaṁciye*: CKD 401
- ADJ. GEN.PL. *Yayeayaṁciyanana* (?) 'idem': CKD 37; *Yayeayani(m)ciyana*: CKD 431 = 432; *Yayiayaṁciyana*: CKD 745
- DIR.SG. *Yiruṁḍhinaayaṁmi* '*Yiruṁḍhina* village': CKD 297
- LOC.SG. *Yiruṁḍhinaayaṁmi* 'idem': CKD 297; *Yiruṁḍhinaayaṁmi*: CKD 163

As the word *ayana* 'village, territory of a clan' is semantically closely connected to *kilme* 'family estate', this lemma is best read in conjunction with §3.2.4 s.v. *kilme*. As described there in more detail, *ayana* refers to a territorial unit more extensive than a *kilme* but likewise used to collect taxes. That *ayana* refers to a larger territory is, for instance, clear from compounds such as the loc.sg. *Petaayaṁnakilmeyami* 'in a family estate (located) in *Peta* village' (CKD 32). In addition, Burrow (1935a: 779; 1935b: 674) noted that *Petanagaṁraṁmi* 'in *Peta* city' appears as a substitute for the more frequent

⁴¹⁸ One could emend the transmitted *Ajimaayaṁmi* to *Aji<*ya>maayaṁmi*.

Petaayana in CKD 25. It seems, however, doubtful that one can use this as evidence that *ayana* and *nagara* ‘city’ are exact synonyms.⁴¹⁹

Given its semantics, *ayana* probably does not come from Skt. *āpaṇa*- ‘market place’ (so e.g. KD: 333; Thomas 1931: 520f.; 1935: 63f.; Bailey 1946: 793 fn. 1). More likely, Burrow (1935a: 779) was correct when he suggested *ayana* to be a further witness of OIr. **ā-wahana*- ‘dwelling’, an Iranian word preserved in OP *āvahana*- ‘village’ (Schmitt 2014: 145); MP *āwahan* ‘fortified place, stronghold’ (CPD: 13); and, as a loanword, Arm. *awan* ‘village, small town’ (Olsen 1999: 869).⁴²⁰

Niya *ayana* differs from **ā-wahana*- in that the intervocalic **h* has been lost. If this loss happened already in the donor form, Sogdian presents itself as a possible source language in view of examples such as Sogd. *z’k* /*zāk*/ ‘child, offspring’ vs. MP/Parth. *zahag* ‘idem’ < **zaha-ka*-. Intervocalic *h* can also disappear in Niya Prakrit’s inherited vocabulary, as shown by examples such as *danagrana* (CKD 577; 588) next to *danagrahana* ‘giving and taking’ < Skt. *dāna-graṇa*- (cf. LKD: §28). Therefore, *ayana* could as well be borrowed from an unattested Parth. **āwahan* or Bactr. **αααααο* /*āwahanə*/ < **ā-wahana*-, whose formal reconstruction can be backed up by Parth. *padwahan* ‘supplication, prayer’ and Bactr. *πιδοοαααο* ‘request, entreaty’ < **pati-wahana*- (DMMP: 271; BD II: 255).⁴²¹

⁴¹⁹ The names given to *ayanas* (see the attestations above and cf. LKD: 77f. s.v.) are sometimes also transferred to words denoting different territorial units. Note e.g. gen.pl. *Yayekilmeciyana* (also *Yave*-) in CKD 431 = 432, with the element *Yaye* that frequently occurs as the name of an *ayana*. Note also that Caḍota, called a *nagara* ‘city’ in CKD 879, is a larger territory than an *ayana* (see e.g. CKD 496). On this basis, I conclude that a *nagara* ‘city’ is a larger unit than an *ayana* ‘village, territory of a clan’ (cf. also Padwa 2007: viii).

⁴²⁰ Khot. *vāna*- does not mean ‘dwelling place’, but ‘temple’ < **dmāna*- and should be kept apart (Skjærvø 1985: 69f. *contra* DKS: 383). The alleged Tumshuqese acc.sg. *wāno* < *wānā*-* ‘village’ (so Konow 1935: 804; 823) is probably a ghost word, as Maue (2009) has read its sole instance (I 24) more plausibly as acc.sg. *gūno* < *gūnā*-* ‘mark, sign’ (cf. Ogihara & Ching 2017: 462).

⁴²¹ If my Bactrian etymology of *kilme* ← **γιρλομηνο* < **gṛda-maiθa*- ‘dwelling of a household’ were to be confirmed (§3.2.4 s.v.), this would favour the assumption that *ayana* indeed comes from Bactr. **αααααο* /*āwahanə*/. For more discussion on the treatment of intervocalic *h* in the Iranian loanwords in Niya Prakrit, see §4.3.23.

62. *gavaša* ‘deer, stag’

Compounds

DIR.SG. *gavašanačira* ‘deer hunting’: CKD 509

gavaša, i.e. /gǎvāšna/, occurs only once in the Niya documents, but in a compound that leaves no doubt that this word refers to an animal one goes hunting for (*načira*). The more precise translation ‘deer, stag’ is based on an etymological comparison with various Iranian words of this meaning, including Av. *gauuasna*- < **gawazna*- (TKD: 99; cf. also Konow 1943: 67).

As is often the case, Khotanese is an unlikely donor language since the vowel -ū- in Khot. *ggūysna*- /gūzna/ < **gawazna*- (DKS: 87) does not match the sequence -ava- in Niya *gavaša*. In Sogdian, the word for ‘deer, stag’ is attested as BSogd. *γʹwzn*- (SD: 162), CSogd. *γwz-n*- (only acc.pl. *γwz-nt*ʹ; DCS²: 88), and MSogd. *γwzn*- (nom.sg. (?) *γwznyh*; DMSB²: 107). The phonological realisation behind these variant spellings was probably /γuzn/ (earlier **γwazn*), as Schwartz (*apud* Sims-Williams 2014: 47f.) convincingly argues based on the light-stem inflection of this word in Christian Sogdian. Accordingly, the assumption of a Sogdian loanword would again leave the sequence -ava- in Niya *gavaša* unaccounted for.

A phonologically possible source of Niya *gavaša* is MP *gawazn* ‘deer’ (CPD: 36; cf. NP *gawazn*). Yet, it would seem more logical that *gavaša* was borrowed from a language spoken closer to Gandhāra and/or the Tarim Basin. Therefore, one may also consider the possibility that *gavaša* is a loan from a hypothetical Bactrian form **γαοαζvo* /γawaznə/ < **gawazna*-. In the latter case, one would have to assume that the word-initial γ- /γ/ was substituted with Niya *g*- /g/ rather than ***g*- /γ/ because of the absence of a phoneme /γ/ in initial position in Gāndhārī (§2.1.2).⁴²²

Otherwise, the phonological correspondences are easy to understand: there are parallels for foreign -w- being borrowed with Niya -v- (cf. §4.3.22), and the substitution of the cluster -zn- with Niya -š- /sn/ is not surprising either, since /sn/ may well have been pronounced as [zn] due to assimilation of the sibilant to the voiced nasal.

⁴²² There are personal names in which Bactrian initial γ- /γ/ is, as expected, substituted with Gandh. *g*- /γ/, i.e. *Gaṇavhryaka* ← **γοανοφρυακο* /γwanəfryak(k)ə/ < **wana-friya-k(k)a*- (CKI 150) and *Ĝema* ← **γοημο* /γwēmə/ < **waima*- (CKI 1073; CKM 297); see Schoubben (2023: 290f.). Being foreign names, they do not necessarily comply with the phonotactic rules applied to inherited words and phonologically integrated loanwords.

63. *tavastaga* ‘carpet’

Attestations of the base form

DIR.SG. *tavastaga*: CKD 431 = 432; 527 (3x); 534; 578; 579; 581; 583; 590 (2x); 633; 728 (2x); 797; *tāvastaga*: CKD 583; *tavastae*: CKD 59
 DIR.PL. *thavastaga*: CKD 416; *thavastae*: CKD 714; *tavastaga*: CKD 622; 728⁴²³

As first recognised by Thomas (*apud* KD: 348), *tavastaga* ‘carpet’ is one of the many textile products of Iranian origin in Niya Prakrit.⁴²⁴ The closest match to the Niya form is Arm. *tapast(ak)* ‘carpet, mat’, a loan from Early Parth. **tāpast(ak)*, later **tābast(ag)*, < OIr. **tāpasta(-ka)*.⁴²⁵ As is always the case with nominal derivatives of the root **√tāp* ‘to twist, to wind’ (EDIV: 389), **tāpasta(-ka)-* should be reconstructed with a long vowel **ā* in its first syllable; the Niya variant spelling *tāvastaga* (CKD 583) provides corroborating evidence for this.

The *-p-* and *-k-* in **tāpasta(ka)-* respectively correspond to *-v-* and *-g-* /*γ-* in Niya *tavastaga*. Due to the Gāndhārī lenition of intervocalic consonants to fricatives (§2.1.2), it is not clear whether these correspondences are to be attributed to the donor language or the recipient. If the former, *tavastaga* could, like Arm. *tapast(ak)*, be a Parthian loanword, or it could have been borrowed from Sogdian where OIr. **-p-* is likewise preserved as such. In case of the latter option, Bactr. **ταβασταγο* /*tāvastəgə*/ would be a plausible source form.

64. *draṃga* ‘office’

Attestations of the base form

ABL.SG. *traṃghade*:⁴²⁶ CKD 640
 LOC.SG. *draṃgaṃmi*: CKD 98; 357 (3x); *draṃgami*: CKD 567 (2x); *traṃghami*: CKD 173
 DIR.PL. *draṃga*: CKD 439 (3x); 520 (2x); *draṃgha*: CKD 430; 775

⁴²³ The variant spellings with initial *th-* are due to unetymological aspiration (§2.1.3); the dir.sg. *tavastae* shows lenition of *-aga* to *-ae* (LKD: §16).

⁴²⁴ Cf. also Lüders (1936a: 12f.; 37f.); Burrow (LKD: 94 s.v.); Weber (1997: 32). In general on the terminology for carpets in Central Asia, cf. Zhang (2015).

⁴²⁵ The frequently cited NP *tabastah* ‘fringed carpet’ may be a ghost word (cf. CPED 280).

⁴²⁶ Boyer et al. (KD: 241) read *traghade*, but a trace of the expected anusvara is visible on the picture in Stein (1921 IV: Plate XXIII).

Compounds

DIR.PL. *draṃgadhare* 'office holder': CKD 272; *draṃghadare*: CKD 107; *traṃghadhare*: CKD 554; *traṃghadhāre*: CKD 86

GEN.PL. *draṃgadharanaṃ* 'idem': CKD 3

ABL.SG. *nagaradraṃgade* 'city office': CKD 317

LOC.SG. *nagaradraṃgaṃmi* 'idem': CKD 283

LOC.PL. *nagaradraṃgeṣu* 'idem': CKD 272

Niya Pkt. *draṃga*⁴²⁷ means 'office' in a double sense (cf. LKD: 98f. s.v.). On the one hand, this word can refer to administrative duties, e.g. 'collecting taxes' (cf. CKD 430; 439; 520; 775); people responsible for such bureaucratic tasks are called *draṃg(h)adhara*, literally 'office-holder'.⁴²⁸ On the other hand, *draṃga* could signify the physical buildings in which tax products were stored (cf. CKD 98; 173; 272; 283; 317; 357; 567). This meaning may be compared with the semantics of the Sanskrit cognate *draṅgā-*, used in Kalhaṇa's *Rājatarāṅgiṇī* (12th century AD) and later Kashmirian chronicles for "a watch-station established near mountain passes for the double purpose of guarding the approaches to the Valley and of collecting customs revenue" (Stein 1900: 291; emph. mine).

Burrow (1934: 509f.) made the convincing proposal that Niya *draṃga* and Skt. *draṅgā-* are loanwords from a nominal derivative **dranga-* of the Iranian root **√dra(n)j* 'to fix, fasten, hold' (EDIV: 76). With this etymology, the meanings of Niya *draṃga*, i.e. 'office (held)', and Skt. *draṅgā-*, i.e. 'stronghold', can be traced back to a more original meaning 'holding, established position' (Bailey 1955: 15).

When Burrow published his etymology, no derivative of OIr. **dranga-* having the same meaning as Niya *draṃga* had been discovered. Meanwhile, a neat equivalent of Niya *draṃgadhara* has surfaced in the form of the Bactrian compound δδραγγοληρο /draṅgəlērə/⁴²⁹ 'office-holder' (cf. BD II: 208). δδραγγοληρο allows one to also safely posit the existence of Bactr. (δ)δραγγο* /draṅgə/ 'office'.

Although Bactr. (δ)δραγγο* /draṅgə/ would obviously be a plausible source of Niya *draṃga*, there may still be a chronological problem. Because

⁴²⁷ The variant spellings of this word listed above do not require much commenting. If not resulting from the palaeographic similarity between 𐰌 *tra* and 𐰌 *dra*, spellings with initial *tr-* can be due to initial devoicing (§2.1.4).

⁴²⁸ Cf. also the syntagm *draṃga* 'office' + *dhar-* 'to hold' in CKD 439 (2x), 520 (2x), and 775.

⁴²⁹ On the late use of δδρ- to write /dr/, cf. BD II (39).

of *καραλραγγο* ‘margrave’ < **karāna-dranga-* ‘holding the border’ (Henning 1965: 77–79 = 1977 II: 633–635), **dranga-* would be expected to yield (Kuṣāṇa) Bactr. **λραγγο*,⁴³⁰ and *δδραγγοληρο* is only attested in doc. Y, a text datable to 771–772 AD (SCBD: 84), at a time when Bactr. *λρ-* /*lr-*/ from **dr-* had been reversed to /*dr-*/ (written *δρ-*; *δδρ-*; *Δρ-*; cf. SCBD: 60). With only this evidence, the least costly hypothesis would be that (δ)*δραγγο** ‘office’ is a late form of earlier **λραγγο*, itself an unlikely source of *draṃga*.⁴³¹

Nevertheless, there is at least potential evidence that (δ)*δραγγο** does not derive from earlier **λραγγο* but existed already in this form in Kuṣāṇa Bactrian. In line 4 of the Kuṣāṇa inscription DilT₅, a clearly readable sequence *δραγγα* is preceded by omicron, a frequent marker of word end, and followed by the preposition *πιδο* < **pati*. Although the context is too fragmentarily preserved to allow for secure conclusions, *δραγγα* thus seems to be a separate word (cf. Davary 2023: 41 *contra* 1982: 131), which one could analyse as an abl.-ins.sg. in *-α* from *δραγγο** < **dranga-*.⁴³² Consequently, there is at least a tentative possibility that *δραγγο** already existed in Kuṣāṇa Bactrian and Niya *draṃga* is a Bactrian loanword after all.

That said, *δραγγα* in DilT₅ line 4 remains too uncertain to build firm conclusions on. Therefore, I would still not exclude that Niya *draṃga* is a loan from a different Iranian language. As it remains a fact that Bactr. *δδραγγοληρο* ‘office-holder’ is the only secure derivative of **dranga-* having the same semantics as Niya *draṃga*, it is hard to tell which this language could be.⁴³³

⁴³⁰ OIr. **dr-* also becomes *λρ-* /*lr-*/ in initial position; cf. e.g. *λρ(υ)γο* /*lrūgə*/ ‘healthy, in good health’ < **druwa-ka-* (BD II: 228).

⁴³¹ Given that intervocalic *-ρλ-* /*rl-*/ is, as a rule, substituted with *-r-* (§4.3.25), I would expect *λρ-* /*lr-*/ to be simplified to either *l-* or *r-*. Due to its late attestation, Skt. *draṅgā-* could still be an independent borrowing from Late Bactrian (δ)*δραγγο**.

⁴³² For the Kuṣāṇa Bactrian abl.-ins.sg. in *-α*, cf. Sims-Williams (2015: 258) and Halfmann et al. (2024: 27f.). Davary’s (2023: 41) hypothetical translation of *δραγγα* as “Befestigung” suggests that he also understands it to be from *δραγγο** < **dranga-*. It still remains unclear why *δραγγο** would have escaped the change from **dr-* to *λρ-* /*lr-*/ . One could think that *δραγγο** is a loanword, but there is no obvious source language.

⁴³³ If the word was borrowed very early, one may consider its source to have been a hypothetical OP **dranga-*, cf. OP **ā-dranga-* ‘guarantor, guaranteed’ → Aram. *’drng* (Iranica: §4.4.10.3; ADAB: 115). Another theoretical possibility is that *draṃga* is a loan from Parth. **drang*. Depending on the chronology of the

65. *namata* ‘felt’

Attestations of the base form

DIR.SG. *namata*: CKD 151; 184; 382; 385 (3x); 575 (2x); 796; *namatha*:⁴³⁴ CKD 154
 DIR.PL. *namata*: CKD 151; 382; 387; *namate*: CKD 476; *namati*: CKD 345;
naṃmati: CKD 728

Attestations as a PN

DIR.SG. *Namata*: CKD 742
 GEN.SG. *Namataṣa*: CKD 376

Derivatives

DIR.SG. *namataga* ‘felt’ < **namata-ka-*: CKD 728; *naṃmataga*: CKD 728;
naṃmatae: CKD 714

That Niya Pkt. *namata* means ‘felt’ has been noted as early as Stein (1903: 402; 1907: 367), who identified it with Anglo-Indic *numdah* ‘felt-rug’. The same word also occurs in other ancient Indo-Aryan languages: there is Pāli *namataka-* ‘a felt covering for a knife’ and *nantaka-* ‘dirty or ragged cloth; rag’ (Cone 2001– II: 505; 508); BHS *namata-* ‘felt to make a monk’s garment’ and *nāmatika-* ‘wearing garments of felt’ (BHSD: 290; 293); and Skt. *namata-* / *navata-* ‘felt, woollen stuff’ (in lexic; MW: 528; 531).⁴³⁵

Niya *namata* and its cognates are likely Iranian in origin and to be compared with the many derivatives of OIr. **namata-* ‘felt’ (cf. Lüders 1936a: 13–20; LKD: 100 s.v. *namatae*), e.g. YAv. *nəmata-* / *nimata-* (AIW: 1068);⁴³⁶ MP *namad* (CPD: 57); BSogd. *nmt* (SD: 240); Khot. *namata-* (DKS: 173); and Oss. I. *nymæt*, D. *nimæt* (Cheung 2002: 209f.).

Due to the lack of distinctive phonological developments, it is difficult to determine the donor language of Niya *namata* and its congeners. Yet, the aforementioned Sogdian and Khotanese forms would, for instance, work

relevant sound change, Sogdian is excluded as a donor since **dr-* became Sogd. *ž-* (via **δr-*; Sims-Williams 1989a: 180).

⁴³⁴ This variant spelling with *-th-* is due to unetymological aspiration (§2.1.3).

⁴³⁵ Lelli (2020: 151f.) argues that this word for ‘felt’ occurs already in AVP 15.12.6 as nom.pl. **namatā*. This form is, however, an uncertain emendation of the received text *namatis* / *namatas*, so it seems best not to build conclusions on this Atharvavedic passage regarding how old this term for ‘felt’ is in Indic.

⁴³⁶ The Avestan word does, however, not refer to ‘felt’ but to a type of wood, as observed by Milad Abedi, in his talk “A pressing matter – the linguistic origin of Iranian felt terms” presented at the conference “Language and culture in the borderlands of the eastern silk road” (Vienna, 5 September 2024).

phonologically.⁴³⁷ In case there also existed a Bactrian descendant of OIr. **namata-*, one may consider the further possibility that *namata* was borrowed from an unattested word **ναμαδο* /*namadə*/.⁴³⁸

66. *paraša* ‘abduction, plundering’

Attestations of the base form

DIR.SG. *paraša*: CKD 165; 195; 324 + 328; 338; 625

INS.SG. *parašena*: CKD 436

Derivatives

PRET.3PL. *parasitaṃti* ‘they abducted’: CKD 324 + 328; *parašitaṃti*: CKD 491

PST.PTCP. *parašitaya* ‘abducted’: CKD 283; *parašitae*: CKD 292

paraša, i.e. /pārāza/, means ‘abduction, plundering’ (Thomas 1934a: 48 fn. 1). Therefore, Burrow (LKD: 103 s.v.) related it to Plr. **parā* + **√Haz* ‘to take away, carry’ (EDIV: 171f.), a verb continued in Avestan (3pl. *parāzənti* ‘they take away’ Yt 13.68; opt.3sg. *para ... azōiṭ* Vd 18.12) and Wanetsi (*pr(y)ez-* ‘to take out’ < **parai-az-*; EDP: 65). Although a corresponding nominal formation **parāza-* ‘taking away’ seems otherwise unattested in Iranian, this etymology is both semantically and formally quite plausible.⁴³⁹

If Burrow’s idea is indeed correct, the absence of distinctive phonological developments hinders the identification of the most likely donor language. Some hypothetical options would be Bactr. **παραζο* /*parāzə*/, Parth. **parāz*, Sogd. **parāz*, or Khot. **parāysa-* /*parāza*/.

As an alternative etymology, one could envisage that Niya *paraša* ‘abduction, plundering’ is a loanword from Bactr. *παρasso* /*parātsə*/ ‘away’ < **parāčā* (BD II: 251). This idea would have the significant advantage of not requiring the reconstruction of unattested forms, and Bactr. *παρasso* is used in the phrase *παρasso ζiv-*, pret. *παρasso ζιδο* ‘to take away’, which comes

⁴³⁷ Because of the cognates of Niya *namata* in South Asian languages, Sogdian and Khotanese are, however, not so likely donor languages for geographical reasons.

⁴³⁸ The voiced -δ- /d/ would not be a problem as the -t- in Niya *namata* stands for /δ/ (§2.1.2). The Sanskrit and Pāli forms with a voiceless dental could have been back-formed from the Gāndhārī one, there being reason to assume that this type of Iranian loanword first entered Gāndhārī before spreading towards other Indo-Aryan languages (Burrow 1973³: 389).

⁴³⁹ Foreign z is more commonly rendered as *jh*. Yet, by the time of the Niya documents, *jh* and *ś* /z/ had become interchangeable, so there is no reason why *ś* /z/ could not have been used for a foreign z too (cf. also §2.1.7 and §4.3.19).

close to the semantics of Niya *paraṣa*.⁴⁴⁰ Yet, there is also a drawback. Since Bactr. *παρᾶσο* is an adverb, while Niya *paraṣa* is an inflectable noun (cf. the ins.sg. *paraṣena* in CKD 436), one would have to posit a reanalysis from adverb to noun during the borrowing process. Such a reanalysis is not inconceivable, but it is still not immediately obvious how and why this would have happened.⁴⁴¹

As concerns phonology, it may seem counter-intuitive that Bactr. *-σ-* /ts/ would be rendered as Niya *-ṣ-* /z/, even though there is a cluster *-ts-* in Niya Prakrit, including in loanwords (e.g. *putgetsa*, a type of camel). Yet, there appears to be a parallel for this substitution in the feminine marker *-(i)sa* (*-(i)ṣa*), which can probably be derived from Bactr. *-σα* /tsā/ < **-čī-ā-* (§6.4.4). As I will further discuss in §4.3.15, I therefore do not consider this phonological peculiarity an insuperable obstacle against deriving *paraṣa* out of Bactr. *παρᾶσο* /parātsə/.

In conclusion, it seems that, with the evidence at hand, Niya *paraṣa* ‘abduction, plundering’ could either be a loan from a descendant of OIr. **parāza-* ‘taking away’ or from Bactr. *παρᾶσο* /parātsə/ ‘away’ < **parāčā*.

67. *parivanae* ‘burden, provisions’

Attestations of the base form

DIR.SG. *parivanae*: CKD 214

According to Burrow (LKD: §20; §45; 104 s.v.), Niya *parivanae* ‘burden, provisions’ could be derived from Skt. *paribhāṇḍa(-ka)-* (so also CDIAL: no. 7850), with the same phonological development of the cluster *-ṇḍ-* shown by Niya *rupyabhana* ‘silver object’ < Skt. *rūpyabhāṇḍa-* (CKD 149). The semantic aspect of this etymology is nevertheless not self-evident, since Skt.

⁴⁴⁰ The semantic match is not exact, because the Niya word consistently refers to kidnapping and plundering, whereas Bactr. *παρᾶσο* *ζίδο* in doc. je refers to the confiscation of animals for tax purposes.

⁴⁴¹ As an alternative option, Federico Dragoni (p.c.) suggested that an allegro pronunciation of Bactr. *παρᾶσο* *ζίδο* /parātsə *zidə*/ was borrowed into Niya Prakrit as *paraṣita** ‘kidnapped’ (cf. the verb forms listed under “derivatives”). In this case, the noun *paraṣa* could be a back-formation, but it still remains unclear how and why such a back-formation would have happened. If directly from *παρᾶσο* *ζίδο* /parātsə *zidə*/, I would perhaps also expect *paraṣita** to contain a palatal sibilant /ž/ rather than a dental sibilant *-ṣ-* /z/.

paribhāṇḍa- has a different meaning than Niya *parivanae*, i.e. ‘utensils, furniture’.⁴⁴²

Burrow’s alternative derivation from OIA **paribandhaka-* ‘bound around (the beast of burden)’ is semantically more attractive, but this formation seems otherwise unattested in Indo-Aryan. I therefore suggest that *parivanae* is an Iranian loanword related to CSogd. *prbnty* /parvandē/⁴⁴³ ‘burden’ (~ Syr. *mwbl’*) < **pari-banda-ka-* ‘bound around (the beast of burden)’ (DCS²: 135); Pers. *parwanda* ‘bundle, roll of tissues, etc.’ < **pari-banda-ka-* (CPED: 246); and TB *perpente* ‘burden’ < PToch. **perpente* ← OIr. **pari-banda-* (Bernard 2023: 51f.).

A first possibility is that *parivanae* is borrowed from Sogdian, seeing that in Niya Prakrit voiced consonants could be assimilated to a preceding nasal.⁴⁴⁴ The other option is that *parivanae*, which can be regularly traced back to earlier **parivanaga*, is a loan from Bactr. **παροβανδαγο* /parəvandagə/ < **pari-banda-ka-*. This option likewise requires the loss of /d/ to have taken place in Gāndhārī.⁴⁴⁵

68. *pravamṇaga* ‘(authoritative) document’

Attestations of the base form

DIR.SG. *pravamṇaga*: CKD 72; 81; 86 (3x); 100; 275; 348; 416; 419; 443; 549; 571 (2x); 579 (2x); 582; 586 (2x); 587 (2x); 589 (2x); 590 (2x); 633; 648; 654; 655 (2x); 710; 715; 782; 795; 805; *pravamṇae*: CKD 369; *pravamṇaka*: CKD 370; *pravamṇa*: CKD 573

INS.SG. *pravamṇagena*: CKD 275

LOC.SG. *pravamṇagammi*: CKD 59; 633

⁴⁴² Note moreover that intervocalic *-bh-* by default develops to Niya *-h-* (LKD: §27) and not to *-v-*, as Burrow’s etymology requires.

⁴⁴³ Except for the position after a nasal, CSogd. from OIr. **b* stands for /v/; cf. e.g. CSogd. *prbyr-* /parvēr/ ‘to explain, expose, tell’ < **pari-bāraya-*, a verb spelled as *prβ(’)yr-* in Manichaean and Sogdian script (SD: 282; DMSB²: 168f.; DCS²: 136). For the use of CSogd. <nt> to write the cluster /nd/, cf. e.g. the spelling variation between *nbnt*, *nbnθ*, and *nbnd* ‘with, at, beside, by’ (DCS²: 114), a cognate of Bactr. *vaβanδo* /voβanδo ‘idem’ < **ni-bandV* (BD II: 236).

⁴⁴⁴ See §4.3.29 for more examples of this change in Iranian loanwords.

⁴⁴⁵ In Khotanese, **pari-banda-ka-* would probably yield **parbanaa-*, cf. *parbav-* ‘to overcome (tr.), grow up (intr.)’ < **pari-bawa-* (SGS: 75; EDIV: 17) and *bana-* ‘bundle’ < **banda-* (DKS: 264). Were **parbanaa-* the source of *parivanae*, one would be freed from the assumption that the *d* was lost in Gāndhārī, but then *b* needs to have been lenited to *v*.

Compounds

DIR.SG. *gaṃnaṃnapravāṃnaga* ‘accounting document’: CKD 159; *ganana-pravāṃnaga*: CKD 278; *ganāṃnapravāṃnaga*: CKD 289

DIR.SG. *rayakaūṭipravāṃnaga* ‘account of the royal she-camels’: CKD 180

DIR.SG. *lekhapravāṃnaga* ‘written document’: CKD 580 (2x); 582

The word *pravāṃnaga* refers to a contract or legal document that is written on a double rectangular tablet, has a summary of its contents and seals on the obverse of the cover-tablet, and concerns exchange or a legal dispute (Høisæter 2020: 108).

In Burrow’s view (LKD: 107 s.v.; cf. already KD: 357), *pravāṃnaga* would be an inherited word and derived from Skt. *prapanna-* to *pra* + $\sqrt{\text{pad}}$ with an additional *ka-* suffix. There is a semantic problem with this etymology since the basic meaning of Skt. *prapanna-* is ‘approached’ (MW: 682), and the required meaning ‘document’ seems to be found nowhere. For the same reason, I reject Bailey’s (KT IV: 70) derivation of *pravāṃnaga* from Skt. **pratipanna-ka-* to *prati* + $\sqrt{\text{pad}}$ ‘to enter, to arrive at, etc.’ (MW: 667). His proposal moreover runs into phonological problems as **pratipanna-ka-* should yield Niya ***paḍivāṃnaga* or the like.⁴⁴⁶

I propose to compare Niya *pravāṃnaga* with Sogd. *prwn’k** ‘document’ in *prwn’k’ kr’k* ‘document compiler’ (Livshits 2015: 164) and Bactr. $\pi\alpha\rho\sigma\sigma\alpha\nu\alpha\gamma\omicron$ /*parwānāgə*/ ‘authorisation, authority’ < OIr. **parwānākā-* (BD II: 252).⁴⁴⁷ The Sogdian and Bactrian forms would both be a fitting source of Niya *pravāṃnaga*, the Bactrian especially so when Miyamoto (2022–23: 92) is correct in thinking that $\pi\alpha\rho\sigma\sigma\alpha\nu\alpha\gamma\omicron$ meant ‘type of document on which orders were written’ instead of ‘authorisation, authority’, as Sims-Williams has it (BD II: 252).⁴⁴⁸

⁴⁴⁶ Bailey (KT IV: 70) further proposed that Khot. *pravanaa-* is a loan from Niya *pravāṃnaga* (so also Yoshida 2008: 106; Zhang 2016: 162f.). Yet, the meaning of Khot. *pravanaa-* is considered unclear by some researchers (cf. Degener 1989: 211 s.v. *pravānāja* and Skjærvø 2002: 8), so I leave this question open.

⁴⁴⁷ After completing my lemma on *pravāṃnaga*, I found out that Miyamoto (2022–23: 92ff.) independently makes the same comparison. Our treatments of the subject complement each other since my approach is more linguistic than Miyamoto’s: he only notes that “Gāndhārī *pravāṃnaga* and Bactrian $\pi\alpha\rho\sigma\sigma\alpha\nu\alpha\gamma\omicron$ have some relationship” and mainly focusses on the semantics and sociohistorical interpretation of the Bactrian word.

⁴⁴⁸ The required lenition of Bactr. *-γ-* /*g*/ to Niya *-g-* /*γ*/ would be regular (cf. §4.3.11), and it seems possible that Sogd. *-k-* would likewise be lenited to Niya *-g-* /*γ*/ just like OIA *-k-* became a voiced fricative in Niya.

The reason for not including this etymology among the secure ones is that one could expect Bactr. παροοανayo or Sogd. *prwn'k'* to have resulted in ***paronaga* or the like because of the substitution of Ir. *-wā-* with Niya *-o-* seen elsewhere (§4.3.1). In my view, one can assume that the initial *pra-* in Niya *pravaṃnaga* is due to contamination with *pramana* ‘authority’ < Skt. *pramāṇa-*, as these two words regularly co-occur, and *pramana* was specifically used for the authority enjoyed by a legal document.⁴⁴⁹

69. *maravara* ‘accountant’

Attestations of the base form

DIR.SG. *maravara*: CKD 186; 187; 385; 781; 782

maravara is one of the lower-ranking official titles in the Niya documents. Its meaning, as Burrow (1935a: 785 *contra* 1934: 510) observed, “must be something like accountant, because the *maravara* Kuvīṇeya (385) is also referred to as *gaṃṇavara* “treasurer” (310)”. Therefore, it seems clear that *maravara* ultimately goes back to OIr. **hmāra-bāra-* ‘accountant’ (so first Bailey *apud* Burrow 1935a: 785), a variant of **hmāra-kāra-* ‘idem’, whose second element is built with **√bar* ‘to bring, carry’ instead of with **√kar* ‘to do, make’.⁴⁵⁰

Niya *maravara* differs from OIr. **hmāra-bāra-* in two respects: the initial **h* has been lost, and the intervocalic **b* has been lenited to *v*. As for the first point, one could argue that **hm-* had already been simplified in the donor language (as Burrow seems to have thought). Yet, seeing that ***hm-* is an impermissible onset in Niya Prakrit, it is equally possible that the loss of the **h* occurred during the borrowing process (cf. also §4.3.23). Theoretically, the lenition could likewise be ascribed to the recipient language (cf. §2.1.2).

⁴⁴⁹ See CKD 348; 419; 571; 573; 579; 580; 582; 586; 587; 589; 590; 648; 654; 655; 782. Contamination is more likely to happen when two lexemes regularly co-occur (Hock 1991²: 197–199; Vine 2006). It is moreover worth noting that *pramana* was borrowed into Bactrian as παρμανο ‘authoritative’ (BD II: 251f.), whose initial sequence παρ- rather than ***παα-* may itself result from contamination with παροοανayo ‘authorisation, authority’ (*teste* πριγγοοαβο ‘weaver of damask’, there was no inhibition against initial παρ- /pr/ in Bactrian).

⁴⁵⁰ Whereas **hmāra-bāra-* does not seem to be attested elsewhere, reflexes of **hmāra-kāra-* have been borrowed into many languages, including Aramaic, Babylonian (Iranica: §4.4.7.57), Armenian (Olsen 1999: 889), and Syriac (Ciancaglini 2008: 101). For corresponding forms in Indian inscriptions, see Falk (2002–3: 44f. = 2013a: 329f.; 2010b: 78 = 2013a: 249).

However, intervocalic **b* also develops to a voiced fricative in various Middle Iranian languages, most notably in Parthian,⁴⁵¹ Sogdian, Khotanese, and Bactrian, so the lenition may rather be attributed to the donor language. If *maravara* was borrowed from Bactrian, its donor form could be reconstructed as **υμαροβαρο* /*hmārəvārə*/ < **hmāra-bāra*-.⁴⁵²

70. *raji* ‘cloak, woollen cloth’

Attestations of the base form

DIR.SG. *raji*: CKD 431 = 432; 655; 714; 795

The word *raji* clearly refers to a textile product, as Lüders (1936a: 21 fn. 2) was the first to recognise (see also Agrawala 1953a: 83). Its exact meaning cannot be deduced from the available contexts, since they mostly consist of lists.

No etymology appears to have been proposed until now. Yet, in neighbouring Iranian languages, there are some words for textiles which are similar in form to *raji*. I am referring to New Iranian forms, such as Dārī *rayza* and Yidgha *royz* ‘women’s cloak’ (Morgenstierne 1938: 243); Sogd. *ryzy* /*rayzi*/ ‘cloth made of wool or hair’ (Sims-Williams & Hamilton 2015: 30; 108); and Bactr. *παγαζο* ‘cloak’ (BD II: 259).⁴⁵³

Sogd. *ryzy* /*rayzi*/ is also attested in the derived adjective *ryzy-cykw* ‘of *rayzi* type’, which confirms that the *-y* in *ryzy* is not the nom.sg. ending of light stems but an integral part of the word. It follows that the immediate pre-form of Sogd. *ryzy* /*rayzi*/ and Bactr. *παγαζο* can be reconstructed as OIr. **ragzi*-.

⁴⁵¹ Cf. Sundermann (1989: 123). It is irrelevant for my argument whether the lenition is phonemic or allophonic in Parthian (for which cf. GW: §§173–178).

⁴⁵² The root **√hmar* ‘to count’ (EDIV: 137f.) occurs in the Bactrian words *υμαρο* ‘account’ < **ā-hmāra*- (BD II: 198), *υμαρο* ‘account, total’ < **ham-(h)māra*-, and *υμαρογαρο* ‘accountant’ < **hmāra-kāra*- (BD II: 271). MBactr. *hm’r* could be either from **ham-(h)māra*- (= GBactr. *υμαρο*) or from **hmāra*- without any preverb (Sims-Williams 2009a: 262).

⁴⁵³ In Bactrian orthography, an alpha is sometimes added in between a consonant cluster, perhaps to render a svarabhakti schwa. Cf. e.g. the variation between *τογδο* /*tuydə*/ and *τογαδο* /*tuyədə*/ ‘paid’ < **tuxta*- (BD II: 270). Although it is only a hapax, *παγαζο* is found next to other textile products, such as *κωσοβο* ‘blanket’ and *βαρζο* ‘pillow’ (BD I²: 28f.). Interestingly, Niya *kojava* ‘rug, blanket’, conceivably a loan from Bactr. *κωσοβο* (§3.3.3 s.v.), is also found in the proximity of *raji* (CKD 714).

Niya Pkt. *raji* likewise ends in final *-i*, so one could take *raji* to be a loan from Sogd. *ryzy* /rayzi/ ‘cloth made of wool or hair’. This option requires Sogd. *-yz-* /yz/ to have been rendered as Niya *-j-* /ǰ/ (or /ǰǰ/), which seems conceivable since Sogd. /z/ stands here in front of the palatal vowel /i/ and /y/ may easily have been lost during the borrowing process as the first member of a foreign cluster. As argued in more detail in §4.3.27, there is even a possibility that this observed loss of /y/ has to do with a tendency to borrow velar fricatives as sibilants in Niya Prakrit: instead of arguing that /y/ was simply lost during the borrowing process, one could alternatively conjecture that /y/ was substituted in this word with Niya /ǰ/. In this case, the *-j-* in *raji* could indicate a geminate /ǰǰ/.

There is a second option. In Kuṣāṇa Bactrian, final **-i* could still be preserved (cf. §4.2.1). Bactr. *ṛαγαζο* may therefore stem from earlier **ṛαγζι*. When one accepts that OIr. **z* (<PIr. **j*) became palatalised to Bactr. /ǰ/ in front of **i* (§2.2.4.3), this form would be phonologically interpretable as /rayǰi/ and thus an attractive etymon of Niya *raji*. The Bactrian cluster *-γζ-* /yǰ/ would be rendered as Niya *-j-* /ǰ/ (or /ǰǰ/), with the same loss of /y/ that one has to assume if regarding *raji* as a Sogdian loanword.

In conclusion, it seems plausible that Niya *raji* is borrowed from Sogd. *ryzy* /rayzi/ ‘cloth made of wool or hair’ or Bactr. **ṛαγζι* /rayǰi/ (cf. attested *ṛαγαζο*) ‘cloak’ < OIr. **raqzi-*. The etymology is not entirely secure because the semantics attributed to *raji* are partially based on the etymological proposal.

3.3.3 Arguable etymologies

71. *agiṣḍha* ‘cover, rug’

Attestations of the basic form

DIR.SG. *agiṣḍha*: CKD 154; 431 = 432;⁴⁵⁴ *akiṣḍha*: CKD 207; 881

DIR.PL. *agiṣḍha*: CKD 431 = 432; 652; *akiṣḍha*: CKD 881 (2x)

Based on the contexts in which *agiṣḍha* occurs, Lüders (1936a: 12) reasonably suggested that this lexeme refers to some form of ‘cover’ or ‘rug’ (cf. also LKD: 71 s.v. *akiṣḍha*). Etymologically, the Niya form may be

⁴⁵⁴ KD’s (157) reading *agiṣḍha* in CKD 432 under-tablet obverse line 7 should be corrected to *agiṣḍha*.

connected with Bactr. γῑζδο /giždə/ (or /yiždə/) ‘rug (?)’, Kabuli Pers. *yiždī* ‘goats-hair tent’, and Psht. *kəğdəy* ‘idem’ (cf. EDP: 38; BD II: 207).

It is difficult to trace the exact trajectory of borrowings.⁴⁵⁵ Given that initial α- /ǣ/ can sometimes be lost in Bactrian, Niya *agišdha* could be a loan from Bactr. *αγῑζδο /ǣgiždə/ (or /ǣyiždə/), a more archaic form than the attested γῑζδο.⁴⁵⁶ A Bactrian loanword may also be the most plausible option since this textile term has not yet been found in other Middle Iranian languages, and one cannot easily think of another donor language for Niya *agišdha*. Yet, as long as we remain ignorant of the ultimate etymology, I would not claim that Niya *agišdha* is necessarily a Bactrian loanword.

72. *ageta* ‘tax collector’

Attestations of the base form

DIR.SG. *ageta*: CKD 105 (2x); 132; 169 (2x); 197; 264; 384; 411; 422 (3x); 431 = 432; 444; 571; 577; 580; 583; 586; 587 (2x); 590; 592 (2x); 640 (2x); 715 (2x); 782; 823; 879; 886; *agita*: CKD 42; 137

GEN.SG. *agetaša*: CKD 275; 307 (2x); 322

DIR.PL. *ageta*: CKD 59; 714; *agita*: CKD 725

GEN.PL. *agetana*: CKD 437; 496; 571; 714

It is generally accepted that Niya Pkt. *ageta* approximately means ‘tax collector’ (cf. e.g. LKD: 71f. s.v.; Atwood 1991: 194).

Because of these semantics, I cautiously propose that *ageta* is an Iranian loanword ultimately going back to OIr. **ā-kaita*- ‘assessor (of taxes)’, an agent noun made from the preverb **ā* and the root **√čait*/θ ‘to consider’

⁴⁵⁵ Harmatta’s (1964a: 16f.; 1967: 3ff.) suggestion to trace *agišdha* back to Sogd. **ākišt* ‘drawn, hung’ < OIr. **ā-kṛšta*- (cf. BSogd. “k(’)yš- ‘to draw, pull out’ < **ā* + **√karš*; SD: 6; EDIV: 241) is semantically not self-evident and phonologically hardly possible. Out of *-*št*-, one would namely anticipate Niya -*tḥ*- /*ṣt*- and not the voiced cluster -*ṣdh*- /*zḍ*^(h)-. For the same reason, one should resist an otherwise tempting comparison with Aram. *’krst*, a type of dress mentioned in the Aramaic documents from Bactria and interpreted in ADAB (57; 217; 274) as a loan from OIr. **ā-kṛšta*- ‘something cut’ ← **ā* + **√kart* ‘to cut’.

⁴⁵⁶ For the loss of initial α- /ǣ/ in Bactrian, cf. e.g. μαχο /*māxə*/ ‘us, we’ < αμαχο /*amāxə*/ < **a(h)māxam* and ματο /*matə*/ ‘broken up, disposed’ < αματο /*āmatə*/ < **āmašta*- (BD II: 191). It should, however, be conceded that γῑζδο, attested in doc. cj of about 465 AD (SCBD: 83), would be the earliest example of the loss of initial α- /ǣ/. If *agišdha* is indeed borrowed from *αγῑζδο, the variant spelling with -*k*- could be due to a hypercorrect fortition of the intervocalic velar consonant in Niya Prakrit, for which cf. §3.2.1 s.v. *vaga* and §§4.3.10–11.

(EDIV: 31). **ā-kaita-* does not seem to be continued elsewhere; but a parallel **abi-kaita-* can be posited based on Oss. I. *ævgid*, D. *evged* ‘guarantee’ (Cheung 2002: 166), and **kaita-*, without a preverb, is attested by way of MP *kēd* ‘magician’ (CPD: 50) and Bactr. *κηδο* /*kēdā*/ ‘priest’ (BD II: 222). The original form of the verbal root is **√čait* (cf. Ved. *√cit*). PIIr. **t* developed to Plr. **θ* before any consonant, thus giving rise to a by-form **√čaiθ* (e.g. opt.3sg. **čiθyāt* < PIIr. **čityāt*). In the agent noun, the **t* was followed by the vowel **-a-* < PIE **-o-* (τομός-type), which allowed the original form of the root to be preserved. For the combination of the preverb **ā* with **√čait/θ*, one may refer to OAv. *acistā* (Y 51.11), which, for instance, Insler (1975: 316) interprets as standing for **ācistā*, i.e. a middle 3sg. injunctive aorist based on **ā* + **√čait/θ*.⁴⁵⁷

My etymology requires one to accept that **ā* + **√čait/θ* underwent a semantic development from ‘to consider’ to ‘to assess, to reckon (taxes)’ so that the agent noun **ā-kaita-* would mean ‘assessor (of taxes)’. Although hypothetical, this semantic change seems conceivable, as Niya Pkt. *cim̐t-* / *cim̐d-*, a cognate of Plr. **√čait/θ*, is also used in the technical sense ‘to assess, to reckon (taxes)’ (LKD: 89 s.v.). An additional parallel is Latin *ensor*. Etymologically an agent noun to *censeo* ‘to estimate, to think’, this Roman official was responsible for the national register used to collect the right amount of taxes.

If the etymology proposed here is correct, the lack of distinctive phonological features makes it challenging to identify the donor language of *aġeta* with any precision. In view of the vowel *-e-* in *aġeta*, the diphthong **-ai-* in the reconstructed Old Iranian pre-form **ā-kaita-* should have been monophthongised; this points to a Middle Iranian source, but one cannot go much further than that. Given that some of the bureaucratic titles in the Niya documents are quite certainly borrowed from Bactrian (cf. §4.5.2), *aġeta* could be a loan from Bactr. **αγηδο* /*āgēdā*/ < **ā-kaita-*, but Parth. **āgēd* cannot be excluded on phonological grounds. If one accepts that intervocalic **-k-* could still be lenited to Niya *-g-* /*γ-*/ in loanwords, a hypothetical Sogdian form **ākēt* would also be a possible source of Niya *aġeta*.⁴⁵⁸

⁴⁵⁷ A corresponding verb *ā* + *√cit* is also attested in Vedic, but with a different meaning, i.e. ‘to attend to, comprehend, appear’.

⁴⁵⁸ As there are only three attestations of *aġita* and *aġeta* is clearly the standard form, a Khotanese source seems less likely since **-ai-* develops to *-ī-* in this language, probably already before coming into contact with Niya Prakrit (see §3.2.1 s.v. *jheniga*).

73. *kojava* ‘rug, blanket’

Attestations of the base form

DIR.SG. *kojava*: CKD 173; 222; 327; 382; 416; 431 = 432 (2x); 448; 534; 549; 583; 592; 633; 668 (2x); 841 (2x); *košava*: CKD 345; 448; 575 (2x); 714; 728
DIR.PL. *kojava*: CKD 431 = 432; *košava*: CKD 207.

The contexts in which Niya *kojava* (also *košava*) occurs prove that this word denotes a textile product. That it meant something like ‘rug’ or ‘blanket’ is rendered likely by the obvious etymological connection with the following Indo-Aryan words (first compared to *kojava* by Lüders 1936a: 4f.):

- (i) Pāli *kojava(ka)*- ‘woollen rug or cover’ (Cone 2001– I: 731).
- (ii) BSkt. *kocava*- ‘woollen blanket’ (BHSD: 193). In Mvy. 5861, the nom.sg. *kocavaḥ* is translated as Tib. *la ba* ‘woollen rug’ and Chin. *hè zǐ* 褐子 ‘coarse cloth made of wool’. In addition, Mvy. 8982 lemmatises a neuter form *kocavakam*, again translated into Tibetan as *la ba* ‘woollen rug’ and into Chinese as either *zhāng pí* 麋皮 ‘deerskin’ or *dà máo shuā róng* 大毛刷絨 ‘long-haired brushed velvet’.
- (iii) Skt. *kaucapaka*- in a list of textile products in *Kauṭīliya Arthaśāstra* 2.11.98 (Olivelle 2013: 126; 533).⁴⁵⁹

Regarding the etymology of these words, Lüders (1936a: 11) already noted the absence of a straightforward inner-Indo-Aryan derivation, which led him to conclude that they are loanwords, “vermutlich aus dem Iranischen”. At the time, Lüders’ proposal of an Iranian origin could not be confirmed as forms resembling Niya *kojava* and its cognates were nowhere attested in Iranian languages. This is no longer true since the surfacing of a Bactrian word *κωσοβο*, which, given its co-occurrence with *βαρζο* ‘pillow’, probably means

⁴⁵⁹ In addition to these Indo-Aryan forms, Lüders (1936a: 10f.) also compared Latin *gausape* (also *-um*; *-es*; *-a*) ‘cloth of woollen frieze or a piece of it; cloak made of this material’; Gr. γαυσάπης (a form cited within the Latin text of Varro’s *De lingua Latina* fr. 14 Kent as the putative source of *gausape*; cf. de Melo 2019: 640f.; 1259f.); and Gr. γαύσαπος* ‘woollen cloth’ (nom.pl. γαύσαποι at Strabo 5.1.12). It is, however, not guaranteed that these Latin and Greek words are indeed connected, as they have alternatively been argued to find their origins in a Balkanic language (cf. EDG: 263 who cites Albanian *gëzóf* ‘animal skin, cloak’). Due to this uncertainty, I will not discuss them further.

‘blanket’ and hence semantically matches well with Niya *kojava* and its cognates (BD II: 225).⁴⁶⁰

Can we conclude that Niya *kojava* is a loanword from Bactr. κωσοβο ‘blanket’? In principle, one would like to answer this question with a simple “yes”; after all, Bactrian is the source of several other terms for textile products in Niya Prakrit (cf. §4.5.3), and κωσοβο is so far the only trace of this word for ‘blanket’ in Iranian languages. Yet, the absence of a convincing etymology of κωσοβο complicates matters, as this means that we cannot be sure about the phonological interpretation of κωσοβο.⁴⁶¹

Sims-Williams (BD II: 225) derives κωσοβο from **kaučapa-*, presumably under the influence of the Sanskrit forms *kocava(ka)-* and *kaucapaka-*. This derivation would entail that κωσοβο stands for /kōtsəvə/ as the default outcome of OIr. *č is Bactr. /ts/ (cf. §2.2.4.2). Were this correct, it would not be so easy (though perhaps not impossible) to interpret *kojava* (also *košava*) as a loan from Bactrian: the alternation between -j- and -š- in *kojava* / *košava* points to the presence of a phoneme /ž/, and it seems difficult to reconcile this with Bactr. /ts/.⁴⁶² Since **kaučapa-* is only a mechanical reconstruction and it thus is not certain that κωσοβο stands for /kōtsəvə/, other options may be pursued as well.

I wonder if the -σ- in κωσοβο could alternatively stand for /š/, perhaps as the result of an older cluster *-sy-. Although I am unable to substantiate this suggestion with a convincing etymology of κωσοβο, this would at least allow for a plausible chain of borrowings. If we take into account that intervocalic -š- became a voiced /ž/ in Gāndhārī (written as -š- or -j-; cf. §2.1.2), κωσοβο would, when standing for /kōšəvə/, be a phonologically straightforward source of *kojava* (also *košava*). In other words, Gāndhārī could have borrowed this word directly from Bactrian. Pāli *kojava-* ‘rug,

⁴⁶⁰ Another word which may belong here is Syr. *gwšp’* (fem. *gwšpqt’*) ‘rug’ / *kwšp’* (fem. *kwšpt’*) ‘outer garment’. According to Ciancaglini (2008: 140f.), this Syriac lexeme is an Iranian loanword somehow related to Bactr. κωσοβο. As the details are, however, complicated (something Ciancaglini duly admits), I will leave the Syriac evidence aside in what follows. In any case, it does not contribute anything essential to the etymological analysis of Niya *kojava*.

⁴⁶¹ Cf. the similar case of Niya *agiṣḍha* ‘cover, rug’ and Bactr. γιζδο ‘idem’ (§3.3.3 s.v.).

⁴⁶² By default, one would assume Bactr. /ts/ to be borrowed with Niya -ts-, although there is so far no example of this correspondence. There are two cases where Bactr. /ts/ may have been substituted in Niya Prakrit with -s- or -š- /z/ (cf. §3.3.2 s.v. *paraṣa*; §4.3.15; §6.4.4).

cover' would be explainable as a borrowing from Gāndhārī, conforming to Burrow's (1973³: 389) observation that this type of Iranian word first entered Gāndhārī before spreading to other Indo-Aryan languages.⁴⁶³ The Sanskrit forms could be hypersanskritisms based on a Gāndhārī model. As Skt. -c- regularly corresponds to Gandh. /ž/ (§2.1.2), it would namely be possible to back-form the Sanskrit forms with -c- out of *kojava* (*kośava*).⁴⁶⁴

Although this scenario seems attractive, one cannot prove it as long as the etymology of Bactr. κωσοβο has not been clarified. This calls for cautious conclusions: it seems plausible that Niya *kojava* 'rug, blanket' and its cognates are Iranian loanwords and etymologically connected to Bactr. κωσοβο 'blanket', but whether the latter is also the donor of the Indic forms remains to be seen.

74. *namanaga* / *namaṇniya* 'exchange'

Attestations of the basic form

DIR.SG. *namanaga*: CKD 222; 769 (2x); *namaṇnaga*: CKD 279; *namaṇniya*: CKD 571; 580; 581; 586; 590; 655; 839; *namani*: CKD 587; 591; 769; *namaṇni*: CKD 582; 820; *namaṇni*: CKD 839; *namaṇniya*: CKD 592

Compounds

INS.SG. *namanagamuliyena* 'price (consisting of) an exchange': CKD 677

The Niya word *namanaga* / *namaṇniya*⁴⁶⁵ typically co-occurs with the verb *de(na)*- 'to give', most frequently in a legal formula stipulating the rights one has with regard to newly acquired property. (3.32) is a representative example.

(3.32) CKD 592 under-tablet obverse 5-7

taha ajuyadae atra striya Lýmisoae vaṃti Ramšotsaša ešvarya huda taḍanae baṃnanae vikranamṇae naṃmaniya deyaṃnae badho deyaṃnae taha šarva boga kikama karamṇi siyati

"From now on Ramšotsa has ownership of the woman Lýmisoae, to beat her, to bind her, to sell her, to give her (as) *naṃmaniya*, to pledge her, to do whatever he likes with her." (after TKD: 127).

⁴⁶³ Phonologically, this proposal assumes that the Gāndhārī voiced palatal sibilant was substituted with the voiced palatal affricate -j- in Pāli.

⁴⁶⁴ Consequently, I cannot entirely agree with Lüders (1936a: 5) that the Sanskrit forms are necessarily more archaic because of their intervocalic -c-.

⁴⁶⁵ The variation between -*aga* and -*i(ya)* will be discussed below.

In Bailey's view (1955: 19; 1982: 38f.), *namanaga* / *namaṃniya* would be translatable as 'pledge'. This translation seems unlikely, as the word *badho* is already used in this meaning (see §3.2.3 s.v.), and the two words can occur side by side, as they do in (3.32) (see also CKD 590; 591). Consequently, I also reject Bailey's etymological proposal to trace *namanaga* / *namaṃniya* back to OIr. **ni-vāna*- < OIr. **ni-pāna*-, which is anyhow but a postulated variant of OIr. **ni-pāka*- 'pledge' (Bactr. *vaβaγo*, Sogd. *np'k*, etc.).⁴⁶⁶

Instead, I follow Burrow (LKD: 100 s.v. *namaṃniya*) in thinking that *namanaga* / *namaṃniya* means 'exchange'. The best evidence in favour of this translation comes from CKD 279, where *namaṃnaga* seems to be used for the exchange of two women in the context of the exogamous marriage practices also evidenced elsewhere in the Niya documents (cf. §3.2.3 s.v. *muṣḍhaṣi*; §3.7.2 s.v. *muḱaṣi*).⁴⁶⁷

Burrow likewise provided *namanaga* / *namaṃniya* with a possible etymology. He compared the Niya word to Arm. *nman* 'similar, like', generally accepted to be an Iranian loanword that can be traced back to OIr. **nimāna*- (cf. NP *namūna* 'similar, like; pattern, etc.'; Hübschmann 1897: 205).⁴⁶⁸ The meaning 'exchange' in Niya Prakrit would be based on the notion that one gives something for something like it when exchanging goods.

A potential issue with Burrow's etymology is how to account for the variation between Niya forms in *-aga* and *-i(ya)*.⁴⁶⁹ If I understand Burrow correctly, he thought that both forms were independent derivatives from an underlying word **namana* ← a descendant of OIr. **ni-māna*-. Although not impossible, this seems implausible since the forms in *-aga* and *-i(ya)* are interchangeable.

⁴⁶⁶ The *-m-* in *namanaga* / *namaṃniya* would, according to Bailey, result from earlier **-v-*, parallel to examples such as Niya *ami* < *avi* < *api* 'also'. Yet, there is no other Iranian loanword in which this change would have happened.

⁴⁶⁷ Lüders' (1940b: 46–49) proposal to interpret *namanaga* / *namaṃniya* as 'loan' appears to fit less well. His etymological comparison with Av. *nəmah-* 'loan' (Vd. 4.1; AIW: 1070) seems unlikely too since this Avestan noun is otherwise isolated in Iranian, and there is no compelling evidence for an Iranian root **√nam* 'to loan' as posited by Lüders.

⁴⁶⁸ As discussed below, the OIr. pre-form could also be reconstructed as **ni-māni*-. The underlying root is **√mān* 'to like, to resemble' (EDIV: 272f.), which itself is probably denominative from **māna*- 'measuring'.

⁴⁶⁹ For the interchangeability between *-i* and *-iya* in Niya Prakrit, see LKD (§9).

A different option would be to assume that the forms in *-aga* are more archaic and those in *-i(ya)* due to a phonological development. Although *-aga* normally only develops as far as *-ae* or *-e* (LKD: §53), a parallel for *-aga* becoming *-i(ya)* may be sought in dir.sg. *spāšavaṃni* (CKD 84), possibly a lenited form of dir.sg. *spāšavaṃnaga* (CKD 507; 515; 541 (2x)). Under this assumption, the Iranian source of *namanaga* / *namaṃniya* may descend from OIr. **ni-māna-ka-* ‘equal > exchange’.

Given that the forms in *-i(ya)* outnumber those in *-aga* (14 vs. 5 tokens), yet another possibility would be to take the forms in *-i(ya)* as the more original ones. This option would allow us to compare Olsen’s (1999: 296 fn. 221) observation that Arm. *nman* inflects as an *i*-stem in the fifth-century authors Eznik Koḥbac’i and Łazar P’arpec’i, which may be taken to suggest that the Old Iranian pre-form is to be reconstructed as **ni-māni-* rather than **ni-māna-*.⁴⁷⁰ Since Niya *-i(ya)* often derives from earlier **iga*, the Iranian source of Niya *namanaga* / *namaṃniya* could thus also derive from **ni-māni-ka-* ‘equal > exchange’.

Most likely, *namanaga* / *namaṃniya* was borrowed from an Iranian language in which **ni-* developed to **nə-*, for otherwise the rendering with Niya *na-* would be hard to account for. This development cannot be ascribed to any language in particular, as it occurs in all relevant Middle Iranian languages.⁴⁷¹ Depending on how to account for the variation between *-aga* and *-iya*, a possible Bactrian source of *namanaga* / *namaṃniya* could be reconstructed as **ναμνο* / *nəmānə* / < **ni-mānV-*, **ναμαναγο* / *nəmānəgə* / < **ni-māna-ka-*, or **ναμανιγο* / *nəmānigə* / < **ni-māni-ka-*.⁴⁷²

⁴⁷⁰ Iranian loanwords in Armenian are often assigned to a declension type that reflects the corresponding Old Iranian morphological class; see Olsen (2005); Korn (2013); Fattori (2023).

⁴⁷¹ In Bactrian, the outcome of **ni-* can be written as *vi-*, *va-*, or *vo-* (SCBD: 63), and in Sogdian, as *ny-* or *n-* (GMS: §§676–678). In (Old) Khotanese, there is variation between *ni-*, *nā-*, and *nyi-*, but before *-m-*, the default outcome is *nu-* (SGS: 234). For Parthian and Middle Persian, Durkin-Meisterernst (GW: §462) assumes that **ni-* is continued as *ni-*. Yet, given that the outcome of **ni-* in these languages can be spelled with simple *n-*, e.g. *nm’y-* ‘to show’ < **ni-māya-*, I would not exclude that the **-i-* could also be weakened to a schwa-like sound.

⁴⁷² Note, however, that *nihamñ-* ‘to deposit, to put down’ and *nihala* ‘settlement, agreement’ seem to have been borrowed from a Bactrian source where **ni-* was continued as *vi-* / *ni-* and not as *va-* / *nə-* (§§3.2.2 and 3.2.3 s.vv.).

75. *pajhavaṃta* ‘breastband (?)’

Attestations of the base form

DIR.SG. *pajhavaṃta*:⁴⁷³ CKD 316

DIR.PL. *pasamvaṃta*:⁴⁷⁴ CKD 534

In CKD 316, *pajhavaṃta* combines with the adjective *prighamaga* ‘made from damask’, while in CKD 534, its spelling variant *pasamvaṃta* is specified by the adjective *thavaṃnamae* ‘made from cloth’, so we can be sure that some textile product is meant. The alternation between *-jh-* and *-s-* points to the presence of a phoneme /z/, a potential marker of Iranian loanwords.⁴⁷⁵

In my view, Niya Pkt. *pajhavaṃta* may be derived from an Iranian compound **pāza(h)-banda-* ‘breastband’, i.e. a band worn around the breast. Although I am unaware of other derivatives of the reconstructed **pāza(h)-banda-*, various parallels can be cited for this type of compound. Compare, for instance, MP *kamarband* ‘bound around the waist > belt’ (CPD: 49); NP *gardanband* ‘bound around the neck > necklace, ornament, etc.’ (CPED: 1081); (Parth. →) Arm. *dandanawand* ‘bound around the teeth > bridle’ (Olsen 1999: 875); and Bactr. *λιστοβανδιγο* ‘bound around the hand > bracelet’ (BD II: 227).⁴⁷⁶

If accepted, the proposed etymology of *pajhavaṃta* implies that the cluster **-nd-* in OIr. **pāza(h)-banda-* was continued unchanged in the donor language and borrowed from there into Niya Prakrit as *-ṃt-* /*nd-*.⁴⁷⁷ Consequently, Khotanese can be excluded as a donor language because **-nd-* develops to *-n-* in this language (cf. Khot. *bana-* ‘bundle’ > **banda-*). In addition, the **-b-* in **pāza(h)-banda-* corresponds to *-v-* in *pajhavaṃta*. In

⁴⁷³ Boyer et al. (KD: 115) read this word as *paṃjhavaṃta*. In my view, the first akṣara is more likely a *ḥ pa* than a *ḥ paṃ*; cf. the similarly drawn *ḥ pa* in *aparimana* ‘without measure’ in the same line.

⁴⁷⁴ See TKD (106) for this reading. The etymology proposed below starts from the assumption that the anusvāra in <saṃ> is non-etymological.

⁴⁷⁵ For the alternation between *-jh-* and *-s-* in an Iranian loanword, cf. *asade* (CKD 436) next to *ajhate* ‘free’ (§3.3.1 s.v.).

⁴⁷⁶ In Indo-Aryan, such compounds exist too, e.g. BSkt. *kāyabandhana-* ‘bound around the body > girdle’ or Niya Pkt. *karnabaṃdhana* ‘bound at the ears > earring’ (CKD 566). In a note added to his copy of LKD (104), Burrow compares *pajhavaṃta* to NP *pazwand* ‘a bundle of clothes’ (CPED: 248). This Persian word lacks, however, a good etymology and seems completely isolated in Iranian, making me to prefer the etymology presented above.

⁴⁷⁷ For the phonological interpretation of Niya <ṃt> as /nd/, see §2.1.5.

theory, such a lenition could have happened in Gāndhārī itself (cf. §2.1.2). Yet, it may rather be attributable to the Middle Iranian source. Bactr. *παζοβανδο /pāzəvandə/ would therefore be a likely source of *pajhavamta*,⁴⁷⁸ although Parth. *pāzβand or Sogd. *pāzβand would work phonologically too.⁴⁷⁹

76. *rasamna* ‘rope (?)’

Attestations of the base form

DIR.PL. *rasamna*: CKD 345

The hapax *rasamna* occurs in a list of stolen commodities. Its semantics cannot be deduced from the context. If, however, Burrow (1935a: 786; LKD: 114 s.v.) is correct in his assumption of an etymological relationship with MP *rasan* ‘rope’ (CPD: 71; cf. also Khwar. *rsyn* ‘knit, rope’), the meaning ‘rope’ may arguably be assigned to Niya *rasamna*.⁴⁸⁰

For geographical reasons, MP *rasan* ‘rope’ is an unlikely donor form of Niya *rasamna*. Given the Indo-Parthian rule in Gandhāra (cf. §1.5.1), a more plausible source of *rasamna* would be Parth. **rasan*, which can be safely posited as the donor of Arm. *arasan* ‘cord’ (Olsen 1999: 867). Yet, one can envisage other options too, e.g. that *rasamna* is borrowed from a hypothetical Bactrian word *ρασανο /rasanə/ < OIr. **rasanā*-.⁴⁸¹

⁴⁷⁸ παζο ‘breast’ and βανδο ‘bundle, bond’ are both attested in Bactrian (BD II: 201; 250f.).

⁴⁷⁹ For the (possibly allophonic) lenition of OIr. postvocalic *-b- to Parth. -β-, cf. Sundermann (1989: 123) and GW (§§173–178).

⁴⁸⁰ Niya *rasamna* cannot be inherited, as the palatal sibilant seen in Skt. *raśanā*- ‘rope, cord, girdle’ should have been preserved. Sindhi *rasan* ‘girdle’ (CDIAL: no. 10647) is probably an Iranian loanword too; the inherited form in Sindhi is *rāhāna* (also *rāna*) ‘cord, rein, line’, given that intervocalic sibilants regularly become -h- in Sindhi (Masica 1991: 194; 207). MP *rasan* ‘rope’ is a loanword from another Iranian language, as Plr. **raśanā*- (cf. Skt. *raśanā*-) should yield OP ***raθanā*-, whence MP ***rahan* (cf. Plr. **daśa* ‘ten’ > OP *daθa* > MP *dah*).

⁴⁸¹ Gholami’s (SFBG: 65) claim that *-a- is changed to Bactr. -i- /i/ in front of *-n- is not wholly accurate. The change to -i- /i/ is only regular “in the case of the sequences -ivδ- and -ivζ- or where there was a palatal vowel or consonant before or after *-an-” (Sims-Williams 2017c: 111). None of these contexts applies to *ρασανο /rasanə/ < **rasanā*-.

77. *vara* ‘load’

Attestations of the base form

DIR.SG. *vara*: CKD 291 (*eka vara*)

DIR.PL. *vara*: CKD 291 (*dui vara*)

In nearly all its instances, Niya Pkt. *vara* means ‘time’ (as in French *fois*) < Skt. *vāra*- ‘idem’, but this meaning does not seem to suit the two occurrences of *vara* in CKD 291, here cited as (3.33) (Burrow 1935a: 787; LKD: 119 s.v. *varaya*). In this passage, dealing with the collection and transport of corn, Burrow instead translated *vara* as ‘part’.

(3.33) CKD 291 obverse 3–5

*eka vara ya*⁴⁸² *abhyadara kuhaniyaṃmi aniṣyaṃti ityārtha ima yatma*
Porkota atra viṣajida ... dui vara Piṣaliyaṃmi nihaṃñitavya.

“The *yatma* Porkota has been sent there on the understanding that they will bring one-(third) part of it (*eka vara*) into the capital. ... (The remaining) two-thirds (*dui vara*) are to be deposited at Piṣali.” (TKD: 52).

Since ‘part’ is not a known meaning of Skt. *vāra*- (cf. MW: 943; CDIAL: no. 11547), Burrow furthermore suspected the *vara* in (3.33) to be related to MP/Parth. *bahr* (also *baxr*) ‘part, share’ (DMMP: 107; 119).⁴⁸³

The etymology of *bahr* speaks against Burrow’s proposal. *bahr* is most likely a cognate of Av. *baxθra*- ‘share, portion’ < **baxθra*- (Hübschmann 1895: 33; AIW: 923).⁴⁸⁴ For Burrow’s idea to work, Niya *vara* would consequently have to come from a Middle Iranian language in which initial **b*- is spirantised to **v*- and **-xθr*- underwent the same type of simplification as in Persian and Parthian. Now, Bactrian and Sogdian would meet the first criterion, but neither language satisfies the second. In Bactrian, **bāxθri*- ‘Bactria’ yields βαχλο /vāxlə/ (BD II: 202), leading one to expect

⁴⁸² With Baums and Glass (2002a– *contra* Burrow 1935a: 787), I do not read *vara* and *ya* together as *varaya* < **varaga*, as this destroys the parallel with *dui vara*.

⁴⁸³ Burrow cited the New Persian form *bahr(ah)* ‘part, portion’ (CPED: 210). Bailey (1951b: 32) additionally connected Khot. *vāra*-, but Skjærvø has shown (*apud* SVK III: 137–140) that this Khotanese lexeme does not mean ‘part’ (as claimed by Bailey), but rather ‘(still) missing > (still) owed’.

⁴⁸⁴ In light of OP **bāxçi*- < **bāxθri*- → Elam. *pá-ak-ši-iš* ‘Bactria’ (Sims-Williams 2016b: 273), **baxθra*- ‘share’ should have resulted in OP **baxça*-. MP *bahr* must thus come from a different dialect showing an early simplification of **-xθr*- to *-hr*- (*-xr*-); cf. Tremblay (2004: 136).

**baxθra*- ‘portion, share’ to result in *βαχλο /vaxlə/, a phonologically unlikely source of Niya *vara*.⁴⁸⁵ In Sogdian, *-θr- by default develops to the spirant -š- (Sims-Williams 1989a: 180), so a hypothetical Sogdian outcome of **baxθra*- would not account for the -r- in Niya *vara* either. Unless one is willing to accept an otherwise unknown Middle Iranian language as the donor of *vara*, Burrow’s etymology is thus best rejected.

In my view, Niya *vara* should instead be considered a loan from Bactr. βαρο /vārə/ ‘load’ (BD II: 202) or its Sogdian cognate β’r ‘idem’ < **bāra*- (SD: 97; DMSB²: 57; Livshits 2015: 176).⁴⁸⁶ The Bactrian word occurs in the phrase χαρο αλο βαρο ‘a donkey with its load’ (doc. xk), which comes close to the overall context of CKD 291, where it is said that camels (*uṭa*) transport *vara*, and one can translate the relevant passage as “they will bring one load (*eka vara*) into the capital. ... (The remaining) two loads (*dui vara*) are to be deposited at Piṣali”. *eka vara* ‘one load’ is moreover paralleled by Sogd. ’yw β’r ‘idem’ in the sentence *rtȳ ’yw β’r rtk pr’šȳw* ‘And (with him) I have sent a load of flour’ (B11.9; Livshits 2015: 127f.).

In sum, this new etymology is phonologically more straightforward than Burrow’s and semantically not inferior. Due to its being attested in only one document, the semantics assigned to *vara* are partially based on etymology, however. My proposal can thus not be proved for now.

78. *ṣaṃna* ‘hemp, hempen (?)’

Compounds

DIR.SG. *ṣaṃnapaṭamae* ‘made of hempen (?) cloth’: CKD 318

The hapax legomenon *ṣaṃna* appears in the phrase *ṣaṃnapaṭamae kaṃculi* ‘a jacket made of *ṣaṃna* cloth’ and seemingly refers to a type of fabric. Given this, one could be inclined to regard *ṣaṃna* as a derivative of Skt. *śaṇa*- ‘hemp’ (also *śāṇa*- ‘hempen, a hempen garment’; MW: 1063). Phonologically, this idea is not viable, however, as the OIA sibilants are typically not confused in Gāndhārī (cf. §2.1.2).

⁴⁸⁵ Henning (*apud* Livshits 1969: 76) regarded the sequence βαυ- on a potsherd from Kara-Tepe as the remnant of a Bactrian word βαυ[πο] ‘share’, but βαυ- is better restored as βαυ[απο] ‘monastery’ (BPN: no. 149; Fussman 2011: 106).

⁴⁸⁶ Bactrian and Sogdian are the only relevant Iranian languages where initial **b*- develops to *v*- (cf. *supra*), so one does not need to consider other donor languages.

In light of the initial *ṣ-*, Burrow (1935a: 787; LKD: 126 s.v.) opted for an Iranian loanword, comparing Niya *ṣamna* to MP/NP *šan* ‘hemp’ < OIr. **šana-* (CPD: 79).⁴⁸⁷ Like Lüders (1936a: 30) and Bailey (DKS: 52), I accept Burrow’s comparison. Yet, it should be noted that the current evidence for OIr. **šana-* is limited to Persian, thus leaving us in the dark whether the relevant word also existed in more eastern Iranian languages. In any case, Khotanese and Sogdian already have a different word for ‘hemp’, i.e. Khot. *kaṃha-* < **kanafa-* (DKS: 51f.; Kümmel 2018: 163 fn. 3) and Sogd. *kynp’* (SD: 203). How the word for ‘hemp’ sounded in Bactrian is currently unknown. In case the word used was **ḡavo /šanə/* < **šana-*, this could be a possible source of Niya *ṣamna*, but this naturally cannot be proved for now.

79. *hastama* ‘quarrel, dispute’

Attestations of the base form

DIR.SG. *hastama*: CKD 434; 561 (2x); 569; 583; 584; 593; 767; 842; 884; *astama*:⁴⁸⁸ CKD 506; 582; 676; 732; 820

The meaning and etymology of *hastama* have been discussed by Burrow (1935a: 788; 1936: 428; LKD: §45; 133 s.v.; TKD: 151) and Konow (1938a: 156). As noted by them, this lexeme frequently occurs together with words such as *garah-* ‘to complain’, *pruch-* ‘to examine’, and *niče* ‘decision’. Consequently, *hastama* is probably a synonym of *vivada* ‘quarrel, dispute’, with which it is used interchangeably (so e.g. in CKD 434).

Burrow connected *hastama* to the Proto-Iranian root **√stamb(H)* ‘to withstand, be stiff, stern, unmoving’ (EDIV: 362f.), on the assumption of a nominal formation **ha(m)-stamba-*. There being no independent support for the reconstructed **ha(m)-stamba-* or a corresponding verb **ham + *√stamb(H)*, Burrow’s etymology cannot be confirmed for now.⁴⁸⁹ Yet, it is certainly worth considering in view of YAv. *stəṇbiia-*, an entry in the *Frahang-*

⁴⁸⁷ See additionally Iranica (§4.3.206; §4.4.20.16) for indirect traces of OIr. **šana-ka-* ‘hemp seed’ or ‘hemp cookie’ in Elamite.

⁴⁸⁸ The variant *astama* manifests the omission of *h-* found more often in Niya Prakrit (cf. LKD: §10).

⁴⁸⁹ The root **√stamb(H)* does combine with other preverbs. Cf. e.g. Parth. *wistambag* ‘rebellious’ < **wi-stamba-ka-*.

ī ōīm (F 519), which is glossed by MP *stēz* ‘strife, quarrel’ and evidently derives from the root $\sqrt{*stamb(H)}$ (AIW: 1606; Klingenschmitt 1968: 14).⁴⁹⁰

The simplification of $*-mb-$ to $-m-$ necessary for Burrow’s etymology does not need to have happened in the donor language.⁴⁹¹ It could also be due to the loss of originally voiced consonants after homorganic nasals seen in Gāndhārī words such as the loc.pl. *udumareṣu* < *udumbara-* ‘fig tree’ in the *Khotan Dharmapada* (Brough 1962: 99).⁴⁹² If so, one cannot easily determine the immediate source of Niya *hastama*; it could, for instance, be Parth. $*hastamb$ or Bactr. $*(\upsilon)\alpha\sigma\tau\alpha\mu\beta\omicron / (h)astamb\omicron$.⁴⁹³

Konow (1938a: 156) remarked that if the donor language was Khotanese, Niya *hastama* could alternatively go back to $*fra-stamba-$, which would yield Khot. $*hastama-$ because $*fra-$ develops into Khot. *ha-* (e.g. *hatcañ-* ‘to break’ < $*fra-sčandaya-$; SGS: 145f.) and $*-mb-$ simplifies to Khot. $-m-$ (Emmerick 1989: 215). This proposal has the advantage that it frees one from assuming that the $-m-$ in *hastama* results from an inner-Prakrit simplification of $*-mb-$ to $-m-$. The low number of Iranian loanwords in Niya Prakrit securely ascribable to Khotanese may, however, speak against Konow’s idea (cf. §4.2.5), especially by lack of any trace of $*hastama-$ in Khotanese. Burrow’s derivation from $*ha(m)-stamba-$ allows for more donor languages (cf. supra) and seems preferable.

3.3.4 Tentative etymologies

80. *ujhmayuga* ‘trustworthy, skilled (?)’

Attestations of the base form

DIR.PL. *ujhmayuga*: CKD 283; 373

⁴⁹⁰ Other derivatives of $\sqrt{*stamb(H)}$ have, for instance, to do with “austerity” and “oppression”. Cf. e.g. Bactr. $\sigma\tau\alpha\mu\beta\omicron / stamb\omicron$ ‘injury, ill-treatment, oppression’; MP $(i)stambag$ ‘oppressive’ / $(i)stambagīh$ ‘oppression, obstinacy, tyranny’; MSogd. *stmb* (and variants) ‘stern, severe, coarse’; and Arm. *stambak* ‘austere’.

⁴⁹¹ In Khotanese, $*-mb-$ becomes $-m-$; see just below.

⁴⁹² For more examples of Iranian loanwords in Niya Prakrit still undergoing this sound change, cf. §4.3.29.

⁴⁹³ If *hastama* is a Bactrian loanword, it would come from the same language as the semantically related word *lastana* ‘lawsuit’. The presence of a phoneme /h/ in *hastama* speaks against the assumption of a Sogdian source.

ujhmayuga is an adjective with a seemingly positive connotation, used to describe *manuṣya* ‘man’ (CKD 283) and *jaṃna* ‘people’ (CKD 373). Its exact meaning is uncertain, but the cluster *-jhm-* /*zm-* suggests an Iranian origin.

Bailey (*apud* Burrow 1935a: 780; LKD: 79 s.v.) drew a comparison between *ujhmayuga* and MP *uzmāy-* ‘to prove, to test, to try’ (also *uzmāyīšn* ‘skill, experience’; CPD: 85), the latter having a cognate in Sogd. *zm’y-* ‘to tempt’ < **uz* + **√maH* (SD: 461; DCS²: 236; EDIV: 254–256). Accepting Bailey’s comparison, Burrow conjectured *ujhmayuga* to mean either ‘tried > trustworthy’ or ‘skilled’.

If this etymology is correct, *ujhmayuga* would seem to come from a donor form in which the initial **u-* of the preverb **uz-* remained unchanged. Sogd. *zm’y-* does not meet that criterion, but one can envisage other donor languages. In Khotanese, for instance, **uz-* is regularly continued as *uys-* /*uz-* (SGS: 230), although it should be noted that there is no trace of a derivative of **uz* + **√maH* in this language. In Bactrian, the initial **u-* in **uz-* is usually weakened, including in loanwords into Niya Prakrit (cf. §3.2.1 s.v. *śpara* / *śpura*). Yet, there at least exist archaic forms showing a retention of the initial vowel, e.g. *οζοαστο* /*uzwāstə*/ ‘brought out, released, issued’ < **uz-wāsta-*. A Bactrian origin of *ujhmayuga* is thus not excluded *a priori*.

One problem remains: which type of formation is *ujhmayuga*, which Burrow does not discuss? Morphologically, it would probably be easiest to start from a pre-form like **uz-māy-a-ka-*. Yet, if so, it is not so clear how to account for the word-internal *-u-* in *ujhmayuga*. **uz-māy-a-ka-* could probably yield Bactr. **οζμαιογο*. Still, I would expect this to stand for /*uzmāyægə*/ rather than **/*uzmāyugə*/, and it is not quite certain whether *-ογο* /*ægə*/ could be rendered as *-uga* instead of as ***-aga* (cf. §3.2.4 s.v. *listuga*). Starting from a pre-form **uz-māy-u-ka-* would be even less attractive since there is no productive suffix **-ukā*;⁴⁹⁴ and *u-*stems are rather rare. Therefore, I prefer to leave the issue open for now.

In brief, Bailey’s proposal to see in *ujhmayuga* a further witness of the root **uz* + **√maH* is only tentative: it is not much more than a root etymology and the meaning assigned to *ujhmayuga* cannot be independently verified.⁴⁹⁵

⁴⁹⁴ The hypocoristic suffix in **-uka-* proposed on the basis of some Old Iranian names (Iranica: 573) is probably irrelevant for *ujhmayuga*.

⁴⁹⁵ Given its positive connotation, it may be worth considering if *ujhmayuga* could alternatively come from an Iranian adjective starting in **hu-* ‘good’.

3.4 Personal names from Bactrian

3.4.1 Introductory notes

In addition to the loanwords, the Niya documents contain personal names whose origin is to be sought in Iranian languages. In his articles about Iranian borrowings in Niya Prakrit (1934: 515; 1935a: 789), Burrow, for example, noted the existence of some names ending in *-rasma* / *-rajhma* ← Ir. **razman-* ‘battle’.

The Iranian names collected by Burrow can generally not be ascribed to Bactrian specifically since they lack decisive phonological features. More such examples remain to be discovered. I would, for instance, interpret the so far unexplained PN *Maṣḍhige* (e.g. CKD 17 (3x)) as “Middle Iranian” **mazdīg(ə)* < **mazd-iya-ka-* ← **mazdā-* ‘wisdom’, on the assumption of a substitution of Ir. **-zd-* with Niya *-ṣḍh-* (on which cf. §4.3.19).⁴⁹⁶ Yet, because of the focus of this study, I shall for now confine the discussion to names more securely ascribable to Bactrian.

Since the publication of Burrow’s articles, various Bactrian names have been uncovered in Central Asian Gāndhārī sources. Below, I list three examples, two from the Niya documents and one from an inscription discovered in Miran.

- (i) *Aṣaṃna* (CKD 327) ← Bactr. αζανο /āžānə/ ‘worthy’ < **arjyāna-* (Weber 1997: 31f.)
- (ii) *Marega* (e.g. CKD 431 = 432) ← Bactr. μαρηγο /marēgə/ ‘servant’ < **maryaka-* (Maricq 1958: 367; BPN: no. 237; cf. the patronymic μαρηγανο)
- (iii) *Tita** (gen.sg. *Titaṣa* in CKI 443, an inscription from Miran) ← Bactr. τητο /tētə/, an attested PN (BPN: no. 465 *contra* Stein *apud* Boyer 1911: 417 who derives *Tita** out of Latin *Titus*)

In addition, Bactrian names have been discovered in Gāndhārī inscriptions.⁴⁹⁷ One of these has a hitherto unrecognised pendant in Niya Prakrit, i.e. *Liaka* (CKI 46, 2x) ← Bactr. λιακο /l(i)yāk(k)ə/ < **dahyu-k(k)a-*

⁴⁹⁶ See Iranica (244–246) for a list of Old Iranian names made from **mazdā-* ‘wisdom’, including **mazdā-ka-* and **mazd-uka-*.

⁴⁹⁷ A somewhat famous example is Gandh. *Yolamira* (CKI 165, 2x) ← Bactr. *ιωλομι(υ)ρο /yōləmi(h)rə/ < **yāuda-miθra-* (BPN: no. 195).

‘(little) land’ (BPN: no. 117), which I propose to compare with Niya *Lýaka* (CKD 701; cf. also §6.3).

§3.4.2 hopes to add to the evidence for Bactrian personal names in Niya Prakrit by proposing Bactrian etymologies for ten so far unetymologised Niya names. I do not aim at comprehensiveness, and a monographic study of the Bactrian names indirectly attested by the Gāndhārī collateral tradition remains a task for the future.

Due to the methodological pitfalls involved in onomastic research,⁴⁹⁸ I only include names that fulfil the following criteria. To begin with, the names discussed below contain phonological markers indicative of a Bactrian origin, such as the clusters *-tḡ-* (~ *-δγ-* /*dg*/) or *-lḡ-* (~ *-λγ-* /*lg*/). In this way, one can exclude more easily that these names were adopted from a (Middle) Iranian language other than Bactrian. Second, the sound substitutions required for my etymologies should be paralleled among the secure and/or plausible Bactrian loanwords treated in §2.2. Otherwise, they should be readily understandable phonologically. Finally, reconstructed donor forms need to comply with the general principles of Iranian and specifically Bactrian onomastics (on which cf. BPN: 5–12).⁴⁹⁹ In other words, one has to find parallels in the onomastic record of Bactrian and closely related languages for the form and semantics of the reconstructed source.⁵⁰⁰

A peculiarity shared by some of the etymologies proposed in the following is that the Niya name ends in *-e* without there being a clear source for this *-e* in Bactrian (see s.vv. *Apge*; *Katge*; *Kutge*; *Palge*). This issue will receive a separate treatment in §4.4.3.

⁴⁹⁸ On these pitfalls, cf. e.g. Kloekhorst (2019: 12–15). As the etymological origin of a name is often independent of the ethnic identity of the person bearing it, I am here purely concerned with the linguistic interpretation of these names. Baums (2018c) has shown how Gandhāran people from the same family carried names from Indian, Iranian, Greek, and other origins.

⁴⁹⁹ It would be ideal if the proposed donor forms were actually attested in Bactrian as a name. Due to our small corpus, this requirement is, however, too strict (cf. §3.1.6).

⁵⁰⁰ In searching for these, I have consulted Tavernier’s *Iranica* and various fascicles of the *Iranisches Personennamenbuch*.

3.4.2 A discussion of ten selected examples

81. *Apge*, PN

Attestations of the base form

DIR.SG. *Apge*: CKD 36; 262; 701 (2x); *Apgeya*: CKD 262; 304; 580; 842 (2x);
Apgaya: CKD 654

INS.SG. *Apgeyena*: CKD 47 (2x)

GEN.SG. *Apgeyaša*: CKD 313; 419; 428; 443; 444; 589; 648; 782

ABL.SG. *Apgeyade*: CKD 63

Niya *Apge* may represent *αβγο /āvgə/, the expected Bactrian outcome of *āpa-ka-, an Old Iranian hypocoristic name made from *āp- ‘water’. The same name is evidenced by Elam. *ab-ba-ka*₄ / *ab-ba-ak-ka*₄; Gr. Ἀπάκης (Avroman 1 A28; B30); and Arm. *Apak* (see Martirosyan 2021: no. 37). If correct, this etymological proposal precludes donor languages such as Sogdian because of the apparent syncope of *-a- in between *-p- and the suffixal *-k-.⁵⁰¹

82. *Katge*, PN

Attestations of the base form

DIR.SG. *Katgeya*: CKD 324 + 328

GEN.SG. *Katgeyaša*: CKD 324 + 328; 886; *Katgayaša*: CKD 324 + 328

The Niya PN *Katge* (attested in the longer form *Katgeya*) could represent a so-called *Kurzname* *καδγο /kādɡə/, derivable from *kāta-ka- ‘beloved’ with syncope of the middle *-a-, a characteristic trait of Bactrian. This reconstruction can be backed up by the attested Avestan name *Kāta*- ‘the beloved one’ (Mayrhofer 1977: 15) and other Iranian names made from the verbal root *√kaHm ‘to desire, to love’, e.g. OIr. *ǵta-kāma- ‘he who desires for order’ → Gr. Ἀρτακάμας (Schmitt 2011: no. 62, cf. also Iranica: 593 for names with *kāma- ‘love’ and see §3.4.2 s.v. *Kamlana*).

Alternatively, *Katge* could be etymologically related to the Bactrian word for ‘house’, i.e. καδγο /kadɡə/ < *kata-ka- (BD II: 220). If this were the case, the name could have been extracted from compound names containing *kata(-ka)- ‘house’, as in OP *xšaya-kata- ‘ruling the house’ → Elam. šá-a-ka₄-da (Iranica: §4.2.1981) and perhaps the Bactrian royal name

⁵⁰¹ For the substitution of Bactr. -βγ- /vg/ with Niya -pg- required by my proposal, cf. §4.3.8.

καδφισο, if from **kata-fšuyantiča-* or nom.sg. **kata-fšuyans* ‘lord of the house’ (BPN: no. 218).

83. *Kamlana*, PN

Attestations of the base form

DIR.SG. *Kamlana*: CKD 701; 754

The Niya PN *Kamlana* possibly reflects a Bactrian name **καμολανο* /*kāmlānə*/, derivable with Bactrian’s typical syncope and lambdacism from OIr. **kāma-dāna-* ‘gift of (the god of) love’. While Iranian names ending in **-dāta-* ‘given’ are more frequent than those in **-dāna-* ‘gift’, two clear examples of the latter category are **baga-dāna-* ‘God’s gift’ seen in Aram. *bḡdn* and Elam. *ba-ka₄-tan-na* and **hauma-dāna-* ‘gift of Hauma’ seen in Elam. *u-ma-da-na* (Iranica: §4.2.244; §4.2.730). For the common use of **kāma-* as a name component in Iranian onomastics, see §3.4.2 s.v. *Katge*.⁵⁰²

The Brāhmī inscriptions from Mathurā may provide more evidence for the use of Bactr. **λανο* ‘gift’ < **dāna-* as a name component. In my view, the name *Valāna* in Lüders (1961: §30 gen.sg. *Valānas[y]a*; §123 *Balānās[.]*) could be interpreted as a rendering of Bactr. **βαγολανο* /*vaylānə*/ < **baga-dāna-* ‘God’s gift’, a cognate of the aforementioned Aramaic and Elamite names. The required simplification of Bactr. /*yl*/ to the *-l-* in *Valāna* (variant *Balāna*) would be the same as in Niya *Suliga* ‘Sogdian’ ← σογλιγο* /*suylīgə*/ < **sugdiya-ka-* (§3.2.1 s.v.).⁵⁰³

84. *Kutge*, PN

Attestations of the base form

DIR.SG. *Kutge*: CKD 11; 115; 221; *Kutgeya*: CKD 125; 523; 898; *Kutgo*: CKD 416
GEN.SG. *Kutgeyaša*: CKD 11; 103; 823 (2x); 898 (2x)⁵⁰⁴

⁵⁰² The Niya name *Kame* (CKD 21) can perhaps come from a short name **kāma-* as in Elam. *ka₄-ma* (Iranica: §4.2.915).

⁵⁰³ It has been suggested (cf. e.g. Lüders 1961: 67; Albery 2020: 315) that the PN *Ulāna* in Lüders (1961: §119 gen.sg. *Ulānāsyā*) is another variant of the same name, but nothing proves the supposed equivalence. *Ulāna* may alternatively be accounted for as a rendering of Bactr. **(v)ολανο* /*(h)ulānə*/ < **hu-dāna-* ‘good gift’. Harmatta’s (1989: 302) suggestion to analyse *Ulāna* as “Khotanese Saka *ula* ‘up’ + the suffix *-āna-*” is unconvincing.

⁵⁰⁴ The sequence *kutgana* in CKD 819 may also belong here, but since the context is badly preserved, I leave this form aside here. It remains likewise uncertain

For the name *Kutge*, I see two possible explanations.

One possibility is to compare the Parthian name *ktwk** /kadug/, attested by way of the patronymic *ktwkn* (ŠKZ §45; cf. MP *ktwk'n*; Gr. κιδουκάν). *ktwk** /kadug/ can be explained as a *ka*-extension to the Old Iranian name **katu-* known from YAv. *Katu-* (see Huyse 1999 II: 153f.; Schmitt 2016: no. 250). **katu-ka-* could yield Bactr. **κοδυο* /kudgə/ in the same way that **razu-ka-* results in Bactr. *ροζγο* /ruzgə/ 'vineyard', viz. with *u*-umlaut happening before syncope (cf. Benvenuto & Bichlmeier 2022a: 98; 2022b: 24); and if **κοδυο* /kudgə/ existed as a name in Bactrian, Niya *Kutge* would be a phonologically plausible rendering of it.

The second possibility is to start from OIr. **kuta-ka-* 'the little one' (cf. Av. *kutaka-* 'small, less'), whose use as a personal name is suggested by Neo-Assyrian *^mKu-ta-ki* (see Schmitt 2009: no. 83).⁵⁰⁵ Because of syncope, **kuta-ka-* would also result in Bactr. **κοδυο* /kudgə/, and the base form *κοδο* /kudə/ 'small, insignificant' < **kuta-* has recently surfaced in Bactrian birchbark letters (see Sims-Williams 2022–23: 139f.).

Besides *Kutge*, there also exists a Niya name *Kutaka* (CKD 129; 204; 700 gen.sg. *Kutakaša*). In case this second form contains the same basis as *Kutge*, we could set up another Bactrian name **κοδοκο* / **κοδικο* / **κοδακο* /kudək(k)ə/, with the hypocoristic suffix *-κο* /k(k)ə/ < **-kka-* (BPN: 11). The co-existence of syncopated **κοδυο* and non-syncopated **κοδοκο* / **κοδικο* / **κοδακο* would not be unexpected, as Bactrian also has *ζαδυο* 'born' next to *ζαδοκο* / *ζαδικο* 'child' < **zāta-k(k)a-* (BD II: 210). Cf. the discussion §3.4.2 s.v. *Pitga*.

85. *Namilga*, PN

Attestations of the base form

GEN.SG. *Namilgae*: CKD 660; *Namilgaae*: CKD 288 (2x)

The female name *Namilga* should, I think, be compared with Bactr. *ναμλγο* /namilgə/ 'salt' (BD II: 238). Phonetically, this etymology is entirely straightforward, and Sogd. *nm'δkynch* is another example of a female name

whether the partially legible names [*Kutg*]. (CKD 129) and *Kutg.sena* (CKD 684) have anything to do with the name under discussion here.

⁵⁰⁵ More generally, there are parallels for Iranian names meaning 'small'. Cf. e.g. Khwar. *ksyštək* /kasištək/ < **kasišta-ka-* 'very small, smallest'.

derived from OIr. **namadkā-* ‘salt’ (Lurje 2010: no. 778; Colditz 2018: no. 371).⁵⁰⁶

Because of the sequence *-aae* in the gen.sg. *Namilgaae*, Burrow (LKD: §69) speculated that the final *-a* of Niya *Namilga* may have been long. If true, *Namilga* possibly reflects an early Kuṣāṇa form **ναμιλγα* /*namilgā*/ < **namadkā-*, to be compared with other archaic feminine forms such as *λογδα* /*luydā*/ ‘daughter’ < **duxtā-*.

86. *Palge*, PN

Attestations of the base form

DIR.SG. *Palge*: CKD 209; *Palgeya*: CKD 209

GEN.SG. *Palgeyaša*: CKD 72

The Niya PN *Palge* could come from Bactr. **παλγο* /*pālgə*/ < **pāda-ka-* ‘little foot’. This supposed Bactrian name would have cognates in Elam. *ba-da-ka*₄; Bab. *pa-da-ak-ka*; and Gr. Παδάγος (Iranica: §4.2.1205). Since both lambdacism and syncope have to be assumed, this etymology would only work with Bactrian as a donor language.

87. *Pitga*, PN

Attestations of the base form

DIR.SG. *Pitga*: CKD 93; 108; 117; 185; 571; 588 (3x); 590; 774

GEN.SG. *Pitgaša*: CKD 108 (2x); 154; 168; 588; *Pitgasya*: CKD 588 (2x)

The well-attested anthroponym *Pitga* could represent a hypocoristic name **πιδγο* /*pidgə*/, derivable from **pati-ka-* with the syncope and *i*-umlaut that are indicative of a Bactrian origin.⁵⁰⁷ Names with the element **pati-* ‘lord, chief’ are a characteristic feature of Iranian onomastics in general, and Bactrian names form no exception (cf. e.g. *σπαλοβιδο* < **spāda-pati-* ‘chief of the army’; BPN: no. 28).

In the case of **πιδγο*, one can draw a comparison with the attested Bactrian name *πιδoko* (also *πιδικο*; *πιδako*) < **pati-kka-* (BPN: no. 372). The presumed co-existence of **πιδγο* and *πιδoko* would be of the same kind as that between *ζαδγο* ‘born’ < **zāta-ka-* and *ζαδακο* (also *ζαδικο*) ‘child’ < **zāta-kka-* (BD II: 210).

⁵⁰⁶ The element *-ynch* in Sogd. *nm’δkynch* is a feminine suffix (GMS: §§1052f.).

⁵⁰⁷ For the relative chronology of these sound changes, see §3.4.2 s.v. *Kutge*.

The sequence *Pitg-* recurs in the female name *Pitgina* (gen.sg. *Pitginae* in CKD 762). Yet, the exact analysis of *Pitgina* stays uncertain since the Bactrian hypocoristic suffix -ivo / -ηvo that could correspond to -ina has so far not turned up in inherited names (BPN: 11; cf. also §6.4.1).⁵⁰⁸

88. *Lamga*, PN

Attestations of the base form

DIR.SG. *Lamga*: CKD 129; 686; *Lamgo*: CKD 80; 543

Lamga can come from a Bactrian cognate *λαμγο /lāmgə/ of the Old Iranian name **dāmi-ka-*, the source of Elam. *da-mi-ik-ka*₄ (Iranica: §4.2.485).⁵⁰⁹ **dāmi-ka-* is a so-called *Kurzname* derived from longer compounds such as **dāmi-dāta-* ‘given by the creator’ (Aram. *dmydt*; Elam. *da-mi-da-ad-da*; Parth. *dmydt*; cf. Iranica: §4.2.484; Schmitt 2016: no. 167).⁵¹⁰

89. *Larsu*, PN

Attestations of the base form

DIR.SG. *Larsu*: CKD 69; 243 (2x); 318; 343; 345 (3x); 420

INS.SG. *Larsuena*: CKD 345 (2x)

GEN.SG. *Larsuaša*: CKD 94; 223; 236; 239; 318; 345 (4x);⁵¹¹ 401; 558; *Larsuša*: CKD 345; 378; 383

Derivatives

ADJ. *Larsuani* ‘of Larsu’: CKD 74

The Niya PN *Larsu* may reflect Bactr. *λαρσαοο /lārsawə/ < **dāra-sawah-* ‘the one having power’.⁵¹² σαοο /sawə/ ‘power’ is one of the more frequent

⁵⁰⁸ The Niya name *Pite* (longer form *Piteya*) perhaps reflects Bactr. *πιδο /pidə/ < **pati-* (for the ending -e(ya), cf. §4.4.3).

⁵⁰⁹ For the Bactrian outcome of *-mVk-, cf. ζιμγο ‘winter’ < **zima-ka-* (BD II: 212). This type of syncope and the change of *d to λ /l/ point to Bactrian being the donor language.

⁵¹⁰ Cf. also SA Gandh. *Damijada* (CKI 42, gen.sg. *Damijadasa*), a PN ← Ir. **dāmizād(ə)* < **dāmi-zāta-* ‘born through (the will of) the creator’ (§2.1.7.1). One further wonders if the Niya PN *Lampurta* (CKD 678) could be interpreted as Bactr. *λαμβορδο /lāmburdə/ < **dāmi-bṛta-* ‘carried by the creator’, as a parallel to the Old Iranian PN **baga-bṛta-* ‘carried by God’ seen in Aram. *bgbrt* and Bab. *Ba-ga-bar-ta* (Iranica: §4.2.242).

⁵¹¹ In cover-tablet obverse l. 10, read *Larsuaša* and not *Larsuasa* (so KD: 125).

⁵¹² Lambdacism combined with syncope rules out other donor languages.

name components in Bactrian (cf. BPN: no. 418), and the assumed compound would structurally and semantically be comparable to the Middle Persian name *Dār-farrah* < **dāra-farnah*- ‘the one having glory’ (Colditz 2018: no. 191).⁵¹³

This etymology requires that Bactr. *-*awə* was first rendered as *-*u(y)a* in Niya Prakrit, due to a colouring of the **a* by the following **w* and then shortened to the attested -*u* in the same way that word-final -*iya* developed to -*i* and -*oṃa* (-*ova*) to -*o* (cf. §3.2.3 s.v. *piro*).

90. *Vhurmajheva*, PN

Attestations of the base form

DIR.SG. *Vhurmajheva*: CKD 143; *Vhurmasēva*: CKD 26; *Vhurmaṣeva*: CKD 135

INS.SG. *Vhurmaṣevena*: CKD 135

GEN.SG. *Vhurmajhevaṣa*: CKD 143; *Vhurmaṣevaṣa*: CKD 135 (2x)

The Iranian provenance of the name *Vhurmajheva* is shown by its initial since the only function of the akṣara 𑀧 *vha* in Niya Prakrit is to render an Iranian *f* (see §2.1.6). The spelling variation between -*jheva*, -*seva*, and -*ṣeva* moreover points to the presence of a phoneme /z/, another feature common in borrowings from Iranian.

Proceeding from these observations, Burrow (1935a: 789; LKD: 108 s.v. *pḥumāṣeva*) saw a connection between the element -*jheva* (-*seva* / -*ṣeva*) and OIr. **zaiba*- ‘beautiful, ornament’, attested as a name component in Persian *Aurangzeb*, literally ‘ornament of the throne’.⁵¹⁴ The element *Vhurma*- he left unexplained.

I suggest to compare *Vhurmajheva* to the Bactrian names $\varphi\rho\rho\mu\alpha\sigma\alpha\rho\alpha\zeta\omicron$ and $\varphi\rho\rho\mu\alpha\rho\iota\zeta\mu\omicron$ (also $\varphi\rho\alpha\mu\alpha\rho\iota\zeta\mu\omicron$). These names are either to be accounted for as governing compounds with $\varphi\rho\rho\mu\alpha$ - in the sense of the verb $\varphi\rho\rho\mu\iota$ - ‘to order’ < **fra-māya*- or as mechanical combinations of $\varphi\rho\rho\mu\alpha$ -, a shortened form of $\varphi\rho\rho\mu\alpha\nu\omicron$ ‘command’ < **fra-māna*-, with the frequent name

⁵¹³ Given these compounds with the root **√dar* ‘to hold’, one wonders if the Niya PN *Larka* in CKD 80 likewise stands for a Bactrian *Kurzname* * $\lambda\alpha\rho\gamma\omicron$ /*lārgə*/ < **dāra-ka*-. For the assumed substitution of Bactr. -*py*- /*rg*/ with Niya -*rk*-, cf. LKD (§36), where it is pointed out that -*rk*- and -*rg*- frequently interchange in foreign PNs.

⁵¹⁴ The lack of a clear cognate of **zaiba*- in Eastern Middle Iranian languages makes one a little hesitant to accept Burrow’s idea, but I have no better proposal on offer. Conceivably, the Niya Prakrit name *Sevaṣena* (CKD 181; 383; 499; 604 (2x); 612; 618; 620) contains the same name element with initial devoicing to *s*-.

components $\alpha\rho\alpha\zeta\omicron < *warāza-$ ‘boar’ and $\rho\iota\zeta\mu\omicron$ ‘battle’ $< *razman-$ (see BPN: no. 506).

$\varphi\rho\omicron\mu\alpha\alpha\rho\alpha\zeta\omicron$ and $\varphi\rho\omicron\mu\alpha\rho\iota\zeta\mu\omicron$ display the most common outcome of $*fra-$ in Bactrian, i.e. $\varphi\rho\omicron-$ /frə/. Yet, already in early Bactrian sources, a variant outcome $\varphi\omicron\rho-$ is attested, e.g. $\varphi\omicron\rho\zeta\iota\nu\delta\omicron$ next to $\varphi\rho\omicron\zeta\iota\nu\delta\omicron$ ‘descendant(s)’ $< *frazanti-$ (BD II: 274f.) and $\varphi\omicron\rho\delta\alpha\mu\omicron\sigma\omicron$ ‘at first’ $< *fratama-čiya-$ (SK₄M 2; SK₄A 3; SK₄B 4). It thus seems possible that *Vhurmajheva* was borrowed from a source starting in $*\varphi\omicron\rho\mu\alpha-$ /furmä/.

I transcribe the -o- in $*\varphi\omicron\rho\mu\alpha-$ as /u/ because $*fra-$ may have developed into $\varphi\omicron\rho-$ via an intermediary $*f_f-$ (cf. Sims-Williams 2009b: 284) and $*f_f$ vocalises to Bactr. -op- /ur/ in a labial environment (SFBG: 60). What speaks in favour of an intermediary $*f_f-$ is the cluster -p̣t- /št/ in $\varphi\omicron\beta\tau\iota-$, pret. $\varphi\omicron\beta\tau\alpha\delta\omicron$ ‘to send’ $< *fra-stāya-$, pret. $*fra-stāta-$ (BD II: 275), which evidently derives from earlier $*f_fst-$, given parallels such as $\pi\alpha\rho\iota\beta\tau\omicron$ ‘blocked’ $< *pari-w_fsta-$ (SFBG: 56).⁵¹⁵

If combining my idea about *vhurma-* and Burrow’s idea about *-jheva* (-seva / -seva), one may tentatively reconstruct the hypothesised Bactrian source of *Vhurmajheva* as $*\varphi\omicron\rho\mu\alpha\zeta\eta\beta\omicron$ /furmäzēvə/.

3.5 Loanwords from Iranian languages other than Bactrian

This section is devoted to Niya words with an established Iranian etymology whose donor language was most likely not Bactrian.

3.5.1 Secure etymologies

91. *gaṃñā* ‘treasury’

Derivatives

ADJ. *gaṃñi* ‘of the treasury’: CKD 357; *kañi*: CKD 357 (2x)

Compounds

DIR.SG. *gaṃñāvara* ‘treasurer’: CKD 310 (2x)

GEN.PL. *kaṃjhavaliyana* ‘idem’: CKD 725

⁵¹⁵ If one prefers to interpret $\varphi\omicron\rho-$ as a metathesised variant of $\varphi\rho\omicron-$, $*\varphi\omicron\rho\mu\alpha-$ may rather stand for /fər/. In this case, it is still possible that the -u- in *Vhurmajheva* was caused by an allophonic pronunciation of the Bactrian schwa as a back vowel.

The Iranian loanword *gaṃṇā* ‘treasury’ does not so far occur on its own. Yet, one can posit its existence on the basis of some derivatives and compounds (cf. Burrow 1934: 509).⁵¹⁶ To begin with, there exists the adjective *gaṃṇī* / *kaṇī* ‘of the treasury’, which in its three attestations modifies *draṃga* ‘office’ (§3.3.2 s.v.). In addition, there are two compounds with the meaning ‘treasurer’, i.e. *gaṃṇāvara* (~ Skt. *gañjavara*–; Lüders 1961: 100) and *kaṃjhavaliya* (gen.pl. *kaṃjhavaliyana*).⁵¹⁷

Before returning to the variant forms in Niya Prakrit, the Iranian evidence needs a brief review. The Iranian word for ‘treasury’ shows a cluster *-zn-* in some languages, e.g. Parth. *gazn* (DMMP: 170), Sogd. *γzn-* (SD: 182; DMSB²: 107; DCS²: 88), and Bactr. *γαζvo* / *γaznə*/ (BD II: 205). There is also a form with *-nz-*, i.e. “Median” **ganza-*, reconstructable by way of the Old Iranian *Nebenüberlieferung* (Gershevitch 1964b: 10–12 = 1985: 203–205; Iranica: §4.4.7.49) and the source of ZMP *ganj* and MMP *ganz* (CPD: 35; DMMP: 163). Henning (1963: 196–198 = 1977 II: 584–586) convincingly explained this state of affairs by assuming that the eastern languages directly continue an older form **gazna-*, which in “Median” was metathesised to **ganza-* and from there passed on to Old Persian in Achaemenid times.⁵¹⁸

gaṃṇā derives from earlier **gaṃj(h)a* (cf. Skt. *gañja-*; Niya *kaṃjhavaliya*) with the reduction of voiced (aspirated) consonants after homorganic nasals frequently found in dialects of Central Asian Gāndhārī (§2.1.5). But what is the origin of this cluster *-ṃj(h)-* / *ñj(h)*/ ?⁵¹⁹ It probably is not *-zn-*, as in e.g. Bactr. *γαζvo*, since Ir. *-zn-* is borrowed as *-š-* / *sn/* (perhaps [zn]) in the case of *gavaša* ‘deer, stag’ (see §3.3.2 s.v.). More likely, *gaṃṇā* < **gaṃj(h)a* was

⁵¹⁶ The Sanskrit cognate *gañja-* ‘treasury’ is attested as a separate word.

⁵¹⁷ Burrow (LKD: 81 s.v. *kaṃjhavaliyana*; 119 s.v. *valiyana*) considered the element *-valiya* in *kaṃjhavaliya* unclear. I agree with Weber (1997: 32) that this can be derived from OIA **-pālika-* ‘in charge of’ (cf. e.g. Skt. *udyānapālikā-* ‘(female) gardener’). Weber’s alternative suggestion that it is from Ir. **-bāra-* with the addition of the *ka-* suffix leaves the Niya *l* unexplained. The initial *k-* in *kaṃjhavaliya* (and the adjective *kaṇī*) is due to devoicing (§2.1.4; §6.3.1).

⁵¹⁸ The genuine Persian form may be continued by Classical Persian *gašn* ‘plenty’, with the same change of **-zn-* to *-šn-* as in *jašn* ‘celebration, festival’ < **yazna-* ‘sacrifice’ (cf. Henning 1963: 198 = 1977 II: 586; Gershevitch 1964b: 10 fn. 1 = 1985: 203 fn. 1).

⁵¹⁹ Pace Weber (1997: 32), the variation between *-ṃj-* and *-ṃjh-* need not point to two different Iranian sources, since aspiration was, certainly after nasals, no longer distinctive in Gāndhārī (§2.1.3); cf. e.g. the variation between *-ṃg-* and *-ṃgh-* in a word such as *ṣvaṭhaṃgha* / *ṣoṭhaṃga* (§3.2.4 s.v.).

borrowed during the Achaemenid conquest of Gandhāra from OP **ganza-* (so also Henning 1963: 197 = 1977 II: 585),⁵²⁰ seeing that foreign *z* is elsewhere substituted with voiced (aspirated) palatals too (§2.1.7.1; §4.3.19).

The observed change of *-b-* to *-v-* in *gaṃṇāvara* ‘treasurer’ ← OP **ganza-bara-* ‘idem’ (MMP *ganzwar*; ZMP *gañjwar*) can be attributed to lenition processes in Gāndhārī (§2.1.2). As with other Old Persian loanwords (cf. §4.2.2), the Sanskrit cognate *gañjāvara-* may therefore have been borrowed through a Gāndhārī intermediary.

92. *thavaṃnaga* ‘cloth’

Attestations of the base form

DIR.PL. *thavaṃnaga*: CKD 141; *thavaṃnae*: CKD 207 (2x); *tavanaga*: CKD 476

Derivatives

DIR.PL. *thavaṃnamae* ‘made from cloth’: CKD 534

Compounds

DIR.SG. *kaśathavaṃnaga* ‘silken cloth’: CKD 897; *kajahavaṃnaga*: CKD 583; 808

DIR.PL. *kajathavaṃne* ‘idem’: CKD 149

DIR.PL. *omnathavaṃne* ‘woollen cloth’: CKD 149

DIR.SG. *um̐nathavanagamae* ‘made from woollen cloth’: CKD 318

/// *havaṃnaga*: CKD 808

A survey of the passages in which Niya Prakrit *thavaṃnaga* occurs shows it to be a textile product (see Lüders 1936a: 21–24). As first noticed by Burrow (1934: 515; LKD: 96f. s.v.), these semantics strongly favour an etymological connection with Khot. *thauna-* ‘cloth’ < **tāfna-*. Some other forms from the region meaning ‘cloth(ing)’ belong here too: Kuča Skt. *thacaṇa-*, a misspelling for **thavaṇa-*, TB *tono*, and Old Uyghur *ton*.⁵²¹

In CKD 476, the Niya word is spelled with an initial *t-* and not with *th-*, as elsewhere. The compound form *-havaṃnaga* shows that the spelling with *th-* is the correct one and not an instance of unetymological aspiration as in *thavastaga* next to *tavastaga* ‘carpet’ (§3.3.2 s.v.). *-havaṃnaga* exemplifies

⁵²⁰ If we can trust Herodotus 3.94, the Indians paid the largest tribute of the whole empire to the Achaemenid treasury.

⁵²¹ On these words, see e.g. Schaeder (*apud* Lüders 1936a: 24); Bailey (1937a: 916f. fn. 1); Schmidt (1980: 411); Ching (2011: 76 fn. 44); HWA (730f.); and Dragoni (2023b: 123–125). Sims-Williams (2023: 36) additionally refers to Sogd. *δβn’k* ‘cloth’.

the default Prakrit development from intervocalic *-th-* to *-h-*, whereas a change from unaspirated *-t-* to *-h-* would be highly unusual.

The initial aspirate of *thavaṃnaga* is the reason why we are most likely dealing with a Khotanese loanword. The aspirated *th-* in Khot. *thauna-* < **tāfna-* is caused by the **f* later in the word, a transfer of aspiration (*Hauchumsprung*) which does not seem to occur in other Middle Iranian languages (see Sims-Williams 1983: 48, who calls this sound change “transfer of friction from internal to initial position”).

The apparent rendering of Khot. *-au-* as Niya *-ava-* could suggest that Niya Prakrit borrowed the word at a time when the Khotanese form was still **thāvna-* with **-āvn-* as an intermediary stage between **-āfn-* and *-aun-*.⁵²² If so, the cluster *-vn-* could have been broken up by a *svarabhakti* vowel (cf. Dragoni 2023b: 124f.), for which one may compare Skt. *stavaraka-* ‘silk’, a loan from an East Iranian, perhaps Bactrian, cognate **stavrag* of MP *stabrag* ‘shot silk’ (Agrawala 1951: 14f.; EWAia III: 523).

thavaṃnaga may have been secondarily created in Niya Prakrit from an earlier **thavaṃna* ← **thāvna-*, possibly preserved in the derived form dir.pl. *thavaṃnamae* ‘made from cloth’ (CKD 534). Alternatively, *thavaṃnaga* could be a loan from a variant of Khot. *thauna-* exhibiting the *ka*-suffix, i.e. *thaunaka-*. The latter form is actually attested, but seemingly only in Late Khotanese and with a more specific meaning ‘silk brocade’ (Duan 2013a: 310f.). All in all, the assumption of an inner-Prakrit remodelling of **thavaṃna* to *thavaṃnaga* thus seems preferable.⁵²³

I now move on to a compound built from *thavaṃnaga* whose transliteration and etymological interpretation can be improved. Although the same word appears to be intended in both cases, Boyer et al. (KD: 61; 218) had read *kaṭathavaṃne* (dir.pl.) with Z *ṭa* in CKD 149, but *kajahavaṃnaga* with Y *ja* in CKD 583. Noting this inconsistency and observing that Z *ṭa* and Y *ja* can be difficult to distinguish in Niya Kharoṣṭhī, Lüders (1936a: 23) proposed to change the reading *kajahavaṃnaga* in CKD 583 to *kaṭahavaṃnaga*. New evidence suggests that the transliteration *kajahavaṃnaga*⁵²⁴ was right after all, and that one should rather correct *kaṭathavaṃne* in CKD 149 to *kajathavaṃne*. In the recently edited document

⁵²² This suggestion implies that the development to *-aun-* is recent in Khotanese, perhaps not earlier than the 3rd or 4th century AD.

⁵²³ Possibly, an analogy with *tavastaga* ‘carpet’ played a role in the hypothesised remodelling to *thavaṃnaga*.

⁵²⁴ Specifically this form is now also attested in CKD 808.

CKD 897, a new form *kaśathavaṃnaga* has surfaced, and given that intervocalically -ś- and -j- are alternative ways to write /ž/ (cf. §2.1.2), this new form makes it clear that the transliteration *kaja-* is preferable over ***kaṭa-*.⁵²⁵

Jiang (2020: 143f.) proposed to derive the element *kaśa-* (and by implication *kaja-*) from Skt. *kāśa-*, a type of grass used for hand-weaving. This derivation seems possible. Yet, I think that Skt. *kāśi-* ‘(Benares) silk’ provides an even better source since *kaśathavaṃnaga* and its variants could then be seen as cognate with the Old Uyghur expression *kaš ağılar üzäki ton* ‘a garment from Benares silk’ (HWA: 341), where the Indic loanword *kaš* ‘(Benares) silk’ combines with the Old Uyghur pendant of Niya *thavaṃnaga*, i.e. *ton* ‘garment’.⁵²⁶

To summarise, *thavaṃnaga* ‘cloth’ can be derived from **thavaṃna*, a loan from **thāvna-*, itself a more archaic version of the attested Khotanese word *thauna-* ‘cloth’. *thavaṃnaga* can also be compounded with an element *kaśa-* / *kaja-*, which I propose to derive from Skt. *kāśi-* ‘(Benares) silk’.

93. *darṣ-* ‘to load (a beast of burden)’

Attestations of the base form

PRET.3SG. *darṣida*: CKD 431 = 432

PRET.3PL. *darṣitaṃti*: CKD 305; 401

OPT.3PL. *darṣeyāti*:⁵²⁷ CKD 842

PST.PTCP.INS.SG. *darṣidagena*: CKD 40

GERV. *darṣitavo*: CKD 73 (2x); 305; *darṣidavo*: CKD 236; *darṣidavya*: CKD 413 (2x)
darṣida ??: CKD 413

Derivatives

DIR.SG. *darṣa* ‘load’: CKD 329

Burrow (1934: 510f.; LKD: §23; 97 s.v.) convincingly compared *darṣ-* ‘to load (a beast of burden)’ to the Iranian root **√darz*, which is continued by,

⁵²⁵ The available pictures of CKD 149 and 583 confirm that it is possible to read *kaja-* there. This new reading renders Lüders’ (1936a: 22f.) etymological comparison with Skt. *kaṭavānaka-* ‘mat-cloth’ obsolete.

⁵²⁶ Cf. also Zieme (1997), who *inter alia* derives NP *kaṣ* ‘coarse silk’ from the same Indic source as Uyghur *kaš*.

⁵²⁷ Read alternatively *darṣeyamti* (Schoubben 2022b: 346 fn. 5).

amongst others, Av. *darəz-* ‘to attach’ and Parth. *darz-* ‘to tie on, load (carrier or pack animal)’ (EDIV: 63f.).⁵²⁸

To account for the Niya cluster *-rš-*, Bailey (1946: 768) reconstructed the direct source of *darš-* as **darž-* < **darz(a)ya-*, comparing the palatalisation seen in Khot. *dals-* ‘to fasten, load’ (SGS: 44). Given that this scenario requires *darš-* to have been borrowed from an otherwise unattested Middle Iranian language, other options need to be considered too. It would, for instance, also be conceivable that the retraction of the sibilant was caused by the preceding *r* since clusters of preconsonantal *r* and dental consonants often result in retroflexes in Gāndhārī and other MIA languages (cf. also §3.2.4 s.v. *svaṭhaṃgha* / *ṣoṭhaṃga*).

The absence of lambdacism precludes *darš-* from being a Bactrian loanword,⁵²⁹ and most other Iranian languages do not qualify as a plausible source either.⁵³⁰ The only form in a known Middle Iranian language that matches Niya *darš-* both semantically and formally is Parth. *darz-*. Consequently, *darš-* may be (but need not be) a linguistic vestige of the Indo-Parthian rule in Gandhāra (cf. also §4.2.4).⁵³¹

94. *divira* ‘scribe’

Attestations of the base form

DIR.SG. *divira*: CKD 348; 384; 385; 454; 507; 520; 552; 569; 571 (5x); 572; 576 (4x); 577 (3x); 579 (2x); 580 (3x); 581; 582 (2x); 586 (5x); 587 (2x); 588 (4x); 589 (5x); 592 (2x); 649; 765; 788; 819 (2x); 820 (2x); *tivira*: CKD 90; 157; 222 (2x); 234; 336; 415 (2x); 419; 422 (2x); 436; 437; 572 (2x); 573; 579 (3x); 581 (5x); 582 (2x); 587 (2x); 590 (6x); 591; 592; 598 (2x); 648; 652; 654 (4x); 655; 715 (2x); 782; 883; 889

GEN.PL. *divirana*: CKD 330; 816; *tivirana*: CKD 422; 436

⁵²⁸ Khovar *drazēik* ‘to load up’ comes from a derivative of the same Iranian root (Morgenstierne 1936: 667).

⁵²⁹ In Bactrian, the relevant verb may have been **liž-* /liž/ or **lēž-* /lēž/ < **darzaya-* (→ Niya *leš-*; cf. §3.2.3 s.v.), pret. **liṛto* /lirtə/ < **dṛšta-* (→ Skt. **lārda-* ‘load, cargo’ → *lādayati* ‘to load’; cf. Schoubben 2022b).

⁵³⁰ Khot. *dals-* is phonologically incompatible with Niya *darš-*, and no suitable source is found in Sogdian either. Persian seems to preserve no trace of **√darz*, but a hypothetical MP **dāl-* < OP **dard-* (cf. *sāl* ‘year’ < **sardV-*) would in any case not fit the phonology of Niya *darš-*.

⁵³¹ A somewhat hypothetical option is to assume that *darš-* was borrowed at an early stage from a neighbouring Old Iranian language (cf. Av. *darəz-*).

Compounds

DIR.SG. *rajadivira* ‘royal scribe’: CKD 575

INS.SG. *rajadivirena* ‘idem’: CKD 677

Niya Prakrit *divira* ‘scribe’ and its Sanskrit counterpart *divira-* are most likely loanwords from OP **dipīra-* ‘idem’ > MP *dibīr*.⁵³² They are thus a linguistic trace of the Iranian influence on the development of writing in South Asia (Falk 2010a: 213; Ollett 2024: 90f.).

Itself going back to Elam. *tup-pi-ra* ‘scribe’,⁵³³ the Old Persian word has been borrowed into various Iranian and non-Iranian languages, including Bactr. λαβίρο /ləvīrə/⁵³⁴ and Arm. *dpir*. Skt. *divira-* may have been adopted through a Gāndhārī intermediary, as the observed lenition of postvocalic *-p-* to *-v-* could be ascribed to this language (cf. §2.1.2).

95. *dhane*, a unit of measure

Attestations of the base form

DIR.SG. *dhane*: CKD 702 (3x *dhane* ½)

GEN.SG. *dhanaīasa*:⁵³⁵ CKI 262; 263

DIR.PL. *dhane*: CKD 702 (*dhane* 3); *dhanea*: CKI 725

abbr. *dha*: CKI 91; 173; 260; 450; 716; 727; 729

dhane is a small unit of measure used to weigh pepper (*marica*), cinnamon (*tvaca*), and cardamom (*suṣmela*) in the Niya documents. The same word occurs in South Asian Gāndhārī (Falk 2001: 309–314 = 2013a: 48–53), and there is also a Sanskrit cognate *d(h)ānakā-*, the name of a coin (cf. Schmitt

⁵³² Cf. Burrow (1934: 514; LKD: 98 s.v.); Bailey (1949a: 127f.); and EWAia (III: 266; 560). The variant spelling with *t-* results from devoicing of the initial consonant (on which cf. §2.1.4; §6.3.1).

⁵³³ See Livshits (1980: 168 fn. 17) against an Old Iranian compound **dipi-bara-* or **dipi-wara-*.

⁵³⁴ The initial *l-* in λαβίρο of course precludes *divira* from being a Bactrian loanword. Instead of being an “East Iranian” loan (Henning 1957: 337 = 1977 II: 523; BD II: 227), Pkt./Skt. *lipi-* ‘inscription, writing’ next to *dipi-* can alternatively be explained from contamination with *√likh* ‘to write’ (cf. e.g. Bloch 1950: 90 fn. 2). This explanation would make these forms comparable to Pers. *nibīg* ‘text, writing’, Judaeo-Pers. *nywy* ‘inscription’, Sogd. *np’yk* ‘book, scripture’, and Bactr. ναβηγγο ‘text, writing’, which derive from **dipīka-* with the **d-* changed to **n-* by contamination with **ni* + **√pais* ‘to write’ (BD II: 236). With this account of *lipi-*, one moreover does not have to assume two different Iranian donor languages, one for *lipi-* and one for *dipi-/divira-*.

⁵³⁵ For this interpretation of CKI 262; 263, cf. Falk (2001: 310 = 2013a: 49).

1991: 159; EWAia III: 264f.). The final *-e* in *dhane* probably derives via **-ae* from earlier **-aga*.

The Iranian origin of Niya *dhane* was first noticed by Burrow (1935a: 783; LKD: 99 s.v.), who compared, amongst others, MP *dānag* ‘1/4th of a drachm’. MP *dānag* derives from OP **dāna-kā-* (Schmitt 1991: 160), the source of Elam. *da-na-ka₄(-um)* / *da-na-kaš*, a weight unit (Iranica: §4.4.15.2), and Gr. *δανάκη(ς)*, the name of a coin (Brust 2008²: 230–235). Due to the lack of evidence supporting the assumption of an intermediary language,⁵³⁶ the least costly hypothesis would be that OP **dāna-kā-* was adopted directly by the ancestor of Gāndhārī in Achaemenid times. From there, the word could have been continued into Niya Prakrit as *dhane* and passed on to Sanskrit as *d(h)ānakā*.⁵³⁷

96. *prahoni* ‘garment’

Attestations of the base form

DIR.SG. *prahoni*: CKD 318 (3x)

One cannot deduce the exact meaning of Niya Pkt. *prahoni* from the context. Yet, the word occurs in a list of textile products, so it probably belongs to this semantic category.

Burrow (1934: 514) persuasively related Niya *prahoni* to Khot. *prahoṇa-* (also *prahaṇa-*) ‘garment’.⁵³⁸ By lack of comparable forms in other Iranian languages, and in view of the corresponding verb *prahaṇy-* ‘to put on (clothing)’ (SGS: 89), Khotanese is probably also the direct donor of *prahoni* (cf. Bailey 1949a: 121; Weber 1997: 31).⁵³⁹

Niya Prakrit no longer distinguishes between dental and retroflex nasals (§2.1.6 under *ṣ na*), which explains why the Khotanese retroflex nasal is

⁵³⁶ In any case, a Bactrian intermediary is excluded since Niya *dhane* and its cognates show no sign of lambdacism.

⁵³⁷ The initial aspirate in Indo-Aryan may be due to folk etymology. Because OP **dāna-kā-* is likely derived from **dānā-* ‘corn’, Brust (2008²: 233) suggests Skt. *dhānā-* ‘idem’ as the analogical model. One could alternatively think of *dhana-* ‘valued object’. Why Brust uses the initial aspirate as an argument that Niya *dhane* is borrowed from Sanskrit is not clear to me.

⁵³⁸ In Kuča Sanskrit, the same word occurs as *parhūṇa-* / *parhyaṇa-* (Bailey 1966: 32; DKS: 255).

⁵³⁹ For a possible etymology of the Khotanese word, see now Dragoni (2023b: 124 fn. 239).

rendered in Niya with *-n-*. The word-final *-i* in *prahoni* may render the Khotanese nom.sg. in *-ä* (Lüders 1936a: 35).

97. *mudra* ‘seal’

Attestations of the base form

DIR.SG. *mudra*: CKI 95; CKD 206; 318; 324 + 328; 332; 380; 421; 574; 575; 578; 582; 749; 787 (2x); 792; 793; 795; 819; *muṃdra*: CKD 331; 820; *mutra*: CKD 326; 345; 348; 416; 419; 436; 489; 496; 507; 576; 584; 588; 591; 592; 593; 879; 881; 885; 889; *mutre*: CKD 889; *muṃtra*: CKD 216; 247 (2x); 330; 383; 454; 461; 568; 569; 570; 577; 604 (4x); 676; 788

INS.SG. *muṃtrena*: CKD 247

Derivatives

DIR.SG. *mudraga* ‘seal’ < **mudra-ka-*: CKD 425

PST.PTCP. *mudrita* ‘sealed’: CKD 493; *muṃtritaga*: CKD 247; 838

Compounds

DIR.SG. *kilamudra* ‘sealed wedge-tablet’: CKD 3; 5; 6; 7; 8; 10; 12; 13; 14; 17; 18; 19, etc.; *kilamuṃdra*: CKD 11; 26; 49; 54; 57; 62; 68; 136; 198; 223; 226; 240; 256; 274; 310; 312; 339; 340; 374; 817 (2x); *kilamutra*: CKD 15; 308; 338; 403; 408; 520; 819; 860; *kilamuṃtra*: CKD 16; 33; 135; 152 (2x); 156; 160; 219; 251; 295; 296; 297; 315; 356; 366; 375; 400; 427; 430; 433; 439; 440 (2x); 474; 482; 524; 540; 564; 606; 621; 630; 706; 719 (2x); 743; 816

LOC.SG. *kilamuṃtraṃmi*: CKD 160

DIR.SG. *saṃghamudra* ‘community seal’: CKI 183; *saghamudra*: CKI 542; *saghamudre*: CKI 220

There is a consensus (cf. EWAia III: 409f.) that Gandh. *mudra* ‘seal’ and its Sanskrit cognate *mudrā*⁵⁴⁰ are loans from OP **mudrā-* (**muḍrā-*), the latter safely reconstructable based on its Middle Persian descendant *muhr*. Signet rings being an Egyptian invention, the Persian term is itself probably derived from the name for Egypt, *Mudrāya-* (or *Muḍrāya-*) in Old Persian (cf. de Blois 2013: 269).

Referring to a culturally important item *inter alia* used in an administrative context (Garrison 2021), OP **mudrā-* (**muḍrā-*) was borrowed into various languages in Achaemenid times, also into Bactrian, where due to lambdacism the word became *μολρο* /*mulrə*/ ‘seal’.⁵⁴¹ This

⁵⁴⁰ The word is attested from the Sanskrit epics onwards. The personal name *Lópāmudrā-* in RV 1.179 is insufficient to postulate the existence of *mudrā-* in Vedic (cf. Remmer 2006: 71f.).

⁵⁴¹ For other Old Persian loanwords in Bactrian, cf. Sims-Williams (2002: 227f.).

Bactrian form can scarcely have been the source of Gandh. *mudra* and Skt. *mudrā*- since this would require Bactr. -λρ- /lr/ to have been substituted with Indic /dr/,⁵⁴² a counter-intuitive hypothesis at best. If one takes OP **mudrā*- (**muδrā*-) as the source of the Indic words, there are no phonological problems.

98. *hinajha* ‘army commander’

Attestations of the base form

DIR.SG. *hinajha*: CKD 661

hinajha is attested once as a title of the Khotanese king and is probably a rendering of Khot. *hīnāysa*- /hīnāza/ ‘army commander’ < **haināza*- (so first Burrow 1934: 514; cf. also DKS: 482). Not only is Khotanese the most likely donor language for historical reasons, the change of **-ai-* to *-ī-* → Pkt. *-i-* is also typical for Khotanese.⁵⁴³

It remains a matter of debate whether *hīnāysa*- is calqued on Gr. στρατηγός ‘general, commander’ (so e.g. Burrow; Tóttösy 1980: 132f.; Sims-Williams 2023: 3 who also compares Sogd. *sp’δny* ‘idem’), or an Old Iranian formation comparable to, for instance, Av. *nauuāza*- ‘leader of the ship > sailor’ (so Thomas 1936a: 789–791; 1945: 513–515).⁵⁴⁴ As στρατηγός was borrowed into Gāndhārī as *stratega*,⁵⁴⁵ option one seems entirely conceivable. Yet, the same seems true about the second option, given that a parallel OIr. **spādāza*- ‘leader of the army’ has been reconstructed based on the Lycian PN *Sppñtaza* (Schmitt 1971). It thus seems best to leave the issue undecided.

⁵⁴² The orthographic variation between <dr> and <tr> in Gāndhārī is probably phonologically insignificant.

⁵⁴³ In front of a nasal, as is the case here, -η- /ē/ < **-ai-* can, however, also develop further to -ι- /ī/ in Bactrian (SFBG: 61f.). In fact, Bactr. **υινο* /hīnə/ ‘army’ < **hainā*- may be attested in the PN υινοσαρο (BPN: no. 482).

⁵⁴⁴ Thomas’ assertion that the Chinese emperor conferred the title on the Khotanese kings is without foundation (cf. Brough 1965: 594 fn. 48 = 1996: 289 fn. 48).

⁵⁴⁵ See recently Candotti & Guidice (2024: 245–252).

3.5.2 Plausible etymologies

99. *khakhordi* ‘witch’

Attestations of the base form

DIR.SG. *khakhordi*: CKD 58; 63; *khakhorti*:⁵⁴⁶ CKD 880; *khakhortiya* ‘witchcraft’: CKD 880

DIR.PL. *khakhordi*: CKD 63 (*khakhordi stri* 3); *khakhorda*: CKD 248

khakhordi can co-occur with *stri* ‘woman’ (CKD 58; 63; 248) and the contexts in which this word occurs allow one to deduce that being a *khakhordi* was considered a grave offence, punishable by death. Based on these observations, Burrow (1935a: 780f.) plausibly assigned the meaning ‘witch’ to *khakhordi* (see also Hansen 2004: 292; Kaur 2024).⁵⁴⁷ He further made a convincing etymological comparison with Av. *kax^varəiδī-* ‘witch’ < **kaxwardī-* (cf. masc. *kax^varəḍa-* ‘wizard’ < **kaxwarda-*) and various Late Sanskrit words for ‘evil spirit’, viz. *kākhorda-*, *kakkhorda-*, *kharkoda-*, and *khārkoṭa-*.⁵⁴⁸

Which Iranian language could be the source of Niya *khakhordi* ‘witch’ and its Sanskrit cognates? Many can be excluded for phonological reasons because they would not account for the cluster *-rd-* (alternative spelling *-rt-*) in *khakhordi*. In Bactrian, **-rd-* is expected to yield *-rλ-* /*rl-*, a cluster by default substituted in Niya Prakrit with *-r-* (§4.3.25). In Middle Persian and Khotanese, intervocalic **-rd-* evolves to /*l-*/ (cf. e.g. MP *sāl* ‘year’ < **sardV-*; Khot. *salii-* < **sardī-kī-*), so these languages do not work as a source of

⁵⁴⁶ This variant form (on which cf. Duan & Tshelothar 2016: 15) proves that Burrow (1935a: 780f.; LKD: 86 s.v. *khakhorna*; cf. also Bailey 1955: 14 fn. 1) was correct in preferring the transliteration *khakhordi* over *khakhorni* (as in KI: 341).

⁵⁴⁷ Accusations of witchcraft might seem like a phenomenon typical of Medieval Europe, not necessarily expected in an Ancient Central Asian context. Yet, important Mesopotamian parallels exist for witchcraft (Akkadian *kišpu*) being treated as a punishable offence: §2 of the Old Babylonian Codex Hammurabi (18th cent. BC) deals with false accusations of witchcraft (Roth 1997²: 81); and in §47 of the Middle Assyrian Laws (11th cent. BC), it is ordered that practitioners of witchcraft be put to death when caught in the act (Roth 1997²: 81).

⁵⁴⁸ **kaxwarda-* / **kaxwardī-* may itself be a loanword from the BMAC language (Kümmel 2020: 258). For an overview of the contexts in which the Sanskrit words occur, see White (2021: 75; 77–80).

khakhordi either.⁵⁴⁹ Phonologically, Sogdian would be a possible donor since in this language *-rd- is continued as /rδ/ (cf. e.g. *srδ* ‘year’ < **sardV-*). Yet, in view of the Sanskrit cognates of Niya *khakhordi* attested in South Asian sources such as the *Carakasamhitā*, Sogdian still seems an unlikely donor language because of its geographical remoteness.

Hence, only a few options are left. One possibility is that the word was borrowed early on in (Pre-)Gāndhārī from a neighbouring Old Iranian dialect (cf. Av. *kax^varəδa-*; *kax^varəiδī-*). In light of the Indo-Parthian rule in Gandhāra, it may, however, be more plausible that the Indic words come from a feminine equivalent of Parth. **kaxward* ‘wizard’, the latter probably also underlying Arm. *kaxard* ‘idem’ (Olsen 1999: 886).⁵⁵⁰

3.5.3 Arguable etymologies

100. *ratu*, a religious title

Attestations of the base form

DIR.PL. *ratu*: CKD 489

The hapax *ratu* is a title applied to elder monks (*vṛdha ratu bhikṣu*). It has been compared by Konow (*apud* Thomas 1934a: 62 fn. 2) and Burrow (1934: 514) to Av. *ratu* ‘judge, authority’ and MP *rad* ‘(spiritual) chief, master’ < OIr. **ratu-* (AIW: 1498–1502; CPD: 70). Since *ratu* is attested only once, one cannot confirm beyond doubt the correctness of this etymology; but the formal match makes it at least worth considering.

Burrow (LKD: 113 s.v.) observed that “if it is really the Iranian word it is noteworthy that the final -u is preserved at so late a date”. The apparent preservation of -u also complicates the identification of the donor language of Niya *ratu*: in Middle Persian and Parthian, word-final vowels are lost; in Khotanese, *u*-stems were transferred to the *a*-declension (SGS: 250); and in Bactrian, OIr. **ratu* may, because of *u*-umlaut as in ποζγο /ruzgə/ ‘vineyard’ < **razu-ka-*, have become *ποδο /rudə/. These languages can thus all be ruled out. A Sogdian source of Niya *ratu* would formally not seem impossible, as

⁵⁴⁹ Loukota (2024: 76) also notes that “the term *khakhorda* is unlikely to be Khotanese”.

⁵⁵⁰ When assuming that the initial aspirate in *khakhordi* is unetymological (§2.1.3), the phonological correspondences all work fine; for -wa- being rendered as -o-, cf. §4.3.1. I did not put *khakhordi* under the secure etymologies of §3.5 because Parth. **kaxward* is not attested.

OIr. **ratu* is continued in this language as *rtw* (also *rttw*; *rtww*; *rṭww*), although only in the meaning ‘period of ten seconds, moment’ (DMSB²: 199). Another possibility is that, as a technical Zoroastrian term, Niya Prakrit adopted the Avestan form via some currently unidentified Middle Iranian language (cf. also §4.2.3).

When correct, the etymology of *ratu* could have interesting historical consequences, for this would mean that a Zoroastrian term entered the Buddhist terminology of an Indo-Aryan language. Such a scenario is historically not too far-fetched given that Buddhism and Zoroastrianism co-existed in Bactria.⁵⁵¹ Caution is needed, however, before jumping to far-reaching conclusions.

3.5.4 Tentative etymologies

101. *denuga*, a title (?)

Attestations of the base form

DIR.SG. *denuga*: CKD 418

The hapax *denuga* occurs in the phrase *denuga Aṃtoaša paride* “from (the) *denuga* Aṃto”. Since it stands before a personal name, *denuga* seems to be a title, but this remains uncertain.

Burrow (1934: 513; LKD: 98 s.v.) tentatively assumed an etymological connection between *denuga* and Av. *daēnā*- ‘religion’ < **dayanā*-. Although he is not explicit, it seems as if Burrow interpreted *denuga* as a derivation in *-uga* from the Iranian word,⁵⁵² perhaps on the assumption that *denuga* approximately meant ‘religious (specialist)’.

Were this highly uncertain etymology correct, *denuga* cannot have been an originally Bactrian word. **dayanā*- namely yielded Bactr. **ληνο* /lēnə/, as indirectly preserved in MBactr. *lyn’ng* ‘of the religion’ and *ly(y)nlyryg* ‘Electus’ (Sims-Williams 2009a: 263).

⁵⁵¹ For Zoroastrianism in Bactria, see recently Grenet (2015) and Kreidl & Choksy (2021). For Buddhism, cf. e.g. Fussman (2015).

⁵⁵² According to Burrow, a suffix *-uga* would also occur in Niya *vevatuga* ‘object of (legal) dispute, disputant’, in his view derived with *vṛddhi* from OIA *vivāda*- ‘dispute’ (cf. LKD: §75).

102. *rotamṇa* ‘madder (?)’

Attestations of the base form

DIR.SG. *rotamṇa*: CKD 261; 295; 357; 385 (2x); 450; *rotam*: CKD 252; 272; 387.

Niya Prakrit *rotamṇa* is often mentioned in parallel with food commodities (e.g. *daḍima* ‘pomegranate’ in CKD 252; 295); it is also one of the typical tax products of the Shanshan kingdom (cf. CKD 295; 357; 385; 450). Its exact meaning can, however, not be established from the available contexts.

Bailey (1946a: 794) suggested *rotamṇa* to be loaned from an unidentified East Iranian cognate **rōδ-vanna-* of NP *rūband* / *rūy band* ‘veil’ < **rauda-banda-* ‘bound around the face’ (CPED: 591; 598). But the lack of occurrences of *rotamṇa* in lists of textile products renders this proposal semantically unconvincing.

Slightly more attractive, although still tentative, is Burrow’s (1935a: 787; LKD: 114 s.v.) comparison with OIr. **raudana-* ‘the reddening thing > madder’.⁵⁵³ If this etymology were correct, MP *rōyan* (CPD: 72), Khot. *rrūnaa-* < **raudana-ka-* (DKS: 366), and a hypothetical Bactr. **ρωλανο* / *rōlanə* / are all easily excluded as donor languages on phonological grounds. Parthian and Sogdian would work fine since **raudana-* would be expected to yield respectively Parth. **rōdan* and Sogd. **rwδn*. As the word for ‘madder’ is not attested in these languages, and the semantics of *rotamṇa* cannot be determined on internal grounds, Burrow’s etymology must still be treated with caution.⁵⁵⁴

3.6 Iranian loanwords from an unidentified source

With the loanwords reviewed until now, one can apply Bactrian sound changes to an Old Iranian pre-form to determine if Niya Prakrit could have borrowed the relevant word from Bactrian, even if the word in question is not attested in this language.

This approach is not possible with four of the five words treated in this section, i.e. *anada* ‘carefully’; *kremeru* ‘crimson, scarlet’; *načira* ‘hunting’; and

⁵⁵³ Madder owes its Iranian name to its use as a dye to colour textiles red. Archaeobotanical analysis of textiles from Xinjiang dating back to the end of the second millennium BC has revealed that madder was likely already used to dye cloths at that time (cf. Zhang, Good & Laursen 2008: 1099).

⁵⁵⁴ Given that *rotamṇa* is mentioned next to words such as *daḍima* ‘pomegranate’, one should also consider the possibility that it refers to one of the locally grown fruits, e.g. grapes (so Thomas 1934a: 46 fn. 3) or apricots.

paṇḍvara ‘provisions (for a journey)’. Although these words are likely borrowed from an Iranian language, there is insufficient agreement on the inner-Iranian etymology to decide if borrowing from an unattested Bactrian cognate would be a viable option. Therefore, I classify these words as “Iranian loanwords from an unidentified source”.

The final lexeme to be discussed here, i.e. *bhaṭaraga* ‘lord, owner’, has been allocated to this section for a different reason. For this word, a plausible Iranian model has been suggested, i.e. **frataraka*- ‘superior, foremost’, but if this etymology is correct, the phonological appearance of *bhaṭaraga* still owes much to a folk etymological influence from MIA *bhaṭṭr*- ‘lord, husband’ < OIA *bharṭr*-. Consequently, there is too much room for debate on what the Iranian donor form of *bhaṭaraga* looked like for one to be able to identify the most plausible donor language.

103. *anada* ‘carefully’

Attestations of the base form

ADV. *anada*: CKD 1; 3; 5; 7; 9; 11; 12; 13 (2x); 15 (2x); 18; 19; 20; 24; 26; 27; 29; 30; 32; 33; 36; 37; 38; 39; 42; 45; 46; 47; 49; 53; 54; 56; 62 (3x); 63; 71; 124; 134; 189; 192; 208; 212; 213; 229; 235; 240; 243; 256; 262; 265; 272; 283 (2x); 291; 297 (2x); 301; 308; 310 (3x); 312; 315 (3x); 318; 326; 329; 331; 341; 347; 349; 351; 356; 357; 358; 359; 364; 375; 383; 386; 387; 393; 400; 403; 408; 419 (2x); 423; 425; 433; 435; 437; 438; 451; 471; 473; 479; 480; 481; 482; 484; 494; 502; 509; 518; 520; 526; 528; 530; 532; 538; 542 (2x); 545 (2x); 551; 553; 556; 561; 564; 567; 571; 572; 574; 579; 580; 581; 582; 584 (2x); 586; 587; 589; 591; 606; 621; 636; 638; 640; 643; 676; 719; 720; 725; 735; 747; 751; 769; 792; 795; 815; 820; 841; 846; 859; 860; 862; 881; 885; *anata*: CKD 223; 335; 340; 345; 362; 366; 368; 379; 474; 540; 576; 577; 588; 635; 749; 869; *anatha*: CKD 322; 325; 330; 336; 348; 380; 421; 489; 635; 732; 889

The Niya Prakrit adverb *anada* (also *anata*; *anatha*) ‘carefully’ is usually employed in stock phrases with verbs such as *dhar*- ‘to hold’, *rakṣ*- ‘to protect’, and *pruch*- ‘to examine’ (LKD: §91; 73f. s.v.). Since the meaning of *anada* “hardly allows us to equate it with Skt. *ājñāptam* ‘ordered’” (LKD: 74 *pace* Bailey 1946a: 779),⁵⁵⁵ we seem to be dealing with a loanword.

Indeed, it is likely that *anada* ‘carefully’ should be compared with (i) Khot. *ānata*- as used in the phrase *ānatā (ānatu) yan*- ‘to take care of, to protect,

⁵⁵⁵ Phonologically, a derivation from *ājñāptam* would be regular; cf. e.g. Niya *anati* / *anadi* ‘command’ < *ājñāpti*-.

pass. *ānatā hām-* ‘to be taken care of, to be protected’ (LKD: 73f. s.v.; Skjærvø 2004 II: 242) and (ii) BSogd. *”n’t(t)* ‘perfectly, clearly’, an adverb which often pairs together with verbs of perception (KT VI: 95; DKS: 18; SD: 7).⁵⁵⁶

Khot. *ānata-* and Sogd. *”n’t(t)* could both work as a possible donor of Niya *anada*. Whether an unattested Bactrian cognate of these words would also be a viable source of *anada* cannot be determined, since the inner-Iranian etymology has not been clarified, and we thus cannot confidently reconstruct an Old Iranian pre-form of Khot. *ānata-* and Sogd. *”n’t(t)*.⁵⁵⁷

104. *kremeru* ‘crimson, scarlet’

Attestations of the base form

DIR.SG. *kremeru*: CKD 318; 660

In both its attestations, Niya Pkt. *kremeru* appears to be an adjective specifying a type of textile product: *paliyarnaga*⁵⁵⁸ *prahoni* ‘a *paliyarnaga* garment’ in CKD 318 and *paṭamṇa* ‘silk-rolls’ in CKD 660. A probable cognate is the Buddhist Sanskrit lookalike *kemerūka-*, which, like *kremeru*, modifies a textile product, i.e. *kambala-* ‘woollen blanket’ (SWTF II: 122f.).⁵⁵⁹ BSkt. *kemerūka-* occurs in the *Sarvastivāda*-version of the *Vinayavibhaṅga* and corresponds in the Chinese translation of the *Mūlasarvastivāda*-version to a word for ‘red’ (cf. Rosen 1959: 107 fn. 1). It follows that BSkt. *kemerūka-* probably means ‘red’, and we may cautiously assume the same for Niya *kremeru*.

⁵⁵⁶ I leave aside Tumsh. *anādīu* (1.22) as its meaning is up for debate; cf. e.g. Hitch (2009: 19), who translates *anādīu* as ‘commanded’ and interprets it as a loan from Pkt. *anada-* < Skt. *ājñapta-*.

⁵⁵⁷ Dragoni (*apud* Bernard 2023: 131 fn. 99; cf. already DKS: 18) has made a semantically attractive comparison with OIr. **nātha-* ‘protection, refuge’, a supposed cognate of Ved. *nāthá-* ‘refuge, help, protector’ that seems to have left some indirect traces in Middle and New Persian (see Bernard 2023: 129–131). Formally, this etymology is, however, not self-evident because the *-t-* in Khot. *ānata-* and BSogd. *”n’t(t)* cannot reflect earlier **-θ-*.

⁵⁵⁸ This is the preferred reading of Boyer et al. (KD: 116), but *paliyardaga* is, as they note, palaeographically possible too. According to Bailey (1946a: 783; DKS: 220), *paliyarnaga* would also be an Iranian loanword, meaning ‘of variegated colour’; but the etymology he proposes can easily be discarded because it is based on the implausible idea (see EWAia II: 163) that the Iranian word for ‘panther’ (e.g. Sogd. *pwrδnk*) continues a base **parda-* ‘variegated’.

⁵⁵⁹ The difference in onset between Niya *kremeru* and BSkt. *kemerūka-* could be due to a dissimilation of *kr-* > *k-* in *kemerūka-* induced by the *-r-* later in the word.

Bailey⁵⁶⁰ made the attractive proposal that Niya *kremeru* is an Iranian loanword and connected it to the word for ‘crimson, scarlet’ seen in Arm. *karmir*, Hebr. *karmīl*, and BSogd. *krm’yr* (also MSogd. *qrmyr*; *krmyr*; CSogd. *qyrmyr*; SD: 193; DMSB²: 116; DCS²: 99).⁵⁶¹

How to reconstruct the Old Iranian pre-form of this colour term is unfortunately a matter of debate. Since scale insects (cochineals) were used in antiquity to make a crimson dye, there is a general acceptance that the first part of the word continues OIr. **kṛmi-* ‘worm’ (cf. MP *kirm*), parallel to how French *vermeil* ‘scarlet’ is derived from *ver* ‘worm’. Yet, it is not entirely clear how exactly to reconstruct and interpret the second part of the word (see Korn 2016: 14–16 for various options). Due to this lack of consensus on the Old Iranian pre-form, I refrain from trying to identify the donor language of Niya *kremeru* (and BSkt. *kemerūka-*).⁵⁶²

Even so, it is still worth commenting briefly on the phonological appearance of the Indic forms vis-à-vis the Armenian, Hebrew, and Sogdian forms. Three aspects are to be noted: (i) the onset *kr-* (Skt. *k-*); (ii) the vowel *-e-* where other forms have *-a-* and/or *-i-*; and (iii) the final *-u(ka)* which is absent in all other forms. As Bailey (1946: 782) pointed out, the first two features may be attributable to phonological processes in the recipient language, viz. Dardic liquid metathesis, as in e.g. *kramaṃ* ‘action, work’ < *karma(n)-* (SHĀH IV 10), and the Gāndhārī interchange of *-i-* and *-e-*, as in e.g. *petavaṃnidaga* ‘yellow-coloured’ < **pīta-varṇitaka-* (like *kremeru* attested in CKD 318).⁵⁶³ As *u*-stems are moribund in Niya Prakrit (cf. LKD: §71), it is,

⁵⁶⁰ See Bailey (1946: 781–783; 1954b: 14f.; KT VII: 85; 97 fn. 242), and cf. also Sims-Williams *apud* Høisæter (2020: 255 fn. 781).

⁵⁶¹ For a detailed study of these words, see now Korn (2016). I follow her in leaving MP *karmīr(-hyōn)* and Gr. Κερμυχίωνες / Ἐρμυχίονες, names of some Hunnic people, out of consideration (Korn 2016: 2–4). When first publishing his etymology of Niya *kremeru*, Bailey could not yet know of BSkt. *kemerūka-*.

⁵⁶² In light of the prestige enjoyed by Armenian scarlet in antiquity, Korn (2016: 6–8; cf. also Korn & Warning 2017) has argued that the word originated in an Iranian language from within the Armenian-speaking territories. If this argument is correct, the word for ‘crimson, scarlet’ should have travelled a considerable distance for it to be found in Niya Prakrit. Accordingly, one probably has to posit several unattested intermediaries, which makes it even more cumbersome to reconstruct the exact paths of borrowing.

⁵⁶³ This would seem most easy from an Iranian source with **kirm-* < **kṛm-*. It is also conceivable that a folk etymology with Gandh. **krimi* or even **kremi* < Skt. *kṛmi-* / *krimi-* ‘worm’ influenced the form of *kremeru*.

however, hard to explain the final *-u(ka)* in Niya *kremeru* and BSkt. *kemerūka*- as having come about within Indic (*pace* Bailey 1954b: 14). Bailey (1946: 782) assumed word-final **-am* to have become **-u* in the source form of *kremeru*, in which case one has to interpret the *ka*-suffix in Sanskrit as a secondary addition. Although I cannot make a better proposal, Bailey's scenario is not entirely convincing, since it is not clear why a neuter or an acc.sg. in **-u* < **-am* would be the source of an adjective like *kremeru*.⁵⁶⁴

105. *načira* 'hunting'

Attestations of the base form

DIR.SG. *načira*: CKD 13 (3x); 15 (2x)

LOC.SG. *načiraṃmi*: CKD 156

Compounds

DIR.SG. *gavašanačira* 'deer hunting': CKD 509⁵⁶⁵

Niya *načira* /naščira/ 'hunting' has an inner-Indic cognate in Epigraphical Skt. *naščirapati*- 'person responsible for hunting' (Lüders 1940b: 37f.).⁵⁶⁶ Its Iranian origin was first recognised by Bailey (*apud* Burrow 1934: 513; cf. also LKD: §123; 99 s.v.), based on a comparison with Sogd. *nxš(')yr* /naxšīr/ 'wild animal, deer' (SD: 237) and MP/Parth. *naxčīr* 'game, quarry, chase' (CPD: 58; DMMP: 249).⁵⁶⁷

From which Iranian language could *načira* have been borrowed? One can rule out Khotanese and Sogdian, the first because this language preserves no trace of the word for 'hunting' (cf. Bailey 1949a: 122), the second because out

⁵⁶⁴ Were *kremeru* an adverb, this problem would not pose itself; cf. §3.3.1 s.v. *ajhate* 'free' where I argue that the adverb *ajhatu* 'free' in CKD 152 is a loan from an Iranian language in which **-am* became **-u*. Bailey's (1946: 782) alternative proposal to compare the Khotanese suffix *-ua* < **-ūka*- as in *kšīrua*- 'of the land' ← *kšīra*- 'land' is semantically unattractive, as this Khotanese suffix is typical for local and temporal adjectives (Degener 1989: 156–158), whereas *kremeru* is a colour term.

⁵⁶⁵ If *ničiri hargā* in CKD 677 means 'hunting tax' (cf. Thomas 1936a: 792; LKD: 101 s.v.; TKD: 139), this expression must be added to the list of attestations too.

⁵⁶⁶ The Sanskrit title occurs in the Kurā stone inscription of the time of Toramāṇa Śāhi (line 7). Bakker (2020: 326–328) recently re-edited and re-translated this inscription, but he does not take Lüders' proposal on *naščirapati*- into account.

⁵⁶⁷ The earliest trace of this Iranian term is Aram. *nhšyr* in the Qumran War Scroll (1QM); see de Menasce (1956) and Asmussen (1961). For more cognates, cf. also Ciancaglini (2008: 213).

of *nxš(')yr* /*naxšīr*/ one would expect Niya ***nakšira* rather than the attested *načira* /*naščira*/ (cf. §4.3.18). Parthian could work phonologically, as the foreign cluster *-xč-* in *naxčīr* could easily have been substituted with Niya *-č-/šc/* (see §4.3.27). Whether the so far unattested Bactrian cognate of Parth. *naxčīr* would also be compatible with the form of Niya *načira* is more difficult to predict since there is no consensus on the ultimate etymology of the Iranian word for 'hunting'.⁵⁶⁸ Therefore, I have allocated *načira* to the present category of loanwords.

106. *pačēvara* 'provisions (for a journey)'

Attestations of the base form

DIR.SG. *pačēvara*: CKD 19; 22; 109; 142 (2x); 164; 236; 505 (2x); 509; 637 (2x); 714; 842; *pačēvare*: CKD 164; *pačavara*: CKD 382 (2x); 671; *pačivara*: CKM 84; *pacivara*:⁵⁶⁹ CKD 25.

Compounds

DIR.SG. *aṃnapačēvara* 'provisions of corn': CKD 637

It has long been known that Niya *pačēvara* /*paščēvāra*/ 'provisions (for a journey)' is an Iranian loanword (Burrow 1935a: 784; LKD: 102 s.v.). The following etyma, all with the same meaning as *pačēvara*, are to be compared: Elam. *baššabara*, Aram. *pšbr*', Arm. *pašar* ← Parth. **pašābar* (cf. Korn 2013: 76f.), and Sogd. *pš'br* (also *pš''br*; *pyš''br*; CSogd. *pš'br*; cf. SD: 300; DMSB²: 177; DCS²: 144).

Weber (1975: 91–94) proposed to trace these forms back to an Old Iranian compound **pasčābara-* 'that which is carried after'. This etymology works phonologically well for most languages and is commonly accepted nowadays.⁵⁷⁰ Yet, it is far from obvious what the donor language of Niya *pačēvara* could be, were Weber's proposal correct.

⁵⁶⁸ Various unconvincing etymologies have been proposed in the past. See e.g. Bailey (1946a: 774 fn. 1; 1949a: 122) for **naxti-čiθra-* 'originating in the night' (decisively refuted by Henning 1947: 57 fn. 1 = 1977 II: 291 fn. 1); Bailey (1958a: 44f.) for **naxa-čarya-* 'wandering in the open space'; or Gershevitch (1964a: 91f. = 1985: 191f.) for **naxu-sčrya-* 'the first to be hunted'.

⁵⁶⁹ Boyer et al. (KD: 9) note that the akšara <ci> is hardly readable, so it is possible that the correct reading in CKD 25 is the more expected *pačivara* (or *pačēvara*).

⁵⁷⁰ See e.g. Iranica (§4.4.3.9) and Korn (2013: 76f. with fn. 12). Weber argues that **pasčābara-* would derive its name from the custom of carrying provisions at the

The word for ‘provisions’ has not yet turned up in Bactrian, but we at least know that **pasča-* ‘after’ yields Bactr. πισο /pitsə/ (Sims-Williams & Lee 2003: 169; BD II: 257), which is phonologically incompatible with Niya *pače-* (or *pača-*). Sogdian and Parthian are likewise excluded since the sibilant *-š-* in Sogd. *pš’βr* and Parth. **pašāβar* (→ Arm. *pašar*) would not account for the Niya Prakrit cluster *-č-* /šc/ either.⁵⁷¹ Hence, in order to uphold Weber’s etymology, one would probably need to assume that *pačēvara* was borrowed from an unattested Middle Iranian dialect preserving **-sč-* or that the speakers of Niya Prakrit still recognised the literal meaning of the Iranian compound and substituted its first part by the Indo-Aryan cognate *pača* / *pače* ‘after’. Neither option seems particularly plausible, so Weber possibly went too far in claiming that *pačēvara* “bestätigt ... mit seinem *-č-* ... unsere hier vorgetragene Etymologie.” (1975: 93f.).

I would conclude more cautiously that while the Iranian origin of *pačēvara* cannot be doubted, we currently cannot determine its etymology and exact source in more detail.

107. *bhaṭaraga* ‘lord, owner’

Attestations of the base form

DIR.SG. *bhaṭaraga*: CKD 324 + 328; 492 (?); 552; 575; 675 (2x); 713; 722; 783; 842; 884

GEN.SG. *bhaṭaragaša*: CKI 363; CKD 24; 31; 34; 89; 104; 133; 247; 259; 278; 288 (2x); 320; 370; 372; 415; 492; 498; 563; 573; 585 (2x); 696 (2x); 819; *bhaṭaragasya*: CKD 541 (2x); *bhaṭarasa*: CKI 536 (cf. Baums 2012: 238 fn. 86); *bhaṭarakasa*: CKI 564

DIR.PL. *bhaṭare*: CKD 524; 682; *bhaṭari*: CKD 12 + 43

GEN.PL. *bhaṭaragana*: CKD 157; 164; 216; 552; 585; 702; 703; 897 (2x); *bhaṭaraganām*: CKD 140 (2x); 162; *bhaṭaraganam*: CKD 698; *bhaṭarana*: CKD 379

bhaṭaraga ///: CKD 216; 285; 372; 772; *bhaṭara* ///: CKD 663

end of a caravan, but Naveh & Shaked (ADAB: 197) point to an alternative interpretation of the same compound as ‘carrying (food for) afterwards’.

⁵⁷¹ The assumption of a Parthian dialect form with **-č-* < **-sč-* as in Parth. **pc’gryw* ‘deputy (of the king)’ < **pasčā-grīwa-* ‘behind the self’ → Syr. *pšgryb’* (Gershevitch 1954: 125 = 1985: 163; Ciancaglini 2008: 235f.) would not account for Niya *-č-* /šc/ either. Khotanese preserves no trace of the word for ‘provisions’ and thus also seems an unlikely donor.

Derivatives

FEM.GEN.SG. *bhaṭariyae* ‘lady’: CKD 755; 756; *bhaṭariyāe*: CKD 697

Compounds

DIR.PL. *goṭhabhaṭare* ‘farm-owner’: CKD 147

DIR.PL. *goṭhabhaṭarajaṃna* ‘idem’: CKD 554

In the Niya documents, the lexeme *bhaṭaraga* ‘lord, owner’ (fem. *bhaṭari** ‘lady’) can, for example, refer to the owner of a particular commodity (see e.g. CKD 24; 31; 147; 324 + 328), including the master of a slave (Agrawala 1953b: 98). On the other hand, *bhaṭaraga* is often used as a honorific title (see e.g. CKD 34; 89; 104; 133), in which function the word also occurs in Gāndhārī inscriptions.

Gandh. *bhaṭaraga* corresponds to Skt. *bhaṭṭāraka*- ‘great lord, venerable or worshipful person’, fem. *bhaṭṭārikā*- ‘noble lady, tutelary deity’ (MW: 745). Traditionally (e.g. in EWAia III: 362), *bhaṭṭāraka*- is considered an enlargement with the *ka*-suffix of MIA *bhaṭṭr*- ‘lord, husband’ < OIA *bharṭr*- (nom.sg. *bhaṭṭā*; acc.sg. *bhaṭṭāraṃ*). More recently, Falk (2010b: 75 = 2013a: 246; cf. also von Hinüber 2004: 129) observed that the earliest attestations of *bhaṭaraga* / *bhaṭṭāraka*- cluster in the NW of South Asia, suggesting that the word originated there.⁵⁷² Based on this argument from geography, Falk ingeniously argued that *bhaṭaraga* / *bhaṭṭāraka*- is “a local adaptation of the Iranian title *frataraka*, “the foremost”, used for “leader, governor, forerunner””. The Iranian title which Falk refers to is attested since Achaemenid times through Aram. *prtrk* ‘superior’ (Iranica: §4.4.7.42; ADAB: 55; 74), a term used for the administrative head of a province or district.⁵⁷³ Rather than being derived from MIA *bhaṭṭr*-, *bhaṭaraga* / *bhaṭṭāraka*- would thus be an Iranian loanword, although one that still underwent folk etymological influence from *bhaṭṭr*-.

Since (i) **frataraka*- is actually attested as an Iranian title, (ii) its semantics ‘superior, foremost’ dovetail with those of *bhaṭaraga* / *bhaṭṭāraka*-, and (iii) an Iranian origin fits well for a word seemingly originating in the NW of South Asia, I agree with Schmitt (2015: 154) that Falk’s etymology is “überzeugend”.⁵⁷⁴

⁵⁷² Consequently, Burrow’s (LKD: §37) assertion that *bhaṭaraga*- is a loan from an eastern MIA dialect appears unlikely.

⁵⁷³ For the use of the same title in Seleucid times (2nd century BC) by the dynasts of Fārs, see Panaino (2003).

⁵⁷⁴ Falk’s etymology is also accepted by Ollett (2024: 92–94).

At the same time, it seems that the phonological appearance of *bhaṭaraga* / *bhaṭṭāraka*- should still owe a lot to the hypothesised influence from *bhaṭṭr*-, viz. (i) the rendering of Iranian *f- with *bh*- rather than *vh*-; (ii) its geminate retroflex; and (iii) its long -ā- (cf. acc.sg. *bhaṭṭāram*) where all the *as* in **frataraka*- are short.⁵⁷⁵ Although I do not consider this a problem for the etymology as such, the consequence of allowing for such a heavy folk etymological adaptation is that one can debate what the actual donor form of *bhaṭaraga* / *bhaṭṭāraka*- exactly looked like and whether it was borrowed from an Old or a Middle Iranian language. Accordingly, it would be even more cumbersome to identify the (possible) donor language(s) of *bhaṭaraga* / *bhaṭṭāraka*- than with some of the loanwords discussed in §3.3 or §3.5. I therefore allocated *bhaṭaraga* / *bhaṭṭāraka*- to this section of “Iranian loanwords from an unidentified source”.

3.7 Rejected etymologies

This section brings together Niya Prakrit words whose previously suggested Iranian etymology I propose to reject. The first group (§3.7.1) involves words that one can as plausibly explain as Indo-Aryan vocabulary. The second group (§3.7.2) concerns words whose formerly proposed Iranian etymology suffers from, in my view, insuperable phonological and/or semantic problems.

3.7.1 Possibly Indo-Aryan words

108. *kharayarna* ‘donkey-coloured (?)’

Attestations of the base form

DIR.SG. *kharayarna*: CKD 318⁵⁷⁶

kharayarna is attested only once, as an adjective describing *prahoni* ‘garment’ (for which cf. §3.5.1 s.v.). Although its exact meaning is thus unclear (cf. LKD: 86 s.v.; TKD: 59), Lüders’ (1936a: 35) translation as

⁵⁷⁵ Falk argues that an intermediary form **vhartaraga* or the like may be indirectly attested in Greek script as BAPTAP/// on a coin legend of Higaraka (ca. 65–55 BC). Because of the fragmentary preservation of BAPTAP///, this cannot be proved.

⁵⁷⁶ One could also consider to read *kharayarda*, but this alternative reading has so far not yielded a better explanation of the word.

‘donkey-coloured’ from *khara-* ‘donkey’ and *varṇa-* ‘colour’ is definitely preferable over Bailey’s (1954b: 18) unnecessarily complicated proposal to compare Ossetic *xæræ* ‘grey, dark’. Bailey’s proposal may even be chronologically impossible if it is true that the Ossetic word is a later borrowing from Turkic *kara* ‘black’, as argued by Sims-Williams (*apud* Wilkens 2021: 7 fn. 27).⁵⁷⁷

109. *baṃna* ‘bundle’

Attestations of the base form

DIR.PL. *baṃna*: CKD 66 (3x)

Bailey (1946a: 767) and Weber (1997: 31) connect Niya *baṃna* ‘bundle’ to LKhot. *baṃ* ‘idem’ < **bana-* < **banda-* (DKS: 264) with the Khotanese development of **-nd-* > *-n-*.⁵⁷⁸ Although formally possible, it cannot be proved that Niya *baṃna* is a Khotanese loanword. In Central Asian Gāndhārī, voiced (aspirated) consonants tend to be assimilated to a preceding homorganic nasal (see §2.1.5), meaning that *baṃna* can also be inherited from OIA *bandha-* (so already Thomas 1935: 56). Compare the infinitive *baṃna(m)nae* (CKD 590; 592) ‘to bind’ < **bandhanāya* in the Niya documents and *baṇa* ‘binding’ < *bandha-* (v. 28), *baṇaṇa* < *bandhana-* ‘bond’ (v. 92; 146; 169; 170), and *baṇava* < *bāndhava-* ‘relative’ (v. 261) in the *Khotan Dharmapada*.⁵⁷⁹

110. *masu* ‘wine’

Attestations of the base form

DIR.SG. *masu*: CKD 130; 140 (2x); 168 (3x); 169 (4x); 170 (3x); 172 (3x); 173 (6x); 174 (2x); 175 (2x); 176 (2x); 206 (2x); 207; 208; 225 (3x); 244; 247 (4x); 261; 268; 272 (4x); 299 (5x); 329 (4x); 345; 349 (2x); 358; 387; 405; 431 = 432 (5x); 443 (3x); 523 (2x); 539 (3x); 567 (5x); 571; 574 (3x); 585 (2x); 587; 619 (8x); 622 (2x); 633; 634; 637 (10x); 652; 655; 789 (6x); 796 (6x); 853; 856; 858; 881 (6x)

INS.SG. *masuṇa*: CKD 307; 728

GEN.SG. *masuṣa*: CKD 431 = 432; *masuṣa*: CKD 585; *masuṣya*: CKD 329 (2x); 663

⁵⁷⁷ Sims-Williams and Wilkens do not identify the exact donor language of Oss. *xæræ*.

⁵⁷⁸ Contrast e.g. Bactr. βαῦδο /vandə/ ‘bundle, bond’ (BD II: 201).

⁵⁷⁹ The akṣara ṁ ṇa, an orthographic peculiarity of the *Khotan Dharmapada*, is used for the sound deriving from OIA *-ndh-* (perhaps aspirated /n^h/). See Brough (62; 98f.), who points out that the outcome of *-ndh-* can alternatively be spelled with simple ṁ na (like the outcome of unaspirated *-nd-*).

LOC.SG. *masuṣaṇṇi*: CKD 291; 333; 531; *masuvaṇṇi*: CKD 567

Derivatives

ADJ. *masuvi* ‘related to wine’: CKD 272; 539; 567 (2x)

Compounds

DIR.SG. *masuṣaḍa* ‘vineyard’: CKD 90; 187; 419 (2x); 581; 586; 655; 779; 805 (3x);
masuṣaḍo: CKD 586; *masuṣaṭa*: CKD 473 (2x)

INS.SG. *masuṣaḍena* ‘idem’: CKD 885

GEN.SG. *masuṣaḍaṣa* ‘idem’: CKD 581; 655

LOC.SG. *masuṣaḍaṇṇi* ‘idem’: CKD 581; *masuṣaṭaṇṇi*: CKD 586

DIR.SG. *masuṣaḍaṭṭhivana* ‘tilling of vineyards’: CKD 565

DIR.SG. *masuvyoṣitaḡa* ‘reimbursement of wine’: CKD 803

Lüders (1933: 1000–1002 = 1940a: 729f.) interpreted Niya *masu* ‘wine’ as a loanword from “East Iranian” **maḍu* < OIr. **madu*- ‘idem’ (cf. e.g. Av. *maḍu*-), arguing the spirant *-ḍ- to have been rendered as -s- /z/.⁵⁸⁰

This would seem a viable option, but it should be investigated whether *masu* ‘wine’ can alternatively continue OIA *madhu*-, whose basic meaning is ‘sweet drink’ but which can also mean ‘grape wine’ (cf. McHugh 2021: 119–122). If we compare *gohoma* (*gohomi*, also contracted *goma*) ‘wheat’ < OIA *godhūma*- (LKD: 88 s.v. *goma*), *madhu*- may be expected to yield Niya ***mahu*, which could speak in favour of Lüders’ etymology. However, in some other dialects of Gāndhārī, OIA intervocalic -dh- did lenite to -s- /z/ (see §2.1.2), including in the adj. *masura* (and variants) ‘sweet’ < OIA *madhura*- (Brough 1962: 94; Salomon 2000: 85; 232; 2008: 114; 436). It follows that *masu* can also be a loan from a different dialect of Gāndhārī, which means that Lüders’ idea of an Iranian loan is difficult to verify.

3.7.2 Words of unknown origin

111. *akri*, a type of land

Attestations of the base form

DIR.SG. *akri*: CKD 222; 579; 580; 582; 795; 885; *akriya*: CKD 580; *agri*: CKD 654

The Niya word *akri*, an epithet of *bhuma* ‘grounds, land’, has been argued by Bailey (1953: 540) to derive from Ir. **a-griya*- ‘without soil ground’. A serious

⁵⁸⁰ Cf. also Bailey (1954d: 1): “the Old Indian *madhu* was replaced in Krorain (Lou-lan) northwestern Prakrit by the frequent *masu*.”. For the use of ʔ *sa* to write /z/, cf. §2.1.2 and §2.1.7.3.

issue with this argument is that Bailey's reconstruction is based on a hapax *gramña* in the Khotanese *Rāmāyaṇa* that lacks comparative support from other Iranian languages (cf. DKS: 91) and may have been interpreted wrongly. Another problem is that the semantics of *akri* are very uncertain (cf. LKD: 71 s.v.).⁵⁸¹

112. *arnavaji* (or *ardavaji*?), textile product

Attestations of the base form

DIR.SG. *arnavaji* (*ardavaji*?): CKD 59; 83 (2x); 385; 433; 714

DIR.PL. *arnavaji* (*ardavaji*?): CKD 113

Although probably a textile product (Lüders 1936a: 20f.; LKD: 77 s.v.), the exact meaning of *arnavaji* remains unclear. Bailey (1946: 793) suggested to analyse this word as a compound containing Ir. **warnā*- 'wool' (cf. Av. *varənā*-) as its first part. This etymology assumes, however, an ad hoc loss of **w*-,⁵⁸² while also leaving the second part of the word unexplained.

I wonder whether the word should not be read as *ardavaji* instead, 𐭠 *rna* and 𐭡 *rda* being easily confused in Niya Kharoṣṭhī (cf. §3.5.2 s.v. *khakhordi*).⁵⁸³ If so, it may be possible that *artayaśa*, a hapax in a document mentioning several textile products (CKD 431 = 432), is a variant of the same word.

113. *asaṃkharajiya*, textile product

Attestations of the base form

DIR.SG. *asaṃkharajiya*: CKD 207

The reading of the hapax *asaṃkharajiya*, given its co-occurrence with words such as *kośava* 'rug, blanket' and *akiṣḍha* 'cover, rug' presumably a textile

⁵⁸¹ Thomas (1934a: 38) argued on the basis of CKD 582 *puranaga miṣiya bhuma huati tade paru eṣa bhuma akri patida* "formerly this land was *miṣi* but after that this land fell *akri*" (TKD: 120) that *akri* means 'uncultivated'.

⁵⁸² One likewise cannot derive the first element from Skt. *ūrṇā*- 'wool' (*pace* Loukota 2020: 106). It remains unclear if *arnavaniya* (CKD 883) is connected; the element *vaniya* in this word possibly means 'merchant', but Høisæter (2020: 417f.) goes too far in building historical conclusions on this highly uncertain etymology.

⁵⁸³ The available pictures of CKD 385 and CKD 714 confirm the possibility of reading *ardavaji*. Lüders' (1936a: 21 fn. 2) reading *arnaraji* is palaeographically unwarranted.

product, is doubtful (cf. Lüders 1936a: 21 fn. 2). For this reason alone, Harmatta's (1967: 7–9) comparison with Sogd. *s'yr'* 'saddle', itself a hapax of uncertain etymology, can only be tentative.⁵⁸⁴ Since Harmatta moreover had to postulate *asamkharajiya* to be borrowed from an unattested derivative of *s'yr'* with the Sogdian adjective suffix *-cyk*, and his etymology requires several phonological assumptions,⁵⁸⁵ I consider it best to reject Harmatta's proposal.

114. *ogu*, a title

Attestations of the base form

DIR.SG. *ogu*: CKD 38; 71; 90; 114; 136 (2x); 165; 193; 198; 209; 214 (3x); 254 (2x); 297; 315; 320; 345; 370; 393; 399; 496 (2x); 506; 518; 546 (2x); 574 (2x); 575; 582 (2x); 621; 629; 639 (3x); 682; 721 (2x); 732; 734; 740; 788 (3x); 815; 817 (3x); 884 (4x); 888

GEN.SG. *oguaša*: CKD 377

GEN.PL. *oguana*: CKD 318 (2x); 324 + 328; 326; 494; 570 (2x); 574 (2x); 578 (2x); 665; 709; 793; 815; 817 (3x)

Bailey (KT VII: 5f.) proposed that Niya Pkt. *ogu*, a high-ranking official title (LKD: 80f. s.v.; Høisæter 2020: 596), could be traced back to Ir. **augu-*, a *u*-stem corresponding to Av. *aogah-* 'power'. This etymology is formally unconvincing because (i) the required *u*-stem is not paralleled elsewhere, and (ii) the consistent spelling of *ogu* with ʕ *ga* and not with ʕ *ga* suggests that *ogu* contains a geminate /gg/ (cf. LKD: 80f. s.v.).⁵⁸⁶

115. *kamaṃta* / *kamuṃta*, unclear

Attestations of the base form

DIR.SG. *kamaṃta*: CKD 272 (*caṃdri kamaṃta*); 714 (*suḍae kamaṃta* ⁵⁸⁷); *kaṃmaṃta*: CKD 714 (*cāṃdri kaṃmaṃta*)

DIR.PL. *kamuṃta*: CKD 207 (*kamuṃta 10 4 2*); *kamude*: CKD 357 (*karci kamude*)

⁵⁸⁴ The Sogdian word is attested in Mugh document B-19.6 (Livshits 2015: 133), mistakenly referenced by Harmatta as B-18. The meaning of *asamkharajiya* would, in Harmatta's opinion, be 'saddle cloth'.

⁵⁸⁵ Some of the assumptions are positing a prothetic vowel to explain the initial *a-* in *asamkharajiya*, regarding the anusvāra unetymological, and supposing Sogd. *-čyk* to have been lenited to Niya *-jiya* /*ziya*/.

⁵⁸⁶ It is perhaps possible but as yet unproven that Niya *ogu* is etymologically related to the Tocharian B title *oko*_u (also *okau*; *akau*) and the Old Turkic title *oko* / *ogu* (Ching & Ogihara 2013: 112f.; HWA: 505).

⁵⁸⁷ For this word division, see Lüders (1936b: 642 fn. 4) *contra* KD (269).

The Niya word *kamaṃta* / *kamuṃta* (also *kamuda** in CKD 357) always occurs in lists of commodities paid as tribute, but the evidence is too scanty to determine what kind of commodity it could be.⁵⁸⁸ Consequently, proposals to explain *kamaṃta* / *kamuṃta* as an Iranian loanword have remained conjectural. Schaeder and Henning (*apud* Lüders 1936a: 6 with fn. 2) suggested a connection with NP *kamand* ‘halter, noose, snare, lasso’ (CPED: 1051). Although formally conceivable, I reject this suggestion because the semantic part of this etymology remains highly uncertain, and the Persian word appears not to have any cognates in other Iranian languages. Bailey (1936: 576; 1946a: 793f.; 1966: 26; DKS: 58) made an alternative comparison with Khot. *kāṃmadā* ‘trousers’, but this etymology has been cogently refuted by Harmatta (1967: 9f.).

In an attempt to account for *kamaṃta* / *kamuṃta* as an inherited word instead, Thomas (1934: 46 fn. 3; 1944: 64f.) focussed on the phrase (or compound) *caṃdri kamaṃta* (*cāṃdri kaṃmaṃta*) in CKD 272 and 714. According to him, *kamaṃta* would be the outcome of Skt. *karmānta*- ‘work’, and *caṃdri* of Skt. *cāndrī* ‘moonlight’ (MW: 392). Together, these words would mean ‘moonlight workings’, which Thomas took as a reference to the famous jade from Khotan because “detection of jade in rivers by the aid of moonlight is a Khotanī craft reported by the Chinese” (1934: 46 fn. 3). This idea founders on the very hypothetical semantics and on the fact that *kamaṃta* would be the only derivative of *karma(n)*- ‘work, action’ where the cluster *-rm-* would not have been preserved (cf. LKD: 89 s.v. *caṃdrikamaṃta*).⁵⁸⁹

⁵⁸⁸ Unlike Burrow (LKD: 81 s.v. *kamuṃta*; 89 s.v. *caṃdrikamaṃta*; TKD: 38), I follow Lüders (1936a: 6 fn. 2) in assuming that *kamaṃta* and *kamuṃta* are variants of the same word. They occur in similar lists, and the interchange between *-a-* and *-u-* does not seem a decisive reason to assume that they are different words (cf. the same variation in *śpara* / *śpura* ‘full, completely’).

⁵⁸⁹ Bailey (1946a: 793; cf. also Harmatta 1967: 10) suggested that *caṃdri* could alternatively be an adjectival derivation from a cognate of NP *chādar* ‘mantle, veil, etc.’ (CPED: 383f.). Yet, this idea hinges on the doubtful idea that *chādar* is an inherited word and not, as more commonly thought (cf. e.g. EDIV: 341f.), a loan from Late Skt. *chattra*- ‘covering’.

116. *kala*, a title

Attestations of the base form

DIR.SG. *kala*: CKD 25; 28; 103 (2x); 169; 181; 202; 210; 221 (?); 245; 256; 278; 279; 294; 295; 307; 322; 324 + 328; 331 (3x); 349; 358 (3x); 360; 363; 366 (2x); 379; 383 (2x); 384; 387; 420; 425; 467; 495; 513; 524; 531; 558; 586; 606; 615; 630 (2x); 637 (6x); 640; 654; 715; 812; 815; 817 (2x); 880; 882; 885; *kāla*: CKD 112; 147; 210; 216; 305; 399; 529; 571; 572; 573; 579; 580 (2x); 581; 582; 587; 589; 590; 591 (4x); 622; 634; 637 (2x); 879; *kaṃla*: CKD 715

GEN.SG. *kalaṣa*: CKD 28; 132; *kālaṣa*: CKD 637

DIR.PL. *kale*: CKD 327

Burrow (LKD: 82 s.v.) observed that persons who carry the title *kala* are at the same time sometimes called *maharayaputra* ‘son of the great king’ (CKD 307; 331; 622; 634). Whether this observation counts as proof that *kala* means ‘prince’ remains to be seen. Sometimes, *kalas* also fulfilled official duties, e.g. supervising the collection of taxes (note CKD 634, and see also Høisæter 2020: 144; 594f.).

This word lacks a convincing etymology. Bailey (1964: 22) compared a supposed Khotanese title *kāla*-, which he derived from **kāṣala*- ‘protector’ to the root *kāt*-, pret. *kāṣta*-, ‘to think, to protect’ (SGS: 22). The existence of such a title in Khotanese hinges on a questionable interpretation of a particular Khotanese document, and Bailey later abandoned the connection himself (DKS: 59).⁵⁹⁰

117. *kuṭhakṣira*, unclear

Attestations of the base form

DIR.SG. *kuṭhakṣira*: CKD 741; *kuṭhekṣira*: CKD 771

GEN.SG. *kuṭhakṣiraṣa*:⁵⁹¹ CKD 45; *kuṭhakṣiraṣa*: CKD 39 (2x); 553; 569 (2x); *kuṭhekṣiraṣa*: CKD 331; *kṣiraṣa*: CKD 415; 434

⁵⁹⁰ DKS (58) contains a second lemma “*kālā* ‘a title’”, but the instances Bailey cites there belong to *kāla*- ‘time’, a loanword from Sanskrit (or Gāndhārī). See Skjærvø (2002: 352; 564), a reference I owe to Federico Dragoni.

⁵⁹¹ Given that 𑖦 *ṭha* and 𑖧 *tha* tend not to be confused in Niya Prakrit (cf. infra), I deem it likely that this variant is a lapsus of Boyer et al. (KD: 15). In the absence of a picture of CKD 45, this suspicion cannot be verified, however.

The technical term *kuṭhakṣira* always occurs in the context of a payment to be made when adopting a child; its exact meaning remains unclear.⁵⁹²

According to Bailey (1950a: 397–399), *kuṭhakṣira* would represent an unattested Khotanese compound **ggurṣṭa-ṣīra-* ‘called > adopted child’.⁵⁹³ This etymology is marred with problems. To start with, Niya Prakrit uses *uneyaga*, a word found next to *kuṭhakṣira* in e.g. CKD 569, in the meaning ‘adopted child’, thus making one wonder what the distinction between *uneyaga* and *kuṭhakṣira* would be, were Bailey’s idea correct. The second element of the presumed compound **ggurṣṭa-ṣīra-* is moreover but a postulated variant of an etymologically obscure word *ṣīrka-* ‘child’.⁵⁹⁴ In addition, Bailey had to hypothesise a more archaic form of **ṣīra-* with an initial **x-* still preserved to account for the Niya cluster *kṣ-*.⁵⁹⁵

Thomas (1934a: 37) and Burrow (LKD: 83 s.v.) started from the assumption that *kuṭhakṣira* is a compound containing the Indo-Aryan word for ‘milk’ as its second part. They, however, encountered difficulties in explaining the first part. As in other forms of Gāndhārī, the Kharoṣṭhī akṣaras 𑖦 𑖩𑖫 and 𑖦 𑖩𑖫𑖱 are kept well distinct in Niya Prakrit, the former representing the outcome of OIA *-rth-* or *(-)sth-* and the latter of OIA *-ṣṭ(h)-* (cf. §2.1.6). Yet, in spite of this distinction, both scholars traced *kuṭha-* back to an OIA source with *-ṣṭ-*: Thomas derived *kuṭha-* from an unattested variant **kuṣṭa-* of Skt. *kuṣita-* / *kuṣita-* ‘mixed with water’, adjectives only known from late lexica (MW: 297), while Burrow suggested that *kuṣṭa-* is here the verbal adj. of the root $\sqrt{kuṣ}$ in the meaning ‘to extract’. As both proposals do not account for the consistent spelling with 𑖦 𑖩𑖫, I concur with Konow (1943: 72) in rejecting them.⁵⁹⁶

⁵⁹² *kuṭhakṣira* is mostly used in the gen.sg. (see the list of attestations), also in contexts where a gen. is difficult to explain (see LKD: 83 s.v. for a suggestion).

⁵⁹³ Khot. *ggurṣṭa-* is the verbal adj. of the verb *grūs-* ‘to call’ < **xraus-* (cf. SGS: 32). On **ṣīra-*, see below.

⁵⁹⁴ In a later publication (DKS: 410), Bailey derives *ṣīrka-* ‘child’ from the root $\sqrt{ṣar}$ ‘to press’ (EDIV: 93). This etymology for *ṣīrka-* has little to recommend itself, as **ṣ-* normally yields *kṣ-* in Khotanese (e.g. *kṣārma-* ‘shame’ < **ṣārma-*).

⁵⁹⁵ Bailey’s etymology would further presuppose a substitution of Khot. *gg-* /g/ with Niya *k-*.

⁵⁹⁶ The speculative semantics involved are another reason not to accept Thomas’ and Burrow’s suggestions. The latter, for instance, translated *kuṭhakṣira* as ‘milk-payment’, reasoning that, when adopting a child, the “extracted milk”, i.e. the mother’s milk, needs to be compensated to the biological parents.

118. *kurora*, an adjective specifying a type of land

Attestations of the base form

DIR.SG. *kurora*: CKD 496; 574; 678; 839

Niya *kurora* is always used in connection with *bhuma* 'grounds, land', making it likely that it is an adjective specifying a particular type of land. Its exact meaning remains unclear.

The same applies to its etymology. Burrow (1935a: 780; LKD: 84 s.v.) cautiously compared *kurora* to NP *kurār(ā)* 'the threshold of a door; a plot of ground with a raised border prepared for sowing' (CPED: 1019). Yet, it remains highly uncertain if the meaning of the Persian word would fit Niya *kurora*. In addition, the lemma *kurār(ā)* in CPED is only based on a lexicographic source, which makes it doubtful if this Persian word is *sprachwirklich* in the first place. If it is, we are probably dealing with a comparatively recent loanword, as suggested by the variation between *kurār* and *kurārā* (Chams Bernard p.c.). As a result, a connection with Niya *kurora* seems unlikely at best.

119. *curorma*, an agricultural product

Attestations of the base form

DIR.SG. *curorma*: CKD 264; 272; 357 (2x); *crorma*: CKD 714

GEN.SG. *cirormaša*: CKD 622; *curarmaša*: CKD 450

DIR.PL. *crorma*: CKD 264 (3x)

curorma is "some kind of agricultural commodity, sent as tax" (LKD: 90 s.v.). Because of these semantics, Bailey's (1946a: 794) proposal to interpret *curorma* as a loan from a hypothetical Middle Iranian **čirōrma-* < **čihra-warma-* < *čiθra-warma-* 'face-covering' seems unconvincing.⁵⁹⁷

Burrow (LKD: 90 s.v.) observed that CKD 264 draws a distinction between a *ghriti pašu* and a *curorma pašu*, i.e. a sheep (or goat) used to produce ghee (*ghriti*) or *curorma*. According to Burrow, this distinction could point to *curorma* signifying 'cheese'. Yet, this piece of evidence would also fit Thomas'

⁵⁹⁷ Besides, Bailey's etymology works with a long vowel in the first syllable, even though this vowel appears to be short, as it is liable to both colouring (cf. *curorma* vs. *cirorma*) and syncope (*crorma*).

(1934a: 46 fn. 3) proposal that it means ‘skin’ or ‘leather’.⁵⁹⁸ So far, neither option has resulted in a convincing etymology.

120. *cojhbo*, a title

Attestations of the base form

DIR.SG. *cojhbo*: CKD 1 (2x); 3 (2x); 6 (2x); 7 (2x); 9 (2x); 10; 11 (2x); 13 (2x); 14 (2x); 15 (3x); 16; 17 (2x); 18; 19; 20 (2x); 23; 24 (2x); 26; 27 (2x); 28; 29 (2x); 30; 31 (2x); 33 (2x); 35; 36 (2x); 37 (2x); 39 (2x); 42 (2x); 44; 45 (2x); 46 (2x); 47 (2x); 49 (3x); 50; 51; 52 (2x); 53 (2x); 56; 57; 58; 61; 63 (3x); 68 (2x); 70 (2x); 71 (2x); 72 (3x); 85; 86 (2x); 97; 99; 100; 103; 104; 113; 114; 115; 118; 119; 120; 124 (6x); 126; 127 (2x); 130 (5x); 133 (2x); 134; 136 (2x); 138; 139 (2x); 142; 144 (2x); 145; 147; 150; 152; 153; 155; 156 (2x); 157; 158; 159; 160 (2x); 161 (2x); 162 (3x); 164; 165 (2x); 166; 184; 186; 189; 192; 193; 194; 198, etc.

GEN.SG. *cojhboṣa*: CKD 247; 370

GEN.PL. *cojhboana*: CKD 22; 40; 55 (2x); 62 (2x); 64; 84; 88; 119; 126; 214; 322; 332; 360; 367; 421; 430 (2x); 435 (2x); 438 (2x); 490; 492; 494 (2x); 515; 532 (2x); 554; 576; 578; 582; 593 (2x); 842; 854; 884; 889 (3x); *cojhboṣṇa*: CKD 709; *cojhboāna*: CKD 107; *cojhboanām*: CKD 576

Compounds

DIR.SG. *mahacojhbo* ‘great *cojhbo*’: CKD 259; 288; 307; 385; 399; 585; 897; *mahācojhbo*: CKD 585

Despite a wealth of attestations, one cannot easily pinpoint the exact duties of officials referred to in Niya Prakrit as *cojhbos* (LKD: 90f. s.v.; Atwood 1991: 195f.; Høisæter 2020: 593). The same is true of the cognate titles Tumsh. *cazbā-* (Konow 1935: 816) and TA *cospā* (Bailey 1947: 149; Ching 2019: 13; DTTA: 188).⁵⁹⁹

Niya *cojhbo* and its congeners still lack a convincing etymology. One proposal goes back to Henning (1936: 12 fn. 6 = 1977 I: 390 fn. 6), who,

⁵⁹⁸ Some Niya documents are made from goat leather, which may thus have been a tax product. A potential counterargument against the meaning ‘leather’ is CKD 714. In this document, *crorma* occurs together with *maḱa* and *ogana*, most likely products for human consumption (cf. §3.2.2 and §6.2 s.vv.).

⁵⁹⁹ Unless one is willing to assume an unparalleled simplification from **cojhbuveṇa*, the Gāndhārī ins.sg. *cobuveṇa* (CKI 179) is best kept aside (*pace* Konow 1938b: 239). Any connection with the Bactrian PN ζαζοβο must likewise be regarded as extremely uncertain (BPN: no. 143).

proceeding from a comparison with OAv. *cazdōṇhūuant-*,⁶⁰⁰ reconstructed the source of Tumsh. *cazbā-* as a nom.sg. **čazdahwāh*. Henning's derivation is nonetheless unattractive from a phonological point of view (*pace* Tremblay 2005a: 429). **č-* must namely yield Tumsh. *ts-* when not before a front vowel as here (Dragoni 2023b: 120f.), and ad hoc assumptions are needed to account for the vocalism and the *-b-* of Niya *cojhbo*.

According to Bailey (1949a: 127), these words should instead be interpreted as an "East Iranian" derivative of **xšaθra-pāwan-* 'satrap'. This suggestion seems phonologically hardly possible, as **xšaθra-* cannot result in any straightforward way into either Tumsh. *caz-* or Niya *cojh-*.

Equally implausible is the idea that *cojhbo* and its cognates are loanwords from Chin. *zhǔ bù* 主簿 'master, host' + 'register', i.e. 'official scribe' (so e.g. Duan & Tshelothar 2016: 40f.). The (Early) Middle Chinese form of this title can be posited as *tsyux* + *buX*, and it is not clear, as noted by Ching (2019: 13 fn. 23), where the /z/ in Niya Prakrit (written with 𑖦𑖩𑖫) and Tumshuqese would come from, would this Chinese etymology be correct.

121. *trušga*, unclear

Compounds

LOC.SG. *trušgakalaṃmi*⁶⁰¹ 'at the *trušga* time': CKD 581

The concrete meaning of the hapax *trušga* cannot be decided based on the available context. As the word pairs together with *trubhikṣa* < Skt. *durbhikṣa-* 'famine', one can conjecture *trušga* to refer to some unfavourable situation.

According to Burrow (1934: 511), *trušga* could have been made by adding the same prefix *tru-* < Skt. *dur-* 'bad' as in *trubhikṣa* 'famine' (Bailey 1946: 791) to a derivative of OIr. **huška-* 'dry' (e.g. Av. *huška-*). Semantically, this proposal would be conceivable, as *trušga* could then mean something like 'drought' (TKD: 120). Yet, Burrow's etymology still runs into trouble for

⁶⁰⁰ The meaning of OAv. *cazdōṇhūuant-* is not precisely known, but it is glossed in Middle Persian as *wizārtār* 'decider' (AIW: 583). *cazdōṇhūuant-* is the traditional spelling, but Peschl (2022: 99) notes that the manuscript evidence may rather favour *cazdō.āṇhūuant-*. The attested forms are dat.pl. *cazdōṇhūuadābiiō* in Y 31.3 and acc.sg. *cazdōṇhūuāntām* in Y 44.5.

⁶⁰¹ Reading *yušga* (suggested as an alternative by Burrow 1935a: 783f.; LKD: §49; 96 s.v. *trušga*) is palaeographically unwarranted.

formal reasons since Ir. **-šk-* ought to be represented in Niya with *-ḳ-* and not with the voiced cluster *-sg-* (Schoubben 2021; §4.3.18).⁶⁰²

122. *Nuava*, ancient name of the Shanshan kingdom

Derivatives

ADJ. *Nuaviya* ‘native of Nuava’: CKD 883

Compounds

DIR.SG. *Nuavamaharaya* ‘great king of Nuava’: CKD 187; 581; 648; 655; 656

INS.SG. *Nuavamaharayena* ‘idem’: CKD 842

GEN.SG. *Nuavamaharayaša* ‘idem’: CKD 884

LOC.SG. *Nuavarajaṃmi* ‘kingdom of Nuava’: CKD 884

GEN.SG. *Mahanuayaša* ‘great Nuava’: CKI 363

DIR.SG. *Mahanuavaraja* ‘king of great Nuava’: CKD 422; 808; *Mahanuavaraya*: CKD 495

GEN.SG. *Mahanuavarayaša* ‘idem’: CKD 782

DIR.SG. *Mahanuavamaharaya* ‘great king of great Nuava’: CKD 1; 3; 4; 5; 6; 7; 9; 10; 11; 12; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 24; 26; 27; 28; 29; 30; 31; 32; 33; 36; 37; 38; 39; 40; 42; 45; 46; 47; 49; 52; 53; 54; 55; 56; 57; 62; 63; 64; 68; 70; 71; 116; 124; 134; 135; 136; 143; 144; 156; 169; 180 (2x); 182; 189; 195; 198; 204; 212; 214 (2x); 219; 222; 223; 226; 228; 235; 236; 243; 251; 254; 262; 265; 272; 275; 279; 286; 291; 296; 297; 298, etc.; *Mahanuavamaharāya*: CKD 209; 604; 617; 828; *Mahanuavamaharāyā*: CKD 589; *Mahanuayamaharaya*: CKD 430; 639; *Mahanuhavamaharaya*: CKD 339; 401; 569; 582; 593; 709; 732; *Mahanuhavamaharāya*: CKD 478

It had been generally accepted since Stein (1903: 361; 1907: 321; 325; 366) that (*maha*)*nuava maharaya* in the opening formula of many Niya documents would correspond to Skt. *mahānubhāva- mahārāja-* ‘His Majesty the Great King’ (LKD: 101 s.v. *nuava*; 111 s.v. *mahanuava*). In a recent article, Loukota (2020: 102–105) could prove that *Nuava* is instead the endonym of the Shanshan kingdom.

Based on this new interpretation, Duan Qing (*apud* Loukota 2020: 103) etymologised *Nuava* as “a compound of the stems **nau-* ‘new’ ... and a form akin to Khotanese *āvū*, *auv-* ‘village’”. One can ask whether the resulting meaning ‘new village’ is so appropriate as the name of a kingdom. There are moreover some formal issues with Duan’s suggestion. **nau-* ‘new’ is not attested on its own in Khotanese and only found in the synchronically untransparent *nūvara-* ‘new’ < **nawa-karā-* (cf. Sogd. *nwkr* ‘now’; Bactr.

⁶⁰² Burrow’s (1934: 511; LKD: §49) suggestion that *šk* is sometimes voiced intervocalically is phonologically unlikely (cf. fn. 687).

πιδωνωγαρο ‘anew, again’).⁶⁰³ In addition, the Khotanese word for ‘village’ is more accurately transcribed as *āguta-* / *āguva-* / *āvua-* (Skjærvø 2004 II: 240f. *contra* DKS: 15; 48), and the spelling variation between *-g-* and *-v-* suggests that these are mere orthographic hiatus fillers (Federico Dragoni p.c.), which would not necessarily be rendered as *Niya -v-* (variant *-y-*). All in all, it thus seems best to suspend judgement on the etymology of *Nuava*.

123. *paṃcara* ‘animal provisions’

Attestations of the base form

DIR.SG. *paṃcara*: CKD 349

INS.SG. *paṃcarena*: CKD 816 (5x)

DIR.PL. *paṃcare*: CKD 40

Derivatives

ADJ. *paṃcaraīṃna* ‘concerning the animal provisions’: CKD 146 (2x);
paṃcarayina: CKD 146; *paṃcyarayina*: CKD 65.

Burrow (LKD: 102 s.v.) and Lüders (1940b: 39–43) noted that *paṃcara* by default refers to corn (*aṃna*) given to royal camels going on a journey, hence the approximate translation ‘animal provisions’.⁶⁰⁴

According to Harmatta (1960: 212), the original form of the word would have been **paṃcaraga*, which he proposed to interpret as a loan from a hypothetical Mlr. **pačaray* < **paččaray* < OIr. **paθya-čaraka-*, literally ‘travel fodder’ (cf. MP *čarag* ‘fodder’). I find this etymology unconvincing for several reasons. To begin with, there is no good evidence that the original form of the *Niya* word was indeed **paṃcaraga*. In Harmatta’s view, the form *paṃcare* in CKD 40 would be from **paṃcaraga* via **paṃcarae*. Yet, nothing precludes *paṃcare* from being a dir.pl. in *-e* from an underlying *paṃcara* (so Baums & Glass 2002a– s.v.; cf. LKD: §60). More severely, Harmatta has to postulate a change from **-θy-* to **-č-* that is unparalleled in the known Middle Iranian

⁶⁰³ For the derivation of Khot. *nūvara-* adopted here, see BD II (255) *contra* DKS (189) and Degener (1989: 268).

⁶⁰⁴ Cf. Lüders (1940b: 43): “Es scheint also, daß der *paṃcara* ein bestimmtes Maß Korn war, das den Benutzern der Kamele des königlichen Gestüts zur Verpflegung der Tiere mitgegeben wurde.” *paṃcara* seems to stand in a complementary distribution with *pačēvara*, an Iranian loanword referring to the provisions humans take with them whilst travelling (see §3.6 s.v.).

languages.⁶⁰⁵ Finally, his etymology does not account for the consistently written anusvāra in *paṃcara*, which Harmatta counter-intuitively explains away as being “unetymological”.

124. *potge* ‘water tank’; *potga* / *potgoña*, a type of wine

Attestations of the base forms

DIR.SG. *potge* ‘water tank’: CKD 701

LOC.SG. *potgeyaṃmi* ‘idem’: CKD 204; 397 (3x)

potge ///: CKD 333

ADJ. *potga*, a type of wine: CKD 225

ADJ.DIR.SG. *potgoña*⁶⁰⁶, a type of wine: CKD 796

ADJ.INS.SG. *potgoñena* ‘idem’: CKD 207; 574 (3x); 637 (7x)

Derivatives

ADJ. *potgeci* ‘related to the water tank’: CKD 347

Compounds

DIR.SG. *ṣitgapotgeya* ‘*ṣitga* water tank’: CKD 259

ABL.SG. *ṣitgapotgeyade* ‘idem’: CKD 120

LOC.SG. *ṣitgapotgeyaṃmi* ‘idem’: CKD 120

The semantics of *potge* have been interpreted in two different ways: whereas Burrow (LKD: 107 s.v.) hypothesised *potge* to refer to a ‘water tank’ used for irrigation, Bailey (1951a: 925; 1954a: 129ff.) opined that this word means ‘kitchen’. With the help of archaeological evidence, Bertrand (2012: 27–35 *et passim*) could prove that Burrow’s is the more likely option, thereby rendering Bailey’s suggestion of an etymological relationship between *potge* and OIr. **puxta-ka-* ‘cooked’ obsolete.⁶⁰⁷

⁶⁰⁵ In a later article (1964b: 376), Harmatta seems to imply that **pačaray* would be a Bactrian word, but contrast the development of **-θy-* in Bactr. *χοβο* < **hwa-paθya-* (§5.3.4.1).

⁶⁰⁶ The reading *poñoña* in Baums & Glass (2002b–) is to be corrected to *potgoña*.

⁶⁰⁷ Bailey’s etymology was, in any case, implausible in that a kitchen is ‘a place where one cooks’ and not ‘something cooked’. *Pace* Bailey, it is moreover phonologically impossible to derive the element *ṣitga-* in *ṣitgapotgeya* (CKD 120 (2x); 259) out of OIA **ṣṭaka-* ‘cooked’. The cluster *-tg-* in both *ṣitga-* and *potge* suggests that these words are borrowings from Bactrian. The same origin is suggested by Bertrand’s (2012: 35–46) archaeological observation that the water tanks discovered in the territory of ancient Niya are inspired by tanks used in ancient Bactria and Gandhāra. No convincing etymology of either *ṣitga-* or *potge* has presented itself, however.

It remains an open question if the similarly looking adjectives *potga* / *potgoña*, both indicating a type of wine (*masu*), are historically related to *potge*. Whatever the answer, there is no hard-and-fast evidence in support of Henning's claim (1948: 603 fn. 3 = 1977 II: 317 fn. 3; cf. also Harmatta 1967: 10ff.) that *masu potga* (*potgoña*) is connected with Pers. *maipuxte* 'boiled wine, a sweet decoction of grape-juice or must with spices added' < **madu*- 'wine' + **puxta-ka*- 'cooked' (see further §3.7.2 s.v. *mepoga*).⁶⁰⁸

125. *pothi*, unclear

Attestations of the base form

DIR.PL. *pothi*: CKD 534

Compounds

DIR.SG. *carmapothithavitaga* 'deposit of a *pothi* made of skin': CKD 17

Niya Pkt. *pothi* occurs in a list mentioning deposited goods (CKD 534) and in the compound *carmapothithavitaga* 'deposit of a *pothi* made of skin' (CKD 17). More is not known about its semantics.

Burrow (LKD: 107 s.v.) tentatively compared *pothi* to MP/NP *pōst* 'skin' < **pawasta*- (CPD: 69; DMMP: 287). Yet, the cluster *-st-* is, including in borrowings from Iranian (cf. §4.3.14), preserved in Niya Prakrit, a point conceded by Burrow (TKD: 106).⁶⁰⁹ In the other known MIA languages, *-st-* does develop to a voiceless aspirated dental (cf. e.g. Pāli *potthaka*- < *pustaka*-). As, however, positing interdialectal borrowing from a more eastern Prakrit would be a costly assumption in the case of Iranian loanwords, I remain hesitant to accept Burrow's etymology.

⁶⁰⁸ Lüders (1936b: 642 fn. 3) compared the element *-oñ-* in *potgoña* to the Khotanese abstract suffix *-auña-* (on which see Degener 1989: 158ff.). This comparison remains to be confirmed by lack of an obvious Khotanese source of the base word. *potgoña* is moreover an adjective instead of an abstract noun. Burrow (LKD: 107f.) and Harmatta (1967: 11) additionally refer to a Tocharian B suffix *-oñe*, but such a suffix does not exist; a word such as TB *ompalskoñe* 'meditation, contemplation' is to be analysed as *ompalsko* 'meditation' + abstract suffix *-ññe* (DoT: 125) and does not contain a suffix *-oñe* (there does exist an abstract suffix *-auñe*; cf. Peyrot 2008: 43f.).

⁶⁰⁹ CDIAL's (no. 8414) comparison with Lahndā *pothī* 'fleece' does not solve this problem.

126. *miši*, a type of land

Attestations of the base form

DIR.SG. *miši*: CKD 235 (3x); 655; 782; *mišiya*: CKD 571; 580 (3x); 582; 715; 805 (3x); *mišiye*: CKD 808

GEN.SG. *mišiyaša*: CKD 571

ABL.SG. *mišiyade*: CKD 296; 808

LOC.SG. *mišiyammi*: CKD 90; 212; 327; 419; 571; 572

Derivatives

ADJ. *mišiyeci*: CKD 582

While it is beyond dispute that the Niya word *miši* denotes a specific type of agricultural land, its more exact semantics are yet to be determined (LKD: 111 s.v.; see also §3.7.2 s.v. *akri*).

Etymologically, Niya *miši* belongs together with Khot. *miš(š)a-* (also *māš(š)a-*; DKS: 332f.), TA *miši* (DTTA: 348), and TB *miš(š)e* (DoT: 498), all three of them translation equivalents of Skt. *kṣetra-* ‘field’.⁶¹⁰ But the exact relationship between these words is, as shown below, difficult to disentangle, to the point that one cannot be sure if Niya *miši* is an Iranian loanword or not (see also Dragoni 2023b: 153–156).

The one reasonably clear thing is that TA *miši* and TB *miš(š)e* are not inherited in these languages since it is impossible to reconstruct a single proto-form out of TA *miši* and TB *miš(š)e* (Peyrot 2018a: 269). Formally, Niya *miši* could be the source of the Tocharian A form. Yet, for TB *miš(š)e*, one probably needs a different source as the final vowels of Niya *miši* and TB *miš(š)e* do not match up. In any case, the word is probably not Indic in origin, as it is hard to substantiate Burrow’s (LKD: §38; 111 s.v.) derivation from Skt. *miśrya-* ‘mixed’ semantically.

Are the Niya and Tocharian words then loans from Khot. *miš(š)a-*? Here again, the details are complicated. When taking into account that in the earliest Old Khotanese, the nom.sg. of *miš(š)a-* ended in *-ā* and that the Khotanese vowels *ā* and *i* merged relatively early, one could theoretically

⁶¹⁰ It remains an open question whether Arm. *mšak* ‘farmer’ and other Caucasian forms are also connected (so Bailey 1953: 539, but cf. Peyrot 2018a: 269 fn. 31). Khot. *ttumāšā* ‘seed-field’ cited by Burrow is a ghost word (cf. Maggi *apud* SVK III: 69f.). The <š> (variant <šš>) in Khot. *miš(š)a-* stands for a voiceless single [š] (Dragoni 2023b: 155).

regard Niya *miši* and TA *miši* as borrowings from Khotanese.⁶¹¹ TB *miš(š)e* is less easily interpretable as a loan from Khotanese as the final *-e* remains difficult to explain (see Peyrot 2018a: 269). An additional issue with taking Khotanese as the donor language is that Khot. *miš(š)a-* does not have a convincing inner-Iranian etymology itself; Bailey made various etymological proposals (1953: 538f.; 1956a; 1958a; DKS: 332f.), but none of them works well (see Dragoni 2023b: 155).

To conclude, Niya *miši* is definitely related to Khot. *miš(š)a-*, TA *miši*, and TB *miš(š)e*. As long as the etymology of these words and the exact paths of borrowing remain unknown, one cannot determine if Niya *miši* is an Iranian loanword or if one should, for instance, posit independent borrowings from a non-Iranian language of the area (an option briefly considered by Dragoni 2023b: 156).

127. *mukāṣi*, woman exchanged within exogamous marriage practices

Attestations of the base form

DIR.SG. *mukāṣi*: CKD 279; 338; 474 (2x); 481; 555; 585; 817 (2x)

The semantics and etymology of *mukāṣi*, a word mistakenly read as *mukeṣi* in earlier scholarship, have been discussed in Schoubben (2021: 54–56). Building further on Burrow (LKD: 115–117 s.v. *lote*) and Padwa (2007: 211–215), I argued in my article that *mukāṣi* is a technical term, referring to women given in reciprocal exchange in the context of exogamous marriage practices (cf. also §3.2.3 s.v. *muṣḍhaṣi*). A new attestation of *mukāṣi* in the Schøyen manuscript MS 4579/1/2, a Niya document to be published in Baums (fthc.), yields further support for this argument:

(3.34) Schøyen MS 4579/1/2

*asti maṃnuśa aṣ[ga]ra Lýimirkeya nāma se uthida kāla Rutrayena
saṃñāṇavita stri Suhapriyae nita mukāṣi dita stri Cogaroe nama aṃña 3
arohaga aśpa trevarśaga 1*

“There is a man, a herald (?)⁶¹² with the name Lýimirke. He arose and made an agreement with the *kāla* Rutraya. He [i.e. Lýimirke] married the woman Suhapriyae (and) as exchange woman (*mukāṣi*) he gave a

⁶¹¹ Khotanese borrowings into Tocharian normally end in *-o* (← acc.sg. *-u*), however (Dragoni 2023b).

⁶¹² For the provisional translation of *aṣgara* as ‘herald’, see §3.2.3 s.v.

woman called Cogaroae. In addition (*aṃṇa*), (he gave) a mountable (*arohaga*) three-year-old horse.” (tr. mine).

As it is clearly the case in (3.34) that the woman (*stri*) Cogaroae should first be given (*dita*) as a *mukāṣi* before Suhapriyae can marry with Lýmirkē, it fits my approximate translation of *mukāṣi* as ‘exchange woman’.

Observing that the letter *k* in *mukāṣi* ought to stand for the combination of a sibilant and a *k* (cf. §2.1.6), I furthermore argued that *mukāṣi* is a loan from an unattested Bactrian word **μoḅkoḅi* /*muškəšši*/ ‘exchanged woman’ < OIr. **mišta-ka-strī*-. I would now like to retract this etymology. It still seems likely to me that *mukāṣi* goes back to a compound ending in **strī*- ‘woman’ (cf. also §3.2.3 s.v. *muṣḍhaṣi*). But my assumption that **mišta-ka-* could be analysed as a verbal adj. of the Plr. root **√Hmaiṣ* ‘to exchange’ (EDIV: 178) can hardly be justified: since **√Hmaiṣ* would go back to PIE **√h₂meig^w* (Gr. ἀμείβω ‘to (ex)change’), its verbal adj. could only be **mixta(-ka)-*, not ***mišta(-ka)-*.⁶¹³ So, for now, *mukāṣi* remains without a convincing etymology.

128. *mepoga*, unclear commodity

Attestations of the base form

DIR.SG. *mepoga*: CKD 721

Henning (1948: 603 fn. 3 = 1977: 317 fn. 3) compared Niya *mepoga*, a hapax legomenon of unclear semantics, to Pers. *maipuxte* ‘boiled wine, a sweet decoction of grape-juice or must with spices added’.⁶¹⁴ As it would be hard to explain a simplification of Pers. *-xt-* to Niya *-g-* /*γ*/, Henning’s etymology is best viewed with scepticism.

⁶¹³ An additional issue is that the reconstruction of Plr. **√Hmaiṣ* ‘to exchange’ rests on flimsy grounds. I provisionally accept Sims-Williams’ idea to derive Bactr. *μyḍo* < **mixta-* from this root (Sims-Williams 1997a: 24; BD II: 232); but (i) one would like supporting evidence for the reconstruction of Plr. **√Hmaiṣ* from other (Indo-)Iranian languages (not only from Greek), and (ii) there have been alternative interpretations of Bactr. *μyḍo* (see Skjærvø 2005: 315; Cheung 2009: 53–57).

⁶¹⁴ *maipuxte* was also borrowed into Syriac as *mypwkt*’ (Ciancaglini 2008: 205).

129. *śiti* ‘side, direction’

Attestations of the base form

LOC.SG. *śitiyaṃmi*: CKD 604

Compounds

LOC.SG. *dakṣinaśitiyaṃmi* ‘southern side’: CKD 678

The Niya word *śiti* is attested twice in the loc.sg.⁶¹⁵

(3.35) CKD 604 obverse 3

*yaṃ kālaṃ Ramakaśa śitiyaṃmi Caṣgeya soṃgha anita taṃ k[a]laṃ
muṃtra biṃnitaga ṣoṭha[m]gha Lýipeya.*

“When Caṣgeya brought *soṃgha* (= ?) to (in) the *śiti* of Ramaka, at that time the *ṣoṭhaṃgha* Lýipeya broke the seal.” (after TKD: 128).

(3.36) CKD 678 under-tablet obverse 2f.

*se Cimaka Kroraīṃnaṃmi mahamta nagaraśa dakṣina śitiyaṃmi bhuma
kurora tre milimi pramaṃna Yapguvasya vaṃti vikrita.*

“This Cimaka sold to Yapgu *kurora* land with a capacity (for seed) of three *milima* (situated) on the south *śiti* (*dakṣina śitiyaṃmi*) of the great city.” (after TKD: 139).

Drawing chiefly on (3.35), Burrow (1934: 511) plausibly assigned the meaning ‘side, direction’ to *śiti*.

Seeing that *śiti* lacks an obvious Indo-Aryan cognate, Burrow (1934: 511f.; LKD: 125 s.v. *śitiyaṃmi*) suspected it to be an Iranian loanword. In Burrow’s view, *śiti* could have been borrowed from a cognate of Av. *šiti*- ‘dwelling’ (~ Skt. *kṣiti*-), but he had to admit that Ir. *š*- would be more likely borrowed with *ṣ*- in Niya Prakrit.⁶¹⁶ Attempting to circumvent this problem, Burrow considered the possibility of a palatalisation of **ṣi*- > *śi*-. However, such a palatalisation would be entirely ad hoc, given that an onset *ṣi*- is attested in Niya Prakrit loanwords, e.g. in *ṣitgapotge* (CKD 120; 259). A further issue with Burrow’s idea is the non-trivial semantic development from ‘dwelling’

⁶¹⁵ Reading the word as ***yiti*, as considered in Burrow 1934: 511f., can be excluded because the right-most vertical line of the akṣara is too long to read *yi* instead of *śi*.

⁶¹⁶ There could be a precedent for this substitution if one accepts Weber’s (1997: 37) proposal that the element *śir*- in the Niya PNs *Śirjhata* (also *Śirjhata*) and *Śirmitra* should be identified with Sogd. *šyr* ‘good’.

to ‘side, direction’ one would have to assume. I therefore do not accept Burrow’s etymology.

130. *sanapru*, unclear

Attestations of the base form

DIR.SG. *sanapru*: CKD 660; *sānapru*: CKD 660

Basing himself on the fact that it is used to modify *paṭa* ‘silk roll’, Bailey (1946: 781f.; 1961: 482; 1966: 35) interpreted *sanapru* as an additional witness of the Iranian term for ‘vermilion’ attested via OP *sinkabruš* ‘red stone, carnelian’ (Schmitt 2014: 243; Brust 2018: 310), NP *šangarf* ‘cinnabar’ (CPED: 763), Sogd. *synqrb* ‘cinnabar’ (Sims-Williams 2019a: 93; 172; DCS²: 179), and Arm. *sngoyr* ‘rouge, paint’ (Olsen 1999: 906). The context does, however, not necessitate *sanapru* to be a colour term in the first place,⁶¹⁷ and there is only a weak phonological similarity with the Iranian words cited.⁶¹⁸ Thus, it seems best to reject Bailey’s etymology.

131. *soṃstaṃni* ‘trousers’

Attestations of the base form

DIR.PL. *soṃstaṃni*: CKD 149

Seeing that the dir.pl. *soṃstaṃni* occurs in a list of textile products, one can agree with Lüders (1936a: 22) that this hapax legomenon is etymologically connected to Skt. *sunthaṇā-* (v.l. *saṃthaṇā-*) in *Mahāvīyutpatti* 5849 (~ Tib. *dor ma* ‘trousers’ and Chin. *kù zǐ* 褲子 ‘idem’; BHSD: 556; 599). Other forms of the same Sanskrit word are *sunthāṇa-* in the Lexicon Bacot 81 b1 (~ Tib. *dor ma*); *sūthāṇna-* in a Sanskrit-Khotanese bilingual (~ Khot. *kaumadai* ‘trousers’; Bailey 1938: 532); and *svasthāna-* (v.l. *svasthagana-*) in the *Harṣacarita* (Agrawala 1951: 16). Further cognates are found in NIA, e.g.

⁶¹⁷ Bailey drew a comparison with *paṭa paṃdura* (also CKD 660), assuming *paṃdura* to be derived from Skt. *pāṇḍura-* ‘white, yellow’. It is, however, far from certain that *paṃdura* is indeed connected to *pāṇḍura-*, given that this etymology requires the retroflex cluster *-ṇḍ-* to have become a dental *-ṃd-* /nd/ (cf. perhaps *dhamṭa* ‘punishment, fine’ < *daṇḍa-* in CKD 348; 419).

⁶¹⁸ The *-n-* in the Niya form does not correspond to the cluster of a nasal and a velar stop in the Iranian forms, and the variant spelling *sānapru* suggests a long vowel in the first syllable for which there is no evidence in Iranian.

Hindi *sūthan*, Lahndā *sutthan*, Romani *sosten*; and Nuristani languages, e.g. Ashkun *ṣātū* / *ṣāṭū*, Waigali *so(n)ta* (CDIAL: no. 13468).

According to Bailey (1954c: 16–18; 1956b), these lexemes would be loanwords from a Middle Iranian outcome of a presumed compound **srauni-starana-* ‘covering of the hips’. If so, the phonology of Niya *soṃstaṃni* is not easily accounted for. To begin with, Bailey is required to postulate a change from **-starana-* over **-starna-* to Niya *-staṃna-*. Both these steps can be paralleled independently of one another but not in one and the same word.⁶¹⁹ Still worse is that out of **sr-*, one would expect an initial retroflex in Niya Prakrit and not the dental *s-* shown by *soṃstaṃni*.⁶²⁰ Aware of this problem, Bailey conjectured that Niya Prakrit borrowed the word through the intermediary of a more eastern Prakrit where all sibilants became dentals. In my view, such a scenario seems hardly likely for an Iranian loanword.

Thus, despite the approval of Szemerényi (1959: 75) and Mayrhofer (EWAia III: 515f.), there is reason to doubt Bailey’s etymology.

3.8 Reference list

By way of conclusion, the list below gives a synopsis of the data pertaining to Iranian lexical influence on Niya Prakrit collected and scrutinised in the present chapter. It outlines the different categories distinguished and lists the words belonging to each class.

Secure loanwords from Bactrian (§3.2.1)

1. *aviṃdama* ‘fine, recompense’
2. *kṣuna* ‘date, reign, regnal year’
3. *guśura* ‘prince’
4. *jheniga* ‘in charge of, under the care of’
5. *daśavida* ‘chief of ten households’
6. *nokṣari* ‘month of the new year’
7. *prigha* ‘(monochrome) damask’
8. *laṣi* ‘gift’
9. *lastana* ‘dispute, lawsuit’
10. *vaga* ‘rent (paid for the use of land)’

⁶¹⁹ For the first step, cf. Niya *vastarna* ‘bedding’ (CKD 565) next to *vastarana* < Skt. *upastaraṇa-*, and for the second, cf. Niya *vaṃna* ‘colour’ (CKD 501) < Skt. *varṇa-*.

⁶²⁰ Ashkun *ṣātū* / *ṣāṭū* is the only form with an initial retroflex. Could this be due to contamination with NP *ṣalwār* ‘trousers’?

11. *valaga* 'animal keeper'
12. *śadavida* 'chief of a hundred households'
13. *şada* 'pleased, happy'
14. *Suliga* 'Sogdian'
15. *stora* 'large animal, horse, camel' (also *storabala* 'animal flock'; *storavara* 'horse driver'; *storvana* 'groom')
16. *şpara* / *şpura* 'full, completely'

Plausible loanwords from Bactrian (§3.2.2)

17. *aṃtagi* 'belonging to the district'
18. *are* 'a half'
19. *aşpista* 'lucerne'
20. *Khotamṇa* 'Khotan'
21. *jenavida* 'chief of the armour'
22. *nihaṃñ-* 'to deposit, to put down'
23. *picara* '(mark of) honour'
24. *maķa* 'bean'
25. *milima*, a unit of measure
26. *yatma* 'measurer of rations'
27. *vaşe* 'garments'
28. *saste* 'day, elapsed'

Arguable loanwords from Bactrian (§3.2.3)

29. *aṃbukaya*, a title
30. *aco* 'frontier, border post' (also *acoviṃna* 'border official'; *Acomena*, place name)
31. *aḏini* '(broomcorn) millet'
32. *atga* 'additional, complementary'
33. *avalika* 'swaddle'
34. *aşgara* 'herald (?)'
35. *oḏ-* 'to let go'
36. *caṃkura* 'imposer of penalties'
37. *tim-* 'to be concerned about, to be angry'
38. *toṃga*, a title
39. *niħala* 'settlement, agreement'
40. *paķe* 'allotment, share'
41. *picav-* 'to hand over'
42. *piro* 'military post, fort'
43. *badho* 'pledge, mortgage'
44. *muşḏhaşi*, woman exchanged within exogamous marriage practices
45. *leş-* 'to dispatch, to conduct'

- 46. *vaṣḍhiga*, festival on the mountain
- 47. *yapga* 'weaver'
- 48. *suḷinakirta* 'needlework, embroidery'

Tentative loanwords from Bactrian (§3.2.4)

- 49. *apcira*, a unit of measure (for vineyards)
- 50. *kilme* 'family estate' (also *vegakilme* 'outside (?) the family estate')
- 51. *taravara* 'sword'
- 52. *reda* 'seed, sprout (?)'
- 53. *Remena*, place name
- 54. *laṭhana* 'plain, open land (?)'
- 55. *lastuga*, textile product
- 56. *ṣvaṭhaṃgha* / *ṣoṭhaṃga* 'finance officer'

Secure loanwords from Bactrian or another language (§3.3.1)

- 57. *ajhate* 'free, noble'
- 58. *śpaṣa* 'watching, guarding'
- 59. *harga* 'dues, tax'

Plausible loanwords from Bactrian or another language (§3.3.2)

- 60. *aṭa* 'flour'
- 61. *ayana* 'village, territory of a clan'
- 62. *gavaśa* 'deer, stag'
- 63. *tavastaga* 'carpet'
- 64. *draṃga* 'office' (also *draṃgadhara* 'office holder')
- 65. *namata* 'felt'
- 66. *paraṣa* 'abduction, plundering'
- 67. *parivanae* 'burden, provisions'
- 68. *pravamṇaga* '(authoritative) document'
- 69. *maravara* 'accountant'
- 70. *raji* 'cloak, woollen cloth'

Arguable loanwords from Bactrian or another language (§3.3.3)

- 71. *agiṣḍha* 'cover, rug'
- 72. *aḡeta* 'tax collector'
- 73. *kojava* 'rug, blanket'
- 74. *namanaga* / *namamniya* 'exchange'
- 75. *pajhavamṇta* 'breastband (?)'
- 76. *rasamṇa* 'rope (?)'
- 77. *vara* 'load'
- 78. *ṣamṇa* 'hemp, hempen (?)'
- 79. *hastama* 'quarrel, dispute'

Tentative loanwords from Bactrian or another language (§3.3.4)

80. *ujhmayuga* ‘trustworthy, skilled (?)’

Bactrian PNs (§3.4.2)

81. *Apge*
 82. *Katge*
 83. *Kamlana*
 84. *Kutge*
 85. *Namilga*
 86. *Palge*
 87. *Pitga*
 88. *Lamga*
 89. *Larsu*
 90. *Vhurmajheva*

Secure non-Bactrian loanwords (§3.5.1)

91. *gaṃṇa* ‘treasury’ (also *gaṃṇavara* ‘treasurer’)
 92. *thavaṃnaga* ‘cloth’
 93. *darṣ-* ‘to load (a beast of burden)’ (also *darṣa* ‘load’)
 94. *divira* ‘scribe’
 95. *dhane*, a unit of measure
 96. *prahoni* ‘garment’
 97. *mudra* ‘seal’
 98. *hinajha* ‘army commander’

Plausible non-Bactrian loanwords (§3.5.2)

99. *khakhordi* ‘witch’

Arguable non-Bactrian loanwords (§3.5.3)

100. *ratu*, a religious title

Tentative non-Bactrian loanwords (§3.5.4)

101. *denuga*, a title (?)
 102. *rotaṃna* ‘madder (?)’

Iranian loanwords from an unidentified source (§3.6)

103. *anada* ‘carefully’
 104. *kremeru* ‘crimson, scarlet’
 105. *načira* ‘hunting’
 106. *pačevara* ‘provisions (for a journey)’
 107. *bhaṭaraga* ‘lord, owner’

Rejected etymologies: possibly Indo-Aryan words (§3.7.1)

- 108. *kharayarna* 'donkey-coloured (?)'
- 109. *baṇṇa* 'bundle'
- 110. *masu* 'wine'

Rejected etymologies: words of unknown origin (§3.7.2)

- 111. *akri*, a type of land
- 112. *arnavaji* (or *ardavaji*?), textile product
- 113. *asaṃkharajiya*, textile product
- 114. *ogu*, a title
- 115. *kamaṇṭa* / *kamuṇṭa*, unclear
- 116. *kala*, a title
- 117. *kuṭhakṣira*, unclear
- 118. *kurora*, an adjective specifying a type of land
- 119. *curorma*, an agricultural product
- 120. *cojhbo*, a title
- 121. *truṣga*, unclear
- 122. *Nuava*, ancient name of the Shanshan kingdom
- 123. *paṃcara* 'animal provisions'
- 124. *potge* 'water tank'; *potga*/*potgoṇa*, a type of wine
- 125. *pothi*, unclear
- 126. *miṣi*, a type of land
- 127. *muḱaṣi*, woman exchanged within exogamous marriage practices
- 128. *mepoga*, unclear commodity
- 129. *śiti* 'side, direction'
- 130. *sanapru*, unclear
- 131. *soṃstaṇni* 'trousers'

CHAPTER 4 Iranian loanwords: Analysis

In this fourth chapter, I will study the data collected in the preceding chapter from various angles. Four questions will be addressed (see §4.1): (i) which Iranian languages other than Bactrian were in contact with Niya Prakrit, and how do loanwords from these languages relate to the Bactrian borrowings (§4.2); (ii) how consistently were Bactrian sounds substituted in the corpus of loanwords, and what can this tell us about some debated issues in Bactrian phonology (§4.3); (iii) how were Bactrian borrowings integrated into the morphology of Niya Prakrit (§4.4); and (iv) which semantic categories can we identify among these loanwords (§4.5)? The conclusions will be presented in §4.6.

4.1 Introduction: the four questions addressed in this chapter

Based on the corpus assembled in Chapter 3, I shall now attempt to study in more detail four questions about the Iranian loanwords in Niya Prakrit that have remained largely unanswered in earlier scholarship or should be tackled anew in light of the now increased evidence. This section briefly introduces these four questions and their relevance to the overarching themes of this book.⁶²¹

Question 1 (§4.2): when, where, how, and from which language(s) have the Iranian loanwords in Niya Prakrit been adopted? To a certain extent, the previous chapter already addressed this question by distinguishing between Bactrian loanwords (§3.2); loans from Bactrian or another language (§3.3); non-Bactrian loanwords (§3.5); and borrowings from an unidentified source (§3.6). Yet, a fuller treatment is needed on which donor languages other than Bactrian there are and which loanwords can be attributed to them. Another topic worthy of further discussion is how loanwords from these languages relate in time and space to the Bactrian influence on Niya Prakrit; in other words, is it possible to develop a stratification of the loanwords, even if only provisionally?

Question 2 (§4.3): how well are the Bactrian and possibly Bactrian borrowings integrated into the phonological system of Niya Prakrit?

⁶²¹ It goes without saying that one could study these loanwords from still more angles than I do here. One could, for instance, additionally look at the gender assignment of the Bactrian loanwords in Niya Prakrit, which would, however, be a difficult task because our knowledge of grammatical gender in early Bactrian and Niya Prakrit is quite limited.

Phonological integration is a primary criterion for differentiating adapted loanwords from so-called code-switches (cf. §3.1.1). The consistency with which sound substitutions are or are not applied furthermore helps to distinguish between more and less likely etymologies (cf. §3.1.7). Finally, these substitutions could contribute to our understanding of Bactrian phonology in points where the orthography of the Graeco-Bactrian and Manichaean scripts is ambiguous (cf. §2.2).

Question 3 (§4.4): are the Bactrian and potentially Bactrian loanwords integrated morphologically, and, if yes, how? Examining this topic provides an extra opportunity to test if we are dealing with loanwords *stricto sensu* rather than code-switches, although one must be cautious not to conclude too much from the presence of morphological integration, as code-switches can also be morphologically integrated (Gardner-Chloros 2009: 31f.).⁶²²

Question 4 (§4.5): which semantic domains are covered by the identified loanwords, in particular those that have or could have been borrowed from Bactrian? This type of semantic analysis can help to reconstruct the historical context in which Bactrian influenced Niya Prakrit (cf. Chapter 7). In addition, it may also allow us to rethink some thorny historical issues, e.g. the presumed Kuṣāṇa domination of the Tarim Basin.⁶²³

4.2 Iranian languages possibly in contact with Niya Prakrit

In this section, I investigate which Iranian languages were or could have been in contact with Niya Prakrit or its ancestor; and, if so, when, where, and how. First, I attempt to arrive at a more precise dating of the contact between Bactrian and Niya Prakrit based on historical considerations and linguistic features of the assembled loanwords (§4.2.1). Related to this, I also briefly

⁶²² Generally, morphological adaptation seems more widespread than phonological integration, which occurs frequently in some languages but less in others (Myers-Scotton 2006: 219; 224). There are more aspects to the integration of loanwords than only phonology and morphology, e.g. graphemic or prosodic adaptation (cf. e.g. Clyne 2003: 142–146 and on corpus languages, Dickey 2018; 2023: 7–16). Yet, the data available for Niya Prakrit are too limited to study these other types of adaptation in any depth. It is at least the case that Bactrian and other Iranian loanwords are by default graphemically integrated, meaning that they are always written in the same type of Kharoṣṭhī script as inherited words.

⁶²³ On this debated issue in the history of the Tarim Basin, cf. recently Høisæter (2017; 2020: 124–131) and Vorderstrasse (2020), with references to older literature. See also Chapter 8.

explore where this contact most likely took place. The next subsections examine which languages other than Bactrian certainly or possibly lent words to Niya Prakrit or its ancestor (§§4.2.2–4.2.7). Finally, I propose a preliminary stratification of the Bactrian and other Iranian loanwords based on linguistic and historical evidence (§4.2.8).

4.2.1 Dating and locating the contact with Bactrian

The first question to address is when the Bactrian loanwords most likely entered Niya Prakrit. An obvious *terminus ante quem* is provided by the approximate date of the Niya documents in the 3rd to 4th century AD (Høisæter 2020: 91–103), which implies that the loanwords cannot have been borrowed later than Kuṣāṇa times (1st–3rd century AD). Dating the contact between Bactrian and Niya Prakrit to the Kuṣāṇa period is also most plausible for historical reasons (cf. §1.4.3; §§7.2–7.3), but it is still worth exploring how the linguistic evidence relates to these historical conclusions.

A first linguistic observation is that no loanword is so archaic phonologically that it would need to have been borrowed before the first written attestation of Bactrian in the 1st century AD.

One may contrast Tocharian B, which did borrow words from Pre-Bactrian. The most notable instance of such a loanword is TB *mālo* ‘alcoholic drink’ ← Pre-Bactrian **malu-* < **madu-* ‘wine’, with lambdacism but before the *u*-umlaut resulting in attested Bactr. *μολο* /mulə/.⁶²⁴ Another example is TB *sapule* ‘pot, jar’; this word must be compared with Bactr. *σαβολο* ‘idem’ < **sapauda-*, which is combined with *μολο* ‘wine’ in doc. B 5f. and may originally have been a wine jar of standardised proportions. The archaic feature of TB *sapule* is its final *-e*. Bernard and Chen (2022: 17 fn. 41) derive this vowel from Bactrian final **-ə*, but I would rather opt for an old nom.sg. ending in *-i* /i/ < **-ah* as in Sogdian and Khotanese.⁶²⁵ The same explanation could be applied to the suffix *-ike*, which can come from **-īgi*, nom.sg. of **-īga-* (Bactr. *-iγo*) < **-iya-ka-* rather than from **-īgə* (as in Bernard 2023: 57f.).⁶²⁶

⁶²⁴ Cf. Benvenuto & Bichlmeier (2022a: 98 with fn. 36; 2022b: 23 with fn. 28) and Del Tomba (2023a: 130; 144f.).

⁶²⁵ See now Michetti (fthc. §5) for some attestations of a Bactr. nom.sg. in *-i* /i/ < **-ah*.

⁶²⁶ I would date this stratum of Pre-Bactrian loans in Tocharian B to Hellenistic times (323 BC–31 BC). A first reason has to do with the chronology of Bactrian sound changes. **malu-* < **madu-* shows that lambdacism preceded *u*-umlaut,

The majority of Bactrian loanwords in Niya Prakrit are *a*-stems rather than *i*-stems (see §§4.4.1–4.4.2); so, unlike these Pre-Bactrian loans in Tocharian B, they were probably not borrowed from a nom.sg. in -ι /i/ < *-ah. The loans into Niya Prakrit could have been adopted from the attested dir.sg. in -o, which stood for either /ə/ or -∅ (cf. §2.2.2).

At the same time, there are a few Bactrian and potentially Bactrian words in Niya Prakrit ending in vowels other than -a.⁶²⁷ Two of them, i.e. *nokṣari* ‘month of the new year’ and *laṣi* ‘gift’, are certainly borrowed from Bactrian, but their Bactrian source forms are only attested as νωγοσαρλο* and λαβνο, i.e. without any trace of a final vowel -ī. To account for the -i in the Niya form, I cautiously proposed to reconstruct more archaic forms *νωγοσαρλι /nōgsarli/ < *nawa-ka-sardī- and *λαβνι /lāšni/ < *dāšinī-. Although it is hard to prove that these words continue an old ī-stem (§3.2.1 s.vv.), this seems preferable over having to assume that they are the only two words preserving a trace of an archaic nom.sg. ending in -ι /i/ < *-ah.⁶²⁸ Another word, i.e. *muṣḍhaṣi* ‘reward woman’, may either have been borrowed from a Bactrian compound ending in *-πι /šī/ < *-strī- or from a fem.sg. *μοζδοπι < *miždušī-, but the etymology of this word is arguable (§3.2.3 s.v.; cf. also §3.7.2 s.v. *muḥaṣi*). The adverb *ajhatu* ‘free’ in CKD 152 could be a borrowing from an Iranian language in which the *-am of an adverbial neuter *āzātam yielded *-u. Whether this language was Bactrian is, however, difficult to say (§3.3.1 s.v. *ajhate*). *raji* ‘cloak, woollen cloth’ finally can be plausibly explained as a loan from Bactr. *ραγζι /rayži/ (attested ραγαζο) < *ragzi-, but in this case nothing excludes Sogd. *ryzy* /rayzi/ ‘cloth made of wool or hair’ from being the source of *raji* (§3.3.2 s.v.).

That these few loanwords were borrowed from a Bactrian donor form preserving final vowels inherited from Old Iranian is hardly provable.

which in its turn should have preceded syncope, as shown by ροζγο /ruzgə/ ‘vineyard’ < *razu-ka-. Since (i) these sound changes had all been completed before the first century AD, and (ii) lambdacism can be tentatively dated to the Late Achaemenid and early Hellenistic period (see fn. 253), the phonology of the Pre-Bactrian loanwords in Tocharian B points to a Hellenistic date for their adoption. This conclusion is also historically likely, as both *mālo* and *sapule* seem to relate to viniculture (cf. above), and archaeobotanists have dated the introduction of grape cultivation to Xinjiang to about 300 BC (Jiang et al. 2009).

⁶²⁷ In what follows, I leave aside loanwords ending in -e, which are dealt with in §4.4.3, and *aḍini* ‘(broomcorn) millet’, whose -i could be secondary (§3.2.3 s.v.).

⁶²⁸ I also see no reason (linguistic or other) why *nokṣari* and *laṣi* would have been borrowed earlier than the other loanwords.

However, if they did, it is not excluded that also these loans were adopted in Kuṣāṇa times, as the early Kuṣāṇa inscriptions, such as the Rabatak inscription (first half of the 2nd century AD), occasionally preserve traces of final vowels, e.g. a 1sg. ending in -μι (later -μο) < *-mi or an infinitive ending in -δι (later -δο) < *-tayai (Sims-Williams & Cribb 1995–96; Michetti fthc.: §4).

As concerns the question of where these loanwords were borrowed, it is worth noting that 12 of the 56 Bactrian loanwords (= 21,4%) and 5 out of 24 loanwords from Bactrian or another language (= 20,8%) have cognates in South Asian Gāndhārī and/or other Indo-Aryan languages. See the list below.⁶²⁹ For these words, it thus seems most likely that they were adopted before Niya Prakrit was introduced in the Tarim Basin (cf. LKD: viii).

Secure Bactrian loanwords (§3.2.1)

- (2.) *kṣuna* ‘date, reign, regnal year’ ← χῥονο /xšunə/ ← Gr. χρόνος ‘time (period)’. Likewise attested in SA Gandh.
- (3.) *gušura* ‘prince’ ← γοσοβοργο /γυśvūrgə/ < **wisah puθra-ka-* (or **γοσβορο /γυśvūrə/* < **wisah puθra-*). Likewise attested in SA Gandh., including a variant form *gušuraka**. Cf. also Skt. *guśūra-*; *gośūra-*; *gauśūra-*; *gaśūra-*; *giśūra-* ‘idem’.
- (7.) *prigha* ‘(monochrome) damask’ ← πριγγο* /prīṅgə/ (attested πριγγο-οαβγο) < **pir-aina-ka-*. Cf. Skt. *prīṅga-* ‘idem’.
- (11.) *valaga* ‘animal keeper’ ← οαλαγο /wālāgə/ < **wād-āka-* ‘leader’. Possibly attested as a PN in SA Gandh.
- (13.) *šada* ‘pleased, happy’ ← ῥαδο /šādə/ < **čyāta-*. Likewise attested in SA Gandh.
- (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /suylīgə/ (attested βονοσογολιγο ‘Sogdian estate’) < **sugdiya-ka-*. Cf. Skt. *śūlika-* (variant *sūlika-*) ‘idem’.
- (15.) *stora* ‘large animal, horse, camel’ ← στωπο /stōrə/ < **staura-*. Cf. BSkt. *sthora-* ‘pack animal’.

Plausible loanwords from Bactrian (§3.2.2)

- (23.) *picara* ‘(mark of) honour’ ← πιδοβαρο /pidšarə/ (attested πιδο-φαρο) < **pati-fšarV-*. Likewise attested in SA Gandh.
- (28.) *saste* ‘day, elapsed’ ← σαχτο /saxtə/ < **saxta-*. Likewise attested in SA Gandh.

⁶²⁹ The same is true of three Iranian loanwords from an unidentified source (§3.6): (i) *kremere* ‘crimson, scarlet’ (cf. BSkt. *kemerūka-* ‘idem’); (ii) *načira* ‘hunting’ (cf. Epigraphical Skt. *naścīrapati-* ‘person responsible for hunting’); and (iii) *bhaṭaraga* ‘lord, owner’ (also SA Gandh. and cf. Skt. *bhaṭṭāraka-* ‘idem’).

Arguable loanwords from Bactrian (§3.2.3)

- (31.) *aḡini* ‘(broomcorn) millet’ ← *αρζινο /aržinə/ < Pre-Bactrian **arzani*-. Cf. Pashai *aḡín*, Dameli *āḡín*, and other Dardic forms of the same meaning.
- (35.) *oḡ-* ‘to let go’ ← *ωυιρζ- /ōhirz/ < **awa-hṛz*-. Cf. SA Gandh. gerv. *praodīdave* ‘idem’.

Tentative loanwords from Bactrian (§3.2.4)

- (51.) *taravara* ‘sword’ ← *ταρλοβαρο /tarləvārə/ < **tarda-bāra*- ‘splitter’. Cf. e.g. Skt. *taravāri*-, *taravālikā*-, *talavāraṇa*- ‘one-edged sword’ and Hindi *tarwār*; *talwār* ‘idem’.

Secure loanwords from Bactrian or another language (§3.3.1)

- (57.) *ajhate* ‘free, noble’ ← αζαδο /āzādə/ < **āzāta*-. Cf. SA Gandh. *ajhade* in the unpublished loan contract in Bajaur fragment 15 (CKM 278).

Plausible loanwords from Bactrian or another language (§3.3.2)

- (60.) *aṭa* ‘flour’ ← αρδο /ārdə/ < **ārta*-. Cf. Skt. *aṭṭa*- ‘food’, Hindi *āṭā* ‘flour, meal’, etc.
- (64.) *draṅga* ‘office’ ← δραγγο* /draŋgə/ (attested δραγγα in DilT₅ and δδραγγοληπο ‘office-holder’) < **dranga*-. Cf. Skt. *draṅgā*- ‘stronghold, watch-station’.
- (65.) *namata* ‘felt’ ← *ναμαδο /namadə/ < **namata*-. Cf. Pāli *namataka*- ‘a felt covering for a knife’; *nantaka*- ‘dirty or ragged cloth; rag’; BHS *namata*- ‘felt to make a monk’s garment’; *nāmatika*- ‘wearing garments of felt’; Skt. *namata*- / *navata*- ‘felt, woollen stuff’.

Arguable loanwords from Bactrian or another language (§3.3.3)

- (73.) *kojava* ‘rug, blanket’ ← κωσοβο, perhaps /kōśəvə/, but the inner-Iranian etymology is unknown. Cf. Pāli *kojava(ka)*- ‘woollen rug or cover’; BSkt. *kocava*- ‘woollen blanket’; Skt. *kaucapaka*-.

With the possible exception of the toponyms *Khotamṇa*, *Acomena*, and *Remena* (§3.2.2 s.v.; §3.2.3 s.v. *aco*; §3.2.4 s.v.), there is, by contrast, no Bactrian loanword in Niya Prakrit for which there is reason to believe that it was borrowed in the Tarim Basin. While it would be rash to exclude the possibility that Bactrian words were still adopted in the Tarim Basin, the least costly conclusion would therefore seem that most of the Bactrian words were borrowed in Gandhāra and the border area with Bactria.

4.2.2 Old Persian

Four loanwords discussed in Chapter 3 should probably be attributed to Old Persian.⁶³⁰

Secure loanwords from Old Persian (§3.5.1)

- (91.) *gaṃṇa* ‘treasury’ < **gaṃj(h)a* ← OP **ganza*- ‘treasury’ (cf. ZMP *gaṃj*; MMP *ganz*) ← “Median” **ganza*- < OIr. **gazna*-. Cf. Skt. *gaṇja*- ‘idem’.
- (94.) *divira* ‘scribe’ ← OP **dipīra*- (cf. MP *dibīr*) ← Elam. *tup-pi-ra*. Cf. Skt. *divira*- ‘idem’.
- (95.) *dhane*, a unit of measure ← OP **dāna-kā*- (cf. MP *dānag*). Cf. Skt. *d(h)ānakā*-, name of a coin.
- (97.) *mudra* ‘seal’ ← OP **mudrā*- (**muḍrā*-; cf. MP *muhr*). Cf. Skt. *mudrā*- ‘idem’.

These words all belong to the administrative sphere. Therefore, they were probably borrowed into a pre-form of Gāndhārī at the time of the Achaemenid conquest of the region and the accompanying introduction of an Aramaic writing tradition (cf. also §§1.5.1; 2.1.1).

Another common characteristic of these loanwords is the existence of cognates in Sanskrit. Because of this, one can assume that after these words were first adopted in the NW, they spread to other parts of South Asia (cf. Burrow 1973³: 389).

4.2.3 Other Old Iranian languages

As the border between Iranian and Indo-Aryan languages has been situated close to Gandhāra since at least the end of the second millennium BC, Niya Prakrit could also preserve lexical traces of early contact with other Old Iranian languages.⁶³¹ Conclusive proof is missing, however.

⁶³⁰ Some more Iranian loanwords could theoretically have been borrowed from Old Persian but are more likely loans from Bactrian; cf. §3.3.1 s.v. *harga* and §3.3.2 s.v. *draṃga*. In the list below and similar lists elsewhere in this chapter, numerals in round brackets refer to the number of the relevant lemma in Chapter 3.

⁶³¹ Cf. the famous example of Skt. *√śav* ‘to go’, borrowed from an Iranian form related to Av. *ś(ii)auu*- ‘idem’; attributed by Yāska to the Kamboja language (EWAia I: 307; 553; II: 623); and characterised by Wackernagel (1934: 199 = 1953: 360) as “eine vom NW.-Mittelindischen infizierte iranische Form”. Hoffmann (1986 = 1992: 824–828; cf. also EWAia I: 335) has convincingly argued in favour of an Old Nuristani source **kāt’s’a*- ‘the shining thing’ for Ved. *kācá*- ‘gem’ (KS+), which would again prove early linguistic contacts in the Indo-Iranian borderlands.

Perhaps the most promising example of an Old Iranian loanword not coming from Old Persian is the religious title *ratu* if truly to be compared with Av. *ratu-* ‘authority, judge, master’ (an arguable etymology). As pointed out in §3.5.3 s.v., the preservation of the final *-u* in Niya *ratu* would seem to point to a borrowing from an archaic Iranian language, and given the religious connotations of the word, one may be tempted to think of Avestan as the donor language. However, it is far from clear when, why, and how a religious term would have been borrowed from Avestan into the ancestor of Niya Prakrit. If the etymology is correct, it would seem more likely that, as a technical Zoroastrian term, *ratu-* was loaned by Avestan to a currently unidentified Middle Iranian language and from there passed on to Niya Prakrit.

For two other words (see 3.5.1 s.v. *darš-*; §3.5.2 s.v. *khakhordi*), I have indicated that an Old Iranian borrowing is a theoretical option, but arguably less plausible than a loan from Parthian (see below).⁶³²

4.2.4 Parthian

As already indicated in §1.5.1, one expects the Indo-Parthian rule in Gandhāra (1st–3rd century AD) to have resulted in at least a few loanwords from Parthian into the local language(s), including the predecessor of Niya Prakrit. Because of Parthian’s rather conservative phonology, such loanwords are nonetheless challenging to detect since one often cannot distinguish potential Parthian loanwords from borrowings from other Middle (or even Old) Iranian languages.

My loanword corpus includes two words that can be plausibly explained as loans from Parthian but not from another known Middle Iranian language. One word, i.e. *darš-* ‘to load (a beast of burden)’, has to do with transport and could be a loanword from Parth. *darz-* ‘to tie on, load (carrier or pack animal)’ (§3.5.1 s.v.). The other word, i.e. *khakhordi* ‘witch’, belongs to the religious vocabulary and has possibly been borrowed from a feminine equivalent **kaxwardī* of Parth. **kaxward* ‘wizard’ → Arm. *kaxard* ‘idem’ (§3.5.2 s.v.).⁶³³

⁶³² If *masu* ‘wine’ were indeed a loan from **maδu-* < OIr. **madu-* (but see §3.7.1 s.v.), it would probably have to be a borrowing from an Old Iranian language.

⁶³³ One of the more promising candidates for a Parthian borrowing into South Asian Gāndhārī is the PN/title *kṣabura* ← **xšā(h)buhr* < **xšāyaθiya-puθra-* ‘son of the king’. In my article on this word (Schoubben 2022a), I forgot to note that MP *šā(h)buhr* is probably also a Parthian loanword because in inherited words **-θr-* yields MP *-s-* instead of *-hr-* (cf. MP *pus* ‘son’ < **puθra-*). Another point I

4.2.5 Khotanese

The re-examination undertaken in Chapter 3 confirms a point repeatedly made in previous scholarship: despite the geographical proximity of the two languages involved and the historically documented contact between the Shanshan kingdom and Khotan (Høisæter 2020: 357–363; 2023: 419), we find only a restricted number of Khotanese loans in Niya Prakrit.⁶³⁴

The reasons for excluding Khotanese as the source language of a particular loanword are manifold. Because of its distinctive sound changes, one can often exclude Khotanese as the donor on phonological grounds, the most decisive criterion (cf. e.g. §3.2.1 s.vv. *ṣada*; *śpara* / *śpura*; §3.3.2 s.v. *gavaśa*). In other cases, a word that could theoretically originate in Khotanese is also found in South Asian sources, whether in Gāndhārī or Sanskrit; under such circumstances, Khotanese is a less probable source for geographical reasons (cf. e.g. §3.3.2 s.v. *aṭa*). In still other instances, there is no trace of the relevant word in Khotanese, which is unlikely to be due to chance given the reasonably large corpus of Khotanese texts (cf. e.g. §3.3.1 s.v. *harga*; §3.3.2 s.v. *ayana*). Finally, there are two words for which a suitable source is attested in Khotanese, but where the absence of an agreed-upon internal etymology renders it difficult to exclude the possibility of independent borrowings from a third source, whether Iranian or not (cf. §3.6 s.v. *anada*; §3.7.2 s.v. *miṣī*).

For three of the words discussed in Chapter 3, it appears likely that they come from Khotanese. One of them, i.e. *hinajha* ‘army commander’, is a special case because it only occurs in CKD 661 as part of the titulature of the Khotanese king. Had we had more documents in Khotan Prakrit, they may well have contained some more Khotanese loanwords. In the Niya Prakrit documents, the two secure examples are both textile products.

Secure loanwords from Khotanese (§3.5.1)

- (92.) *thavaṃnaga* ‘cloth’ ← Niya **thavaṃna* ← Khot. **thāvna-* (later *thauna-*) < OIr. **tāfna-*

would like to add is that Arm. *ašxarh* ‘land’ ← Early Parth. **xšahr* (later *šahr*) < **xšaθra-* confirms that the Parthian change of **-θr-* to *-hr-* preceded the simplification of initial **xš-* to **š-*, thus showing the same relative chronology as in *kṣabura* ← **xšā(h)buhr*.

⁶³⁴ On the low frequency of Khotanese loanwords in Niya Prakrit, see in particular Bailey (1949a: 121–128) and Weber (1997: 31) *contra* Konow (1936: 232). See further §5.4.

- (96.) *prahoni* ‘garment’ ← Khot. *prahoṇa-* (nom.sg. *prahoṇā*)

With *thavaṃnaga*, the aspirated *th-* speaks in favour of a borrowing from (a prehistoric form of) Khotanese. *prahoni* is to be attributed to Khotanese because of the existence of a corresponding verb *prahaṇy-* ‘to put on (clothing)’ and the absence of cognates in other Middle Iranian languages.

4.2.6 Sogdian

As part of their role as traders on the Silk Road, there was a Sogdian community in Niya and other places on the southern rim of the Tarim Basin.⁶³⁵ These people moreover left some written records of their activities in the form of a few letters contemporaneous with the Niya documents,⁶³⁶ and the Sogdian used in these letters contains a few Prakrit loanwords (listed in de la Vaissière 2005: 76). Borrowings in the opposite direction would thus not be unexpected.

There are indeed Iranian loanwords in Niya Prakrit that could have been borrowed from Sogdian (see especially §3.3, e.g. s.vv. *parivanae*; *pravaṃnaga*; *raji*; *pajhavaṃta*; *vara*). However, there is not one of them that, for phonological or other reasons, needs to have come from Sogdian: in all cases, Bactrian, sometimes also another Middle Iranian language, is an equally plausible donor language.⁶³⁷ This observation does not exclude the possibility of Sogdian loanwords in Niya Prakrit. Yet, Ockham’s razor nevertheless suggests that most of these loanwords are borrowed from Bactrian rather than from Sogdian.

If this argument is correct, one can subscribe to Burrow’s conclusion (LKD: 111 s.v. *milima*) that “the evidence seems to be against Sogdian influence in these [i.e. the Niya] documents”.

4.2.7 “Indo-Scythian”

Conforming to the methodology outlined in §3.1.6, I have avoided postulating loanwords from unattested Middle Iranian languages in Niya Prakrit, even though their existence is not to be excluded *a priori*. Yet, a few words need to

⁶³⁵ For Sogdian trading activities in the region, see recently Zh. Zhang (2019) and Høisæter (2020: 370–374; 405–413).

⁶³⁶ See Sims-Williams & Bi (2018) and Sims-Williams (2020; 2023: 25ff.).

⁶³⁷ Chams Bernard kindly informed me that he came to the same conclusion when studying Middle Iranian loanwords in Tocharian. Many of them can be Sogdian, but none needs to be Sogdian rather than, for instance, Bactrian.

be said about potential loanwords from “Indo-Scythian” (“Indic Śaka”), a not directly attested Middle Iranian language allegedly closely related to Khotanese and supposed to have left some traces in the vocabulary of Gāndhārī and other Indo-Aryan languages (see §1.5.1).

One of the prime candidates for a loanword from this “Indo-Scythian” language has long been *saste* ‘day, elapsed’, a word attested in Gāndhārī inscriptions and the Niya documents. *saste* has been considered a loan from a cognate of Khot. *sasta-* ‘appeared’ that had undergone a semantic shift from ‘shined’ to ‘day’. As *saste* typically occurs in Kuṣāṇa sources, I have argued in §3.2.2 s.v. that it is more likely borrowed from Bactr. σαχτο /saxtə/ ‘day’. Accordingly, one can remove *saste* from the dossier of potential loanwords from “Indo-Scythian”.

Interestingly, these so-called “Indo-Scythian” loanwords generally cluster in Kuṣāṇa inscriptions. This is, for instance, the case with the famous term *hora* ‘donation’,⁶³⁸ which has often been assumed to come from “Indo-Scythian” **hora-* ‘gift’ < **fra-bāra-* with the same phonological development as in Khot. *haur-* (also *hor-*) ‘to give’ < **fra-bar-* (SGS: 155).⁶³⁹ In the light of our now much-increased knowledge of Bactrian, it therefore seems a fruitful topic for further research to investigate whether (some of) these “Indo-Scythian” loanwords could alternatively have been borrowed from Bactrian.⁶⁴⁰

For now, it suffices to conclude that at least Niya Prakrit provides no conclusive indication of contact with this “Indo-Scythian” language.

⁶³⁸ Attested in CKI 328. See also *horaka* ‘donor’ in CKI 48 and dir.sg. *horamurto* ‘donation master’ in CKI 149 (2x).

⁶³⁹ See e.g. Lüders (1913: 420ff. = 1940a: 249ff.; 1961: 95ff.) and KI (cxviif.; 37f.; 148).

⁶⁴⁰ Burrow’s (1975) argument about the “Indo-Scythian” origin of the Skt. word *hoḍha-* ‘stolen property’ may also need to be reconsidered. He argued that *hoḍha-* was borrowed from “Indo-Scythian” **hoṣṭa-*, a cognate of Khot. *hoṣṭa-* ‘stolen’, verbal adj. of *haus-* / *hoś-* ‘to steal’ < **fra-wāzaya-* (SGS: 155f.). Burrow’s etymology needs the assumption that this word was borrowed into a midland Prakrit as **hoṭha-* where it could undergo further lenition to **hoḍha-* (cf. also EWAia III: 546). Yet, the same word may now be attested in Gāndhārī as *hoḍe* / *hōṛe* / in BC 11 recto 40 (Schlosser 2022: 136f.; 218; 292), where an original cluster **-ṣṭ-* should have been preserved as such, written with 𑖦 *ṭha*.

4.2.8 A preliminary stratification of the loanwords

As far as feasible with the often ambiguous data, the preceding subsections tried to find out which Old and Middle Iranian languages lent words to Niya Prakrit or its predecessor. On top of the many Bactrian loanwords, it was possible to identify a limited number of borrowings from Old Persian and Khotanese. For other possible donor languages, the situation is less clear. Parthian and Sogdian may have contributed a few loanwords, but it is not possible to state this confidently with the evidence at hand. Decisive data for contact with unattested Middle Iranian languages is lacking altogether. Importantly, most of the loanwords may have been adopted before the arrival of Niya Prakrit in the Tarim Basin.

This subsection briefly relates these conclusions to what we know about the history of Gandhāra and the role the ancestor of Niya Prakrit played therein (cf. §1.5). The aim is to develop an admittedly still preliminary stratification of the Iranian loanwords in Niya Prakrit.

The oldest identifiable layer is the Old Persian loanwords, which, given their semantics, are clearly the result of the Achaemenid conquest of (parts of) the Indus Valley and the establishment of an Aramaic writing tradition there (6th–4th century BC) (cf. §4.2.2). Such loanwords may have been preserved, together with legal formulae and other features of this Aramaic writing tradition (cf. §1.5.1), in an administrative jargon of Gāndhārī used by local bureaucracies and monasteries, of which Niya Prakrit was to be the eventual descendant.

Later invasions of Gandhāra by people of Iranian descent from the 1st century BC onwards resulted in the adoption of additional borrowings. Such is possibly the case with the Indo-Parthians (cf. §4.2.4), but certainly so with the Kuṣāṇas (1st–3rd century AD), to whose reign the Bactrian loanwords in Niya Prakrit can safely be attributed (cf. §4.2.1; §§7.2–7.3).

For geographical reasons, contacts with Khotanese and Sogdian are more likely to have happened after the establishment of Niya Prakrit in the Tarim Basin, i.e. in the 3rd century AD at the latest. The evidence for Khotanese loanwords is scarce, however, and with the exception of Khotan Pkt. *hinajha* ‘army commander’, the two secure loanwords from Khotanese discovered so far, i.e. *thavaṃnaga* ‘cloth’ and *prahoni* ‘garment’, have no relation to administration or politics (cf. §4.2.5). Instead, they are cultural borrowings of textile products whose style and/or design may have been particularly associated with Khotan. I could not find loanwords securely ascribable to Sogdian.

4.3 Phonological correspondences and Bactrian phonology

This section examines the phonological integration of the Iranian loanwords in Niya Prakrit that are probably (§3.2) or possibly (§3.3) loaned from Bactrian.⁶⁴¹ The aims are (i) to evaluate which correspondences and hence which etymologies are more secure than others; (ii) to explain in more detail the rationale behind certain substitutions; and (iii) to see which conclusions about Bactrian phonology (or phonetics) can be drawn from them.

I start with a discussion of vowel correspondences (§§4.3.1–4.3.7). Next, I will treat the Bactrian graphemes whose phonological interpretation is most debated, viz. the triad -β-, -γ-, and -δ- (§§4.3.8–4.3.13) and the sibilants/affricates -σ-, -ϖ-, and -ζ- (§§4.3.14–4.3.21). I will then continue with the rendering of Bactr. -o- /w/ and -v- /h/ (§§4.3.22–4.3.23); the substitution of some clusters involving -ρ- /r/ (§§4.3.24–4.3.26); and a few remaining special topics (§§4.3.27–4.3.29).

Each subsection contains a list of the secure and plausible etymologies relevant to the topic discussed.⁶⁴² Arguable and tentative etymologies are listed when they require separate discussion, e.g. when they exhibit a sound correspondence not found among the secure and plausible evidence. The sound correspondence in question is indicated in boldface.

4.3.1 -α- /ǎ/

No distinction is made between short /a/ and long /ā/ in the Graeco-Bactrian script; both are written with <α> (§2.2.2).

In my loanword corpus, Bactrian short /a/ and long /ā/ are both rendered in Niya Prakrit as -a- /ǎ/: a secure example of -α- /a/ → -a- is *nokṣari* ← *νωγοσαρλι /nōgsarlī/; a secure instance of -α- /ā/ → -a- is *vaga* ← βαγο /vāgə/. More examples can be found in the list below.⁶⁴³

⁶⁴¹ I will not discuss obvious substitutions of the type Bactr. -μ- /m/ → Niya -m-.

⁶⁴² In §4.3.1 (on -α- /ǎ/), the list does not include the plausible Bactrian etymologies (§3.2.2) and the words possibly borrowed from Bactrian (§3.3) because the secure examples are sufficient for drawing conclusions.

⁶⁴³ See additionally §3.2.2 s.vv. *amtagi*; *are*; *āspista*; *nihamñ-*; *picara*; *makā*; *yatma*; *vaṣe*; *saste*, §3.2.3 s.vv. *ambukaya*; *aco*; *aḍini*; *atga*; *avalikā*; *aṣgara*; *caṃkura*; *nihala*; *picav-*; *vaṣḍhiga*; *ṣapga*, §3.2.4 s.vv. *apcira*; *taravara*; *laṭhana*; *ṣvaṭhamgha* / *ṣoṭhamgha*, §3.3.1 s.vv. *ajhate*; *spāṣa*; *harga*, §3.3.2 s.vv. *aṭa*; *aṣana*; *gavaṣa*; *tavastaga*; *draṃga*; *namata*; *paraṣa*; *parivanae*; *pravaṃnaga*; *maravara*; *raji*, §3.3.3 s.vv. *agiṣḍha*; *ageta*; *pajhavaṃta*; *rasaṃna*; *vara*; *ṣaṃna*; *hastama*, and §3.3.4 s.v. *ujhmayuga*. In the case of the arguable etymology *caṃkura* ←

Secure loanwords from Bactrian (§3.2.1)

- (1.) *aviṃdama* ‘fine, recompense’ ← αβινδαμο /əvindāmə/ derived from *αβιν- < *upa-ayanā-
- (6.) *nokṣari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarī/ (attested βιδδιγονωγοσαρλο ‘second new year’) < *nawa-ka-sardī-
- (8.) *laṣi* ‘gift’ ← *λαβνι /lāšnī/ (attested λαβνο) < *dāšinī-
- (9.) *lastana* ‘dispute, lawsuit’ ← λαστανο /lāstānə/ < *dāta-stāna-
- (10.) *vaga* ‘rent (paid for the use of land)’ ← βαγο /vāgə/ ‘share, part, portion’ < *bāga-
- (11.) *valaga* ‘animal keeper’ ← οαλαγο /wālāgə/ < *wād-āka- ‘leader’
- (13.) *ṣada* ‘pleased, happy’ ← βαδο /šādə/ < *čyāta-
- (15.) *storabala* ‘animal flock’ ← στωροβαλο /stōrəbalə/ (or /stōrəvalə/) < *staūra-pada-; *storavara* ‘horse driver’ ← *στωροβαρο /stōrəvārə/ < *staūra-bāra-; *storvana* ‘groom’ ← *στωροβανο /stōrvānə/ < *staūra-pāna- (discussed s.v. *stora* ‘large animal, horse, camel’).

In one instance, the scribe used a length mark to indicate the long vowel /ā/ unambiguously, i.e. *tāvastaga* (otherwise spelled with -ava-) ← *ταβασταγο /tāvastəgə/ or a cognate thereof.

Plausible loanwords from Bactrian or another language (§3.2.2)

- (63.) *tavastaga* (20x -ava-; 1x -āva-) ‘carpet’ ← *ταβασταγο /tāvastəgə/ < *tāpasta-ka-

Besides, one can witness a change of -oa- /wā/ to Niya -o- in the case of *Khotamṇa* and *tomga*.

Plausible loanwords from Bactrian (§3.2.2)

- (20.) *Khotamṇa* ‘Khotan’ ← *χοαδανο /xwadanə/ (or *χοατανο /xwatanə/) ← Khot. *hvatana*-

Arguable loanwords from Bactrian (§3.2.3)

- (38.) *tomga*, a title ← *τ(ο)οαγγο /t(u)wāṅgə/ < *tuwāna-ka- ‘strong’

This substitution, which has a parallel in the non-Bactrian loanword *khakhordi* ‘witch’ ← *kaxwardī (a plausible etymology; §3.5.2 s.v.), can be accounted for on the assumption that the observed loss of -w- was accompanied by a colouring of the vowel -ā- to -o- (cf. infra). One may further compare the parallel change of -va- to -o- in *ṣvaṭhaṃgha* to *ṣoṭhaṃg(h)a* and

*ζιαγγαρο /z(i)yāṅgarə/, -αp- /ar/ would be rendered as Niya -ur-, for which see the discussion §3.2.3 s.v. On the possibility that Bactr. -ηνα- /ēha/ was substituted with Niya -e-, cf. §3.2.3 s.v. *aco* (on *Acomena*); §3.2.4 s.v. *Remena*; §4.3.23.

the royal name *Aṃkvaga* / *Aṃgvaka* (also *Aṃguvaka*) to *Aṃgo(ṃ)ka* (LKD: §7).

Two arguable etymologies, i.e. *aco* and *badho*, point to a similar sound substitution of Bactrian word-final -αοο /āwə/ with Niya -o (also -ova).

Arguable loanwords from Bactrian (§3.2.3)

- (30.) *aco* ‘frontier, border post’ ← *αδοῖαοο /adšāwə/ < *ati-čyāwa-
- (43.) *badho* (4x -o; 4x -ava; 2x -ova) ‘pledge, mortgage’ ← *βαμδαοο /bāmdāwə/ ← *βαμδο ‘loaned’ (βαμδιγο ‘loan’) < *apāmita- + suffix -αο

badho also has a variant spelling that ends in -ava, which may be a more archaic form which stayed closer to the assumed Bactrian preform. The forms in -o, on the other hand, can be explained when again assuming a colouring of -ā- to -o- next to the labial -w-.⁶⁴⁴

4.3.2 -α- /ə/

As we saw in §2.2.2, Graeco-Bactrian <α> does not always stand for /ǎ/; the same grapheme may be used to write /ə/.

When standing for /ə/, -α- is again rendered as Niya -a-, as made clear by the list below.⁶⁴⁵

Secure Bactrian loanwords (§3.2.1)

- (1.) *aviṃdama* ‘fine, recompense’ ← αβινδαμο /əvindāmə/ derived from *αβιν- < *upa-ayanā-

Arguable Bactrian loanwords (§3.2.3)

- (33.) *avalika* ‘swaddle’ when ← *αβαλιῖκο /əvališkə/ < *upa-dṛṣṭa-ka- rather than ← *αβολιῖκο /avəliškə/ < *abi-dṛṣṭa-ka-
- (40.) *pake* ‘allotment, share’ ← *παῖκο /pəškə/ < *piṣṭa-ka-

Arguable loanwords from Bactrian or another language (§3.3.3)

- (74.) *namanaga* / *namamniya* (5x -aga; 8x -iya; 6x -i) ‘exchange’ ← *ναμανο /nəmānə/ < *ni-mānV-, *ναμαναγο /nəmānəgə/ < *ni-māna-ka-, or *ναμανιγο /nəmānigə/ < *ni-māni-ka-

⁶⁴⁴ Cf. also the similar type of substitution seen in TA *pārko* ← Bactr. φρογαοο /frəyāwə/ ‘profit’ < *fra-gāwa- (BD II: 275; Pinault 2008: 229; DTTA: 278).

⁶⁴⁵ The list does not include the word-final sequence /əgə/ < *-aka-, which can be alternatively spelled as -αγο or -ογο. Also here, /ə/ is normally rendered as -a- (cf. e.g. §3.3.2 s.v. *tavastaga*), but there are two tentative etymologies where *-ογο /əgə/ may be rendered as -uga, i.e. *lastuga* (§3.2.4) and *ujhmayuga* (§3.3.4).

This substitution is easy to understand, as Niya *-a-* represents itself a type of schwa (cf. §2.1.1).

If the tentative etymology of *ṣvaṭhaṃgha* / *ṣoṭhaṃgha* is correct, a (likely) unaccented initial schwa would have been dropped during the borrowing process, perhaps due to the length of the word.

Tentative Bactrian loanwords (§3.2.4)

- (56.) *ṣvaṭhaṃgha* / *ṣoṭhaṃgha* ‘finance officer’ ← *αἱβαρασταγγο /*əzvarstāṅgə*/ < **uz-bara-stān-āna-ka-* ‘the person in charge of the place disbursements are stored’ with haplology of *-ān-*

4.3.3 -ε- /e/

The short vowel -ε- /e/ is, outside nominal morphology, a rare phoneme in Bactrian, and there are no clear-cut examples of -ε- /e/ among the Bactrian loanwords in Niya Prakrit. The only relevant word is the unit of measurement *milima*, whose first -i- may render the -ε- /e/ in Bactr. *μελιμνο ← Gr. μέδιμνος.

Plausible Bactrian loanwords (§3.2.2)

- (25.) *milima*, a unit of measure when ← *μελιμνο /*mēlimnə*/ rather than ← *μιλιμνο /*milimnə*/ ← Gr. μέδιμνος

However, *milima* is no compelling piece of evidence that Bactr. -ε- /e/ could be substituted with Niya -i- since one could alternatively posit the Bactrian source form as *μιλιμνο (see §3.2.2 s.v.). In §4.4.3, I will moreover argue that the Bactrian dir.pl. (or obl.sg.) in -ε /e/ was simply rendered as -e in Niya Prakrit.

4.3.4 -η- /ē/

One secure (*jheniga*) and one plausible (*jenavida*) etymology point to the unremarkable conclusion that the Bactrian long vowel -η- /ē/ is substituted with -e- in Niya Prakrit.⁶⁴⁶

Secure Bactrian loanwords (§3.2.1)

- (4.) *jheniga* ‘in charge of, under the care of’ ← *ζηνιγο /*zēnīgə*/ (attested ζινιγο) < **zainiya-kā-*

⁶⁴⁶ For arguable and tentative examples of the same correspondence, see §3.2.3 s.v. *aco* (toponym *Acomena*); *leṣ-*, §3.2.4 s.v. *kilme* (also compound *vegakilme*); *reda*; *Remena*, and §3.3.3 s.v. *ageta*.

Plausible Bactrian loanwords (§3.2.2)

- (21.) *jenāvida* ‘chief of the armour’ ← ζηνοβιδο /zēnəvidə/ < *zaina-pati-

4.3.5 -i- /ĩ/

The Graeco-Bactrian grapheme <ι> writes both short /i/ and long /ĩ/;⁶⁴⁷ both phonemic values are substituted with -i- in Niya Prakrit, as demonstrated by -*vida* ← -βιδο /vidə/ < *-pati-, *jheniga* ← *ζηνιγο /zēnīgə/ < *zainiya-kā-, and other examples listed infra.⁶⁴⁸

Secure loanwords from Bactrian (§3.2.1)

- (1.) *aviṇḍama* ‘fine, recompense’ ← αβινδαμο /əvīndāmə/ derived from *αβιν- < *upa-ayanā-
- (4.) *jheniga* ‘in charge of, under the care of’ ← *ζηνιγο /zēnīgə/ (attested ζινιγο) < *zainiya-kā-
- (5.) *daśavida* ‘chief of ten households’ ← λασοβιδο* /lasəvidə/ (attested λασοβιδιγο) < *dasa-pati- with adaptation of the first part of the compound
- (6.) *nokṣari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarlī/ (attested βιδδιγονωγοσαρλο ‘second new year’) < *nawa-ka-sardī-
- (7.) *prigha* ‘(monochrome) damask’ ← πριγγο* /prīṅgə/ (attested πριγγο-οαβγο) < *pir-aina-ka-
- (8.) *laṣī* (also 3x *laṣā*) ‘gift’ ← *λαβνι /lāšnī/ (attested λαβνο) < *dāṣinī- (this reconstruction with final *-ī is admittedly debatable; cf. §3.2.1 s.v.)
- (12.) *śadavida* ‘chief of a hundred households’ ← *σαδοβιδο /sadəvidə/ < *sata-pati- with adaptation of the first part of the compound
- (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /suylīgə/ (attested βονοσογολιγο ‘Sogdian estate’) < *sugdiya-ka-

Plausible loanwords from Bactrian (§3.2.2)

- (19.) *aśpista* ‘lucerne’ ← *ασπιστο /aspištə/ < *aspa-sti-
- (21.) *jenāvida* ‘chief of the armour’ ← ζηνοβιδο /zēnəvidə/ < *zaina-pati-
- (22.) *nihaṃñ-* ‘to deposit, to put down’ ← *νιτανζ- /nihanz/ < *ni-ṭhanja-
- (23.) *picara* ‘(mark of) honour’ ← *πιδοραο /pidšarə/ (attested πιδο-φαρο) < *pati-fšarV-

⁶⁴⁷ Especially but not exclusively in Kuṣāṇa sources, the digraph <ει> can also be used to write /ĩ/ (or sometimes /i/); see §2.2.2.

⁶⁴⁸ That *-iya-ka- yields /īgə/ is confirmed by Kuṣāṇa Bactr. λαδειγο ‘righteous’ < *dāt-*iya-ka-*, whose <ει> unambiguously points to a long vowel. For arguable and tentative etymologies in which -i- /ĩ/ is rendered as -i-, cf. §3.2.3 s.vv. *aḍini*; *avalīka*; *tim-*; *nihala*; *picav-*; *piro*; *muṣḍhaṣi*; *vaṣḍhiga*; *sujinakirta*, §3.2.4 s.vv. *apcira*; *kilme*, and §3.3.3 s.v. *agiṣḍha*. The arguable etymology *oḍ-* ‘to let go’ ← *ωυιρζιδο /ōhirzīdə/ (§3.2.3 s.v.) is a special case, on which cf. §4.3.23.

- (25.) *milima*, a unit of measure ← *μελιμνο /melimnə/ or *μυλιμνο /milimnə/ ← Gr. μέδιμνος

Plausible loanwords from Bactrian or another language (§3.3.2)

- (70.) *raji* ‘cloak, woollen cloth’ ← *ραγι /rayzi/ (attested ραγαζο) < *ragzi-

One etymology, i.e. *lastuga* ← *λιστογο, does not conform to this rule, which is one of the reasons to label it “tentative”.

Tentative loanwords from Bactrian (§3.2.4)

- (55.) *lastuga*, textile product ← *λιστογο /lištagə/ < *dasta-ka- ‘of the hand’

Yet, as I discuss in §3.2.4 s.v., it seems not impossible that the -ι- /i/ in *λιστογο was phonetically realised as a central vowel (e.g. [ɨ]) and therefore substituted with Niya -a-, itself a central vowel too (§2.1.1).

4.3.6 -ω- /ō/

There are two secure examples of the phonologically straightforward correspondence Bactr. -ω- /ō/ → Niya -o-.⁶⁴⁹

Secure loanwords from Bactrian (§3.2.1)

- (6.) *nokṣari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarlī/ (attested βιδδιγονωγοσαρλο ‘second new year’) < *nawa-ka-sardī-
- (15.) *stora* ‘large animal, horse, camel’ ← στωρο /stōrə/ < *staura-

The arguable etymology *sujinakirta* may be an exception to this correspondence.

Arguable loanwords from Bactrian (§3.2.3)

- (48.) *sujinakirta* ‘needlework, embroidery’ ← *σωσινοκιρδο /sōtsinəkirdə/ < *saučanya-kṛta- or *σοσινοκιρδο /sŭtsinəkirdə/ < *sŭčanya-kṛta-

See, however, the discussion in §3.2.3 s.v., where it is pointed out that the Bactrian preform of *sujinakirta* could perhaps be posited as *σοσινοκιρδο /sŭtsinəkirdə/ < *sŭčanya-kṛta- and not as *σωσινοκιρδο /sōtsinəkirdə/ < *saučanya-kṛta-.

4.3.7 -o- /ŭ/

In the Graeco-Bactrian script, <o> can, amongst other things, stand for both short /u/ and long /ū/.⁶⁵⁰

⁶⁴⁹ For arguable etymologies in which Bactr. -ω- /ō/ → Niya -o-, see §3.2.3 s.vv. *oḡ-*; *piro* and §3.3.3 s.v. *kojava*.

⁶⁵⁰ For spellings with the digraph <ou>, see §2.2.2.

The three secure etymologies listed below show that Bactrian short /u/ could be rendered as Niya -u-.⁶⁵¹

Secure Bactrian loanwords (§3.2.1)

- (2.) *kṣuna* ‘date, reign, regnal year’ ← χῑνο /xšunə/ ← Gr. χρόνος ‘time (period)’
- (3.) *guśura* (also SA Gandh. *guśuraka**) ‘prince’ ← γοσοβοργο /γυśvǔrgə/ < **wisah puθra-ka-* (or *γοσβορο /γυśvǔrə/ < **wisah puθra-*)
- (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /suyliɡə/ (attested βονοσογολιγο ‘Sogdian estate’) < **sugdiya-ka-*

There is no secure evidence for the rendition of Bactrian long /ū/ in Niya Prakrit, as the <o> in between -β- and -ργ- in γοσοβοργο → *guśura* (*guśuraka**) can be either long or short (cf. supra). Yet, one arguable etymology, that of *aṃbukaya*, would suggest that long /ū/ was rendered in the same way in Niya Prakrit as its short counterpart.

Arguable Bactrian loanwords (§3.2.3)

- (29.) *aṃbukaya*, a title ← αμβουκαιο /ambūkā(y)ə/ (?) with unknown etymology

A somewhat peculiar case is *śpara* / *śpura* ← *σπορρο /spurrə/, the only example in the loanword corpus where Bactr. -o- /u/ derives from OIr. *-ǵ- in a labial environment.⁶⁵²

Secure Bactrian loanwords (§3.2.1)

- (16.) *śpara* / *śpura* ‘full, completely’ ← *σπορρο /spurrə/ (attested (α)σπορο) < **us-pr̥na-*

Because the -o- /u/ results here from *-ǵ-, it is conceivable that its phonetic realisation was as a central vowel (e.g. IPA [ʊ]). This hypothesis could, as argued in §3.2.1 s.v., perhaps explain why Niya *śpara* / *śpura* can be written with either -u- or -a-, the latter also a central vowel (§2.1.1).

4.3.8 -β- /v/

In §2.2.3.3, we saw that the default phonological value of the Graeco-Bactrian grapheme <β> is /v/ but that one may assume <β> to stand for /b/ in the position after a nasal and when initial <β> continues OIr. *VpV-. These

⁶⁵¹ For arguable and tentative etymologies showing the same correspondence, see §3.2.3 s.v. *muṣḍhaṣi* and §3.3.4 s.v. *ujhmayuga*.

⁶⁵² A second instance could be the PN *Vhurmajheva*, whose element *Vhurma-* may represent Bactr. φορμα- < **fra-mā(na)-*, which may have passed through an intermediary stage with *fǵr- (see §3.4.2 s.v.).

deductions were based on language-internal data and are subject to two caveats: (i) evidence that also (originally) postvocalic OIr. **p* yielded Bactr. /v/ is restricted to the late Manichaean fragment; and (ii) the idea that <β> from **VpV-* spells /b/ depends on the chronology of procope in Bactrian. In this and the subsequent section, I argue that the picture provided by the loanword corpus is consistent with these earlier conclusions.⁶⁵³

Bactr. -β- in (originally) postvocalic position is normally rendered as Niya -v-, also when -β- continues OIr. **p*. The secure examples of this correspondence are *aviṃdama*, *daśavida*, *śadavida*, and *storvana*.⁶⁵⁴

Secure loanwords from Bactrian (§3.2.1)

- (1.) *aviṃdama* ‘fine, recompense’ ← αβινδαμο /əvīndāmə/ derived from **αβιν-* < **upa-qyanā-*
- (5.) *daśavida* ‘chief of ten households’ ← λασοβιδο* /lasəvidə/ (attested λασοβιδιγο) < **dasa-pati-* with adaptation of the first part of the compound
- (12.) *śadavida* ‘chief of a hundred households’ ← **σαδοβιδο* /sadəvidə/ < **sata-pati-* with adaptation of the first part of the compound
- (15.) *storavara* ‘horse driver’ ← **στωροβαρο* /stōrəvārə/ < **staura-bāra-*; *storvana* ‘groom’ ← **στωροβανο* /stōrvānə/ < **staura-pāna-* (discussed s.v. *stora* ‘large animal, horse, camel’)

Plausible loanwords from Bactrian (§3.2.2)

- (21.) *jenavida* ‘chief of the armour’ ← ζηνοβιδο /zēnəvidə/ < **zaina-pati-*

Secure loanwords from Bactrian or another language (§3.3.1)

- (58.) *spāṣavaṃna* ‘guard, watchman’ ← **σπασοβανο* /spāsəvānə/ < **spāsa-pāna-* (discussed s.v. *spāṣa* ‘watching, guarding’)

Plausible loanwords from Bactrian or another language (§3.3.2)

- (63.) *tavastaga* ‘carpet’ ← **ταβασταγο* /tāvastəgə/ < **tāpasta-ka-*
- (67.) *parivanae* ‘burden, provisions’ ← **παροβανδαγο* /parəvandəgə/ < **pari-banda-ka-* ‘bound around (the beast of burden)’
- (69.) *maravara* ‘finance officer’ ← **υμαροβαρο* /hmārəvārə/ < **hmāra-bāra-*

⁶⁵³ I will not treat the position after a nasal, on which see §3.2.3 s.v. *ambukaya*; §3.3.3 s.v. *hastama*; §4.3.29.

⁶⁵⁴ For arguable etymologies in which -β- < **p* → Niya -v-, cf. §3.2.3 s.v. *avaliḱa*; *piro*. The tentative etymology *apcira* (also 1x *apacira*; 1x *avacira*) ← **αβο σι(υ)πο* /āvə tsi(h)rə/ < **āp-* ‘water’ + **čiθra-* ‘seed’ would be a special case because of its spelling variation between -p- and -v-; see §3.2.4 s.v. For arguable and tentative examples of -β- < **b* → Niya -v-, see §3.2.4 s.v. *taravara* and §3.3.3 s.v. *pajhavaṃta*.

These etymologies could be seen as a confirmation that the change of OIr. **p* to Bactr. /v/ had already been completed in Kuṣāṇa Bactrian, but a word of caution is in place. Because the OIA intervocalic labial obstruents *-p-* and *-b-* also lenited to Niya *-v-* (§2.1.2), one cannot entirely exclude that Bactr. *-β-* from OIr. **-p-* still stood for /b/, and that the lenition to /v/ happened after the adoption of the word into Niya Prakrit, in the same way that Bactr. *-γ-* /g/ can be substituted with Niya *-g-* /γ/ (see §4.3.11).

If, as suggested by the *-b-* in *storabala*, the *-β-* in Bactr. στωροβαλο ‘animal (flock)’ < **staūra-pada-* stands for /b/, this is not necessarily a counter-argument against the idea that **-b-* < OIr. **-p-* had already lenited to /v/ in Kuṣāṇa Bactrian, as a compound boundary sometimes blocks lenition in Bactrian.⁶⁵⁵

One secure etymology, i.e. *guśura* (*guśuraka**), may moreover provide additional evidence that Bactr. <β> from OIr. **-p-* already stood for /v/ in Kuṣāṇa times.

Secure loanwords from Bactrian (§3.2.1)

- (3.) *guśura* (also SA Gandh. *guśuraka**) ‘prince’ ← γοσοβοργο /γυśvürgə/ < **wisah puθra-ka-* (or **γοσβορο* /γυśvūrə/ < **wisah puθra-*)

It seems namely more likely that the *-ś-* in *guśura* is a simplification of Bactr. /śv/ than that it renders Bactr. ***/śb/* (cf. §3.2.1 s.v.).

When resulting from OIr. **b*, Bactr. *-β-* is also rendered as *-v-* in initial position, as shown by the secure etymology *vaga* ← βαγο < **bāga*.⁶⁵⁶

Secure loanwords from Bactrian (§3.2.1)

- (10.) *vaga* ‘rent (paid for the use of land)’ ← βαγο /vāgə/ ‘share, part, portion’ < **bāga-*

A final comment is due on the substitution of Bactr. *-βγ-* /vg/ with Niya *-pg-* required to interpret Niya *yapga* as a loan from Bactr. οαβγο* /wāvgə/ < **wāba-ka-* (and the PN *Apge* as representing Bactr. **αβγο* /āvgə/ < **āpa-ka-*; §3.4.2 s.v.).

⁶⁵⁵ Cf. e.g. νακανδο ‘dug’ < **ni-kanta-*, where OIr. **-k-* is continued as *-κ-* /k/.

⁶⁵⁶ For arguable and tentative examples of this correspondence, cf. §3.2.3 s.v. *vaśdhiga*; §3.2.4 s.v. *kilme* (on *vegakilme*); §3.3.3 s.v. *vara*. See also §3.2.4 s.v. *svaṭhaṃgha* / *ṣoṭhaṃga* for a tentative example of *-ζβ-* /zv/ being borrowed as *śv-*.

Arguable loanwords from Bactrian (§3.2.3)

- (47.) *yapga* ‘weaver’ ← *οαβγο** /wāvgə/ (attested *πριγγοοαβγο*) < *wāba-ka-

Since this is not a straightforward substitution, I classified the etymology of *yapga* as “arguable”. Although peculiar, the required fortition does not seem impossible, however, since (i) there is no cluster ***/vg/* in Niya Prakrit and (ii) the *-p-* in *yapga* may stand for a voiced /b/ in the same way that the *-k-* in *nokṣari* ← **νωγοσαρλι* /nōgsarli/ seems to represent a voiced /g/ (cf. §4.3.11).⁶⁵⁷

4.3.9 -β- /b/

In one case, i.e. *badho* ← **βαμδαοο*, initial β- corresponds to Niya *b-*.

Arguable loanwords from Bactrian (§3.2.3)

- (43.) *badho* ‘pledge, mortgage’ ← **βαμδαοο* /bāmdāwə/ ← **βαμδο* ‘loaned’ (cf. *βαμδιγο* ‘loan’) < *apāmita- + suffix -ao

This correspondence is understandable when one assumes that voicing of intervocalic voiceless stops and the procope of the initial **a-* in **apāmita-* preceded the lenition of **-b-* < OIr. **-p-* to Bactr. /v/ treated above, for in that case the β- in *βαμδαοο* would stand for /b/ (see §3.2.3 s.v.).⁶⁵⁸

On the intervocalic *-b-* in *storabala* ‘animal flock’ ← *στωροβαλο* /stōrəbalə/ (or /stōrəvalə/) < **staura-pada-*, see the preceding subsection.

4.3.10 -γ- /γ/

As pointed out in §2.2.3.2, Bactr. <γ> probably represented two phonological values, i.e. /g/ when found after a nasal or deriving from OIr. **k* and /γ/ in all

⁶⁵⁷ The idea that the *-p-* in the cluster *-pg-* stands for a voiced consonant is strengthened by the observation that there is no attestation of a cluster ***/bg-*, whereas *-pg-* is frequently attested in loanwords and foreign names. One of the names containing a cluster *-pg-* is *Yapgu*, whose *-p-* probably also writes a voiced /b/ since *Yapgu* likely represents Bactr. *αβγο* (BD II: 215). If the *-βγ-* in *αβγο* stands for /vg/—as perhaps suggested by its being rendered in Gāndhārī as *yavuga-* (also *yavua-*; *yaüa-*) on coins of Kujula Kadphises—*Yapgu* ← *αβγο* may even provide a parallel for the fortition required to derive *yapga* out of *οαβγο** /wāvgə/.

⁶⁵⁸ To my knowledge, there is no counter-evidence against this relative chronology. In fact, the absence of further lenition in the case of Bactr. /g/ < OIr. **-k-* and (probably) /d/ < OIr. **-t-* could perhaps support the hypothesis that the lenition of **-b-* < OIr. **-p-* to Bactr. /v/ was a somewhat later development.

other cases. This section briefly discusses how Niya Prakrit substituted /γ/ in initial position and intervocalically.⁶⁵⁹ The substitution of /g/ and the cluster /ŋg/ will be treated in the next sections (§§4.3.11–4.3.12).

The loanword corpus contains three examples of Bactr. /γ/ in initial position.

Secure loanwords from Bactrian (§3.2.1)

- (3.) *guśura* (also SA Gandh. *guśuraka**) ‘prince’ ← γοσοβοργο /γυśvürgə/ < **wisah puθra-ka-* (or *γοσβορο /γυśvūrə/ < **wisah puθra-*)

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* ‘family estate’ ← *γῖρλομηνο /γῖrlmēhə/ < **gr̥da-maiθa-* ‘dwelling of a household’

Plausible loanwords from Bactrian or another language (§3.3.2)

- (62.) *gavaśa* ‘deer, stag’ ← *γᾰοαζνο /γawaznə/ < **gawazna-*

The apparent fortition of Bactr. γ- /γ/ to Niya *g-* /g/ in *guśura* and possibly *gavaśa* is, as argued in §3.2.1 and §3.3.2 s.vv., probably due to the absence of initial /γ/ in Niya Prakrit. The *k-* in *kilme* could, depending on the correctness of this tentative etymology, be the result of initial devoicing, for which see §4.3.28.

There is one instance of Bactr. /γ/ in intervocalic position, i.e. *vaga*.

Secure loanwords from Bactrian (§3.2.1)

- (10.) *vaga* (2x *-g-*; 3x *-k-*) ‘rent (paid for the use of land)’ ← βαγο /vāγə/ < **bāga-*

As expected, Bactr. /γ/ corresponds here to Niya *-g-* /γ/, but there is also a variant spelling with *-k-* that is attested three times. This variant is probably interpretable as a hypercorrect spelling inspired by the OIA suffix *-ka-*, given that the latter regularly yielded Niya *-ga* /γα/ (see §3.2.1 s.v. and cf. *infra*).

4.3.11 -γ- /g/

Regarding the substitution of Bactr. /g/, one must keep in mind that OIA *-k-* and *-g-* fell together as *-g-* /γ/ in Niya Prakrit, e.g. *anega* /anēya/ ‘many’ < *aneka-* and *aroga* /arōya/ ‘health’ < *aroga-* (see §2.1.2; LKD: §16).

⁶⁵⁹ For clusters involving /γ/, see §3.2.1 s.v. *Suliga*; §3.2.3 s.v. *vaṣḍhiga*; §3.3.2 s.v. *raji*; §4.3.27.

This lenition explains why intervocalic *-γ-* /*g*/ typically corresponds to Niya *-g-* /*γ*/, as can be seen from the list below.⁶⁶⁰

Secure loanwords from Bactrian (§3.2.1)

- (4.) *jheniga* (28x *-iga*; 2x *-iya*) ‘in charge of, under the care of’ ← *ζηνιγο /*zēnīgə*/ (attested ζινιγο) < **zainiya-kā*-
- (11.) *valaga* (18x *-g-*; 5x *-k-*) ‘animal keeper’ ← οαλαγο /*wālāgə*/ < **wād-āka-* ‘leader’
- (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /*suylīgə*/ (attested βονοσογολιγο ‘Sogdian estate’) < **sugdiya-ka-*

Plausible loanwords from Bactrian (§3.2.2)

- (17.) *aṃtagi* ‘belonging to the district’ ← *aṃtaga** ‘district’ ← ανδαγο /*andāgə*/ (or /*andāγə*/) with debated etymology
- (18.) *are* ‘a half’ when < **arae* < **araga* ← *αρλαγο /*arləgə*/ < **arda-ka-* and not ← *αρλο /*arlə*/

Plausible loanwords from Bactrian or another language (§3.3.2)

- (63.) *tavastaga* (19x *-aga*; 2x *-ae*) ‘carpet’ ← *ταβασταγο /*tāvastəgə*/ < **tāpasta-ka-*
- (67.) *parivanae* ‘burden, provisions’ < **parivanaga* ← *παροβανδαγο /*parəvandəgə*/ < **pari-banda-ka-* ‘bound around (the beast of burden)’
- (68.) *pravamnaga* (45x *-aga*; 1x *-aka*; 1x *-ae*; 1x *-a*) ‘(authoritative) document’ ← παροοαναγο /*parwānāgə*/ < **parwānākā*-

When (felt to be) part of a suffix, it even occurs that the *-g-* /*γ*/ in such loanwords undergoes further lenition, e.g. *-iga* > *-iya* (see under *jheniga*) or *-aga* > *-ae* (see under *tavastaga*; *parivanae*; *pravamnaga*). Occasional variants forms in *-ka* (see e.g. under *valaga*) can be accounted for as hypercorrect spellings (see §4.3.10).

In the case of *nokṣari* ← *νωγοσαρλι /*nōgsarlī*/, one observes a substitution of Bactr. /*gs*/ with Niya *-kṣ-*.

⁶⁶⁰ For arguable and tentative examples of the same correspondence, cf. §3.2.3 s.v. *vaṣḍhiga* (5x *-iga*; 1x *-ika*), §3.2.4 s.vv. *kilme* (on *vegakilme*); *lastuga* (6x *-uga*; 1x *-uka*), §3.3.3 s.vv. *agiṣḍha* (4x *-g-*; 4x *-k-*); *ageta*; *namanaga* / *namamnīya*, and §3.3.4 s.v. *ujhmayuga*. There are no examples of Bactr. /*g*/ in initial position. Intervocalic *-γ-* /*g*/ can be rendered as *-g-* /*γ*/ in South Asian Gāndhārī too. Note e.g. the names *Vagamarega* / *Vagamariḡa* (CKI 159 (3x); 509) ← βαγομαρηγο /*vaγəmarēgə*/ < **baga-maryaka-* ‘servant of god’ and *Miramarega* (CKI 325) ← μι(υ)ρομαρηγο /*mi(h)rəmarēgə*/ < **miθra-maryaka-* ‘servant of Mithra’.

Secure loanwords from Bactrian (§3.2.1)

- (6.) *nokṣari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarli/ (attested βῆδδιγονωγοσαρλο ‘second new year’) < **nawa-ka-sardi*-

This correspondence is most easily explained when assuming that (i) Niya *-kṣ-* is a way to write /gz/ and (ii) Bactr. /gs/ underwent voice assimilation to [gz]. If *-kṣ-* indeed stood for /gz/, this would be another example of what seems to be a more general tendency to write the first voiced sound in a consonant cluster with the grapheme normally used to write the corresponding voiceless sound (cf. also §4.3.8; §4.3.13).⁶⁶¹

4.3.12 -γγ- /ηg/

Because of the occurrence of non-etymological aspirates and voicing of consonants after nasals (§2.1.3; §2.1.5), <ṃk>, <ṃg>, and <ṃgh> became interchangeable spellings of /ηg/ in Niya Prakrit.⁶⁶² Therefore, all three would be possible renderings of Bactr. -γγ- /ηg/. This seems to be confirmed by the etymologies listed below.

Secure loanwords from Bactrian (§3.2.1)

- (7.) *prigha* ‘(monochrome) damask’ ← πριγγο* /priṅgə/ (attested πριγγο-οαβγο) < **pir-aina-ka*-

Arguable loanwords from Bactrian (§3.2.3)

- (36.) *caṃkura* ‘imposer of penalties’ ← *ζιαγγαρο /ǰ(i)yāṅgarə/ (attested ζιανο κip-) < **ziyāni-kara*-
- (38.) *tomga* (57x *-ṃg-*; 33x *-ṃgh-*; 5x *-gh-*), a title ← *τ(ο)οαγγο /t(u)wāṅgə/ < **tuwāna-ka*- ‘strong’

Tentative loanwords from Bactrian (§3.2.4)

- (56.) *ṣvaṭhamga* / *ṣoṭhamga* (101x *-ṃg-*; 73x *-ṃgh-*) ‘finance officer’ ← *αζβαρσταγγο /əzvarstāṅgə/ < **uz-bara-stān-āna-ka*- ‘the person in charge of the place disbursements are stored’ with haplology of *-ān-*

⁶⁶¹ No discussion is needed on *harga* ‘dues, tax’ ← βαργο /hargə/ (§3.3.1 s.v.). For the clusters *-tg-* ← *-δγ-* /dg/, *-ṣg-* ← *-ζγ-* /zg/, and *-pg-* ← *-βγ-* /vg/, see §3.2.3 s.vv. *atga*; *aṣgara*; *ṽapga*; §3.4.2 s.vv. *Apge*; *Katge*; *Kutge*; *Pitga*; §4.3.8; §4.3.13; §4.3.19. As there appear to be no secure examples of sequences like ***tg-*, ***sg-*, or ***pg-*, the *-g-* /γ/ in the clusters *-tg-*, *-ṣg-*, and *-pg-* may have a graphic rather than a phonetic background.

⁶⁶² An inherited word exemplifying this type of orthographic variation is *upaśaṃk-* (CKD 515) next to *upaśaṃg-* (CKD 86; 272) and *upaśaṃgh-* (CKD 88; 722) < OIA *upa* + √*śaṃk* ‘to suspect’.

Plausible loanwords from Bactrian or another language (§3.3.2)

- (64.) *draṃga* (16x **-ṃg-**; 7x **-ṃgh-**) ‘office’ ← δραγγο* /drangə/ (attested δραγγα in DilT₅ and δδραγγοληρο ‘office-holder’) < *dranga-

prigha,⁶⁶³ *tomga*, *ṣvaṭhaṃgha* / *ṣoṭhaṃga*, and *draṃga* are normally spelled with <ṃg> or <ṃgh>, and *camkura*, an arguable etymology, is consistently written with <ṃk>.

4.3.13 -δ- /d/

The main point of debate regarding the phonological interpretation of the Graeco-Bactrian grapheme <δ> is whether, as I assume, it always indicates /d/ or if it could also stand for /δ/ (see §2.2.3.1).

The only example of word-initial δ- in the loanword corpus is *draṃga* (also *tr-*) ← δραγγο*, whose status as a Bactrian loan is debatable.

Plausible loanwords from Bactrian or another language (§3.3.2)

- (64.) *draṃga* (19x **dr-**; 4x **tr-**) ‘office’ ← δραγγο* /drangə/ (attested δραγγα in DilT₅ and δδραγγοληρο ‘office-holder’) < *dranga-

The corpus contains more instances of intervocalic -δ-, which is typically substituted in Niya Prakrit with either *-t-* or *-d-*; compare, for instance, *-vida* next to *-vita* (*daśavida*; *śadavida*; *jenavida*) ← -βιδο and *śada* next to *śata* ← βαδο.⁶⁶⁴

Secure loanwords from Bactrian (§3.2.1)

- (5.) *daśavida* (99x **-d-**; 21x **-t-**) ‘chief of ten households’ ← λασοβιδο* /lasəvidə/ (attested λασοβιδιγο) < *dasa-pati- with adaptation of the first part of the compound
- (12.) *śadavida* (22x **-d-**; 7x **-t-**) ‘chief of a hundred households’ ← *σαδοβιδο /sadəvidə/ < *sata-pati- with adaptation of the first part of the compound
- (13.) *śada* (34x **-d-**; 8x **-t-**) ‘pleased, happy’ ← βαδο /śādə/ < *śyāta-

Plausible loanwords from Bactrian (§3.2.2)

- (20.) *Khotamṇa* ‘Khotan’ (80x **-t-**; 1x **-th-**; 1x **-d-**) ← *χοαδανο /xwadənə/ (or *χοατανο /xwatanə/) ← Khot. *hvatana*-
- (21.) *jenavida* ‘chief of the armour’ ← ζηνοβιδο /zēnəvidə/ < *zaina-pati-

Secure loanwords from Bactrian or another language (§3.3.1)

- (57.) *ajhate* (6x **-t-**; 5x **-d-**) ‘free, noble’ ← αζαδο /āzādə/ < *āzāta-

⁶⁶³ For the absence of anusvāra, see §3.2.1 s.v.

⁶⁶⁴ For arguable and tentative examples, cf. §3.2.4 s.v. *reda* and §3.3.3 s.v. *ageta*. Occasional variant spellings with aspirates (e.g. *Khothana* next to *Khotana*) are due to unetymological aspiration (§2.1.3).

Plausible loanwords from Bactrian or another language (§3.3.2)

- (65.) *namata* ‘felt’ (20x *-t-*; 1x *-th-*) ← **ναμαδο* /*namadə*/ < **namata-*

-d- is overall more common than *-t-*, but the frequency differs for each word individually, as made clear by the list above. The reason for this interchange between *-t-* and *-d-* is that both letters are alternative ways of writing the same phoneme, i.e. /*δ*/ (see §2.1.2). The fact that Bactrian intervocalic *-δ-* is substituted with Niya /*δ*/ should, however, not be taken as evidence for a Bactrian phoneme /*δ*/ since nothing excludes that Bactr. /*d*/ was substituted with Niya /*δ*/, in the same way that Bactr. *-γ-* /*g*/ can correspond to Niya *-g-* /*γ*/ (see §4.3.11). In other words, the Bactrian loanwords in Niya Prakrit unfortunately do not help in deciding the phonological value(s) of Bactr. <*δ*>.

Finally, two consonant clusters should be briefly discussed, i.e. *-δμ-* /*dm*/ and *-δγ-* /*dg*/.⁶⁶⁵

Plausible loanwords from Bactrian (§3.2.2)

- (26.) *yatma* ‘measurer of rations’ ← **ιαδμα* /*yādmā*/ (later **ιαδμο* /*yādmə*/) < **yāta-mā-*

Arguable loanwords from Bactrian (§3.2.3)

- (32.) *atga* ‘additional, complementary’ ← **αδγο* /*adgə*/ < **ati-ka-*

The consistent rendering of Bactr. *-δμ-* /*dm*/ as Niya *-tm-* seen in *yatma* ← **ιαδμα* /*yādmā*/ seems orthographic in nature, as (i) there is no example of *-dm-* in Niya Prakrit, only of *-tm-*, and (ii) there seems to be a preference to use the sign for the voiceless sound as the first element in a cluster of two voiced consonants (cf. §4.3.8; §4.3.10).⁶⁶⁶ The substitution of Bactr. *-δγ-* /*dg*/ with Niya *-tḡ-* presupposed by *atga* ← **αδγο* /*adgə*/ (cf. also §3.4.2 s.vv. *Katge*; *Kutge*; *Pitga*) would be explainable along the same lines, as there is likewise no example of a ligature ***-dg-*.

4.3.14 -σ- /*s*/

The phonological interpretation of <*σ*> is one of the main cruxes in the study of Bactrian phonology: two phonemic values, i.e. /*s*/ and /*ts*/, are accepted by most scholars, but there is debate whether <*σ*> had still more values. In

⁶⁶⁵ Other clusters are treated in more detail elsewhere and therefore not included here: *-δoḡ-* /*dš*/ in §4.3.18; *-ζδ-* /*žd*/ in §4.3.21; *-ρδ-* /*rd*/ in §4.3.24; *-γδ-* /*γd*/ in §4.3.27; and *-vδ-* /*nd*/ in §4.3.29. For *-μδ-* /*md*/, see §3.2.3 s.v. *badho*.

⁶⁶⁶ There is an example of *-dm-* in Kuča Prakrit, the PN *Yodma(ṃ)re* in CKD 838.

§2.2.4.2, I tentatively concluded there to be two more, i.e. /ś/ and /tś/. Now the question arises how the loanword corpus relates to these earlier conclusions, themselves mainly based on language-internal data.

In this subsection, I discuss the secure and plausible examples of Bactr. /s/ in the loanword corpus (see the list below).⁶⁶⁷ The other phonemic values of <σ> will be treated in the next subsections (§§4.3.15–4.3.17).

In initial position, Bactr. σ- /s/ is, as expected, borrowed with s- in Niya Prakrit. *Suliga* is a secure example of this correspondence and *saste* a plausible one.⁶⁶⁸

Secure loanwords from Bactrian (§3.2.1)

- (14.) *Suliga* ‘Sogdian’ ← σολιγο* /suyliḡə/ (attested βονοσογιγο ‘Sogdian estate’) < *sugdiya-ka-

Plausible loanwords from Bactrian (§3.2.2)

- (28.) *saste* ‘day, elapsed’ ← σαχτο /saxtə/ < *saxta-

Regarding intervocalic position, one should take into account that all intervocalic sibilants were voiced in Gāndhārī (cf. §2.1.2), which explains the -ś- /z/ in *śpaśa* (cf. §3.3.1 s.v.).⁶⁶⁹

Secure loanwords from Bactrian or another language (§3.3.1)

- (58.) *śpaśa* ‘watching, guarding’ ← πασο /spāsə/ < *spāsa-

The cluster -στ- /st/ can be faithfully rendered as Niya -st-, as exemplified by *lastana*, *stora*, and, if a Bactrian loan, *tavastaga* (cf. also §3.3.3 s.v. *hastama*).⁶⁷⁰

Secure loanwords from Bactrian (§3.2.1)

- (9.) *lastana* ‘dispute, lawsuit’ ← λαστανο /lāstānə/ < *dāta-stāna-
- (15.) *stora* ‘large animal, horse, camel’ ← στωρο /stōrə/ < *stauro-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (63.) *tavastaga* ‘carpet’ ← ταβασταγο /tāvastəḡə/ < *tāpasta-ka-

⁶⁶⁷ As in the rest of this chapter, I also include loanwords where it cannot be decided if the donor was Bactrian or another Iranian language.

⁶⁶⁸ For an arguable etymology exhibiting the same correspondence, cf. §3.2.3 s.v. *sujinakirta*.

⁶⁶⁹ If Niya *rasamna* ‘rope (?)’ is a loanword from Bactr. *ρασανο /rasanə/ < *rasanā- (an arguable etymology; see §3.3.3 s.v.), -σ- would correspond to Niya -s-, but the latter also stands for /z/ phonologically (§2.1.2; §2.1.7.3).

⁶⁷⁰ On the substitution of Bactr. -ρστ- /rst/ with Niya -th- /ṣṭ^(h)/ presupposed by the tentative etymology *ṣvaṭhamgha* / *ṣoṭhamgha* ← *αζβαρσταγγο /əzvarstāḡə/ (§3.2.4 s.v.), cf. §4.3.24.

The cluster -σπ- /sp/ shows two different substitutions.

Secure loanwords from Bactrian (§3.2.1)

- (16.) *sp̥ara* / *sp̥ura* ‘full, completely’ ← *σπορρο /spurrə/ (attested (α)σπορο) < *us-pr̥na-

Plausible loanwords from Bactrian (§3.2.2)

- (19.) *asp̥ista* ‘lucerne’ ← *ασπιστο /aspistə/ < *aspa-sti-

Secure loanwords from Bactrian or another language (§3.3.1)

- (58.) *sp̥aša* (also 1x with *sp-*, 1x with *sv-*) ‘watching, guarding’ ← σπασο /spāsə/ < *spāsa-

In the case of *sp̥ara* / *sp̥ura* and *sp̥aša*, σπ- /sp/ corresponds to Niya *sp̥-* /sf/ (cf. the variant spelling of *sp̥aša* with *sv-*), whereas *asp̥ista* exhibits a correspondence between Bactr. -σπ- /sp/ and Niya -*sp̥-*. The *sp̥-* /sf/ in *sp̥ara* / *sp̥ura* and *sp̥aša* is due to a sound change also operative in inherited vocabulary, e.g. *parosp̥ara* ‘one another’ < OIA *paraspara-* (cf. §3.2.1; §3.3.1 s.vv.). The most likely reason for the -*sp̥-* in *asp̥ista* ‘lucerne’ is a folk etymological influence of *aspa* ‘horse’ (cf. §3.2.2 s.v.).

For the rendering of Bactr. /gs/ as Niya -*kṣ-* in *nokṣari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarli/, see §4.3.11.

4.3.15 -σ- /ts/

When the unconditioned reflex of OIr. *č, Bactr. <σ> is thought to stand for /ts/ (§2.2.4.2). Since there is a cluster -*ts-* in Niya Prakrit, including in loanwords,⁶⁷¹ one anticipates that Bactr. /ts/ would be rendered as Niya -*ts-*. There is, however, no example of such a correspondence in the loanword corpus.

In case Niya *paraša* is a loan from Bactr. παρασο /parātsə/ ‘away’ < *parāčā (see above), this word would instead exemplify a substitution of Bactr. /ts/ with Niya -*ṣ-* /z/ (1x also -*s-*).

Plausible loanwords from Bactrian or another language (§3.3.2)

- (66.) *paraša* (9x -*ṣ-*; 1x -*s-*) ‘abduction, plundering’ (and derivatives) when ← παρασο /parātsə/ ‘away’ < *parāčā rather than ← *παραζο /parāzə/ < *parāza- ‘taking away’

For this, there may be a parallel in the form of the feminine marker -(i)sa (-(i)ṣa), in all likelihood a loan from Bactr. -σα /tsā/ < *-čī-ā- (see §6.4.4). This substitution is phonologically a little unexpected, but one could assume that

⁶⁷¹ Cf. e.g. *tsam̐gina*, a type of corn or *putgetsā*, a type of camel.

/ts/ was first simplified to /s/, either in Bactrian or during the borrowing process, and subsequently lenited to /z/ in Niya Prakrit.⁶⁷²

4.3.16 -σ- /ś/

The idea that <σ> can also stand for /ś/ is mainly based on Manichaean examples which suggest that OIr. *s was palatalised to Bactr. /ś/ when preceded by /ĩ/, e.g. *wyś(p)* ~ οισ(π)ο ‘all’ < **wispa*-.⁶⁷³ The issue with this argument is that the Manichaean fragment is late and the observed palatalisation thus potentially a post-Kuṣāṇa (or dialectal) phenomenon.

Yet, I believe that one of the secure etymologies in the loanword corpus, i.e. *guśura*, provides robust evidence that this palatalisation had been completed and phonologised already in Kuṣāṇa times.

Secure loanwords from Bactrian (§3.2.1)

- (3.) *guśura* (also SA Gandh. *guśuraka**) ‘prince’ ← γοσοβοργο /γυśvǔrgə/ < **wisah puθra-ka*- (or *γoσβορο /γυśvǔrə/ < **wisah puθra*-)

As pointed out in the relevant lemma (§3.2.1 s.v.), the -ś- /ž/ in *guśura* is difficult to account for if the -σ- in γοσοβοργο stands for /s/. Therefore, it seems better to assume that, as in MBactr. *wyś(p)* < **wispa*-, the *s in **wisah* became palatalised, as the -σ- in γοσοβοργο would then spell /ś/ and be a plausible source of the -ś- /ž/ in *guśura*. This hypothesis moreover implies the palatalisation to be phonemic in Bactrian because it will have been phonologised at the same time that the *w in **wisah* caused colouring of *-i- to Bactr. -o- /u/.

Otherwise, the loanword corpus does not provide decisive evidence of a Bactrian phoneme /ś/. Since preceded by the vowel -ι- /i/, the cluster *-στ- in *ασπιστο ‘lucerne’ → *aśpista* could be assumed to stand for /št/.

⁶⁷² One could be tempted to compare the simplification of OIA -ts- to Niya -s- in a word such as *osuka* ‘eagerness’ < *autsukya*-. This word is, however, not an exact parallel as the -s- in *osuka* probably stands for a geminate /ss/ and not for **/z/. Another fake parallel is Gandh. *uśiaṇa* ‘settling on’ (SĀ^{S5} recto 7; 11), which is probably not a direct continuant of **utsīdana*- (cf. Pāli *ussīdana*-) but a case of recomposition with the preverb *u*- < *ud*- (on which cf. Brough 1962: 106). In other words, the pre-form of *uśiaṇa* can be set up as **u-sīdana*-, meaning that the -s- /z/ in *uśiaṇa* does not result from *-ts- but from *-s-.

⁶⁷³ It is unclear whether palatalisation of OIr. *s also occurred when followed by -ι- /ĩ/ (cf. §2.2.4.2). The loanword corpus is uninformative on this point.

Plausible loanwords from Bactrian (§3.2.2)

- (19.) *āspista* ‘lucerne’ ← *ασπιστο /aspištə/ < *aspa-sti-

Yet, Niya *āspista* cannot prove this: the -st- in this word could be due to a substitution of a foreign and phonotactically inadmissible cluster /št/ with Niya -st- (cf. §3.2.2 s.v. and §4.3.27 on *saste* ‘day, elapsed’ ← σαχτο), but *āspista* would, of course, also be consistent with the view that the *-στ- in *ασπιστο stood for /st/.⁶⁷⁴

Another indecisive case is *kojava* (also *kośava*) ‘rug, blanket’.

Arguable loanwords from Bactrian or another language (§3.3.3)

- (73.) *kojava* (18x -j-; 7x -ś-) ‘rug, blanket’ ← κωσοβο, perhaps /kōśəvə/, but the inner-Iranian etymology is unknown

It is possible that (i) this word is a loan from Bactr. κωσοβο ‘idem’; (ii) the -σ- in κωσοβο stands for /ś/; and (iii) Bactr. /ś/ was borrowed as Niya /ž/ (spelled as -j- or -ś-) due to the intervocalic voicing of sibilants in Gāndhārī. Yet, all of this remains hypothetical because of the absence of an inner-Iranian etymology of Bactr. κωσοβο (cf. §3.3.3 s.v.).

4.3.17 -σ- /tś/

In §2.2.4.2, I hypothesised that <σ> had a phonemic value /tś/ when continuing OIr. *č in front of -i- /ĩ/. The main reason for this hypothesis was the cluster -nž- /ndž/ in MBactr. *y’wyd’nžyg* ~ ιασηδανζιγο ‘for ever’ < *yāwaitāna-čiya-ka-.⁶⁷⁵ Does the loanword corpus provide more evidence?

In the case of *sujinakirta*, Bactr. *-σ- < *-č- in front of *-i- /i/ corresponds to Niya -j- /ž/.

Arguable loanwords from Bactrian (§3.2.3)

- (48.) *sujinakirta* ‘needlework, embroidery’ ← *σωσινοκιρδο /sōtśinəkirdə/ < *saučanya-kṛta- or *σοσινοκιρδο /sūtśinəkirdə/ < *sūčanya-kṛta-

This correspondence would seem to be most easily explained when assuming that *-σ- stood here for /tś/, which could have been approximated in Niya Prakrit with the voiceless palatal *-c- and subsequently weakened to -j- /ž/ (cf. §3.2.3 s.v.).

⁶⁷⁴ The tentative etymology *lastuga*, textile product ← *λιστογο /lištəgə/ would be another example of this kind (§3.2.4 s.v.).

⁶⁷⁵ If this argument is correct, one could either say that depalatalisation of *č to /ts/ did not occur in front of *ĩ, parallel to what happened in Khotanese and Tumshuqese (Emmerick 1989: 213). Else, one could assume a secondary reversal from *tsĩ out of *čĩ back to /tśĩ/.

A similar example is *apcira*, where *-σι- < *-či- would be rendered in Niya Prakrit as -ci- without further lenition (cf. §3.2.4 s.v.).

Tentative loanwords from Bactrian (§3.2.4)

- (49.) *apcira*, a unit of measure (for vineyards), ← *αβο σι(υ)πο /āvə tsi(h)rə/ < *āp- ‘water’ + *čiθra- ‘seed’

This etymology is admittedly only tentative, but §5.2.2 will present a more secure grammatical borrowing exhibiting the same correspondence, viz. the adoption of the Bactrian suffix -σ(ε)ιγο /tśīgə/ < *-čiya-ka- as Niya -ci.

I would cautiously conclude that these examples provide further evidence that OIr. *č yielded Bactr. /tś/ in front of -ι- /ĩ/. The etymologies themselves do, however, not depend on the correctness of this argument, since, as pointed out by Nicholas Sims-Williams (p.c.), there are at least two other options: Bactr. -σ- /ts/ could have had an allophonic pronunciation [tś] before -ι- /ĩ/ or Bactr. -σι- /tśi/ could have been approximated as Niya -ci- as the closest sound combination available.⁶⁷⁶

4.3.18 -p- /š/

The substitution of Bactr. -p- /š/ is overall quite simple: it typically corresponds to the retroflex sibilant -ṣ- in Niya Prakrit. In Anlaut, this substitution is exemplified by *śada* (see also §3.3.3 s.v. *śaṃna*).

Secure loanwords from Bactrian (§3.2.1)

- (13.) *śada* ‘pleased, happy’ ← βαδο /šādə/ < *čyāta-

A plausible etymology, i.e. *vaṣe*, provides an example in intervocalic position (see further §3.2.3 s.v. *muṣḍhaṣi*).

Plausible loanwords from Bactrian (§3.2.2)

- (27.) *vaṣe* ‘garments’ ← *οαπο /wašə/ < *wastra-

As concerns clusters, *kṣuna* yields evidence for Bactr. χp- /xš/ being rendered as Niya kṣ- (*kṣ-*), and *laṣi* for Bactr. -pv- /šn/ corresponding to Niya -ṣ- /ṣn/.⁶⁷⁷

⁶⁷⁶ In support of the second option, it can be noted that there are only two inherited words in Niya Prakrit containing a cluster -tsi-, both times morphologically induced: (i) *savatsi* ‘having calves’ (CKD 7), dir.pl. in -i < -e made from *savatsa** (LKD: §60) and (ii) *vatsiya* ‘with a calf’ (CKD 676, 2x), an adj. made from *vatsa* ‘calf’ with the suffix -i (LKD: §75).

⁶⁷⁷ See also §3.2.4 s.v. *laṭhana* and §4.3.27 for a possible substitution of Bactr. -χpt- /xšt/ with Niya -ṭh- /ṣṭ(h)/.

Secure loanwords from Bactrian (§3.2.1)

- (2.) *kṣuna* (also *kṣ-*) ‘date, reign, regnal year’ ← *χῑνο* /*xṣunə*/ ← Gr. *χρόνος* ‘time (period)’
- (8.) *laṣi* ‘gift’ ← **λαῑνι* /*lāšni*/ (attested *λαῑνο*) < **dāšini*-

The fact that Indo-Aryan loanwords into Bactrian display the same sound correspondence makes me conclude that Bactr. -ḡ- /š-/ was most likely realised as [s] (thus also Michetti 2024: 186f.).⁶⁷⁸ As noted by Sims-Williams (p.c.), a retroflex pronunciation is also suggested by the sign ḡ being derived from the Greek letter rho (ρ) (Falk 2022: 155–167).

The plausible etymology of *maḱa* illustrates a correspondence between Bactr. -ḡk- /šk/ and Niya -ḱ-.⁶⁷⁹

Plausible loanwords from Bactrian (§3.2.2)

- (24.) *maḱa* ‘bean’ ← **μαḡκο* /*māško*/ < **māša-kā*-

This correspondence finds its explanation in the observation that Kharoṣṭhi 𑀅𑀲 *ka* can also be used for the combination of a sibilant and -k- in inherited words (see in more detail Schoubben 2021).⁶⁸⁰

The substitution of Bactr. -ḡḡ- /dš/ with Niya -c- exemplified by the plausible etymology *picara*⁶⁸¹ may have to do with Bactrian phonetics.

Plausible loanwords from Bactrian (§3.2.2)

- (23.) *picara* ‘(mark of) honour’ ← **πιḡḡαρο* /*pidšarə*/ (attested *πιḡḡαρο*) < **pati-fšarV*-

Phonologically, -ḡḡ- must be interpreted as /dš/, but voice assimilation to [tʃ] can have happened at the phonetic level. If so, the voiceless palatal -c- (phonetically perhaps [tʃ]) would be a sufficiently close approximation of the Bactrian cluster.⁶⁸²

⁶⁷⁸ Relevant examples include MBactr. *šmn** (attested obl.pl. *šmn’n*) ‘(Buddhist) monk’ ← Gandh. *śamaṇa* < OIA *śramaṇa*-, *βῑḡνο* /*višnə*/ ← *Viṣṇu*- ‘a theonym’, and *ιαḡḡο* /*yakšə*/ ← *yakša*- ‘a mythical being’. Sims-Williams (2011a: 174) gives two possibilities for the phonetic value of ḡ /š/, i.e. [ʃ] and [ʂ].

⁶⁷⁹ For two arguable etymologies displaying the same correspondence, cf. §3.2.3 s.vv. *avalika*; *paḱe*.

⁶⁸⁰ It seems likely that Bactr. -ḡk- /sk/ would be substituted in the same way, but there is no example of this cluster in the loanword corpus assembled here.

⁶⁸¹ Two arguable etymologies illustrate the same correspondence. See §3.2.3 s.vv. *aco*; *picav*-.

⁶⁸² Assuming the phonetic value of Bactr. /dš/ was indeed [tʃ], it is noteworthy that this Bactrian cluster was not rendered as Niya -*kṣ*-, since the phonetic value [tʃ] sometimes assumed for the latter (see §2.1.6) would seem to be an even

4.3.19 -ζ- /z/

This and the next two subsections build further on §2.1.7 and §2.2.4.3, whose conclusions are therefore briefly recapitulated below.

§2.1.7 concerned the Kharoṣṭhī sign 𑖀 *jha*. This akṣara remained the standard way to render a foreign *z* throughout the history of Gāndhārī. Once, however, the intervocalic lenition of sibilants resulted in the addition of /z/ to the phonemic inventory of Gāndhārī, 𑖀 *jha* became interchangeable intervocalically and in certain consonant clusters with 𑖄 *sa* and the newly created sign 𑖆 *ṣa*.

§2.2.4.3 concluded that <ζ> had five different phonological values in the Graeco-Bactrian script: (i) /z/ as the outcome of OIr. *z (< Plr. *j) in an unconditioned environment; (ii) /ž/ when continuing OIr. *j, possibly also from a palatalised *z; (iii) /ž/ if the result of OIr. *ž or clusters whose voiceless counterpart yields -p- /š/; (iv) /dz/ when due to postnasal voicing of /ts/ < OIr. *č or deriving from *-tVz-; and (v) /dž/ as a palatalised variant of /dz/ in front of -i- /ī/.

In this subsection, I study how Bactr. /z/ was substituted in Niya Prakrit (examples are listed below). The substitution of /ž/ is treated in §4.3.20 and that of /ž/ in §4.3.21. Because there are no examples of /dz/ and /dž/ in the loanword corpus, these phonological values do not require further discussion.

There is one secure and one plausible example of Bactr. /z/ in initial position.

Secure loanwords from Bactrian (§3.2.1)

- (4.) *jheniga* ‘in charge of, under the care of’ ← *ζηνιγο /zēnīgə/ (attested ζηνιγο) < *zainiya-kā-

Plausible loanwords from Bactrian (§3.2.2)

- (21.) *jenavida* ‘chief of the armour’ ← ζηνοβιδο /zēnəvidə/ < *zaina-pati-

The first (*jheniga*) shows Bactr. /z/ to be rendered, as expected, with Niya *jh-*, while the second (*jenavida*) exemplifies the occasional interchange between initial *jh-* and *j-* (for which see §2.1.7).

The examples concerning intervocalic position are all loans that could but need not have been borrowed from Bactrian. If they are Bactrian, they show

closer approximation of [tʃ]. Therefore, I still believe that “the phonetic value of <kʃ> ... deserves a re-examination” (Schoubben 2022a: 150 fn. 12).

that intervocalic /z/ could be substituted with either *-jh-* or *-s-/s-* /z/ and that both options may occur within the same word.

Secure loanwords from Bactrian or another language (§3.3.1)

- (57.) *ajhate* (10x *-jh-*; 1x *-s-*) ‘free, noble’ ← αζαδο /āzādə/ < *āzāta-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (66.) *paraśa* (9x *-s-*; 1x *-s-*) ‘abduction, plundering’ (and derivatives) when ← *παραζο /parāzə/ < *parāza- ‘taking away’ rather than παρασο /parātsə/ ‘away’ < *parāčā

Arguable loanwords from Bactrian or another language (§3.3.3)

- (75.) *pajhavaṃta* (1x *-jh-*; 1x *-s-*) ‘breastband (?)’ ← *παζοβανδο /pāzəvandə/ < *pāza(h)-banda- ‘bound around the breast’

ajhate is by default written with *-jh-*, but a variant form with *-s-* is attested once; if to be traced back to OIr. **parāza-*, *paraśa* would render /z/ with *-s-*, once with *-s-*; and *pajhavaṃta* is once spelled with *-jh-* and once with *-s-*.⁶⁸³

The phonological integration of clusters of *-z-* followed by a nasal was also not too complicated.

Plausible loanwords from Bactrian or another language (§3.3.2)

- (62.) *gavaśa* ‘deer, stag’ ← *γαιοαζνο /yawaznə/ < *gawazna-

Independent of whether *gavaśa* is a loan from Bactr. *γαιοαζνο /yawaznə/ or a cognate of it, the etymology points to a substitution of Ir. *-zn- with Niya *-s-* /sn/. As Niya /sn/ may have been phonetically realised as [zn] due to voice assimilation of the sibilant to the following nasal, this can be seen as an exact match (cf. §3.3.2 s.v.). The Niya names ending in *-rasma* ← Ir. *-razman- ‘battle’ (§3.4.1) show a similar correspondence between Ir. *-zm- and Niya *-sm-*; they can alternatively be written with *-jhm-* /zm/ (see also §3.3.4 s.v. *ujhmayuga*).

Consonant clusters in which *-z-* combines with a stop or a fricative will have been more challenging to integrate due to the near-complete absence of such clusters in Niya Prakrit. If correctly etymologised, *aśgara* ← *αζγαρο /azgarə/ and *śvaṭhaṃgha* ← *αζβαρσταγγο /əzvarstāngə/ would both suggest that *-z-* could be rendered as *-s-* /z/ in this type of cluster (cf. §3.2.3; §3.2.4 s.vv.).

⁶⁸³ Concerning the non-Bactrian loanwords, it can be noted that Khot. *-ys-* /z/ is substituted with *-jh-* in the case of *hinajha* ‘army commander’ ← *hīnāysa-*.

Arguable loanwords from Bactrian (§3.2.3)

- (34.) *ašgara* ‘herald (?)’ ← *αζγαρο /azgarə/ (attested PN αζγαρακο) < *azda-kara- < *azdā-kara-

Tentative loanwords from Bactrian (§3.2.4)

- (56.) *švaṭhaṃgha* / *šoṭhaṃga* ‘finance officer’ ← *αζβασταγγο /əzvərstāngə/ < *uz-bara-stān-āna-ka- ‘the person in charge of the place disbursements are stored’ with haplology of -ān-

A third instance of this substitution could be the PN *Mašdhiḡe* if, as proposed in §3.4.1, this represents Mr. **mazdīg(a)* < **mazd-iyā-ka*- ← **mazdā*- ‘wisdom’ and *-zd- was thus borrowed as -šdh- /zḡ(h)/. While one must admit the fragility of conclusions based on these uncertain etymologies, two observations add further plausibility to the idea that a foreign -z- could be rendered as -š- /z-/ in clusters.⁶⁸⁴

First, one can invoke the parallel of the non-Bactrian loanword *darš*- ‘to load’ ← **darz*-; unless one follows Bailey (1946: 768) in positing the donor form as **darž*- < **darz(a)ya*-, this loanword exemplifies a substitution of Ir. *-rz- with Niya -rš- (§3.5.1 s.v.).⁶⁸⁵

Secondly, it appears that there are not many alternatives to the proposed substitutions of *-zd-, *-zg-, and *-zv-. Given that foreign *-z- is most commonly rendered as -jh- (cf. supra), one could anticipate *-zd-, *-zg-, and *-zv- to have been borrowed as **-jhd-, **-jhg- / **-jhḡ-, and **-jhv-, respectively. In reality, none of these clusters occurs in Kharoṣṭhī sources, in contrast to, for instance, -jhb-, which occurs in the frequent word *cojhbo*. Assuming that the *z in these clusters would be borrowed with Niya -s-, as in -š- /sn/ ← *zn-, does not seem too attractive either: there are no attestations of **-sd- in the Gāndhārī corpus; -sg- occurs only twice;⁶⁸⁶ and -sv- is mainly limited to Sanskritisms because OIA -sv- developed to Niya -śv-/-śp- (LKD: §49). The clusters -šdh-, -šg-, and -šv-, on the other hand,

⁶⁸⁴ Interestingly, Thomas (1921: 280) already mentioned “the possibility that some of the š’s, e.g. in *ašgara*, were pronounced as z’s”.

⁶⁸⁵ In his edition of CKI 721, Falk (2001: 314f. = 2013a: 53f.) argued that the sequence of akṣaras he reads as *arṣaṇo* is a variant of the Iranian title *erjhuṇa* in CKI 53. If correct, *-rz- would in the same word be rendered as either -rjh- and -rš-, but the reading and interpretation of *arṣaṇo* are uncertain.

⁶⁸⁶ The examples are the theonym *Acokisgiya* (CKD 361) and the anthroponym *Casgeya* (CKD 601). The latter is otherwise always written with <sg> (more than 40 attestations), which suggests that the instance in CKD 601 is a mistake.

typically occur in loanwords,⁶⁸⁷ making them suitable candidates as approximations of *-zd-, *-zg-, and *-zv-.

4.3.20 -ζ- /ž/

The instances of /ž/ in my loanword corpus are all special cases discussed in more detail in other sections: the plausible etymology *nihaṃñ*- ‘to deposit, to put down’ ← *νιανζ- /nihanž/ (§3.2.2 s.v.) exemplifies the Niya Prakrit loss of voiced consonants after nasals treated in §4.3.29; the etymologies of *aḍini* ‘(broomcorn) millet’ and *oḍ-* ‘to let go’ from respectively *αρζινο /aržinə/ and pres.3sg. *ωυρζιδο /ōhiržidə/ (§3.2.3 s.vv.) are based on the idea that Bactr. /rž/ could be substituted with Niya -ḍ- /r/, for which see §4.3.26; the interpretation of *caṃkura* ‘imposer of penalties’ as a loan from *ζιαγγαρο /ž(i)yāṅgarə/ (§3.2.3 s.v.) requires initial devoicing to c-, which will be dealt with in §4.3.28; and *raji* ‘cloak, woollen cloth’ would, if a loan from Bactr. *ραγζι /rayži/ (§3.2 s.v.), illustrate a substitution of Bactr. -γζ- /rž/ with Niya -j- / (ž)ž/, as discussed further in §4.3.27.

4.3.21 -ζ- /ž/

The loanword corpus contains three arguable instances of Bactr. /ž/ (they are listed below). Although none of these etymologies is fully secure, they at least point to the same conclusion, viz. that Bactr. -ζ- /ž/ is borrowed with Niya -š-, which, intervocalically or in contact with a voiced consonant, most likely stands for /z/ (cf. §2.1.2).⁶⁸⁸

Arguable loanwords from Bactrian (§3.2.3)

- (44.) *muṣḍhaṣi*, woman exchanged within exogamous marriage practices ← *μοζδοπι /muždəši/ < *mižda-strī- ‘reward woman’ or *miždušī- ‘gnädige (Frau)’
- (45.) *leš-* ‘to dispatch, to conduct’ ← *λιζ- /liž/ or *ληζ- /lēž/ < *darzaya-

⁶⁸⁷ It has been argued that Niya Pkt. *muṣga* is an inherited word meaning ‘testicle’ < Skt. *muṣka-* (LKD: §49; Duan & Tshelothar 2016: 8; 76). Yet, the implied voicing of OIA -šk- to Niya -sg- is phonologically implausible, so I do not accept this interpretation. -šv- is rare in Niya Prakrit; besides *ṣvaṭhaṃgha*, this cluster only occurs in the foreign PN *Ṣvalýaya* (CKD 709), also written as *Ṣpálýaya* (CKD 579; 709) and *Ṣpálýiya* (CKD 817).

⁶⁸⁸ Parallel to my argument that Bactr. /š/ was a voiceless retroflex [ʂ] (§4.3.18), I suppose that /ž/ corresponds to IPA [z].

Arguable loanwords from Bactrian or another language (§3.3.3)

- (71.) *agiṣḍha* ‘cover, rug’ ← *αγιζδο /ǣgiždə/ (or /ǣyiždə/; attested γιζδο) with unknown etymology

A further example of this sound substitution is the PN *Aṣamṇa*, which should probably be compared with Bactr. αζανο /ǣžānə/ ‘worthy’ < **arjyāna*- (cf. §2.2.4.3 and §3.4.1).

In the case of *muṣḍhaṣi* and *agiṣḍha*, Bactr. -ζδ- /žd/ corresponds to -ṣḍh-, which suggests that the dental stop was assimilated to the preceding retroflex sibilant. The unetymological aspiration in -ṣḍh- may be a graphic phenomenon, seeing that a ligature <ṣḍ> never occurs in Niya Kharoṣṭhī.⁶⁸⁹

4.3.22 -o- /w/

While /w/ is absent from the phonemic system of most Old and Middle Indo-Aryan languages, it is commonly accepted that the special Kharoṣṭhī sign 𑀭 *ya* writes a glide /w/ (see §2.1.6). 𑀭 *ya* would therefore be a likely rendering of Bactr. -o- /w/, an expectation confirmed by a few Gāndhārī coins on which the Bactrian royal name οημο /wēmə/ is rendered in Kharoṣṭhī script as *Yima* (see Falk 2009 = 2013a: 184–195).

As shown by the list of etymologies below,⁶⁹⁰ there are instances where Bactr. -o- /w/ is likewise substituted with -y- in Niya Prakrit. Yet, one should note that substituting Bactr. -o- /w/ as Niya -v- happens in fact more frequently.

Secure loanwords from Bactrian (§3.2.1)

- (11.) *valaga* ‘animal keeper’ ← οαλαγο /wālāgə/ < **wād-āka*- ‘leader’

Plausible loanwords from Bactrian (§3.2.2)

- (27.) *vaṣe* ‘garments’ ← *οαβο /waśə/ < **wastra*-

Arguable loanwords from Bactrian (§3.2.3)

- (30.) *aco* (also loc.sg. *acovaṃmi*; cf. also *acoviṃna* ‘border official’) ‘frontier, border post’ ← *αδοβαοο /adšāwə/ < **ati-čyāwa*-
- (41.) *picav-* ‘to hand over’ ← *πιδοβαο- /pidšaw/ < **pati-čyawa*-

⁶⁸⁹ The only instance of Kharoṣṭhī <ṣḍ> is in Kuča Prakrit document CKD 833 (gen.sg. *Ṣḍayaṣa*, a PN).

⁶⁹⁰ The list concerns the substitution of Bactr. -o- /w/ in initial and intervocalic position. For the rendering of -Cwǎ-, see §4.3.1. If I am right in assuming that the toponym *Remena* renders Bactr. *ρη(ο)μηναο /rē(w)mēhanə/ < **raiwa-maiθana*- ‘rich dwelling’, it is uncertain whether -w- was already lost in Bactrian or if the loss should be attributed to the borrowing process.

- (43.) *badho* (also 4x -*ava*; 2x -*ova*) ‘pledge, mortgage’ ← *βαμδαοο /bāmdāwə/ ← *βαμδο ‘loaned’ (cf. βαμδιγο ‘loan’) < *apāmita- + suffix -ao
- (48.) *yapga* ‘weaver’ (5x *y-*; 1x *v-*) ← οαβγο* /wāvgə/ < *wāba-ka-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (61.) *ayana* (96x -*y-*; 14x -*v-*) ‘village, territory of a clan’ ← *αοαυανο /āwahanə/ < *ā-wahana- ‘dwelling’
- (62.) *gavaśa* ‘deer, stag’ ← *γαοαζνο /γawaznə/ < *gawazna-
- (68.) *pravamṇaga* ‘(authoritative) document’ ← παροοαναγο /parwānāgə/ < *parwānākā- (with analogical adaptation to *pramana* ‘authority’)

So far, only the arguable etymology *yapga* shows a nearly consistent rendering of Bactr. o- /w/ as Niya *y-*. One potentially Bactrian loanword, i.e. the plausible etymology *ayana*, has most often -*y-* (96 tokens), but sometimes also -*v-* (14 tokens). The other words listed above consistently substitute Bactr. -o- /w/ with Niya -*v-*. Hence, it seems that Bactr. -o- /w/ can, in initial and intervocalic position, be rendered as either -*v-* or -*y-*, without there being any clear pattern as to when which is used.

The most likely reason behind the substitution of Bactr. -o- /w/ with either -*v-* or -*y-* is the weak distinction between these two sounds (LKD: §29), which also frequently interchange in inherited vocabulary, e.g. *viṃṇāyēti* beside *viṃṇavēti* ‘(s)he orders’ < OIA *vijñāpayati*.

4.3.23 -v- /h/

Both Bactrian and Niya Prakrit have a phoneme /h/, so the default expectation must be that, except in some clusters, Bactr. -v- /h/ is rendered as Niya -*h-*. This expectation is met by *nihamñ-*, *nihala*, and, if indeed a Bactrian loanword, *harga*.

Plausible loanwords from Bactrian (§3.2.2)

- (22.) *nihamñ-* ‘to deposit, to put down’ ← *νιυανζ- /nihanz/ < *ni-θanʒa-

Arguable loanwords from Bactrian (§3.2.3)

- (39.) *nihala* ‘settlement, agreement’ ← *νιυαλο /nihālə/ ← *νιυαλ- ‘to settle’ (attested *νααλ-*) < *ni-śādaya-

Secure loanwords from Bactrian or another language (§3.3.1)

- (59.) *harga* ‘dues, tax’ ← υαργο /hargə/ ← OP *harkā-

At the same time, -*h-* often drops in Niya Prakrit (see LKD: §28), and it seems that the (potentially) Bactrian loanwords were not immune to this phonological tendency. Most importantly, a few of the etymologies proposed in Chapter 3, admittedly none of them fully secure, require that

intervocalic *-h-* was lost during or after the borrowing process with subsequent vowel contraction. See the list below.

Arguable loanwords from Bactrian (§3.2.3)

- (30.) *Acomena*, place name ← *αδοβαοομηναο /adšāwəməḥanə/ < *ati-čyāwa-maiθana- ‘dwelling located at the border’ (discussed s.v. *aco* ‘frontier, border post’)
- (35.) *oḍ-* ‘to let go’ ← *ωυιρζ- /ōhirz/ < *awa-hr̥z-

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* ‘family estate’ ← *γιρλομηνο /γiɾlmēḥə/ < *gr̥da-maiθa- ‘dwelling of a household’
- (53.) *Remena*, place name, ← *ρη(ο)μηναο /rē(w)mēḥanə/ < *raiwa-maiθana- ‘rich dwelling’

Plausible loanwords from Bactrian or another language (§3.3.2)

- (61.) *ayana* ‘village, territory of a clan’ ← *αοαυαο /āwahanə/ < *ā-wahana- ‘dwelling’

The same phonological process is occasionally observable in inherited vocabulary in variations of the type *danagrana* (CKD 577; 588) next to *danagrahana* ‘giving and taking’ or *goma* (CKD 72 (15x); 683 (3x); 718) besides *gohuma* / *gohumi* / *goduma* < *godhūma*- ‘wheat’. Therefore, I would say that the loanwords and forms such as *danagrana* and *goma* reflected the spoken language more accurately, whereas I would interpret forms in which intervocalic *-h-* was preserved, e.g. *danagrahana*, as historical spellings.⁶⁹¹

Also worth mentioning is *maravara* ‘accountant’.

Plausible loanwords from Bactrian or another language (§3.3.2)

- (69.) *maravara* ‘accountant’ ← *υμαροβαο /hmārəvārə/ < *hmāra-bāra-

With this plausible etymology, one can posit a simplification of the ***hm-* in the Iranian source to Niya *m-* because initial ***hm-* inhibited Prakrit phonotactics.

Another word to discuss is the arguable etymology *hastama*, also attested as *astama* (§3.3.3 s.v.).

⁶⁹¹ My interpretation rests on the assumption that the loss of intervocalic *-h-* is to be dated after the adoption of Bactrian loanwords in Niya Prakrit or that this sound change was synchronically active over a more extended period. To my knowledge, there is no counterevidence against either option. Unless they are likewise historical spellings, the preservation of the *-h-* in *nihamñ-* and *nihala* may have been motivated by the synchronically obvious morpheme boundary after *ni-* (cf. §3.2.3 s.v. *nihala*).

Arguable loanwords from Bactrian or another language (§3.3.3)

- (79.) *hastama* (10x **ha**-; 5x **a**-) ‘quarrel, dispute’ ← *(**u**)ασταμβο /(**h**)astambə/ < **ha(m)-stamba-*

Here, there are two options: either the variant form *astama* merely exemplifies the loss of *-h-* also observed in inherited words in Niya Prakrit (so Burrow), or it is ascribable to variation within the donor language. The second option would be possible under the assumption of a Bactrian loan since **u*ασταμβο and *ασταμβο < **ha(m)-stamba-* could have co-existed in the same way that *u*αμοπαλο and αμβαλο ‘accordingly, immediately’ < **hama-pada-* did (BD II: 272).

Finally, a note on *apcira* ← *αβο σι(**u**)ρο /āvə tsi(h)rə/ is due (cf. also §3.2.4 s.v.).

Tentative loanwords from Bactrian (§3.2.4)

- (49.) *apcira*, a unit of measure (vineyards) ← *αβο σι(**u**)ρο /āvə tsi(**h**)rə/ < **āp-* ‘water’ + **ciθra-* ‘seed’

As implied by the brackets in *αβο σι(**u**)ρο, there are again two possibilities if this tentative etymology is correct. Option one is that /hr/ was simplified to /r/ in Bactrian before the reconstructed form *αβο σι(**u**)ρο was borrowed into Niya Prakrit as *apcira*. This possibility is suggested by the existence of doublets, such as πορο /pŭrə/ next to πουρο /puhrə/ ‘son’ < **puθra-* or παρο /šārə/ next to παυρο /šahrə/ ‘city’ < **xšaθra-*, which prove that /hr/ could indeed be simplified to /r/ within Bactrian.⁶⁹² Yet, given that an intervocalic cluster *-hr-* is not attested in Kharoṣṭhī sources, there is the alternative possibility that Bactrian /hr/ was substituted with *-r-* in Niya Prakrit, similar to how Ir. **xšā(h)buhr* < **xšāyaθiya-puθra-* ‘son of the king’ was borrowed into Gāndhārī as *kṣabura* (Schoubben 2022a).⁶⁹³

In short, Bactr. *-u-* /*h-* was in initial and intervocalic position borrowed as *-h-* in Niya Prakrit, but the latter could, in turn, disappear due to phonetic processes also active in inherited vocabulary. Foreign clusters involving /h/ probably required simplification.

⁶⁹² Simplified forms such as πορο and παρο already occur in early Bactrian sources, e.g. doc. A (datable to 332 AD).

⁶⁹³ Another parallel could be the Gāndhārī PN *Arajha(m)da* (CKI 108; 564), which in fn. 65 I proposed to derive from Bactr. *αυροζαδο /ahrəzādə/ ‘born through (the will of) Ahura’ < **ahura-zāta-*.

4.3.24 -p- before a dental: -pδ- /rd/ and -pστ- /rst/

Here and in the following subsections, I will be concerned with three types of Bactrian clusters involving the phoneme -p- /r/ that either undergo further phonetic developments also occurring in native vocabulary (this section) or get simplified during the borrowing process (§§4.3.25–4.3.26).

The first type concerns clusters in which -p- /r/ precedes a dental, i.e. -pδ- /rd/ and -pστ- /rst/. For -pδ- /rd/, there are two relevant examples: (i) *suḡinakirta* where -pδ- /rd/ would be substituted with -rt- and (ii) *aṭa* where, if not a loan from another Iranian language, -pδ- /rd/ would correspond to -ṭ- /tṭ/.⁶⁹⁴

Arguable loanwords from Bactrian (§3.2.3)

- (48.) *suḡinakirta* ‘needlework, embroidery’ ← *σωσινoki**ρ**δο /sōtsinəkirdə/ < *saučanya-kṛta- or *σοσινoki**ρ**δο /sūtsinəkirdə/ < *sūčanya-kṛta-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (60.) *aṭa* ‘flour’ ← α**ρ**δο /ārdə/ < *ārta-

In my view, the apparent discrepancy between these two words can be accounted for without recourse to the assumption that *suḡinakirta* and *aṭa* were borrowed from different languages (or that one of the etymologies is wrong).

With inherited words, the rule in Niya Prakrit is that, except for historical spellings, a preconsonantal -r- assimilates to a following consonant (cf. LKD: §37). When that consonant is a dental obstruent, the outcome of such assimilation may, as in other MIA languages, be a retroflex geminate (cf. also von Hinüber 2001²: §256). In some words, this sound change is always reflected in writing, e.g. in *parivaṭ-* /parivaṭṭ/ ‘to exchange’ < OIA *parivart-*; but in others, historical spellings occur side by side with the linguistically more innovative form, e.g. in gerv. *kaṭavo* /kaṭṭavo/ ‘to be done’ next to *kartavo* /kartavya < OIA *kartavya-* or *aḍha* /aḍḍha/ ‘half’ next to *ardha* < OIA *ardha-*.

⁶⁹⁴ We would have another example of Bactr. -pδ- /rd/ → Niya -rt- if the PN *Lampurta* (CKD 678) represents Bactr. *λαμβορδο /lāmburdə/ < *dāmi-bṛta- ‘carried by the creator’ (see fn. 510). In the case of the non-Bactrian loanword *khakhordi* (also *khakhorti(ya)*) ‘witch’ (§3.5.2 s.v.), Ir. *-rd- was rendered both as -rd- and -rt-. If *bhaṭaraga* ‘lord, owner’ continues Ir. *frataraka- (§3.6 s.v.), its -ṭ- /tṭ/ could continue *-rt- or *-rd- in the Iranian pre-form, but it could also be due to a folk etymology with MIA *bhaṭṭr-* ‘lord, husband’.

My hypothesis is that Niya *-rt-* ← Bactr. *-ρδ-* /rd/ could still undergo this assimilation and result in a retroflex geminate *-ṛ-* /ṛṛ/. Under this scenario, the apparent discrepancy between *sujinakirta* and *aṭa* would be of the same kind as that between *kaṭavo* /kaṭṭavo/ and *kartavo* / *kartavya*. In other words, *sujinakirta* could be a historical spelling and *aṭa* a linguistically more innovative form.⁶⁹⁵

The substitution of Bactr. *-ρστ-* /rst/ with Niya *-ṭh-* /ṣṭ/ required by my tentative etymology of Niya *ṣvaṭhaṃgha* / *ṣoṭhaṃga* ‘finance officer’ could be accounted for along similar lines (cf. §3.2.4 s.v.).

Tentative loanwords from Bactrian (§3.2.4)

- (56.) *ṣvaṭhaṃgha* / *ṣoṭhaṃga* ‘finance officer’ ← *αζβαρσταγγο /əzvarstāṅgə/ < *uz-bara-stān-āna-ka- ‘the person in charge of the place disbursements are stored’ with haplology of *-ān-*

In this case, there would even be an extra motivation for changing **-rst-* into *-ṭh-* /ṣṭ/ since a cluster **-rst-* did not occur in inherited words.

4.3.25 -ρλ- /rl/

Niya Prakrit does not have clusters in which the liquid sounds *-l-* and *-r-* combine, so it would be interesting to know how Bactrian clusters of this type were rendered. The corpus of loanwords assembled so far does not contain an example of Bactr. *-λρ-* /lr/, but three words, including a secure (*nokṣari*) and a plausible (*are*) etymology, point to the conclusion that Bactr. *-ρλ-* /rl/ was simplified to Niya *-r-* intervocalically.⁶⁹⁶

Secure loanwords from Bactrian (§3.2.1)

- (6.) *nokṣari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarli/ (attested βιδδιγονωγοσαρλο ‘second new year’) < *nawa-ka-sardī-

Plausible loanwords from Bactrian (§3.2.2)

- (18.) *are* ‘a half’ ← *αρλο /arlə/ < *arda- or *αρλαγο /arləgə/ < *arda-ka-

⁶⁹⁵ A possible reason for this difference could be that *aṭa* was more deeply integrated into the language than *sujinakirta*. After all, this would not be remarkable, seeing that *aṭa* must have been frequent enough for it to be passed on to other Indo-Aryan languages (cf. Skt. *aṭṭa-* ‘food’; Hindi *āṭā* ‘flour’; etc.), whereas *sujinakirta* is a hapax legomenon occurring in a list of textile products.

⁶⁹⁶ NP *falāxan* ‘sling’ ← Bactr. *φορλαχανο ‘sling’ < *fra-daxšanā- illustrates a similar type of simplification from Bactr. *-ρλ-* /rl/ to NP *-l-* (Sims-Williams 2011c: 194).

Tentative loanwords from Bactrian (§3.2.4)

- (51.) *taravara* ‘sword’ ← *ταρλοβαρο /tarləvārə/ < *tarda-bāra- ‘splitter’

If one subscribes to the tentative idea that *kilme* continues Bactr. *γῖρλομηνο /γῖrlmēhə/, there would further be an example of a simplification of Bactr. /rlm/ to Niya -*lm*-.

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* ‘family estate’ ← *γῖρλομηνο /γῖrlmēhə/ < *grda-maiθa- ‘dwelling of a household’

Although one can doubt this particular example, it would indeed be conceivable that -ρλ- /rl/ was simplified in different ways according to its phonetic environment.

4.3.26 -ρζ- /rʒ/

The two words listed below may exemplify a substitution with Bactr. -ρζ- /rʒ/ (from OIr. *rz in front of -i- /i/) as Niya -ḡ- /r/.⁶⁹⁷ While their etymologies need too many assumptions to prove this substitution (cf. §3.2.3 s.vv.), this sound correspondence would at least be phonetically understandable, as I hope to show here.

Arguable loanwords from Bactrian (§3.2.3)

- (31.) *aḡīni* ‘(broomcorn) millet’ ← *αρζινο /arʒinə/ < Pre-Bactrian *arzani-
- (35.) *oḡ-* ‘to let go’ ← *ωσιρζ- /ōhirz/ (3sg. *ωσιρζιδο /ōhirʒidə/) < *awa-hʒz-

A first observation has to do with the possible phonetics of Niya -ḡ- /r/. Like von Hinüber (2001²: §201) and Baums (2009: 141), I consider it probable that /r/ corresponds to IPA [ɾ] because this is the pronunciation found in NIA languages, and there is no evidence that the phonetic value changed over time (cf. also §2.1.6). Conventionally labelled a “voiced retroflex flap”, [ɾ] is pronounced in Hindi and other NIA languages somewhat more fronted than retroflex stops, i.e. in the post-alveolar region of the mouth. This more fronted articulation “is due to the tongue movement taking place during its articulation; the tongue tip is curled inwards and approaching the post-alveolar region but flaps out before the actual contact takes place” (Hamann 2003: 25). Since the element /ʒ/ in Bactr. -ρζ- /rʒ/ would be the result of a palatalised dental *z, it could also have been realised as a post-alveolar

⁶⁹⁷ In the case of *oḡ-* ‘to let go’, this idea requires that it was the 3sg. *ωσιρζιδο /ōhirʒidə/ that was borrowed. See §3.2.3 s.v. and §4.4.4.

(approximately IPA [ʒ]), and, if so, the places of articulation of Bactr. -ρʒ- /rʒ/ and Niya -ḍ- /ṛ/ would have been sufficiently close to one another to allow for the former being substituted with the latter.

Secondly, there may not be many alternative ways in which *-rʒi- could have been approximated in Niya Prakrit. One could, for instance, expect such a sequence to be borrowed as **-rjhi- or **-rʃi- (cf. Bailey's 1946: 768 argument that Niya *darṣ-* 'to load' reflects Ir. **darʒ-* < **darz(a)ya-* 'idem'). Yet, the absence of a sequence *-rjhi- in the Kharoṣṭhī corpus and the fact that the occurrences of -rʃi- are mostly morphologically motivated⁶⁹⁸ may, in the end, speak against this idea. A substitution of *-rʒi- with **-rʃi- seems unlikely as well because the Niya Prakrit cluster -rʃ- is largely restricted to words made from the OIA root $\sqrt{d}ṣ$ 'to see', and it certainly is not a marker of loanwords, whereas Niya -ḍ- /ṛ/ occurs in other words that are clearly not inherited, e.g. the toponym *Caḍota* 'Niya'.

4.3.27 Velar fricatives borrowed as sibilants

Intervocally, the Bactrian voiced velar fricative -γ- /γ/ can, as discussed in §4.3.10, be faithfully substituted with Niya -ḡ- /ḡ/. Its voiceless counterpart -χ- /x/ lacks an exact match in Niya Prakrit, but can be approximated with the voiceless aspirate -kh- /kʰ/ (cf. §3.2.2 s.v. *Khotamṇa*).⁶⁹⁹ While these substitutions are more or less predictable from the basic facts of Niya Prakrit phonology, one cannot so easily anticipate how -χ- /x/ and -γ- /γ/ would be rendered as part of a consonant cluster. Yet, the long-known Iranian loanword *načira* /naścira/ 'hunting' ← Ir. **naxčīr* (see §3.6 s.v.) indicates that at least one option was to borrow velar fricatives in consonant clusters with sibilants.

Some newly proposed etymologies (listed below) seem to strengthen that conclusion, although the evidence they provide is often indirect.

Plausible loanwords from Bactrian (§3.2.1)

- (28.) *saste* 'day, elapsed' ← σαχτο /saxtə/ < **saxta-*

⁶⁹⁸ Cf. e.g. *paruvarši* 'of last year' ← *paruvarša* 'last year' + suffix -i or *darṣitavo* (and variants) 'to be loaded' ← *darṣ-* 'to load' + gerundive ending -itavo.

⁶⁹⁹ Cf. also the non-Bactrian loanword *khakhordi* 'witch' (§3.5.2 s.v.), whose internal -kh- renders Ir. *-x-. For the substitution of χp- /xš/ with kʃ-/kʃ-, see §4.3.18.

Arguable loanwords from Bactrian (§3.2.3)

- (46.) *vaṣḍhiga*, festival on the mountain ← *βαγδιγο /vaγdīgə/ ‘tribute’ ← βαγδο ‘distributed’ < **baxta*- + suffix -ιγο

Tentative loanwords from Bactrian (§3.2.4)

- (54.) *laṭhana* ‘plain, open land (?)’ ← *λαχπτανο /laxštānə/ ← λαχπτα (later λαχπτο) ‘desert, plain’ < **daxštā*- + adj. suffix -ανο < **-āna*-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (70.) *raji* ‘cloak, woollen cloth’ ← *ραγζι /rayzi/ (attested παγαζο) < **ragzi*-

The strongest piece of evidence is the plausible etymology *saste* ‘day, elapsed’ ← Bactr. σαχτο /saxtə/. Because a cluster /xt/ is absent from the phonemic system of Gāndhārī, it needed to be adapted to Gāndhārī phonotactics when σαχτο was borrowed, and the eventual outcome of this adaptation process appears to be *-st-*. I believe that the most attractive way to account for this substitution is to say that *-st-* derives from an earlier cluster **-št-* since this would nicely parallel the rendering of Ir. **-xč-* as *-č-* /šc/ in *načira* ‘hunting’. A reason for the subsequent assimilation of **-št-* to *-st-* is also easily found: there were no other words in Gāndhārī exhibiting a cluster **-št-*.

vaṣḍhiga, festival on the mountain ← *βαγδιγο /vaγdīgə/ ‘tribute’ provides a second instance of this type of sound substitution. This etymology is arguable, but the phonological reasoning behind it is similar to what I assume for *saste*. For *vaṣḍhiga*, I namely hypothesise that **-zd-* would have been option number one to render the foreign cluster /γd/. **-zd-* faced, however, the same difficulty as **-št-* given that it was likewise absent from the phonemic system of Gāndhārī. Therefore, a further change from **-zd-* to *-ṣḍh-* /zḍ^(h)/ was probably the best solution available.⁷⁰⁰

Regarding *laṭhana* ‘plain, open land (?)’ ← *λαχπτανο /laxštānə/ and *raji* ‘cloak, woollen cloth’ ← *ραγζι /rayzi/, one can argue that /x/ and /γ/ were dropped during the borrowing process in an attempt to accommodate the foreign cluster to Gāndhārī phonology. With this argument, these words would be comparable to *Suliga* ‘Sogdian’ ← σογλιγο* /suγlīgə/ (§3.2.1 s.v.), where the voiced velar has likewise been lost without a trace.

However, it is also conceivable, albeit unprovable, that they are further examples of borrowing velar fricatives as sibilants. For *laṭhana*, one could

⁷⁰⁰ Due to the lack of a cluster **/zd/ in Gāndhārī, it was not possible to change **-zd-* into ***-zd-*, akin to the assumed assimilation of **-št-* to *-st-*. Cf. also the substitution of Ir. **-zd-* with Niya *-ṣḍh-* /zḍ^(h)/ which I have posited to derive the PN *Maṣḍhige* out of Ir. **mazdīgə* < **mazd-ya-ka-* (§3.4.1 and §4.3.19).

hypothesise that the observed simplification of Bactr. -χπτ- /xšt/ as Niya -th-/št/ is due to Bactr. /x/ being perceived as a palatal sibilant that was subsequently assimilated to the ensuing retroflex sibilant (§3.2.4 s.v.). As regards *raji*, it seems reasonable to assume that -γζ- /γž/ was rendered as /žž/, seeing that the -j- in *raji* could also indicate a geminate (§3.3.2 s.v.).

A typological parallel for the substitution of a velar fricative with a palatal sibilant is provided by Arm. *šloros* ‘yellow, green, pale’, a loanword from Gr. χλωρός ‘idem’ attested in *Revelation* 6.8 (Kölligan 2020: 138).⁷⁰¹

Also noteworthy is the pronunciation of *š* and *ž* in Pashto dialects. In NE Pashto, these are pronounced as velars, i.e. [x] and [g]. Yet, in other dialects, they are realised as palatals or postalveolars: in NW Pashto as [ç⁺] and [ʒ]; in SW Pashto as [f] and [ʒ⁻]; and in SE Pashto as [j] and [ʒ] (EDP: viii).

From a phonological perspective, such examples can be interpreted as velar fronting (or velar palatalisation), a type of sound change whereby the velar fricatives [x] and [ɣ] are fronted to [ç], [ç⁺], or [j] and [j], [ʒ], or [ʒ], respectively. Usually, segmental triggers like front vowels induce this type of change. In certain German dialects, /x/ (spelled <ch>) is, for example, fronted to [ç] after [ɪ], as in *Licht* ‘light’.⁷⁰² Velar fronting can also occur at syllable end before a coronal consonant (Kümmel 2007: 216). This phonetic environment would, depending on syllable divisions in Bactrian, apply to σαχτο /saxtə/, *βαγδιγο /vaydīgə/, *λαχρτανο /laxštānə/, and *ραγζι /rayži/.

The observed rendering of a velar fricative as a (palatal) sibilant is finally of some importance for the field of Kharoṣṭhī palaeography. This sound correspondence can namely be seen as an additional argument in support of Bühler’s (1895: 55) idea that the origin of the Kharoṣṭhī sign 𑀓 *śa* lies in the palaeographically almost identical Aramaic letter 𐤓 *hēth*. As *hēth* probably still indicated a velar fricative [x] in Achaemenid times and had not yet merged with the pharyngeal fricative [ħ] as in Biblical and Qumran Aramaic

⁷⁰¹ Elsewhere in the Bible translation, Armenian borrows Gr. χ as *k*^c /k^h/, e.g. *kʿamid* ‘cloak, mantle’ ← χαμύς, gen. χαμύδος ‘idem’. The most likely reason for the different treatment in *šloros* is that the Armenian translation of *Revelation* was revised in the 12th century by Nersēs Lambronac’i when Gr. χ was no longer pronounced as /k^h/ but as a velar fricative /x/ (cf. Kölligan 2020: 134 fn. 10).

⁷⁰² Hall (2022) is a recent monograph on velar fronting in German dialects. Modern Greek is another language where velar fronting is phonetically active. The χ- /x/ in χίλια ‘thousand’ is, for instance, pronounced as [ç] before the front vowel -ι- /i/ and the γ- /ɣ/ in γέροντας ‘old man’ as [j] in front of -ε- /e/.

(Steiner 2005; Cook 2022: 20), adopting Aramaic 𐤆 *hēth* as Kharoṣṭhī 𐭌 *śa* conceivably reflects the same type of sound substitution as discussed above.

4.3.28 Initial devoicing

The arguable and tentative etymology listed below presuppose initial devoicing to have happened, a phonological process seen with consonants of all places of articulation (see §2.1.4; §6.3).

Arguable loanwords from Bactrian (§3.2.3)

- (36.) *caṃkura* ‘imposer of penalties’ ← *ζιαγγαρο /ḷ(i)yāṅgarə/ (attested ζιανο κιρ-) < *ziyāni-kara-

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* ‘family estate’ ← *γιρλομηνο /γirlmēhə/ < *gr̥da-maiθa- ‘dwelling of a household’

Initial devoicing was not limited to inherited words, e.g. *kilane* < *glāna*- ‘ill’ or the inf. *ciyanae* < √jīv. It did also affect obvious Iranian loans, such as *gaṃñā* ‘treasury’, also 1x *kañi* ‘of the treasury’; 1x *kaṃjhavaliya* ‘treasurer’, ← OP **ganza*- ‘treasury’ (cf. ZMP *ganj*; MMP *ganz*) or *divira*, also 51x *tivira*, ‘scribe’ ← OP **dipīra*- (cf. MP *dibīr*).⁷⁰³ Therefore, it seems possible that *caṃkura* and *kilme* are additional examples of the same phonological process.

Two points should be acknowledged, however: (i) initial devoicing is a sporadic process (cf. §2.1.4), and (ii) Niya Prakrit words undergoing initial devoicing are usually also attested with a voiced initial, which, if their etymologies are correct, is not the case for *caṃkura* and *kilme*. Still, there is at least one frequently attested word whose initial is also consistently devoiced, i.e. *paḷyi* ‘tax’ < OIA *bali*- (ca. 90 attestations; cf. Burrow 1935b: 675; LKD: §14; Lüders 1936b: 647).

With *caṃkura* and *kilme*, there could be an additional motivation for the devoicing in the fact that initial /ḷ/ as in *ζιαγγαρο and initial /γ/ as in *γιρλομηνο are absent from the phonological system of Niya Prakrit. Bactr. initial /γ/ is nevertheless substituted with *g*- in the case of *guśura* ‘prince’ (§3.2.1) and, if it is a Bactrian word, *gavaśa* ‘deer, stag’ (§3.3.2).⁷⁰⁴

⁷⁰³ Cf. also foreign names of the type *Giraka* besides *Kiraka* or *Jimoya* besides *Cimoya*.

⁷⁰⁴ With loanwords, unexpected devoicing of initial consonants occurs cross-linguistically more often. Syriac, for instance, also sometimes devoices originally voiced stops when borrowing Iranian words (Ciancaglini 2008: 69–72). An

4.3.29 Loss of voiced consonants after homorganic nasals

In §2.1.5, I introduced the Niya Prakrit sound change (also operative in some other forms of Gāndhārī), whereby originally voiced consonants are lost after homorganic nasals (see further §5.4.6). It appears that one Bactrian loanword and two words possibly borrowed from Bactrian still underwent the same sound change.

Plausible loanwords from Bactrian (§3.2.2)

- (22.) *nihamñi* ‘to deposit, to put down’ ← *νιυα**νζ**- /niha**ñ**z/ < **ni-ṭhañja-*

Plausible loanwords from Bactrian or another language (§3.3.2)

- (67.) *parivanae* ‘burden, provisions’ ← *παροβα**νδ**αγο /pa**rə**vandəgə/ < **pari-banda-ka-* ‘bound around (the beast of burden)’

Arguable loanwords from Bactrian or another language (§3.3.3)

- (79.) *hastama* ‘quarrel, dispute’ ← *(υ)αστα**μ**βο /(**h**)astambə/ < **ha(m)-stamba-*

At the same time, this change seems not to have happened with four other loanwords, including a secure one.⁷⁰⁵

Secure loanwords from Bactrian (§3.2.1)

- (1.) *avi**ṇ**dama* (12x **-(ṇ)d-**; 5x **-(ṇ)t-**; 4x **-(ṇ)dh-**) ‘fine, recompense’ ← αβ**ṇ**δαμο /ə**vi**ndāmə/ derived from *αβιν- < **upa-ayanā-*

Plausible loanwords from Bactrian (§3.2.2)

- (17.) *am**ṭ**agi* ‘belonging to the district’ ← *am**ṭ**aga** ‘district’ ← αν**ḍ**αγο /andāgə/ (or /andāyə/) with debated etymology

Arguable loanwords from Bactrian (§3.2.3)

- (29.) *am**ḇ**ukaya*, a title ← α**μ**βουκαιο /ambūkā(y)ə/ (?) with unknown etymology

Arguable loanwords from Bactrian or another language (§3.3.3)

- (75.) *pajhava**m**ta* ‘breastband (?)’ ← *παζοβα**νδ**ο /pāzəvandə/ < **pāza(h)-banda-* ‘bound around the breast’

example of the opposite tendency, i.e. voicing an originally unvoiced stop, is (Vulgar) Latin *gamba* next to *camba* ‘leg’ ← Gr. καμπή (J. N. Adams 2013: 786f.). Both *gamba* and *camba* have descendants in the Romance languages (cf. e.g. French *jambe* ‘leg’ < *gamba* and Catalan *cama* < *camba*), which confirms that both variants were *sprachwirklich*.

⁷⁰⁵ Due to the absence of a Kharoṣṭhī grapheme <ṇ>, one would not be able to discern a change from /ṇg/ to /ṇ/. Therefore, I leave Bactrian loanwords containing a cluster -γγ- /ṇg/ aside here; they are treated in §4.3.12.

These loanwords are, I suggest, comparable to inherited words which fulfil the necessary phonological conditions for loss of a voiced consonant after a nasal but do not exhibit this change in writing, e.g. the frequently attested *daṇḍa* ‘stick’ < OIA *daṇḍa*-.⁷⁰⁶ Such words are probably historical spellings (cf. LKD: §45; Brough 1962: 98f.), as there are also words where the assimilation is sometimes reflected in writing and sometimes not, e.g. *baṃdhitaga* ‘bound’ (CKD 660) besides *baṃnidaga* (CKD 436) / ins.sg. *baṃnitagena* (CKD 767).⁷⁰⁷ Therefore, loanwords such as *aviṃdama*, *aṃtagi*, and *aṃbukaya* could likewise be historical spellings, whereas the spelling of *nihaṃñ-*, *parivanae*, and *hastama* could have reflected the actual pronunciation more faithfully.⁷⁰⁸

The advantage of this account is that one does not need to assume that *nihaṃñ-*, *parivanae*, and *hastama* were borrowed before the relevant sound change stopped operating and the other words thereafter, which would seem unlikely since there is otherwise no decisive evidence for different chronological layers among the Bactrian and potentially Bactrian loanwords.

4.4 Morphological integration

In this section, I investigate to what extent and in which way(s) loanwords ascribable to Bactrian (§3.2) and loanwords borrowed from either Bactrian or another language (§3.3) were integrated into the morphology of Niya Prakrit. After surveying the relative frequency with which different parts of speech are represented in the loanword corpus (§4.4.1), I first discuss nouns and adjectives (§§4.4.2–4.4.3) before delving deeper into the morphology of borrowed verbs (§4.4.4).

4.4.1 Parts of speech

As the list below shows,⁷⁰⁹ most words certainly or possibly borrowed from Bactrian are nouns (69 cases ~ 86,3%). Adjectives/adverbs and verbs occur

⁷⁰⁶ Contrast Gandh. **kaṇa* ‘stick, stroke’ < OIA *kāṇḍa*-, whence Tumsh. *kaṇa*- ‘idem’ (Hitch 1988b: 149f.; 2009: 19).

⁷⁰⁷ The Old Persian loanword *gaṃñā* ← OP **ganza*- is another example of this type. This word is normally spelled with *-ṃñ-* but the compound *kaṃjhavaliya* ‘treasurer’ presents us with a historical spelling with *-ṃjh-*.

⁷⁰⁸ Cf. the argument made about the substitution of Bactr. *-ṛḍ-* /*rd*/ in §4.3.24.

⁷⁰⁹ Three notes on the list: (i) loanwords only attested as an adjective, but of which it is likely that the underlying noun was borrowed are put under the category “nouns”; (ii) adjectives and adverbs are allocated to one category

too, but they are decidedly less frequent (6 cases ~ 7,5% and 5 cases ~ 6,3%, respectively).⁷¹⁰

These statistics are in line with typological expectations.⁷¹¹ Most noteworthy is the fact that Niya Prakrit borrowed some verbs from Bactrian because it has often been claimed that verbs are more resistant to borrowing than nouns, especially in synthetic languages (see e.g. Tadmor 2009: 61–63).⁷¹² Yet, the significance of these verbs should not be overstated, as four of them belong to the same semantic category, all having to do with “transport and travel” (see §4.5.2).

Nouns: 69 cases (~ 86,4%)

Secure loanwords from Bactrian (§3.2.1): 13 cases

aviṃdama ‘fine, recompense’ (also denominative pret.3sg. *aviṃdamavita* ‘he imposed a fine’) (1.); *kṣuna* ‘date, reign, regnal year’ (2.); *guśura* ‘prince’ (3.); *daśavida* ‘chief of ten households’ (5.); *nokṣari* ‘month of the new year’ (6.); *prigha* ‘(monochrome) damask’ (7.); *laṣi* ‘gift’ (8.); *lastana* ‘dispute, lawsuit’ (9.); *vaga* ‘rent (paid for the use of land)’ (10.); *valaga* ‘animal keeper’ (11.); *śadavida* ‘chief of a hundred households’ (12.); *Suliga* ‘Sogdian’ (14.); *stora* ‘large animal, horse, camel’ (also *storabala* ‘animal flock’; *storavara* ‘horse driver’; *storvana* ‘groom’) (15.).

Plausible loanwords from Bactrian (§3.2.2): 11 cases

*aṃtaga** ‘district’ → adj. *aṃtagi* ‘belonging to the district’ (17.); *are* ‘a half’ (18.); *aśpista* ‘lucerne’ (19.); *Khotamṇa* ‘Khotan’ (also adj. *Khotamṇi(ya)* ‘Khotanese’) (20.); *jenavida* ‘chief of the armour’ (21.); *picara* ‘(mark of)

because the loanwords belonging here can usually be used in both ways; and (iii) compounds, secondarily derived adjectives, and denominative verbs have not been taken into special consideration in the statistics. After each word, I give the serial number of the relevant lemma in Chapter 3 in round brackets.

⁷¹⁰ Leaving out the tentative etymologies hardly alters the picture. If one does so, there are 60 nouns (~ 85,7%), 5 adjectives/adverbs (~ 7,1%), and 5 verbs (~ 7,1%). The 12 non-Bactrian loanwords (§3.5) show a similar picture: 11 are nouns (~ 91,7%) and 1 is a verb (~ 8,3%). Of the 5 loanwords from an unidentified Iranian language (§3.6), 3 are nouns and 2 are adjective or adverb.

⁷¹¹ For a typological view, cf. e.g. Myers-Scotton (2006: 226–229); Tadmor, Haspelmath & Taylor (2010: 231); Matras (2020²: 179–208). See additionally Noonan (2019: 266f.) and Dragoni (2023b: 225f.), whose figures about respectively non-Semitic loanwords in Biblical Hebrew and Khotanese loans in Tocharian agree in large parts with those observed here.

⁷¹² The various reasons why verbs are borrowed less often are treated in detail in Wohlgemuth (2009). For the borrowed verbs in Niya Prakrit, see §4.4.4.

honour' (23.); *maķa* 'bean' (24.); *milima*, a unit of measure (also adj. *milimi* 'with a capacity of X *milima*') (25.); *yatma* 'measurer of rations' (26.); *vaše* 'garments' (27.); *saste* 'day, elapsed' (28.).

Arguable loanwords from Bactrian (§3.2.3): 15 cases

ambukaya, a title (29.); *aco* 'frontier, border post' (also *acoviṃna* 'border official'; *Acomena*, place name) (30.); *aḍini* '(broomcorn) millet' (31.); *avalika* 'swaddle' (33.); *aṣgara* 'herald (?)' (34.); *caṃkura* 'imposer of penalties' (36.); *tomga*, a title (38.); *nihala* 'settlement, agreement' (39.); *paķe* 'allotment, share' (40.); *piro* 'military post, fort' (also adj. *pirovi* 'of the fort') (42.); *badho* 'pledge, mortgage' (43.); *muṣḍhaṣi*, woman exchanged within exogamous marriage practices (44.); *vaṣḍhiga*, festival on the mountain (also adj. *vaṣḍhigaīm*) (46.); *vaṃga* 'weaver' (47.); *suḍinakirta* 'needlework, embroidery' (48.).

Tentative loanwords from Bactrian (§3.2.4): 8 cases

apcira, a unit of measure (for vineyards) (49.); *kilme* 'family estate' (also *vegakilme* 'outside (?) the family estate') (50.); *taravara* 'sword' (51.); *reda* 'seed, sprout (?)' (52.); *Remena*, place name (53.); *laṭhana* 'plain, open land (?)' (54.); *lastuga*, textile product (55.); *ṣvaṭhaṃgha* / *ṣoṭhaṃga* 'finance officer' (56.).

Secure loanwords from Bactrian or another language (§3.3.1): 2 cases

śpaṣa 'watching, guarding' (also *śpaṣavaṃna* 'guard, watchman') (58.); *harga* 'dues, tax' (59.).

Plausible loanwords from Bactrian or another language (§3.3.2): 11 cases

aṭa 'flour' (60.); *aṃana* 'village, territory of a clan' (also adj. *aṃaneṃci* 'belonging to the village') (61.); *gavaṣa* 'deer, stag' (62.); *tavastaga* 'carpet' (63.); *draṃga* 'office' (also *draṃgadhara* 'office holder') (64.); *namata* 'felt' (65.); *paraṣa* 'abduction, plundering' (also denominative pret.3pl. *parasitaṃti* / *paraṣitaṃti* 'they abducted', etc.) (66.); *parivanae* 'burden, provisions' (67.); *pravamaṃga* '(authoritative) document' (68.); *maravara* 'accountant' (69.); *raji* 'cloak, woollen cloth' (70.).

Arguable loanwords from Bactrian or another language (§3.3.3): 9 cases

agiṣḍha 'cover, rug' (71.); *aḡeta* 'tax collector' (72.); *kojava* 'rug, blanket' (73.); *namanaḡa* / *namaṃniya* 'exchange' (74.); *pajhavaṃta* 'breastband (?)' (75.); *rasaṃna* 'rope (?)' (76.); *vara* 'load' (77.); *ṣaṃna* 'hemp, hempen (?)' (78.); *hastama* 'quarrel, dispute' (79.).

Adjectives and adverbs: 6 cases (~ 7,4%)

Secure loanwords from Bactrian (§3.2.1): 3 cases

jheniga ‘in charge of, under the care of’ (4.); *ṣada* ‘pleased, happy’ (also denominative pres.1sg. *ṣademi* ‘I am happy’, etc.) (13.); *ṣpara* / *ṣpura* ‘full, completely’ (16.).

Arguable loanwords from Bactrian (§3.2.3): 1 cases

atga ‘additional, complementary’ (32.).

Secure loanwords from Bactrian or another language (§3.3.1): 1 cases

ajhate ‘free, noble’ (also special adv. *ajhatu*) (57.).

Tentative loanwords from Bactrian or another language (§3.3.4): 1 case

ujhmayuga ‘trustworthy, skilled (?)’ (80.).

Verbs: 5 cases (~ 6,2%)

Plausible loanwords from Bactrian (§3.2.2): 1 case

nihaṃñ- ‘to deposit, to put down’ (22.).

Arguable loanwords from Bactrian (§3.2.3): 4 cases

oḍ- ‘to let go’ (35.); *tim-* ‘to be concerned about, to be angry’ (37.); *picav-* ‘to hand over’ (41.); *leṣ-* ‘to dispatch, to conduct’ (45.).

4.4.2 The inflection of borrowed nouns and adjectives

As inferable from the list in §4.4.1, most of the nouns and adjectives that were or could have been borrowed from Bactrian were in Niya Prakrit adopted into the productive thematic declension type in *-a* (LKD: §§51–67).⁷¹³ Historically speaking, these loanwords were usually also *a*-stems in Bactrian (and other Iranian languages), although this group additionally includes a few old *i*-stems in which the final **-i* caused umlaut of a preceding **-a-* (e.g. *-vida* ← *-βiḍo* /*vidə*/ < **-pati-*). One can debate whether these words still ended in a schwa in Bactrian (as I tentatively assume in my phonological transcriptions) or if they ended in a consonant and were added to the productive *a*-declension in Niya Prakrit because consonant stems had largely died out in the latter (LKD: §72).

Besides, there may be some evidence among the Bactrian and potentially Bactrian loanwords in Niya Prakrit for the preservation of *i*-stems < OIr. **-i*

⁷¹³ For Bactrian loanwords ending in *-o*, such as *aco* ‘frontier, border post’ or *piro* ‘military post, fort’, cf. §4.3.1.

and *-ī in early Bactrian (see §4.2.1 for an overview). Morphologically, there is not much difference between these *i*-stems and the bulk of (potentially) Bactrian loanwords in Niya Prakrit, as the *i*-stems tended to be transferred to the more productive *a*-declension anyhow (LKD: §70).

One can conclude that the morphological integration in Niya Prakrit of nouns and adjectives borrowed from Bactrian was overall quite simple, presumably because the nominal morphology of both languages did not differ too much.⁷¹⁴

There is one group of Bactrian borrowings whose morphology needs more discussion, viz. nouns and personal names ending in *-e*; they receive a separate treatment in the next section.

4.4.3 A special case: Final *-e* in nouns and personal names

Some Bactrian loanwords/names in Niya Prakrit and one potentially Bactrian loanword (*ajhate*) end in a final vowel *-e*. See the list below.⁷¹⁵

Plausible loanwords from Bactrian (§3.2.2)

- (18.) *are* ‘a half’ ← *αρλο /arlə/ < *arda- or *αρλαγο /arləgə/ < *arda-ka-
- (27.) *vaṣe* ‘garments’ ← *οαβο /wašə/ < *wastra-
- (28.) *saste* (cf. loc.sg. *sasteyammi*) ‘day, elapsed’ ← σαχτο /saxtə/ < *saxta-

Arguable loanwords from Bactrian (§3.2.3)

- (40.) *paḱe* ‘allotment, share’ ← *παῖκο /pəškə/ < *pišta-ka-

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* ‘family estate’ ← *γιρλομηνο /γirlmēhə/ < *gr̥da-maiθa- ‘dwelling of a household’

Secure loanwords from Bactrian or another language (§3.3.1)

- (57.) *ajhate* ‘free, noble’ ← αζαδο /āzādə/ < *āzāta-

⁷¹⁴ The same observation holds for the non-Bactrian borrowings in Niya Prakrit (§3.5). The exceptions are *khakhordi* (also 1x *khakhorda*) ‘witch’, a fem. in *-i* (LKD: §68); *prahoni* ‘garment’, whose final *-i* may come from the Khotanese nom.sg. in *-ā*; and the religious title *ratu*, potentially an old *u*-stem in its Iranian source. For the problem of the final *-u* in *kremeru* ‘crimson, scarlet’, an Iranian loanword from an unidentified source, see §3.6 s.v.

⁷¹⁵ The longer form of this ending is *-eya*, which regularly turns up in the oblique cases (LKD: §6). Words ending in *-ae*, e.g. *parivanae* ‘burden, provisions’, have not been included because in these cases the final *-e* is merely due to a phonologically regular development of earlier *-aga* (LKD: §53).

Bactrian PNs (§3.4.2)

- (81.) *Apge* ← *αβγο /āvgə/ < *āpa-ka-
- (82.) *Katge* ← *καδγο /kādgə/ < *kāta-ka- (or *καδγο /kadgə/ < *kata-ka-)
- (84.) *Kutge* ← *κοδγο /kudgə/ < *katu-ka- or *kuta-ka-
- (86.) *Palge* ← *παλγο /pālgə/ < *pāda-ka-

Only in the case of *kilme* ‘family estate’, whose etymology is merely tentative, would there be a direct source for this vowel in the Bactrian donor form, i.e. *-ηυο /ēhə/. Regarding the other words, I can think of at least three explanations, although none can be proved for now.⁷¹⁶

As a first option, one could consider that *-e* is shortened from *-ae* < *-aga*. Burrow may actually have had this scenario in mind when he derived *Niya are* ‘a half’ from *arda-ka- (LKD: 77 s.v.).⁷¹⁷ Yet, the change of *-ae* to *-e* occurs only infrequently (see LKD: §53), and there are at least two other problems with this suggestion. First, if *-e* comes from *-ae* < *-aga*, one might expect spellings with *-ae* and *-aga* to be attested too; compare, for instance, *namate* ‘felt’ (CKD 154) next to *naṃmatae* (CKD 714) and *na(ṃ)mataga* (CKD 728 (2x)) < *namata-ka-. Second, not all words ending in *-e* can easily come from an Iranian source containing the *ka-suffix. It would, for instance, be hard to justify the existence of a form like **σαχταγο, only to account for the *-e* in *saste* ← σαχτο /saxtə/.

A second option would be to interpret the *-e* as a fossilised nom.sg. in *-e < OIA *-aḥ*, whose prior existence in *Niya Prakrit* is strongly suggested by the abl.sg. in *-ade* (-āde) < OIA *-ātaḥ (cf. Śaur. -ādo; Māh. -āo; see LKD: §56). The issue with this approach is that most loanwords in *Niya Prakrit* simply follow the productive declension of the *a*-stems with dir.sg. in *-a* (cf. §4.4.2). Accordingly, one would have to make the unverifiable assumption that the words ending in *-e* belong to a more archaic stratum of loanwords than the majority of Bactrian borrowings or that they resisted, for as yet unclear reasons, the morphological change of nom.sg. in *-e to dir.sg. in *-a*. Assuming a fossilised nom.sg. ending *-e* may nonetheless still be the best option to account for the personal names *Apge*, *Katge*, *Kutge*, and *Palge*. Being foreign names, they could perhaps have retained archaic forms no longer found in common nouns due to their being less well integrated morphologically.

⁷¹⁶ These explanations are of a morphological rather than a phonological nature, which is why I did not discuss this final *-e* with the phonological correspondences in §4.3.

⁷¹⁷ In view of the co-existence in Middle Persian of *āzād* and *āzādag* ‘free’, one could likewise assume that *ajhate* ‘free’ comes from a descendant of *āzāta-ka-.

For the nouns, I prefer a third option. With these, one could derive the Niya Prakrit ending *-e* from one of the Bactrian case endings in *-ε /e/*, i.e. the obl.sg. or the dir.pl.⁷¹⁸ This possibility was already entertained by Maggi (2017: 157; 2022b: 152), who derived the Niya hapax *vāṣe* ‘garments’ from the dir.pl. **οαβε* /*waše*/ of Bactr. **οαβο* /*wašə*/ ‘garment’ < **wastra-*;⁷¹⁹ and I have previously (2021: 53) suggested that *paḱe* ‘share’ comes from a dir.pl. **παρκε* of Bactr. **παρκο* /*pəškə*/ ‘share’ < **pišta-ka-* ‘that which is cut > share’. An argument in favour of deriving these words from a plural is that both *vāṣe* and *paḱe* are attested with numerals higher than one (cf. *vāṣe* 4 in CKD 534 or *paḱe* 3 in CKD 66).⁷²⁰ Borrowing plural morphemes is furthermore typologically common (Matras 2020²: 190f.; Gardani 2012).

Although the evidence is admittedly limited, the same kind of explanation could work for *are* ‘a half’, *saste* ‘day, elapsed’, and *ajhate* ‘free, noble’. Since *are* ‘a half’ is never attested with a numeral higher than one, and a word meaning ‘half’ is in any case usually used in the singular, the source of *are* may have been the obl.sg. **αρλε*. Yet, in case expressions such as ***are* 2 ‘two halves’ or ***are* 3 ‘three halves’ were possible too, the dir.pl. **αρλε* could be another possibility. *saste* ‘day, elapsed’ often occurs in the plural, even though a dir.pl. *σαχτε** ‘days’ is so far not attested. The obl.sg. *σαχτε* is, however, found in NPlate 6 (Sims-Williams 2015: 257; 261), which could be an alternative source for Niya Prakrit *saste*. Similarly, *ajhate* occurs in the plural (note e.g. gen.pl. *ajhateyana* CKD 242) and frequently combines with *jaṃna* ‘people’ (CKD 120 (2x); 272; 593; 889), which can take plural concord because of its semantics.⁷²¹ Still, I have been unable to find an instance of a dir.pl. *αζαδε** ‘free’ in Bactrian, despite the frequent attestation of the word *αζαδο*.

⁷¹⁸ For TB *sapule* ‘pot, jar’ ← Bactr. *σαβολο* ‘idem’ < **sapauda-*, I proposed in §4.2.1 that the final *-e* in *sapule* continues an archaic nom.sg. ending in *-i /i/* < **-ah*. For the Niya loanwords in *-e*, this option seems unlikely because the vowels *-i-* and *-e-* are mostly kept distinct in Niya Prakrit, including in loanwords (see §§4.3.3–4.3.5). In other words, one would expect the Bactrian nom.sg. to be borrowed as ***-i*, not as *-e* (or at least to see fluctuations between *-i* and *-e*).

⁷¹⁹ Conceivably, *vāṣe* / **οαβε* was used as a general term for ‘cloths’ in much the same way as Dutch *kleren*, which is derived by sound law from *klederen*, the plural of *kleed* ‘garment’ (Philippa et al. 2005–9 III: 72).

⁷²⁰ At least *paḱe* is also used as a singular; cf. e.g. *paḱe* 1 in CKD 66 (2x).

⁷²¹ Cf. e.g. *ajhade jaṃna abhisammitamti* ‘the free people came to an agreement’ (CKD 120 obverse 2f.) or *ajhate jaṃna ... abomata kareṃdi* ‘the free people disobey’ (CKD 272 obverse 10).

Deriving the final *-e* in these loanwords out of the Bactrian dir.pl. in *-ε /e/* may be supported by one more argument. The standard dir.pl. ending in Niya Prakrit is *-a* < OIA *-āḥ*. There exists, however, an alternative ending in *-e*, sometimes also written as *-eya* or *-i* (LKD: §60). This ending can occur with inherited words, e.g. *prahare* ‘blows’ (CKD 209; 462; 554; 609) next to more frequent *prahara* ‘idem’ < OIA *prahāra-*. Interestingly, the same ending also occurs with six (possibly) Bactrian loanwords, where one wonders if the final *-e* is again a rendering of Bactr. *-ε /e/*: *daśavite* ‘chiefs of ten households’; *śeṣavalage* ‘remaining animal keepers’; *śadavide* next to *śadavida* ‘chiefs of a hundred households’; (*surva*)*tomge*, a title; *śpaṣavaṃne(ya)* / *spaṣavaṃne* ‘guards, watchmen’; and *namate* / *na(m)mati* ‘felts’ (see §3.2.1; §3.2.3; §3.3.1–2 s.vv.). Burrow (LKD: §60) moreover noted that the Niya Prakrit dir.pl. in *-e* is especially frequent with the suffix *-ci*, which, as I argue in §5.2.2, seems likewise borrowed from Bactrian.

In brief, there are various options to account for the *-e* in some Bactrian loanwords and personal names in Niya Prakrit. While the evidence is too slender to reach definitive conclusions, my preference is to explain the *-e* in personal names as a Prakrit fossilised nom.sg. in **-e* < **-aḥ* and the *-e* in the common nouns as a rendering of the Bactrian dir.pl. *-ε /e/* or, with a word such as *are* ‘a half’, perhaps the homonymous obl.sg.

4.4.4 The conjugation of borrowed verbs

In the present tense, Niya Prakrit verbs are divided into two conjugation classes, one with the 3sg. in *-ati*, e.g. *ichati* ‘(s)he desires’ < Skt. *icchatī*, and one with the 3sg. in *-eti*, e.g. *nikhaleti* ‘(s)he removes, (s)he produces’ < Skt. *niṣkālayati*. Outside the present tense, every verb is by and large conjugated along the same patterns.⁷²² Similarly, Bactrian verbs either use a 3sg. present ending in *-īdo /idə/* (class A) or in *-do /də/* (class B), while being conjugated according to the same paradigms in other tenses and moods (see BD II: 41–49).

Thus, one can pose the following two questions: (i) into which of the two conjugation classes in Niya Prakrit are Bactrian verbs borrowed; and (ii) is there a correlation between the conjugation class a verb belongs to in Bactrian and the class it gets integrated in when borrowed into Niya Prakrit?

⁷²² See LKD (§§93–116) for the verbal morphology in Niya Prakrit. For the comparable situation in other MIA languages, see e.g. Bubeník (1996: 96–127); von Hinüber (2001²: 273–317 = §§412–500); Oberlies (2019² I: 318–654).

As seen from the list below, the presently available data are too limited to answer these questions conclusively.

Plausible loanwords from Bactrian (§3.2.2)

- (22.) *nihaṃñ-* ‘to deposit, to put down’ ← *νιχανζ- /*nihanz-* / < **ni-θanʾa-*: no present tense forms attested.

Arguable loanwords from Bactrian (§3.2.3)

- (35.) *oḏ-* ‘to let go’ ← *ωσιρζ- /*ōhirz-* / (3sg. *ωσιρζιδο) < **awa-hr̥z-*: 3sg. *oḏeti* attested.
- (37.) *tim-* ‘to be concerned about, to be angry’ ← *τιμ- /*tīm-* / < **tāmya-*: no present tense forms attested.
- (41.) *picav-* ‘to hand over’ ← *πιδοραιο- /*pidšaw-* / (3sg. *πιδοραιοιδο) < **pati-čyawa-*: 3sg. *picaveti** reconstructable based on 2sg. *picavesi*; 2pl. *picavetu*.
- (45.) *leš-* ‘to dispatch, to conduct’ ← *λιζ- /*liž-* / or *ληζ- /*lēž-* / < **darzaya-*: no present tense forms attested.

Of *nihaṃñ-*, *leš-*, and *tim-*, no present forms are currently attested, so not much can be said about their morphology.⁷²³ Yet, we can at least say something about the morphological integration of the other two verbs, i.e. *oḏ-* and *picav-*. Both verbs belong to the *eti*-class, and it is plausible that their hypothesised Bactrian sources *ωσιρζ- and *πιδοραιο- formed their pres.3sg. in -ιδο (class A) given that the base verbs σιρζ- and ραιο- are attested in the pres.3sg. as σιρζιδο and ραιοιδο, respectively (cf. §3.2.3 s.vv.).

Therefore, my hypothesis is the following. Seeing that verbs are often borrowed in their 3sg. form (Matras 2020²: 193; cf. also Wohlgemuth 2009: 82f.), I would argue that Bactrian verbs ending in pres.3sg. -ιδο were adopted into the Niya Prakrit *eti*-class because of the phonological resemblance between the 3sg. endings. Yet, discoveries of additional data will be necessary to confirm whether the assumed correspondence between -ιδο and -*eti* was a general rule and to determine how Bactrian class B verbs in -δο were integrated in Niya Prakrit.

4.5 A semantic analysis

This section classifies the corpus of Bactrian loanwords (§3.2) and words possibly borrowed from Bactrian (§3.3) according to their semantics. After some methodological preliminaries (§4.5.1), I give an overview of the four

⁷²³ There are likewise no present tense forms attested of *darš-* ‘to load (a beast of burden)’, so far the only instance of a verb borrowed from an Iranian language other than Bactrian (see §3.5.1 s.v.).

semantic categories posited together with a list of the words assigned to them and a brief commentary (§§4.5.2–4.5.5).

4.5.1 Methodological preliminaries

While it has long been known that, for instance, words relating to clothing are often borrowed from Iranian languages (cf. Lüders 1936a), a semantic analysis of the hitherto identified Iranian loanwords in Niya Prakrit has not yet been attempted (see also §4.1). This section aims to compensate for this lack.

As in the rest of this chapter, I will concentrate on the Bactrian loans (§3.2) and the words that could come from Bactrian but for which other donor languages are possible too (§3.3).⁷²⁴ With the latter group, we cannot be entirely sure whether they are all borrowed from Bactrian, so I will indicate which words belong to which category. It will nevertheless become clear that the semantic domains covered by the two types of loanwords do not substantially differ, which could be one more indication that most of the words treated in §3.3 were borrowed from Bactrian specifically (see also §4.2.6). Arguable and tentative etymologies are also included since leaving them out does not change the overall picture.

As grouping words into semantic categories can at times be slightly arbitrary, I have chosen to work with four sufficiently large categories that do not show too much overlap.

- (i) Administrative, political, military, and economic terms (§4.5.2: 58 words ~ 72,5%)
- (ii) Textiles and clothing (§4.5.3: 13 words ~ 16,3%)
- (iii) Fauna, flora, and food (§4.5.4: 6 words ~ 7,5%)
- (iv) Emotions and values (§4.5.5: 3 words ~ 3,8%)

When developing these categories, I based myself on the 24 semantic domains posited by the Loanword Typology project (Haspelmath & Tadmor 2009: 7; 22–34). My categories (ii) and (iv) respectively correspond to Haspelmath and Tadmor’s domains “textiles and grooming” (their no. 6) and “emotions and values” (their no. 16). Category (iii) combines three of their domains, i.e. “animals” (their no. 3), “food and drink” (their no. 5), and

⁷²⁴ The number of loanwords securely ascribable to donor languages other than Bactrian is too scanty to warrant a full-scale semantic analysis. See §4.2 for some brief notes.

“agriculture and vegetation” (their no. 8). Category (i) comprises seven subcategories, which are likewise inspired by Haspelmath and Tadmor’s semantic domains (see §4.5.2). Sometimes, however, the nature of the material—technical words attested in administrative texts from an ancient culture—forced me to deviate from their classification system, which is based on analyses of loanwords in modern languages and not always directly applicable to ancient languages (cf. also Clackson 2023: 399f. and Dragoni 2023b: 229).

Words belonging to categories (i)–(iii) are cross-linguistically known to be highly susceptible to borrowing (Tadmor, Haspelmath & Taylor 2010: 232).

4.5.2 Administrative, political, military, and economic terms

The vast majority of the loanwords collected in §§3.2–3.3 (58 words ~ 72,5%) belong to the category of “administrative, political, military, and economic terms”, thus reflecting the role played by the ancestor of Niya Prakrit in the Kuṣāṇa administration (see §7.3). While being much more frequent, they resemble in their semantics the few Old Persian loanwords preserved in Niya Prakrit (§4.2.2).

Although some words would arguably fit into more than one category, one can distinguish seven subgroups.

- (i) Official titles and professions (14 words ~ 24,1%)
- (ii) Legal terminology (13 words ~ 22,4%)
- (iii) Economic terms (10 words ~ 17,2%)
- (iv) Geographical terms and administrative units (7 words ~ 12,1%)
- (v) Transport and travel (6 words ~ 10,3%)
- (vi) Military terminology (5 words ~ 8,6%)
- (vii) Calendrical terms (3 words ~ 5,2%)

The first subcategory, i.e. “official titles and professions”, comprises fourteen lemmata (see the list below). One could further add a few compounds that did not receive a separate lemma: *acoviṇṇa* ‘border official’ (§3.2.3 s.v. *aco*); *spāṣavaṇṇa* ‘guard, watchman’ (§3.3.1 s.v. *spāṣa*); and *draṃgadhara* ‘office-

holder (§3.3.2 s.v. *dramga*).⁷²⁵ Haspelmath and Tadmor do not have a separate semantic domain for this type of word.

Secure loanwords from Bactrian (§3.2.1)

- gušura* ‘prince’ (3.)
- dašavida* ‘chief of ten households’ (5.)
- valaga* ‘animal keeper’ (11.)
- śadavida* ‘chief of a hundred households’ (12.)

Plausible loanwords from Bactrian (§3.2.2)

- jenavida* ‘chief of the armour’ (21.)
- yatma* ‘measurer of rations’ (26.)

Arguable loanwords from Bactrian (§3.2.3)

- aṃbukaya*, a title (29.)
- ašgara* ‘herald (?)’ (34.)
- caṃkura* ‘imposer of penalties’ (36.)
- toṃga*, a title (38.)
- ṽapga* ‘weaver’ (48.)

Tentative loanwords from Bactrian (§3.2.4)

- ṣvaṭhaṃgha* / *ṣoṭhaṃga* ‘finance officer’ (56.)

Plausible loanwords from Bactrian or another language (§3.3.2)

- maravara* ‘accountant’ (69.)

Arguable loanwords from Bactrian or another language (§3.3.3)

- aḡeta* ‘tax collector’ (72.)

A second subgroup concerns “legal terminology”, e.g. regarding punishments, marriage practices, and different transactions of property such as sale or leasing. This subgroup, which basically overlaps with Haspelmath and Tadmor’s semantic domain “law” (their no. 21), consists of thirteen items.⁷²⁶

Secure loanwords from Bactrian (§3.2.1)

- aviṇḍama* ‘fine, recompense’ (1.)
- jheniga* ‘in charge of, under the care of’ (4.)
- laši* ‘gift’ (8.)

⁷²⁵ *storavara* ‘horse driver’ and *storvana* ‘groom’, two compounds formed from *stora* ‘large animal, horse, camel’ (§3.2.1 s.v.) could be added here too. In the word lists below, numbers in round brackets refer to the serial number of the relevant lemma in Chapter 3.

⁷²⁶ Of the official titles listed above, *caṃkura* ‘imposer of penalties’ has probably the closest connection to legal activities (see §3.2.3 s.v.).

lastana ‘dispute, lawsuit’ (9.)
vaga ‘rent (paid for the use of land)’ (10.)

Arguable loanwords from Bactrian (§3.2.3)

nihala ‘settlement, agreement’ (39.)
badho ‘pledge, mortgage’ (43.)
muṣḍhaṣi, woman exchanged within exogamous marriage practices (44.)

Secure loanwords from Bactrian or another language (§3.3.1)

ajhate ‘free, noble’ (57.)

Plausible loanwords from Bactrian or another language (§3.3.2)

pravaṇnaga ‘(authoritative) document’ (68.)

Arguable loanwords from Bactrian or another language (§3.3.3)

namanaga / *namaṇniya* ‘exchange’ (74.)
hastama ‘quarrel, dispute’ (79.)

Tentative loanwords from Bactrian or another language (§3.3.4)

ujhmayuga ‘trustworthy, skilled (?)’ (80.)

A group of ten words encompasses “economic terms”, e.g. units of measure and other words related to taxation.⁷²⁷ There is no exact correspondent in Haspelmath and Tadmor’s list of semantic domains, but the units of measure and words such as *śpara* / *śpura* ‘full, completely’ or *are* ‘a half’ would fit under “quantity”, their domain no. 13.

Secure loanwords from Bactrian (§3.2.1)

śpara / *śpura* ‘full, completely’ (16.)

Plausible loanwords from Bactrian (§3.2.2)

are ‘a half’ (18.)
milima, a unit of measure (25.)

Arguable loanwords from Bactrian (§3.2.3)

atga ‘additional, complementary’ [used of prices] (32.)
paḳe ‘allotment, share’ (40.)
vaṣḍhiḡa, festival on the mountain (46.)

Tentative loanwords from Bactrian (§3.2.4)

apcira, a unit of measure (for vineyards) (49.)
reda ‘seed, sprout (?)’ [used when measuring vineyards] (52.)

⁷²⁷ Official titles belonging to the same semantic sphere are *daśavida* ‘chief of ten households’; *śadavida* ‘chief of a hundred households’; *yatma* ‘measurer of rations’; *ṣvaṭhaṃgha* / *ṣoṭhaṃga* ‘finance officer’; *maravara* ‘accountant’; and *aḡeta* ‘tax collector’.

Secure loanwords from Bactrian or another language (§3.3.1)

harga ‘dues, tax’ (59.)

Plausible loanwords from Bactrian or another language (§3.3.2)

draṃga ‘office’ [place where taxes are stored] (64.)

Seven lemmata can be attributed to the subcategory “geographical terms and administrative units”.⁷²⁸ None of the semantic domains of Haspelmath and Tadmor corresponds exactly to this subcategory; the one that comes closest is “social and political relations” (their no. 19).

Secure loanwords from Bactrian (§3.2.1)

Suliga ‘Sogdian’ (14.)

Plausible loanwords from Bactrian (§3.2.2)

aṃtagi ‘belonging to the district’ (17.)

Khotamṇa ‘Khotan’ (20.)

Tentative loanwords from Bactrian (§3.2.4)

kilme ‘family estate’ (50.)

Remena, place name (53.)

laṭhana ‘plain, open land (?)’ (54.)

Secure loanwords from Bactrian or another language (§3.3.1)

ayana ‘village, territory of a clan’ (61.)

There are six words, including four verbs, that seem to relate in one way or the other to “transport and travel”. This subgroup can be compared to Haspelmath and Tadmor’s semantic domain “motion” (their no. 10).⁷²⁹

Plausible loanwords from Bactrian (§3.2.2)

nihaṃñ- ‘to deposit, to put down’ (22.)

Arguable loanwords from Bactrian (§3.2.3)

oḍ- ‘to let go’ (35.)

picav- ‘to hand over’ (41.)

leṣ- ‘to dispatch, to conduct’ (45.)

Plausible loanwords from Bactrian or another language (§3.3.2)

parivanae ‘burden, provisions’ (67.)

⁷²⁸ Cf. also the toponym *Acomena* discussed §3.2.3 s.v. *aco*.

⁷²⁹ Niya Prakrit *darṣ-* ‘to load (a beast of burden)’ (§3.5.1 s.v.) and *paṇēvara* ‘provisions (for a journey)’ (§3.6 s.v.) are additional examples of this type of word from the broader category of Iranian loanwords. *tomga* is an example of a functionary who was responsible for transport (see §3.2.3 s.v.).

Arguable loanwords from Bactrian or another language (§3.3.3)

vara ‘load’ (77.)

A sixth subgroup consists of “military terminology”, mostly concerning the defence of the outer borders of the Shanshan kingdom.⁷³⁰ There are five words in this category, which in essence corresponds to Haspelmath and Tadmor’s semantic domain no. 20, viz. “warfare and hunting”.

Arguable loanwords from Bactrian (§3.2.3)

aco ‘frontier, border post’ (30.)

piro ‘military post, fort’ (42.)

Tentative loanwords from Bactrian (§3.2.4)

taravara ‘sword’ (51.)

Secure loanwords from Bactrian or another language (§3.3.1)

sṗaṣa ‘watching, guarding’ (58.)

Plausible loanwords from Bactrian or another language (§3.3.2)

paraṣa ‘abduction, plundering’ (66.)

Finally, a small but consistent group is formed by three “calendrical terms”. Two of them, i.e. *kṣuna* and *saste*, also occur in Gāndhārī inscriptions and are, together with the Macedonian month names borrowed into Gāndhārī (Salomon 2011a), evidence for a western influence on the calendrical system. These words belong to Haspelmath and Tadmor’s semantic domain “time” (their no. 14).

Secure loanwords from Bactrian (§3.2.1)

kṣuna ‘date, reign, regnal year’ (2.)

nokṣari ‘month of the new year’ (5.)

Plausible loanwords from Bactrian (§3.2.2)

saste ‘day, elapsed’ (28.)

4.5.3 Textiles and clothing

The presence of “a wonderful variety of fabrics” (Stein & Andrews 1920: 5) in the archaeological record from Niya is nicely mirrored in the textual evidence, as the Niya documents contain a plethora of terms for “textiles and

⁷³⁰ Some official titles listed above are probably also related to the military, viz. *guśura* ‘prince’ [listed amidst military officers in CKD 478]; *jenavida* ‘chief of the armour’; and *ambukaya*, whose presumed Bactrian source αμβουκαιο may be a military title.

clothing". This category of words corresponds to Haspelmath and Tadmor's semantic domain "clothing and grooming" (their no. 6). Since, however, none of the words included here has to do with "grooming", I have renamed it "textiles and clothing".

While it has long been known that many such terms have an Iranian etymology (cf. e.g. Lüders 1936a; Agrawala 1953a), it can now be specified that, with the exception of the Khotanese loanwords *thavaṃnaga* 'cloth' and *prahoni* 'garment' (cf. §4.2.5), most of these words are or could have been borrowed from Bactrian.⁷³¹ The Niya documents thus provide additional linguistic evidence for a flourishing manufacture of textile products in ancient Afghanistan.⁷³²

Secure loanwords from Bactrian (§3.2.1)

prigha '(monochrome) damask' (7.)

Plausible loanwords from Bactrian (§3.2.2)

vaṣe 'garments' (27.)

Arguable loanwords from Bactrian (§3.2.3)

avalika 'swaddle' (33.)

sujinakirta 'needlework, embroidery' (48.)

Tentative loanwords from Bactrian (§3.2.4)

lastuga, textile product (55.)

Plausible loanwords from Bactrian or another language (§3.3.2)

tavastaga 'carpet' (63.)

namata 'felt' (65.)

raji 'cloak, woollen cloth' (70.)

Arguable loanwords from Bactrian or another language (§3.3.3)

agiṣḍha 'cover, rug' (71.)

kojava 'rug, blanket' (73.)

pajhavaṃta 'breastband (?)' (75.)

rasaṃna 'rope (?)' (76.)

ṣaṃna 'hemp, hempen (?)' (78.)

Based on the linguistic evidence presented here (13 loanwords), one expects that the textiles discovered in the archaeological record of the Shanshan

⁷³¹ Besides the textile products listed below, Niya Prakrit may also have borrowed a word for 'weaver' from Bactrian, i.e. *ṣapga* (cf. §3.2.3 s.v.).

⁷³² More evidence of this type is provided by the Aramaic documents from Bactria (ADAB), as they likewise contain some words for textile products with Iranian etymologies. See recently Benvenuto (2018; 2020).

kingdom would include imports from Bactria or that locally produced textiles were at least influenced in their design by those made in Bactria.⁷³³ Pending an interdisciplinary investigation into these matters,⁷³⁴ it can already be noted that the carpets found in Niya (cf. *kojava* ‘rug, blanket’ and *tavastaga* ‘carpet’) have been demonstrated to closely resemble contemporary carpets from ancient Bactria (see H. Zhang 2019). In addition, Cohen (1999) has shown that a woollen flat weave from Niya is woven in a style that is still found today in the weaving traditions of NW India, Pakistan, and Afghanistan (cf. also Padwa 2007: 1).

On a different note, it bears mentioning that textiles additionally functioned as a currency in the Shanshan kingdom and that they were collected as taxes (cf. e.g. Høisæter 2020: 264).⁷³⁵ In other words, these textiles were an integral part of the same economic system reflected by the economic terms borrowed from Bactrian into Niya Prakrit and treated in the preceding section.

4.5.4 Fauna, flora, and food

A third semantic category one can identify among the (potentially) Bactrian loanwords in Niya Prakrit is that of “fauna, flora, and food”. This category encompasses three of the semantic domains posited by Haspelmath and Tadmor (2009: 7), i.e. “animals” (their no. 3), “food and drink” (their no. 5), and “agriculture and vegetation” (their no. 8). In total, I have assigned six words to it, all of them “cultural borrowings” that typically show a special connection with Afghanistan (see also the respective lemmata).

Secure loanwords from Bactrian (§3.2.1)

stora ‘large animal, horse, camel’ [= “animals”] (15.)

⁷³³ On the import of textiles to the Shanshan kingdom, see in general Høisæter (2020: 263–278; 2023: 414–416). For the local manufacture, see e.g. Iyer (2015), who argues that a weft-beater discovered in Niya implies the local production of carpets.

⁷³⁴ Such an investigation would face several methodological challenges, e.g. ascertaining the exact origins of textiles found in the archaeological material (cf. Høisæter 2020: 264) and “matching terms for textiles in excavated documents and historical texts with extant textile fragments” (Hansen & Wang 2013: 156).

⁷³⁵ For the use of textiles as money on the Silk Road, see Wang (2013), Duan (2013), and the other articles in the 2013 issue of the *JRAS* devoted to the topic. These papers mainly focus on sources from the Tang period, but their overall conclusions are also valid for the culture reflected in the Niya documents.

Plausible loanwords from Bactrian (§3.2.2)

aśpista ‘lucerne’ [= “agriculture and vegetation”] (19.)

maśka ‘bean’ [= “agriculture and vegetation”] (24.)

Arguable loanwords from Bactrian (§3.2.3)

aḍini ‘(broomcorn) millet’ [= “agriculture and vegetation”] (31.)

Plausible loanwords from Bactrian or another language (§3.3.2)

aṭa ‘flour’ [= “food and drink”] (60.)

gavaśa ‘deer, stag’ [= “animals”] (62.)

Concerning the plant names, the first thing to note is that, according to a famous story from the Chinese annals, lucerne, Niya Pkt. *aśpista*, was brought to the Han emperor Wu by envoys returning from a mission to Central Asia (Laufer 1919: 208–219).⁷³⁶ Beans, *maśka*, are a type of legume first cultivated in Iranian-speaking regions before spreading east to China (Laufer 1919: 305–308). Millet, *aḍini*, has been a staple food in Central Asia, including Afghanistan, since at least the first millennium BC due to its capacity to grow well in arid regions (Spengler 2019: 79f.).⁷³⁷

One can make similar observations about the two animal names. Regarding *stora*, the meaning ‘camel’ is worth noting, as the close association of this animal with Bactria goes back to antiquity (cf. §6.2 s.v. *aṃklatsa*). *gavaśa* ‘deer, stag’, on the other hand, may have been the word used for the *Cervus hanglu*, the “Central Asian red deer” or “Tarim red deer”, a type of deer differing substantially in appearance from the species living in South Asia (Ahmad et al. fthc.).⁷³⁸

⁷³⁶ Unfortunately, there is currently only limited archaeobotanical data for the early domestication of lucerne (Spengler 2019: 172f.).

⁷³⁷ The preservation of the word for ‘(broomcorn) millet’ in modern Dardic languages suggests that the word was not limited to the administrative register seen in Niya Prakrit texts but also entered the vernacular languages spoken in Gandhāra. The same may be true of other words in this semantic category, although confirmatory evidence for this is lacking.

⁷³⁸ Biologists draw a further distinction between the *Cervus hanglu bactrianus* living in Afghanistan and the *Cervus hanglu yarkandensis* living in the Tarim Basin. *gavaśa* could have referred to both species.

4.5.5 Emotions and values

Finally, three Bactrian loanwords do not easily fit into one of the semantic categories posited in the previous sections.⁷³⁹ Instead, they can be captured under the heading “emotions and values” (= semantic domain no. 16 of Haspelmath and Tadmor).

Secure loanwords from Bactrian (§3.2.1)

ṣada ‘pleased, happy’ (13.)

Plausible loanwords from Bactrian (§3.2.2)

picara ‘(mark of) honour’ (23.)

Arguable loanwords from Bactrian (§3.2.3)

tim- ‘to be concerned about, to be angry’ (37.)

A common characteristic of at least *ṣada* ‘pleased, happy’ and *picara* ‘(mark of) honour’ is that both words also occur in Gāndhārī Buddhist texts from the Bajaur collection (see §3.2.1 and §3.2.2 s.v.). Therefore, they are reminiscent of a few Buddhist terms of Bactrian origin used in the languages from the Tarim Basin. The best-known example of such a term is Bactr. αζαβο /āžānə/ ‘worthy, Arhat’ < **arjyāna-*, borrowed into Khotanese as *āṣana-*, into Tocharian A as *āṣām*, and into Tocharian B as *aṣām* (Weber 1985; Dragoni 2023b: 41).⁷⁴⁰ Given that the scanty traces of Buddhist literature in Bactrian discovered so far are overall quite late (cf. §1.4.2), it remains a moot point whether Buddhist literature in Bactrian was already composed in Kuṣāṇa times, and, if so, how widespread the practice was. Yet, αζαβο and its congeners at least point to the existence of a class of moral and religious terms in Bactrian that could be adapted to suit specifically Buddhist purposes. In my view, lexemes such as *picara* ‘(mark of) honour’, *ṣada* ‘pleased, happy’, and perhaps also *tim-* ‘to be concerned about, to be angry’ could have belonged to this same category of words.⁷⁴¹

⁷³⁹ As a typical component of epistolary formulae, *ṣada* ‘pleased, happy’ could perhaps still be seen as an administrative term. Its occurrence in Buddhist texts (see just below) suggests that this is too narrow a view, however.

⁷⁴⁰ Another instance could be TA/TB *perāk* ‘faithful, credible’ (DTTA: 295; DoT: 424), if borrowed from Bactr. *πηραγο /pērāgə/, an agent noun in *-āka- from the attested verb πηρ- ‘to believe’ < **parya-* (cf. also the noun πηρο ‘faith’). The commonly cited BSogd. *pyr’k* ‘believer’ (SD: 336) is a misreading of Uyghur *pyl’k* ‘gift’ (see Sims-Williams 1983: 44).

⁷⁴¹ It may also be noted that the Middle Persian and Parthian cognates of Bactr. πιδοφαρο came to be used as a technical term in Manichaean texts, thus further

4.6 Conclusions

This chapter addressed four topics concerning the Iranian loanwords in Niya Prakrit (cf. §4.1):

- (i) Possible donor languages (§4.2)
- (ii) Phonological integration (§4.3)
- (iii) Morphological integration (§4.4)
- (iv) The semantics of the loanwords (§4.5)

For each topic, I will now draw some general conclusions. In Chapter 7, I will come back to these conclusions when attempting to define the type of contact between Bactrian and Niya Prakrit in sociolinguistic terms.

4.6.1 Possible donor languages

Niya Prakrit clearly has been in contact with Iranian languages other than Bactrian, undoubtedly Old Persian and Khotanese, perhaps also Parthian and Sogdian. Attributing specific loanwords to these languages can be challenging nevertheless. Notably, only very few loanwords were certainly borrowed in the Tarim Basin: nearly all Bactrian words could have been adopted before Niya Prakrit entered the Tarim Basin, and loanwords from Khotanese are scarce.

4.6.2 Phonological integration

Bactrian words are overall well integrated into the phonology of Niya Prakrit. Foreign sounds and consonant clusters are adapted to native phonotactics, and borrowings undergo the same lenitions and other phonological processes active in inherited vocabulary. One can observe clear tendencies in these sound substitutions, but there is no complete consistency. In my opinion, this lack of consistency does not necessarily imply chronological or geographical variation in the sources of these loanwords. Instead, it seems more plausible that loanwords were subject to the same historical spellings and other orthographic idiosyncrasies so characteristic of Kharoṣṭhī literacy in general.

underlining the potential religious connotations of this word. Regarding Bactr. *ḫaṣo*, it is noteworthy that its Sogdian and Khotanese cognates developed a new meaning ‘rich’ in a Buddhist context due to the influence of Skt. *bhoga*- ‘enjoyment, wealth’ (see Bernard 2023: 74f.; 160f.; 195).

4.6.3 Morphological integration

As expected, most of the Bactrian and potentially Bactrian borrowings are nouns. There are also some adjectives/adverbs and verbs, which are potentially, yet not necessarily, significant to determine the intensity of the contact. On the whole, the loanwords are again well integrated into the productive declension and conjugation classes in Niya Prakrit. Although evidence remains scarce, there may be a correlation between the morphological class a word belongs to in Bactrian and the class it is adopted in when borrowed into Niya Prakrit.

4.6.4 The semantics of the loanwords

Most of the Bactrian and potentially Bactrian words in Niya Prakrit are “administrative, political, military, and economic terms”. Smaller semantic categories, such as “textiles and clothing” or “fauna, flora, and food”, tend to include words that refer to products strongly associated with ancient Afghanistan. The semantic categories covered by the Bactrian loanwords are thus consistent with the ancestor of Niya Prakrit having been used as a chancellery language of the Kuṣāṇa empire. In Chapter 7, I will draw a parallel with Achaemenid Official Aramaic, as the Old Persian loanwords in this language occupy similar semantic domains.

CHAPTER 5 Grammatical borrowings from Bactrian

This fifth chapter examines potential instances of grammatical borrowings from Iranian languages into Niya Prakrit, with a particular focus on features likely adopted from Bactrian. After some preliminaries (§5.1), I first propose that two appurtenance suffixes were borrowed from Bactrian into Niya Prakrit (§5.2). Afterwards, I investigate the possibility of structural borrowings on the basis of two case studies, one about reciprocals and reflexives (§5.3) and one about the Niya Prakrit preterite formations (§5.4).

5.1 Preliminaries

5.1.1 Matter and pattern replication

In contact linguistics, a distinction is drawn between “material borrowing” (Haspelmath 2009: 38) or “matter replication” (Matras 2020²: 160 *et passim*), on the one hand, and “structural borrowing” (Haspelmath 2009: 38f.) or “pattern replication” (Matras 2020²: 257f. *et passim*), on the other.

In the first type of borrowing, “concrete, identifiable sound-shapes of words and morphs” (Matras 2020²: 160) are adopted from the source language into the recipient language. The Iranian loanwords discussed in Chapters 3–4 all belong to this category, but grammatical features, such as phonemes or affixes, can also be subject to borrowing.

“Structural borrowing” or “pattern replication” can be defined as “a change to an inherited structure of the ‘replica’ language, inspired by a structure of the ‘model’ language” (Matras 2020²: 257), whereby “pivotal features of the model construction are identified and replicated in the replica language” (Matras 2020²: 261).⁷⁴² This type of transfer can again be seen in various linguistic domains, from semantics over phonology to morphology and syntax (see e.g. Thomason & Kaufman 1988: 65ff.; Thomason 2001: 59ff.).

5.1.2 State of the art and the scope of this chapter

So far, not much attention has been paid to structural borrowings from Iranian languages into Niya Prakrit (and Gāndhārī at large). The main reference point remains Burrow’s one-and-a-half-page overview of “Iranian idioms in Niya Prakrit” (1935a: 789f.).

⁷⁴² See in more detail Matras & Sakel (2007).

Under this heading, Burrow listed, for example, some instances of loan translations (calques).⁷⁴³ One such case is Niya *śavatha khad-* ‘to eat an oath > to swear an oath’ (CKD 577; 820), an expression which should probably be compared to Pers. *sōgand xwardan* ‘idem’.⁷⁴⁴ Another likely example is the use of Niya *śiro* < OIA *śiras-* ‘head’ to mean ‘end’ in CKD 187, similar to how Pers./Parth. *sar* signifies both ‘head’ and ‘end’. There probably are still more loan translations of this type to be discovered,⁷⁴⁵ but this subject falls outside the purview of this book.

Another topic exceeding the scope of this study is phonological influence. In the past, it has, for instance, been observed that the occasional loss of aspiration in Gāndhārī may be due to bilingual speakers of Iranian languages lacking aspirated consonants (KI: ci; Salomon 1999a: 128; 2008: 340; 2011b: 187),⁷⁴⁶ and that the Gāndhārī voicing of OIA intervocalic *-s-*, a sound change not found in other MIA languages, may have been influenced by the existence of a phoneme /z/ in neighbouring Iranian languages (KI: cix). Recently, Ollett (2024) has argued that the reduction of final syllables in Gāndhārī and Apabhraṃśa is due to influence from Middle Iranian languages, where the same phonological process was active.

Instead, this chapter examines two types of influence that despite their relevance in determining the nature and intensity of a particular contact situation (cf. §1.2.2), have hardly been touched upon in previous scholarship, i.e. morphological and syntactic borrowings. The only significant study on this point is a recent article by Barchi and Peschl (2022), whose hypothesis

⁷⁴³ “an extremely common (and often unnoticed) process whereby a polysemy pattern of a donor language word is copied into the recipient language” (Haspelmath 2009: 39).

⁷⁴⁴ This legal formula finds its ultimate background in Akkadian legal terminology (Charpin 1997, but see also Schwartz 1989).

⁷⁴⁵ One hitherto unnoticed example concerns the pleonastic addition of *ma(m)nuśa* ‘man’ after a noun of profession, in *acoviṃna ma(m)nuśa* ‘border official’ (CKD 133; 323; 563), *śpaśavaṃnaga maṃnuśa* ‘guard’ (CKD 541, 2x), *cora manuśa* ‘thief’ (CKD 345, 2x), and *dajha manuśa* ‘slave’ (CKD 143; 324 + 328). These instances are comparable to e.g. OP *daraniyakara- martiya-* ‘goldsmith’, Parth. *xumbgar mard* ~ *xumbgar* ‘potter’ or Sogd. *mr’z mrtyy* ‘hireling, workman’ (cf. Benkato 2017: 52). Niya *dajha manuśa* even finds an exact parallel in Bactr. *μαρηγο μαρδο* and Sogd. *βntk mrty* ‘slave man’.

⁷⁴⁶ One could draw a comparison with the disappearance of aspirated consonants from the phonemic inventory of Sinhalese due to contact with Dravidian (e.g. Masica 1991: 132).

of Khotanese substrate influence on the alignment of the Niya preterite I will discuss in §5.4.

Were Chapters 3–4 intended as a more or less comprehensive investigation into lexical borrowings from Iranian languages into Niya Prakrit, this chapter should instead be seen as a collection of case studies. The reason for this is a practical one: studying morphological and syntactic influence requires a time-consuming synchronic examination of the relevant features in Niya Prakrit and Bactrian. Reaching the same level of comprehensiveness as in Chapters 3–4 is therefore unrealistic.⁷⁴⁷

Conclusions will be presented after each case study individually and not in a separate section at the end of the chapter.

5.1.3 Why Bactrian?

A methodological issue concerns the exact source of “Iranian-looking” morphemes and syntactic structures in Niya Prakrit. Were these features all borrowed from the same Middle Iranian language, and, if so, from which?

In contrast to lexical borrowings, for which phonological or semantic arguments act in many, though not all, cases as a relatively trustworthy guide, determining the most likely donor language is more challenging in the case of morphosyntactic interference. The reason for this difficulty is that, at least regarding the features under discussion here, the morphosyntax of Middle Iranian languages tends to be relatively homogeneous. Yet, this chapter will, at the expense of other Iranian languages, mainly focus on comparisons between Bactrian and Niya Prakrit.

I proceed in this way because of the following considerations. First and most importantly, the lexical examination conducted in Chapters 3–4 has put it beyond doubt that Bactrian has exerted the most considerable influence on Niya Prakrit. As grammatical borrowings and pattern replication generally require more intense contact (cf. Thomason & Kaufman’s 1988: 74–76 oft-cited borrowing scale), this makes Bactrian *a priori* an appropriate language to concentrate on. A second reason not to discuss other Middle Iranian languages in the same detail as Bactrian is that a more extensive scrutiny of other languages would have enlarged the chapter to excessive lengths. Thirdly, for some of the grammatical features discussed, e.g. the reflexive

⁷⁴⁷ Possible topics for future case studies include a comparison between the syntax of relative clauses in Niya Prakrit and Bactrian or light verb constructions with the outcomes of OIA $\sqrt{kr}$ ‘to do’ and $\sqrt{bh\bar{u}}$ ‘to be(come)’.

pronominal adj. *tanu(vaga)* ‘one’s own’ or the verbal adj. in **-taka-*, there is also evidence from South Asian Gāndhārī. In such cases, languages like Sogdian and Khotanese are less likely donor languages for geographical and historical reasons.

Even though starting from the default premise that Bactrian is the most likely donor language of “Iranian-looking” morphemes and syntactic structures, I will make it explicit for each case individually when there is not much concrete evidence in favour of this assumption.

5.2 Two appurtenance suffixes

This section concerns the appurtenance suffixes *-ani* and *-ci*. In §5.2.1, I will argue that the first is borrowed from Bactr. *-avo* /ānə/ < **-āna-* or *-aviyo* /ānīgə/ < **-ān-iya-ka-*, and in §5.2.2, I propose that the second is a loan from Bactr. *-σ(ε)ιyo* /tśīgə/ < **-čiya-ka-*. The final section (§5.2.3) contextualises the main findings from a typological perspective.

5.2.1 The suffix *-ani*

The adjectival suffix *-ani* is mostly attached to male personal names. A list of attestations is given below.⁷⁴⁸

Attestations

Aṃñayani: CKD 117

Aśogani: CKD 621

O ? kani: CKD 66

Kaṃciyani: CKD 384

Kapgeyani: CKD 437 (2x); 706

Kalaṣḍhani: CKD 706

Kenigani: CKD 235

Koteyani: CKD 176 (2x)

Kolýiṣani: CKD 15

Carakani (*Carakāni*): CKD 706 (2x)

Anugayani: CKD 629

Aṣgarani: CKD 110; 536

Kaṃgucani: CKD 471

Kaṃjagani: CKD 74

Karmayani: CKD 326 (6x)

Kungeyani: CKD 129

Koñayani: CKD 571

Koletani (*Koleyani*): CKD 525; 558

Camagani: CKD 66

Calmasani: CKD 552

⁷⁴⁸ In contrast to earlier publications, I will write *-ani* attached to the preceding word, as is the common practice for other Niya Prakrit suffixes, such as *-ci* or *-i*. *-ani* is usually attached to a personal name on its own, but sometimes also to the combination of a title and a personal name (e.g. CKD 28 *kala Purnabalani*). As they would be highly exceptional, I do not consider *puruṣa ni hetu* ‘on behalf of the man’ and *istri ni hetu* ‘on behalf of the woman’ in CKD 231 examples of the suffix under discussion.

<i>Cinaṣenani</i> : CKD 375	<i>Cinikani</i> : CKD 552
<i>Cimolani</i> : CKD 244	<i>Jeyakani</i> : CKD 210
<i>Jeyaśani</i> : CKD 320	<i>Ḍhagiyani</i> : CKD 552
<i>Ḍhamajani (Ḍhamaśani)</i> : CKD 581; 586	<i>Taṃjakani</i> : CKD 117
<i>Tsinani</i> : CKD 415	<i>Ramakani</i> : CKD 517
<i>Ricikani</i> : CKD 547	<i>Rutra(ya)ni</i> : CKD 74; 667
<i>Larsuani</i> : CKD 74	<i>Lýiptani</i> : CKD 587
<i>Vasulani</i> : CKD 552	<i>Śapukani</i> : CKD 368
<i>Daroṇi</i> : CKD 695	<i>Dharmaladani</i> : CKD 652
<i>Namarajhmani</i> : CKD 163	<i>Patraani</i> : CKD 614
<i>Purnabalani</i> : CKD 28; 358	<i>Pulayani</i> : CKD 552
<i>Ponigani</i> : CKD 266	<i>Priyatatiyani</i> : CKD 87
<i>Mañgeyani</i> : CKD 587	<i>Maṣḍhigeyani</i> : CKD 152
<i>Micgeyani</i> : CKD 116; 558	<i>Muldeyani</i> : CKD 574
<i>Mogatani (Mogayani)</i> : CKD 579; 588	<i>Yitayani</i> : CKD 117
<i>Yipiyani</i> : CKD 582	<i>Śarsenani</i> : CKD 593
<i>Śirmitrani</i> : CKD 117; 601	<i>Śronapremani</i> : CKD 79
<i>Samgilani</i> : CKD 318 (2x)	<i>Samceyani</i> : CKD 558
<i>Sagimani</i> : CKD 580	<i>Signayani</i> : CKD 572
<i>Suḡitani</i> : CKD 552	<i>Sunaṃdani</i> : CKD 516
<i>Sunayani</i> : CKD 117	<i>Sumatani</i> : CKD 117
<i>Suryamitrani</i> : CKD 552	<i>Socarani</i> : CKD 6
<i>Svarcikani</i> : CKD 631	

Due to its attaching to male anthroponyms, *Niya -ani* often resembles a patronymic suffix. Yet, it more generally functions as an appurtenance suffix (cf. LKD: 100 s.v. *nī*).⁷⁴⁹ *Kenigani* ‘son (?) of Keniga’ in sentence (5.1) is a typical example.

(5.1) CKD 235 under-tablet obverse 2

Kuunge viṃṇayeti yatha edaṣa miṣi bhuma anahetu Kenigani Suḡika achiṃnati.

“Kunee reports that Suḡika (son ?) of Keniga is appropriating *miṣi*-land belonging to him without just reason.” (TKD: 44).

⁷⁴⁹ One of the indications that *-ani* is not a patronymic suffix is that it can be used for alienable possession. Cf. e.g. gen.sg. *Mogatani bhumaṣa* ‘land belonging to Mogata’ in CKD 579.

Contrary to Burrow (1935a: 790; LKD: 100 s.v. *ni*) and some other scholars (e.g. KD: 352), I take the suffix to be *-ani* and not *-ni*, given that the vowel before *-ni* is without exception *-a-*, and an *-a-* is added when the suffix is attached to personal names that do not end in *-a* otherwise. The form *Larsuani* (CKD 74), for instance, derives from the relatively frequent name *Larsu*, not ***Larsua* (cf. also §3.4.2 s.v.). Another noteworthy form is *Carakāni* in CKD 706,⁷⁵⁰ where the additional length mark on the *-a-* suggests that the vowel of the suffix may be long.

Because of this alternative view on the form of the suffix, I likewise do not accept Burrow's idea (cf. also CDIAL: no. 7181) that the suffix under review is etymologically derived from Skt. *nija-* 'own'. Yet, even if the suffix would be *-ni* and not *-ani*, Burrow's etymology seems improbable, as Skt. *nija-* and its MIA cognates are used as an adjective or as the first member of a compound (e.g. *nijakarman-* 'one's own work'), whereas Burrow tacitly assumes a reanalysis as a suffix that would require several insufficiently motivated intermediary steps.⁷⁵¹

As part of his argument about the etymology of *-(a)ni*, Burrow further compared this suffix to Khot. *hāvya-* / *hivya-* 'own' < **hwa(i)-paθya-* in its function as a reinforcement of a genitive. See example (5.2), where the acc.sg. *hīvī* 'own', agreeing in case with acc.sg. *hvanau* 'speech', is added redundantly after the gen.sg. *gyastā balysā* 'Lord Buddha'. The underlying Sanskrit text has *bhagavato bhāṣitaṃ* 'the speech of the blessed one' (von Hinüber 2021: 127), and one would suspect that ***gyastā balysā hvanau* 'the Lord Buddha's speech' would already be sufficient as a translation of the Sanskrit.

(5.2) *Saṅghāṭasūtra* §261.2

u bāśśe lova gyastā balysā hīvī hvanau ātaudānde u [ysūṣṭānde].

"... and all people desired and [valued] the Lord Buddha's own speech"
(Canevascini 1993: 116).

⁷⁵⁰ In the same document, the form without length mark (*Carakani*) occurs too.

⁷⁵¹ Incidentally, no other secure trace of *nija-* has been found in Niya Prakrit, nor in Gāndhārī more generally: Falk's (2020–21: 122) reading *nija deti* 'he gives for his own sake' ~ Skt. *nijaṃ dadāti* in CKI 1177 has been corrected to *ñijadeti* 'he hands over' < Skt. *niryātayati* (cf. Baums and Glass 2002a– s.v.), and Falk's (2020–21: 120) reading *ñia śpiho* 'as our own, for ourselves' ~ Skt. *nijaṃ svīyaṃ* in CKI 328 is not secure either.

In this type of example, *hāvya-* / *hivya-* reinforces a noun in the genitive. Yet, *-ani* is a suffix that replaces a genitive.⁷⁵² A second aspect in which Burrow's comparison is not very precise is that *hāvya-* / *hivya-*, unlike *-ani*, shows no particular connection to personal names. When we further take into account that the use of *hāvya-* / *hivya-* to reinforce a genitive is typical of later stages of Khotanese (Del Tomba 2023b: 167f.; HK: 323), i.e. too late to be relevant for Niya Prakrit, Burrow's comparison is best rejected.

Seeing that *-ani* is mainly added to personal names of non-Indic origin and hence likely a borrowing,⁷⁵³ Konow's (1938: 155) comparison with the Khotanese adjectival suffix *-āna-* < **-āna-* (fem. *-āmgya-* < **-āna-čī-ā-*) seems more promising, especially since Khot. *-āna-* can also be attached to personal names (cf. Degener 1989: 83–87). As, according to my findings to date, Khotanese did not exert any considerable influence on the Niya Prakrit lexicon (cf. §4.2.5), it would, however, be typologically unusual that a suffix would have been adopted from this language.

This problem does not pose itself when interpreting *-ani* as a loan from Bactrian, where *-avo* /*ānə*/, the cognate of Khot. *-āna-*, likewise derives adjectives from nouns, “especially ... proper names” (BD II: 193; cf. also BPN: 11f.).

If so, the final *-i* of Niya *-ani* must still be accounted for, as one would expect Bactr. *-avo* /*ānə*/ to be borrowed as **-ana*.⁷⁵⁴ I can think of two options. One possibility is that the final *-i* came about by analogy with the two

⁷⁵² The same noun can be found either with a genitive complement or the suffix *-ani*. Note, for instance, CKD 706, where the noun *goṭha* ‘farm, household’ is twice attested with the appurtenance suffix and twice with a possessive gen.

⁷⁵³ 14,5% of Indic names versus 85,5% of non-Indic names (counted per type). The following names have been left out: (i) the poorly preserved *O?ka* (CKD 66); (ii) *Ramaka* (CKD 517), either < OIA **Rāma-ka-* or ← Bactr. **ραμοκο*, a hypocoristic to attested *ραμο* (BPN: no. 388); and (iii) *Dharmalada* (CKD 652), either comparable to *Kumāralāta* or perhaps a mixed name consisting of IA *dharma-* and its Bactrian equivalent *λαδο* ‘law’. Otherwise, I mostly followed Baums and Glass’ (2002a–) judgement. Yet, I interpret some names they consider “unclear” as Indo-Aryan ones: (i) *Jeyaka* (CKD 210) seems the same as the Sanskrit PN *Jayaka-* ‘victorious’; (ii) *Cinaṣena* (CKD 375) can be a name of the type *Bhadrāsena*, with *Cina* ‘China’ as its first part; and (iii) *Sunaṃda* (CKD 516) likely corresponds to Skt. *Sunanda-* ‘pleasing well’ (attested as a PN).

⁷⁵⁴ If the suffix were Khotanese, as per Konow, the *-i* could conceivably come from the nom.sg. in *-ā* (cf. §3.5.1 s.v. *prahoni*). For the same reasons given in §4.2.1 regarding the loanword corpus, I would be hesitant to assume that the *-i* in *-ani* could go back to an archaic nom.sg. in *-i* /*i*/ < **-ah* in Bactrian.

other appurtenance suffixes *-i* and *-ci*. Alternatively, *-ani* could come from Bactr. *-ανιγο* /*ānīgə*/ ← *-ανο* + *-ιγο* < **-iya-ka-*,⁷⁵⁵ as in *οαραζαγανιγο* ‘belonging to Warazagan’ and *σπανδαγανιγο* ‘belonging to Spandagan’ (BD II: 241; 265). The latter option requires that **-aniga* ← *-ανιγο* /*ānīgə*/ was lenited to *-ani* similar to how OIA **-ika-* became Niya *-i* via **-iga* (LKD: §75; see also §5.2.2 for Niya *-ci* ← Bactr. *-σιγο* /*tśīgə*/).

5.2.2 The suffix *-ci*

The suffix *-ci* (secondary allomorphs *-eṃci*; *-iṃci*⁷⁵⁶) is, like *-ani*, an appurtenance suffix deriving adjectives from nouns, e.g. *kilme-ci* ‘belonging to the family estate’ ← *kilme* ‘family estate’ (cf. LKD: §77). An essential difference between *-ci* and *-ani* is that *-ci* is generally not attached to personal names but to place names and other nouns indicating a location. The list of attestations below will make this clear.⁷⁵⁷

Attestations

ayanemci ← *ayana* ‘village’

DIR.SG. *ayanemci*: CKD 713 (2x); *avamci*: CKD 841 (2x); GEN.PL. *avamciyana*: CKD 841; DIR.SG. *Aṃtuayanemci* (or *Vaṃtu-*): CKD 496; DIR.PL. *Aṃtuayanemci* (or *Vaṃtu-*): CKD 296; GEN.PL. *Ayiamaayanemciyana*: CKD 817; DIR.SG. *Catiṣadeviayanemci*: CKD 474; GEN.PL. *Trasaayanemciyana*: CKD 326; *Trasaayanemciyana*: CKD 326; GEN.PL. *Navagaavamciyana*: CKD 841; *Navagaayanimciyana*: CKD 366; DIR.SG. *Petaayanemci*: CKD 32; 46; 124; DIR.PL. *Petaayanemci*: CKD 124; *Petaayanemciye*: CKD 164; GEN.PL. *Petaayanemciyana*: CKD 839; *Petaavanemciyana*: CKD 162; *Petaayaniciyana*: CKD 110; DIR.SG. *Yaveayanemci*: CKD 532; 740; *Yaveavanemci*: CKD 474; DIR.PL. *Yaveayanemciya*: CKD 37; *Yaveavanimciye*: CKD 401; GEN.PL. *Yaveayanemciyanana* (?): CKD 37; *Yaveayani(m)ciyana*: CKD 431 = 432; *Yaviayanimciyana*: CKD 745

Opimtemci ← *Opimta*, place name

DIR.PL. *Opimtemci*: CKD 686

kilmeci ← *kilme* ‘family estate’

DIR.SG. *kilmeci*: CKD 209; 278; 279 (2x); 297; 331; 358; 437 (2x); 474 (2x); 495; 519; 581; 585 (2x); 621 (2x); 806 (3x); 884 (2x); *kilmeciya*: CKD 381; 393; 532; 806; DIR.PL. *kilmeci*: CKD 632; *kilmeci*: CKD 639; *kilmeciye*: CKD

⁷⁵⁵ Bactr. *-ιγο* /*īgə*/ can be added to other adjectival suffixes without overtly changing their meaning (BD II: 217).

⁷⁵⁶ How these allomorphs came into being will be discussed below.

⁷⁵⁷ Not included are well-attested but etymologically obscure nouns always ending in *-ci*, e.g. the official title *klasemci*.

152; 271 (2x); 279; 307; 338; 468 (2x); 817; *kilmemciye*: CKD 713; GEN.PL. *kilmeciyana*: CKD 16; 254; 338; 374; 468 (4x); 734; 819; 848; *kilmiciyana*: CKD 261; 358; *kilme[c]*.: CKD 257; GEN.PL. *Yavekilmeciyana* 'belonging to the Yave family estate': CKD 431 = 432 (Yave-)

kilyigamci ← unknown base form

GEN.PL. *kilyigamciyana*: CKD 164

kuhaneci ← *kuhani* 'capital'

DIR.SG. *kuhaneci*: CKD 571; *khuyanemci*: CKD 489

Kroraïmci ← *Kroraïmna*, place name [Lóulán]

DIR.SG. *Kroraïmci*: CKD 678; DIR.PL. *Kroraïmci*: CKD 370; *Kroraïmci*: CKD 383;

GEN.PL. *Kroraïmciyana*: CKD 277

Khemaci ← *Khema*, place name

DIR.SG. *Khemaci*: CKD 879 (2x)

Caḍodeṁci ← *Caḍota*, place name [ancient Niya]

DIR.SG. *Caḍodeṁci*: CKD 437

Calmataṁci ← *Calmatana*, place name

DIR.SG. *Calmataṁci*: CKD 305; 582; *Calmadaci*: CKD 419; DIR.PL.

Calmadanemci: CKD 686

tsakemci ← unknown base form

DIR.PL. *tsakemci*: CKD 376

Tsagaïmci ← *Tsaga*, place name

DIR.SG. *Tsagaïmci*: CKD 146; 147; *Tsagayimci*: CKD 80

Tsegeci ← *Tsega*, place name

GEN.SG. *Tsegeciyaša*: CKD 556; DIR.PL. *Tsegeci*: CKD 505

Navoteṁci ← *Navote*, place name

DIR.PL. *Navoteṁciye*: CKD 754

Ninaci ← *Nina*, place name

DIR.SG. *Ninaci*: CKD 879; *Ninaṁci*: CKD 500; 859; *Ninaṁciya*: CKD 157

paṁthaci ← *paṁtha* 'road'

DIR.SG. *paṁthaci*: CKD 637

potgeci ← *potge* 'water tank'

DIR.PL. *potgeci*: CKD 347

Buṁniṁci ← *Buṁni*, place name

DIR.SG. *Buṁniṁci*: CKD 147

Bhagaṣaci ← **Bhagaṣa*, place name

DIR.SG. *Bhagaṣaci*: CKD 131; DIR.PL. *Bhagaseṃci*: CKD 195; *Bhagaseṃciya*: CKD 788; GEN.PL. *Bhagaseṃciyana*: CKD 726

Bhotici ← *Bhoti*, place name [perhaps Tibet]

DIR.SG. *Bhotici*: CKD 84

Masiṃci ← *Masina*, place name

DIR.SG. *Masiṃci*: CKD 839; DIR.PL. *Masiṃciye*: CKD 777

miṣiyeci ← *miṣi*, a type of land

DIR.PL. *miṣiyeci*: CKD 582

motirciya ← unknown base form

DIR.SG. *motirciya*: CKD 277; 304

Yurvaṣkaṃciya ← *Yurvaṣka*, place name [Qizil]

DIR.SG. *Yurvaṣkaṃciya*: CKD 869

lautgaimci ← unknown base form

DIR.PL. *lautgaimci*: CKD 272

Sacici ← *Saca*, place name [perhaps Endere]

DIR.SG. *Sacici*: CKD 436 (3x); 573; 879; DIR.PL. *Saciṃciye*: CKD 1; 160; GEN.PL. *Saciṃciyana*: CKD 97

simici ← *sima* ‘boundary’

DIR.SG. *simici*: CKD 436

Because the suffix *-ci* specifies the place a particular person or object hails from, it is partially synonymous with the ablative case in adnominal usage and the suffix *-i* < OIA *-ika-* (on which cf. LKD: §75; §6.4.3). The notion “a man (coming) from Caḍota [ancient Niya]”, for instance, can be expressed as (i) *Caḍodeṃci manuśa* (suffix *-eṃci*; CKD 437); (ii) *Caḍodade maṃnuśa* (abl.sg. in *-ade*; CKD 575); or (iii) *maṃnuśa ... Caḍoti* (*i*-suffix; CKD 575), without there being any immediately apparent semantic difference between these three options.

According to Burrow (1935b: 672), the suffix *-ci* would be a Tocharian element in Niya Prakrit, and he proposed to connect it to the Tocharian A adjective suffix *-ñci* (TG: 21). Since the suffix *-ci* is most frequently attached to non-Indo-Aryan bases,⁷⁵⁸ I agree that it is a borrowing.

⁷⁵⁸ One exception is e.g. CKD 637 *paṃthaci masu* ‘wine for the journey’, where the *ci*-suffix is attached to *paṃtha* ‘journey’ (cf. OIA *pathin-*; Pāli *pantha-*).

Yet, Burrow's Tocharian etymology is improbable for several reasons (cf. also Banti 2000: 4f.). Most importantly, the suffix *-ñci* is marginal in Tocharian, being limited to a handful of examples: *atroñci* 'of a hero' ← *atār* 'hero', *aneñci* 'interior' ← *ane* 'inside', *k_uleñci* 'female, feminine' ← *k_uli* 'woman', and *šmeñci* 'pertaining to the summer' ← *šme** 'summer' (DTTA: 7; 10; 144; 502).⁷⁵⁹ These forms moreover demonstrate that the Tocharian suffix is, unlike the Niya suffix, not normally combined with place names and nouns of location. Another issue with Burrow's etymology is that the basic form in Niya Prakrit is *-ci*, lacking the nasal seen in TA *-ñci*. As the *ci*-suffix is furthermore most frequently attached to the words *ayana* 'village' and *kilme* 'household' (cf. the list above), the first almost certainly and the second possibly Iranian in origin (see §3.3.2 and §3.2.4 s.vv.), one may further wonder whether the suffix is likewise Iranian instead of Tocharian.

An Iranian origin of Niya Prakrit *-ci* has been proposed by Banti (2000: 4f.), who compared the Niya suffix to the Sogdian adjectival suffix *-cyk* / *-cyq* < **-čiya-ka-*, as in *'rk-cyk* 'from Argi [Qarašahr]' ← *'rk** 'Argi' or *'wccwryk* 'from Učur [perhaps Shorchuk]' ← *'wccwr** 'Učur' (DMSB²: 39).⁷⁶⁰ As the final velar in Sogd. *-cyk* / *-cyq* could have been lenited after being borrowed into Prakrit (cf. infra), Banti's comparison seems indeed promising.

However, Sogdian does not seem a very likely donor language, because Sogd. *-cyk* / *-cyq* is, despite the examples adduced by Banti, not specifically connected to place names. Instead, *-cyk* / *-cyq* is a suffix that derives adjectives out of various types of nouns or even adverbs (see GMS: §§1014–1017); compare, for example, *'ny'mcyq* 'final' ← *'ny'm* 'end' (DMSB²: 16) or *'kδrycyk* 'present' ← *kδry* 'now' (MacKenzie 1970: 44; SD: 31).⁷⁶¹

I deem it more likely that Niya *-ci* is a loan from Bactr. *-σ(ε)ιγο* (after a nasal *-ζ(ε)ιγο*) < **-čiya-ka-*, because, in contrast to its Sogdian cognate, the Bactrian suffix is, like Niya *-ci*, attached in most of its occurrences to place names and nouns of location (BD II: 263). Examples include *αστιλγανσειγο* /

⁷⁵⁹ The form *ātlāñci* 'manly' ← *ātāl* 'man' referenced by Banti (2000: 4) is not lemmatised in the recent dictionary of Tocharian A (DTTA), and I have been unable to find an attestation of it.

⁷⁶⁰ Banti also cited Persian examples, but I leave these aside, as Middle Persian is a historically unlikely donor language of a grammatical suffix in Niya Prakrit.

⁷⁶¹ A secondary argument against taking Sogdian as the donor of the suffix *-ci* is the absence of any decisive evidence in favour of Sogdian loanwords in Niya Prakrit (see §4.2.6), which makes it *a priori* unlikely that Niya Prakrit would have borrowed a grammatical suffix from Sogdian.

υαστιλανζειγο ‘inhabitant of Hastilgan’ ← *(υ)αστιλγανο; χαγοσιγο ‘inhabitant of Khag’ ← χαγο*; ωδαγοσιγο ‘inhabitant of a district’ ← ωδαγο ‘district’; ρηογανζειγο ‘inhabitant of Rewgan’ ← ρηογανο; and γαρσιγοστανο ‘land of the mountaineers’ which consists of γαρσιγο* ‘mountaineer’ ← γαρο ‘mountain’ and -στανο ‘place, land’.

The fact that *-ci* regularly forms its dir.pl. in *-e* instead of in *-a* (LKD: §60) may also find its explanation in Bactrian since the Niya Prakrit dir.pl. in *-e* could be a rendering of the corresponding dir.pl. in *-ε* /*e*/ in Kuṣāṇa Bactrian (see §4.4.3).

Also phonologically, the derivation of *-ci* from *-σ(ε)ιγο* works fine: (i) the palatal affricate in *-ci* could be due to a pronunciation of *-σ(ε)ιγο* < **-čiya-ka-*as /tśīgə/ with palatalisation of the affricate before **ĩ* (on this see §2.2.4.3; §4.3.17, and cf. MBactr. *y’wyd’nžyg* ‘for ever’ < **yāwaitāna-čiya-ka-*), and (ii) a more archaic form **-ciga*, corresponding still closer to *-σ(ε)ιγο* /tśīgə/, can have been lenited to *-ci* in the same way as OIA *-ika-* has been lenited via **-iga* to Niya *-i* (see also §5.2.1 on *-ani*).⁷⁶²

As kindly pointed out by Nicholas Sims-Williams (p.c.), Niya *-ci* could alternatively be a loan from an early Bactrian suffix **-σει* / **-σι* /tśĩ/, attested in later times as *-σο* < **-čiya-* (cf. Sogd. *-c(y)*), e.g. χαγοσο ‘inhabitant of Khag’ next to χαγοσιγο ← χαγο* (cf. Sims-Williams *apud* Gariboldi 2017: 26f.). With this etymology, one could do without the assumption of lenition. Yet, two arguments may still speak in favour of the derivation from *-σ(ε)ιγο* / *-σιγο*. First, the latter is attested much more frequently than **-σει* / **-σι* / *-σο*,⁷⁶³ and second, there is at least one occurrence of an older form *-ciga*, i.e. *Bhaga[sam]ciga* ‘inhabitant of Bhagasa’ (CKD 788) to be compared with *Bhagaśaci* (CKD 131), *Bhagaseṃci* (CKD 195) and the gen.pl. *Bhagaseṃciyana* (CKD 726). Therefore, I still have a slight preference to derive *-ci* from the longer form *-σ(ε)ιγο* /tśīgə/.

A final note is due on the secondary by-forms *-eṃci* and *-iṃci*. They have been explained as follows by Banti (2000: 5):

“The frequent occurrence of non-etymological *ṃ* in the codas of internal syllables and analogical levelling produced from adjectives such as *pamtha-*

⁷⁶² The Bactrian by-forms *-σουο* and *-σιουο* show complete lenition of *-γ-* already in Bactrian, but this development only starts appearing in texts from about 700 AD onwards (cf. SCBD: 61), too late to be of relevance for the Niya Prakrit suffix.

⁷⁶³ The statistics may admittedly be slightly skewed because we do not have many texts in Kuṣāṇa Bactrian, and *-σ(ε)ιγο* / *-σιγο* may have gradually replaced **-σει* / **-σι* / *-σο* over time.

ci, *kilme-ci* or *Kroraiṃ-ci* new forms like *Nina-ṃci* and *kilme-ṃci* from which the new allomorphs *-eṃci* and *-iṃci* were extracted.”

While I agree with Banti’s final step, there is no need to take recourse to the notion of “non-etymological *ṃ*”. It seems more plausible that forms in *-ṃci* spread analogically from examples such as *Kroraiṃ-ci* ‘inhabitant of Kroraina’ ← *Kroraiṇa* or *Calmatam-ci* ‘inhabitant of Calmadana’ ← *Calmatana*. In these cases, the underlying forms **Kroraiṇa-ci* and **Calmatana-ci* may have undergone syncope of *-a-* between the preceding nasal and the suffix *-ci*, resulting in *-ṃci*.⁷⁶⁴ If so, it is possible to compare the Bactrian voicing of *-σ(ε)ιγο /tśīgə/* after nasals seen in, for instance, *ρηογανζιγο /rēwgandzīgə/* ‘inhabitant of Rewgan’ ← *ρηογανο /rēwganə/*, which likewise implies that the nasal of the stem and the suffix were in direct contact with one another.

5.2.3 A typological outlook

The preceding sections argued that the Niya Prakrit appurtenance suffixes *-ani* and *-ci* were respectively borrowed from Bactr. *-ανο /ānə/* or *-ανιγο /ānīgə/* and *-σ(ε)ιγο /tśīgə/*. To conclude the investigation into these suffixes, this section will briefly contextualise the main findings from a typological perspective.

Both examples discussed above belong to the category of derivational affixes;⁷⁶⁵ borrowing such affixes is characteristic of “more intense contact”, i.e. level 3 of Thomason and Kaufman’s (1988: 74ff.) borrowing scale. Affixes are typically “abstracted from borrowed words and added to native vocabulary”, which is referred to by Matras (2020²: 226) as “diffusion of morphology beyond the borrowed lexicon itself”.⁷⁶⁶

⁷⁶⁴ Alternatively, the final *-a* may have been pronounced only very weakly or not at all, for which one can compare spellings such as *aḍiṃ* ‘millet’ (CKD 140) next to *aḍi(ṃ)ni* / *aḍina* or *gamaṃ* ‘going’ (CKD 646) for *gama(ṃ)na* (see also LKD: §13).

⁷⁶⁵ *-ani* and *-ci* are examples of suffixes that change the word class of the word they are attached to, in this case, from noun to adjective. For other examples of borrowing of word-class changing derivation, cf. Matras (2020²: 227).

⁷⁶⁶ In Armenian, for instance, various affixes of Iranian origin that were initially limited to loanwords, e.g. Arm. *-akan* ← Ir. **-akāna-*, came to be combined with native vocabulary and are still productive in Modern Armenian (cf. Meyer 2023: 25). Some Latin suffixes borrowed into Ancient Greek likewise gained productivity over time (see Adams 2003: 495f. and Dickey 2023: 543–556).

The Niya suffixes *-ani* and *-ci* conform to this pattern: although most often found in loanwords, they also gradually spread to inherited vocabulary. Such diffusion to native vocabulary is a necessary condition to speak of a “morphological loan” fully adopted into the recipient language (see Matras 2020²: 226).⁷⁶⁷

5.3 Reciprocals and reflexives

If, as suggested in the preceding section, the contact between Niya Prakrit and Bactrian was indeed “more intense”, Thomason and Kaufman’s borrowing scale would predict or, at least, render it plausible that there are also traces of structural interference from Bactrian on Niya Prakrit. Such traces would moreover be expected to square well with the typological profile of the recipient language. The two case studies presented in this and the next section (§5.4) aim to confirm these predictions.

5.3.1 Introduction

The first case study concerns reciprocals and reflexives. As is done more commonly (cf. e.g. König & Gast 2008), I study these two types of pronouns together because their form and function often overlap in the languages of the world. Both are moreover liable to contact-induced change. First, markers of reflexivity and reciprocity can be borrowed in their entirety, as is, for instance, the case with Dutch *zich* ‘oneself’, borrowed from High German in medieval times (Philippa et al. 2005–9 IV: 662). A second option is that the syntactic properties of reflexives and reciprocals are structurally influenced by those of neighbouring languages, i.e. a case of pattern replication. Regarding this latter alternative, Meyer (2013; 2023: 181–196) has made a convincing case that the Armenian reflexive marker *ink’n* obtained its tripartite function as an intensifier, a discourse anaphor, and a clause-level anaphor after the model of MP *xwad* and Parth. *wxad* (cf. §5.3.4.2). Inspired by Meyer’s research, the following sections study possible Iranian influence on Niya Prakrit’s reciprocals and reflexives.

⁷⁶⁷ Matras makes a distinction between “backward diffusion”, whereby the spread of the borrowed suffix is limited to the pre-existing inherited lexicon, and “forward diffusion”, whereby the borrowed suffix acquires a high degree of productivity to be attached also to newly acquired vocabulary. The limited data for Niya Prakrit leaves it undecided whether *-ani* and *-ci* also underwent “forward diffusion”.

In other words, I shall investigate the possibility of structural influence exerted by closely related languages. As a result, we are confronted with the perennial problem of distinguishing between common inheritance and subsequent language contact (see e.g. Epps, Huehnergard & Pat-El 2013; Pat-El 2013). There is a further tension between the fact that contact-induced change between closely related languages can be more challenging to identify and that structural similarity between languages is precisely one of the factors that seem to facilitate language contact (cf. *infra*). Therefore, one needs to focus on bundles of close similarities rather than on individual and vague points of resemblance and be careful not to jump to far-reaching conclusions that are insufficiently supported by the limited evidence at hand.

When studying the reflexives Niya *sveya* / *apana* ‘oneself’ and Bactr. *χοαδο* / *χοβισαρο* (later *χοβοσσαρο*) ‘idem’ in §§5.3.3–5.3.4, it will be necessary to distinguish between “canonical reflexives” and “intensifiers” and between “inclusive” and “exclusive” intensifiers. For this reason, I will briefly define these terms below.⁷⁶⁸

In “John washes himself”, “himself” is an example of a canonical reflexive: this pronoun functions as the patient of the sentence and is co-referential with “John”, the agent and subject of the sentence.

The same pronoun can also be used as an intensifier, “a focusing particle that singles out an entity as playing a central role or as being involved in an event without the participation of others” (Haspelmath 2013: 350). Examples of “himself” in the function of an intensifier are (i) “John himself has done the dishes” and (ii) “John has done the dishes himself”. In the first example, “himself” is employed in adnominal usage, while in the second “himself” modifies the verb and is therefore called adverbial. The intended meaning is that “John” and nobody else has done the dishes. In such a case, we speak about an exclusive intensifier. Depending on the context, “John himself has done the dishes” can also be an example of an inclusive intensifier, e.g. when the intended meaning is that, as a chef, John has still helped with doing the dishes. In the latter interpretation, “himself” could be

⁷⁶⁸ The term “canonical reflexive” is taken over from Meyer (2013; 2023), and the notes on intensifiers are based on König & Siemund (2000: 43–50). De Vaan (fthc. 2024) objects against the term “intensifier” and proposes to replace it with “identifier” because the main function of such pronouns “is to single out one alternative, that is, to identify a referent in a potentially ambiguous situation”. I will stick here to the traditional and more widespread terminology, but de Vaan’s objection is well taken.

replaced with “too”, whereas “on its own” can often take the place of an exclusive intensifier.

The investigation is structured as follows. In §5.3.2, I first elaborate on Burrow’s idea that the Niya Prakrit reciprocal *eka biti* ‘one the second’ is syntactically calqued from Iranian. Next, I will be concerned with reflexive markers (§§5.3.3–5.3.7), arguing that the Niya Prakrit reflexive pronominal adj. *tanu(vaga)* ‘one’s own, property’ and Bactr. *χοβο* / *χοβιγο* ‘idem’ were mutually intertranslatable. This proposal will be backed up by a brief examination of the other markers of reflexivity in both languages and a discussion of the structural similarities and the phraseological parallels shared between *tanu(vaga)* and *χοβο* / *χοβιγο*. §5.3.8 concludes the investigation.

5.3.2 Reciprocals

There are three reciprocal pronouns in Niya Prakrit (LKD: §88): (i) *aṃṇamaṃṇa*, corresponding to Skt. *anyonya-*;⁷⁶⁹ (ii) *parospāra* / *parospara*, related to Skt. *paraspara-*;⁷⁷⁰ and (iii) *eka biti* < **eka- dvitīya-* ‘one the second’, an idiom not found in OIA or other MIA languages. The attested forms are listed below (other forms of Gāndhārī are also included).

Attestations of *aṃṇamaṃṇa*

DIR.SG. *aṃṇamaṃṇa*: CKM 2; *anyamaṃṇo*: CKM 156

GEN.SG. *aṃṇamaṃṇasa*: CKI 12; *aṃṇamaṃṇasa*: CKI 15; *aṃṇamaṃṇaṣa*: CKD 889

GEN.PL. *aṃṇamaṃṇāna*: CKD 357; *aṃṇamaṃṇāna*: CKD 357; *aṃṇamaṃṇeṣu*: CKM 1 (cf.

Salomon 2008: 281f.; 318); *aṃṇamaṃṇaṇa*: CKM 1; *anyonyana*: CKM 98

Attestations of *parospāra* / *parospara*

DIR.SG. *paroparo*: CKM 368

INS.SG. *parosparena*: CKD 34; *parosparena*: CKD 345

ABL.SG. *parosparade*: CKD 788

GEN.SG. *parosparaṣa*: CKD 97; 593; *parosparasya*: CKD 272; 338; 468

⁷⁶⁹ The Niya form matches that in other MIA languages (e.g. Pāli *aṃṇamaṃṇa-*). According to AiG (II.1: 321f.) and Kulikov (2014: 141), the MIA forms have the acc.sg. as their first part, but the *-m-* could in theory also be a sandhi consonant, as more often in MIA (cf. e.g. Oberlies 2019² I: 188–195 on Pāli).

⁷⁷⁰ The use of cognates of Skt. *paraspara-* is rare in MIA (Kulikov 2014: 142f.), whereas *parospāra* / *parospara* is still used nine times in Niya Prakrit (cf. infra). The use of *parospāra* / *parospara* in the Niya documents may therefore be an archaic retention or, more likely, a Sanskritism.

GEN.PL. *p[ar]os̥paraṇa*:⁷⁷¹ CKD 817

Attestations of *eka biti*

DIR.SG. *eka biti*: CKD 709; *eka bhiti*: CKD 348; 732

INS.SG. *eka bitiyena*: CKD 574

GEN.SG. *eka bitiyaṣa*: CKD 187; *eka bhitiyaṣa*: CKD 425

GEN.PL. *eka bhitiyana*: CKD 577; 820; *aṃṇa bhitiyana* (apparently a blend of *aṃṇamaṃṇa* and *eka biti*): CKD 577

It appears that there are no morphosyntactic constraints on when which pronoun is used. In fact, all three occur in the same legal formula consisting of pres.3sg. *nasti* ‘is not’, the noun *danagrahana* (*dagrana*) ‘giving or taking, payment’, and the postposition *vaṃti* ‘in, at, to’; see examples (5.3)–(5.5).

(5.3) CKD 889 cover-tablet reverse 2

aju kṣana uvatae aṃṇamaṃṇaṣa vaṃti nasti danagrahana.

“From this time onward, there is no giving or taking towards each other.” (Baums 2018b: 61).

(5.4) CKD 593 under-tablet obverse 6f.

ahuno Kupṣuta Suḡuta Balaṣena Śrustingaṣa ca paros̥paraṣa vaṃti nasti dagrana.

“Now Kupṣuta, Suḡuta, Balaṣena, and Śrustinga have no claim to payment from each other.” (TKD: 127).

(5.5) CKD 425 under-tablet obverse 4f.

edeṣa śramaṃṇa Jivamitra Cugapena ṣadha eka bhitiyaṣa vaṃti nasti danagrahana.

“Of these two, the monk Jivamitra along with Cugapa, there shall be no more giving or taking one from the other.” (TKD: 87).⁷⁷²

In these examples, the reciprocal pronouns are all inflected in the gen.sg.: *aṃṇamaṃṇaṣa*; *paros̥paraṣa*; *eka bhitiyaṣa*. Yet, other forms are attested too. In CKD 577 and 820, a gen.pl. *eka bhitiyana* is, for instance, found in the same formula as quoted above without any noticeable difference in meaning or syntactic structure.

The lack of cognates of *eka biti* in other Indo-Aryan languages strongly supports Burrow’s idea (1935a: 790) that it is a calque from a Middle Iranian language, where reciprocal pronouns often go back to the combination of the

⁷⁷¹ My conjecture based on Hasuiki’s (1999: 164) reading *p[un]o s̥para na*.

⁷⁷² For variants of the same formula with *eka biti*, see CKD 577; 732; 820.

word for ‘one’ with that for ‘second’, e.g. Khot. *śśū-jāta-* (DKS: 401f.) or Parth. *ēw bid* (pl. *ēw bidān*; Brunner 1979: 81f.).⁷⁷³

Because this type of reciprocal pronoun is not restricted to one Iranian language in particular, one cannot easily determine the donor language of *eka biti*. Bactrian is at least a possibility, as there is one instance of Bactr. *ωγο* ‘one’ + *βιδδιγο* ‘second’ in the function of a reciprocal (“one ... the other”):

(5.6) X 19–21 ~ X 19’–21’

ωσο κιδασο μαχο ασο σφφαρο βραδο ασιμο σαχονο ... ανδαρζαγγο
κιραμο αλο ωγο αλο βιδδιγο ναγο ζοοαμο ... (X19–21 ~ X19’–21’).

“Now whichever of us four brothers may act otherwise than (according to) this statement ... or will not live one with the other, ...” (BD I²: 138).⁷⁷⁴

5.3.3 Niya Prakrit reflexives

As mentioned in §5.3.1, reciprocals and reflexives often overlap in form and function. Because there is proof of contact influence from Iranian, possibly Bactrian, on the Niya Prakrit reciprocals, it thus seems worth examining whether the same holds for the reflexives. After all, “if structural interference of any kind has occurred, it is highly unlikely to be isolated in the system [of a language]” (Thomason 2008: 49).

The ideal way to investigate this possibility would be (i) to study the syntactic properties of the reflexive pronouns in Niya Prakrit; (ii) to compare the syntax of corresponding formations in other MIA languages; and (iii) to see if the features not paralleled in other MIA languages are found in neighbouring Iranian languages, particularly Bactrian. The first and third

⁷⁷³ The fact that *eka biti* is an innovation hints at its being the living form. I have, however, been unable to find additional clues that *eka biti* would belong to a less formal register than the other pronouns. One indication of a register difference could be that the use of *aṃñamaṃñā* and *parospāra* / *parosṣāra* would be restricted to legal formulae. This holds for the rarely attested *aṃñamaṃñā*, but *parospāra* / *parosṣāra* also occurs in non-formulaic examples like *ede bharyapadaya parosparade vina huvamti* “This couple lived separated from one another” (CKD 788; tr. mine).

⁷⁷⁴ The preposition *αλο* ‘with’ used between *ωγο* ‘one’ and *βιδδιγο* ‘second’ is probably dependent on the verb *ζοοαμο* ‘we live’, as in X 9 ~ X 9’–10’ *οδο δογγο ζοοαμο σογγο βραδο αλο βραδο αβδδινινδο* “and we shall live just as it is the custom (for) brother (to live) with brother” (BD I²: 136). Another reciprocal marker *μαρδο ασο μαρδο*, literally ‘man from man’, i.e. ‘one from another’ is attested in the same document (cf. BD II: 231).

steps require me to first describe the syntax of the reflexive pronouns in both Niya Prakrit and Bactrian in more detail than has been done before (§§5.3.3–5.3.5). Step two confronts us with a practical problem: there is no comprehensive comparative syntax of Middle Indo-Aryan in which one can conveniently look up the syntactic properties of all reflexive pronouns in all MIA languages,⁷⁷⁵ and doing this type of research myself would be impractical within the scope of a single case study. As a result, it will be challenging to decide which similarities between the syntax of the Niya Prakrit and Bactrian reflexives are significant and which are not. Therefore, the best I can do is concentrate on how well the syntax of the Niya Prakrit and Bactrian reflexives matches and from there proceed to necessarily tentative conclusions (§§5.3.6–5.3.8).

The examination will concentrate on Niya *tanu(vaga)* ‘one’s own, property’ and Bactr. *χοβο* / *χοβιγο* ‘idem’. The reason for this is that the Niya pronoun is a typically northwestern form whose cognates are restricted to South Asian Gāndhārī and some NIA languages from the region (EWAia I: 621f.), and thus a possible candidate for Iranian influence.⁷⁷⁶ The Bactrian word has cognates in most Middle Iranian languages (cf. §5.3.4.1), so if certain morphological or syntactic parallels between Bactr. *χοβο* / *χοβιγο* and Niya *tanu(vaga)* result from language contact, it would seem most likely that Bactrian influenced Niya Prakrit and not the other way around.

A secondary point of interest is the other reflexive markers in Niya Prakrit, i.e. the intensifiers Niya *sveya* ‘oneself’ and Bactr. *χοαδο* ‘idem’, and the canonical reflexive/intensifier Niya *apana* ‘oneself’ and Bactr. *χοβισαπο* (later *χοβοσαπο*) ‘idem’. I include these forms in order to point out that the reflexive system in both languages operates with a threefold distinction (see §5.3.5). This threefold structure is primarily the result of common inheritance. However, it is still worth looking at because it has been plausibly argued that inherited similarities in the grammatical systems of two or more

⁷⁷⁵ Sen’s historical syntax of MIA only briefly mentions the reflexives in Niya Prakrit and South Asian Gāndhārī (1953: 90f.) and does not discuss the other languages. Bubeník’s historical syntax of late MIA (1998) does not treat reflexive pronouns at all.

⁷⁷⁶ Schwarzschild (1959) has argued that Ap. *taṇaya-* ‘one’s own, belonging to’ is also a cognate of Niya *tanu(vaga)*. If true, *taṇaya-* could be a northwestern dialect feature in Apabhraṃśa, like the preservation of *-Cr-* clusters which grammarians prescribe for Apabhraṃśa (cf. De Clercq 2009: 9; Ollett 2024: 87–89).

languages increase the potential for contact-induced change (see e.g. Bownern 2013; Law 2013).

5.3.3.1 *tanu(vaga)* ‘one’s own, property’

I start with a synchronic description of the morphosyntactic use of Niya *tanu(vaga)* ‘one’s own, property’. This is not a controversial topic. Yet, Burrow’s treatment of it in LKD (§86) is very succinct, and he does not note some features which in §5.3.7 I will use to argue that Niya *tanu(vaga)* and Bactr. $\chi o\beta o$ / $\chi o\beta i\gamma o$ were mutually intertranslatable, e.g. that (i) *tanu(vaga)* is co-referential with either the agent or the recipient and that (ii) it must co-refer with a noun phrase at the same clause level.

Generally speaking, *tanu(vaga)* is a possessive reflexive adj. with the meaning ‘one’s own’ that can also be substantivised to mean ‘property’. It is the most frequent reflexive marker in Niya Prakrit, and the same form was also used in Gāndhārī inscriptions. The attestations are listed below.

Attestations

DIR.SG. *tanu*: CKD 24; 26; 33; 49; 58; 59 (2x); 90; 106; 130 (2x); 135; 160; 161; 165; 190; 211; 235; 271; 278 (?); 292; 324 + 328 (2x); 326 (4x); 331; 358; 366; 387; 471; 473 (2x); 482; 492; 509; 547; 553; 568; 569; 572; 573; 574; 575; 582; 585 (3x); 624; 713 (3x); 714 (2x); 734 (2x); 769; 779; 889; *tanuvaga*: CKD 90; 235; 437; 491; 656; 677; 836; 884 (2x); *tanuvagā*: CKD 661 (2x); *tanuvāga*: CKD 324 + 328; 506 (2x); 545; 574; 709; 719; 770; 779; 898 (2x); *tanovaga*: CKD 837; 871; *taṇuvaga*: CKI 1177; *danu*: CKD 318; 358 (3x); 743; 783

DIR.SG.FEM. *tanuyi*: CKD 39; 545; 551

ABL.SG. *tanuvagade*: CKD 305 (2x); *tanuvade*: CKD 635

LOC.SG. *taṇuvae*: CKI 60; 178; *taṇuakami*: CKI 241; 564; *tanuakami*: CKI 368; *taṇukaami*: CKI 241; *tanuvakaṃmi*: CKI 153

DIR.PL. *tanuvāe*: CKD 279

GEN.PL. *taṇuakaṇa*: CKI 564

Etymologically, this pronominal adj. derives from the (Ṛg)Vedic reflexive *tanú-*. While originally meaning ‘body’ or ‘person’ (Pinault 2001), *tanú-* was gradually grammaticalised to become an intensifier and a canonical reflexive (cf. e.g. Kulikov 2007; Orqueda 2019: 145–184).

In later Vedic, *tanú-* disappears and is replaced by *ātmán-* (cf. Niya *apana* discussed below). Yet, derivatives of *tanú-* probably survived in the northwest, given Niya Pkt. *tanu(vaga)* and NIA forms such as Torwali *tanu* ‘own’ or Khowar *tān* ‘self, own’ (EWAia I: 621f.). The extensive time gap between the *Ṛgveda* and our earliest evidence for Gāndhārī renders it

difficult to chart the historical changes that took place in the creation of the reflexive possessive adj. in detail.

Coming back to Niya Prakrit, I could not detect a functional distinction between the longer form *tanuvaga* (and variants) and the shorter form *tanu*. Both can occur as a reflexive adj. or as a noun meaning ‘property’. The equivalence between the longer and the shorter form can, for instance, be observed from examples (5.7)–(5.8): in (5.7), *tanuvaga* is used in the meaning ‘property’, whereas *tanu* is used in the same function in (5.8).

- (5.7) CKD 437 under-tablet obverse 7f.
taha ahuno sā kuḍi Saganāpaae etaṣa Maṣḍhigeyaṣa tanuvaga huda.
 “so now that girl Saganāpaae has become the property of this Maṣḍhige.”
 (TKD: 90).

- (5.8) CKD 575 under-tablet obverse 6
se maṃnuṣa Cmaga Kuṣayiciyaṣa tanu huda.
 “That man Cmaga was the property of Kuṣayici.” (TKD: 116).

When *tanu(vaga)* is not, as in the preceding, combined with a genitive complement,⁷⁷⁷ it is co-referential with the agent of the sentence⁷⁷⁸ or the recipient of a ditransitive construction. In example (5.9), the adj. *danu* is co-referential with the dir.sg. *Viharavala*, agent of pres.3sg. *viheḍeti* ‘wastes’ and *vinajeti* ‘destroys’.

- (5.9) CKD 358 obverse 5
Viharavala atra danu kilmiciyana masu maṃtsena suṭha viheḍeti vinajeti.
 “... Viharavala is wasting and destroying the wine and meat of his own tenants.” (TKD: 70).

A similar example is (5.10), where the co-referent of the adj. *tanuvaga* is the agent *Mogeya Cimagāṣa ca* ‘Mogeya and Cimagā’.

⁷⁷⁷ The locative is used when *avāna* ‘village’ is the complement of *tanu(vaga)* (CKD 279; 326). Khotan Pkt. *mayi* in *mayi ... tanuvagā* (CKD 661) is best understood as a gen. and not as a loc. (see LKD: §28; §78).

⁷⁷⁸ The examples in Gāndhārī inscriptions are all of this co-referential and adjectival type. In CKI 48 and 165, a derivative of Skt. *svaka-* is used in this way, respectively *śpae* and *svakiya*. These are probably Sanskritisms. For the loc.sg. *tanuakami śpae* in CKI 368, I tentatively follow Falk’s (2003: 73 = 2013a: 66) interpretation of *śpae* as a noun referring to some territory, as it would be unexpected to have two reflexive adjectives right after another.

- (5.10) CKD 709 cover-tablet reverse 3

tanuvaga muliyena Mogeya Cimagasa ca nikhalitamti.

“Mogeya and Cimagasa got him from there with a price paid out of their own property.” (TKD: 142).

(5.11) is an instance whereby *tanu* is co-referential with the recipient of pres.1sg. *denāmi* ‘I give’, i.e. the gen.sg. *Suḡutaṣa* (a PN).

- (5.11) CKD 568 under-tablet obverse 3f.

ahaṃ Kapgeya Suḡutaṣa paśu 10 tanu denāmi.

“I Kapgeya give ten sheep to Suḡuta as his property.” (TKD: 112).

In every example given so far, *tanu(vaga)* is used co-referentially with a noun phrase at the same clause level, and this pattern holds for all the attestations of *tanu(vaga)*. For co-referentiality with a noun phrase at a different clause level, a demonstrative pronoun in the genitive seems preferred, as in (5.12). In this formulaic example, the gen.sg. *edaṣa* ‘of him’ in the complement clause introduced by *yatha* ‘that’ is co-referential with the dir.sg. *vasu Līpeya* ‘the vasu Līpeya’ in the main clause.

- (5.12) CKD 144 under-tablet obverse 2

iśa vasu Līpeya viṃṇayeti yatha edaṣa dajha Kacana nama hoati.

“Here, the vasu Līpeya informs us that he has a slave called Kacana.” (TKD: 26).

Reduplicated *tanu(vaga)* has a distributive sense, as in (5.13), where *tanu tanu* corresponds in the translation to “each man’s ... separately”.

- (5.13) CKD 59 reverse 3

sā aṃna teṣa jaṃnaṣa tanu tanu nadha iśa anidavo.

“each man’s parcel (of corn) is to be brought here separately.” (after TKD: 13).

Besides, there is at least one case of *tanu* being added after a possessive genitive, here cited as (5.14). In this example, the first *tanu* is put in between the gen.sg. *ogu Bhimaṣeṇaṣa* ‘of the *ogu* Bhimaṣeṇa’ and its syntactic head gen.pl. *kilmeciyana* ‘of the tenants’.

- (5.14) CKD 734 reverse 1f.

yo atra ogu Bhimaṣeṇaṣa tanu kilmeciyana bhumakṣetra Rutraya Paṃcamaṣa ca tanu darśayeti.

“As regards the field there belonging to the tenants of the *ogu* Bhimaṣeṇa which Rutraya and Paṃcama claim as their own” (TKD: 145).

If we, for instance, compare the gen.pl. *ogu Aśogaṣa kilmeciyana* ‘of the tenants of the *ogu Aśoga*’ in CKD 254, where no *tanu* is added, it seems as if ***ogu Bhimaṣenaṣa kilmeciyana* would have been grammatically correct in (5.14) as well.

To finish this overview of the synchronic behaviour of *tanu(vaga)*, I now briefly discuss one instance where Burrow takes *tanu* in an unparalleled sense as ‘(her) person’. This example, i.e. (5.15), concerns the compensation which a certain Pugo and Lýipeya should receive for the death of a witch who belonged to them. Burrow translates *ṣadha tanu* as ‘along with her person’.

(5.15) CKD 58 reverse 2f.

yo taya arthadana giṭamti ṣadha tanu Pugo Lýipeya giṃnidavya.

“The property they took from her Pugo and Lýipe are to receive along with her person.” (TKD: 13).

In my view, Burrow’s translation does not make much sense in context, as the woman in question is actually dead (cf. also the parallel in CKD 63). Moreover, in the two other instances where *tanu* combines with the verb *giṃn-* ‘to take, receive’ (CKD 545; 574), the meaning is ‘to take as one’s own’. Therefore, the same may be intended in (5.15), even though *ṣadha* ‘together’ would then fit less easily into the syntax. Given these uncertainties, I will not base conclusions on example (5.15).⁷⁷⁹

5.3.3.2 *sveya* ‘oneself’

In this subsection, I briefly treat the morphosyntax of Niya *sveya* ‘oneself’, as I will later compare this pronoun with Bactr. *χοαδο* ‘idem’ (§5.3.4.2). *sveya*, the regular outcome of OIA *svayam* ‘oneself’, is typically found in its etymologically expected usage as an intensifier (LKD: §86).⁷⁸⁰

Attestations

ADV. *sveya*: CKD 292; 621; 842 (2x); 884; *sveyam*: CKD 22; *sve*: CKD 193; *svaya*: CKD 709

⁷⁷⁹ Sometimes, Burrow translates *tanu* as an intensifier, but this is never a necessary interpretation. In CKD 624, for instance, Burrow (TKD: 130) translates *uṭa tanu nidavo* as “the camel itself is to be brought”, but nothing speaks against the literal meaning “the camel is to be brought as his property”.

⁷⁸⁰ For the use of OIA *svayam*, see e.g. Speyer (1886: §§263–268) and Orqueda (2019: 128–144).

In most occurrences, *sveya* occurs together with *devaputra* ‘king’ (CKD 193; 709; 842; 884), although it is often difficult to decide whether *sveya* is used adnominally or adverbially. An example is *eda vivada svaya devaputra śruda* in CKD 709 under-tablet obverse 2, translatable as “his majesty heard this dispute himself” (TKD: 142). In this sentence, *svaya* seems to be an inclusive intensifier (§5.3.1), given that the other officials present at the dispute are also mentioned later in the document.

In the spelling *sveyam*, the same word occurs in *ariyaga Rutrayaṣa sveyam eva gaṃdavva* (CKD 22 obverse 2), translated by Burrow as “the guide (*ariyaga*) Rutraya must himself go [i.e. on an embassy].” (TKD: 5). Because of the addition of the particle *eva*, it seems to me that the function of *sveyam* in this sentence is more pronounced than what is captured by Burrow’s translation. Therefore, I wonder whether *sveyam eva* means here ‘on one’s own’, i.e. ‘without the help of others’, comparable in sense to *etaṣa arivagaṣa tanu storena gaṃtavo* “this guide must go on his own beast” (CKD 135 under-tablet obverse 5; TKD: 24). According to this interpretation, *sveyam eva* would be a so-called exclusive intensifier (§5.3.1).⁷⁸¹

5.3.3.3 *apana* ‘oneself’

Although not frequently attested (2 or 3 examples), the morphosyntactic usage of Niya *apana* ‘oneself’ is not notably different from that of its Sanskrit cognate *ātman-* (LKD: §86). It is, as we shall see in §5.3.4.3, also comparable to that of Bactr. *χοβισαπο* (later *χοβοσαπο*) ‘idem’.

Attestations

DIR.SG. *apane*: CKD 139; 502 (?)

GEN.SG. *apanasya*: CKD 201

The clearest example is *tuo apane acovina paśidavo* “you must yourself (*apane*) inspect the *acovinas* [border officials]” (CKD 139 obverse 5f.; TKD:

⁷⁸¹ *sveya* can also be used in compounds, e.g. *sveyaviṣeya* ‘one’s own territory’ (CKD 292; 621; 842) ~ loc.sg. *tanuvaga viṣeyami* ‘idem’ (CKD 884). Compounds with *sva-* only rarely occur in Niya Prakrit. The only clear examples are ins.sg. *svamaraṃnena* ‘with one’s own death’ (CKD 40; cf. Lüders 1940b: 43; Wüst 1966: 44), *svakama* ‘of one’s own will’ (CKD 497), and *svachamdi* / *svachamtaga* ‘idem’ (CKD 555; 639). The latter two correspond nicely to Bactr. *χοακαμο* / *χογαμο* ‘out of one’s own will’ and *χοασινδο* / *χοσινδο* ‘idem’ (on which cf. BD II: 278f.; Sheikh 2023: 69).

25).⁷⁸² Like *sveya*, *apane* functions here as an intensifier, comparable to Sanskrit examples such as *sarpas tenātmanā svālayaṃ nītaḥ* “he himself brought the serpent to his dwelling” (ex. from Speyer 1888: §264), where the ins.sg. *ātmanā* ‘himself’ is co-referential with and the same case as *tena* ‘by him’.

A so far unrecognised second example of dir.sg. *apane* may be found in CKD 502. This document concerns a claim against Apñiya, who is accused of having distributed water he had borrowed. I cite the relevant passage with (a lightly modified version of) Burrow’s translation in (5.16). Burrow takes *apane* to be ‘outlet’, assuming an etymological connection with Skt. *apanaya*- ‘leading away, taking away’.

(5.16) CKD 502 obverse 3–5

a[tra] anada pruchidavo yati Apñiyaṣa udaga yaḷitaga huati tade udagade aṃñeṣa ditaga siyati atha va apane na ditaga siyati eda prace Apñiyaṣa vaṃti nasti parihaṣa.

“... careful investigation must be made (to find out) if this water was borrowed by Apñiya and (part) of this water⁷⁸³ was given to others. (If) on the other hand an outlet (*apanaya*) was not provided, there is no claim against Apñiya.” (after TKD: 98).

I would interpret *apane* in the same way as in CKD 139 discussed above, which yields the more straightforward translation “... (If) on the other hand he has not provided (the water) himself, there is no claim against Apñiya”.

Even though Niya Pkt. *apane* is in both examples used as an intensifier, one suspects that it could also be used as a canonical reflexive, like its cognates in other MIA languages, including South Asian Gāndhārī.⁷⁸⁴

5.3.4 Bactrian reflexives

This section treats the reflexive pronouns in Bactrian in the same way as §5.3.3 did for the Niya Prakrit pronouns. I try to show two things, viz. (i) that

⁷⁸² *apanasya kritaga* in CKD 201 seems to mean ‘your own deeds’, but the reading of this imperfectly preserved document is not entirely certain.

⁷⁸³ Burrow’s translation has “(water) from this water”.

⁷⁸⁴ The South Asian Gāndhārī cognates are mainly found in reliquary inscriptions (cf. CKI 60; 69; 158; 223; 369; 373; 564 (2x)). These are usually gen. forms, e.g. gen.sg. *at[va]ṇasa* in CKI 69 *at[va]ṇasa ṇatimitrasalohidaṇa arogadakṣiṇae* “for his own reward of health and that of his relatives, friends, and kinsmen” (tr. mine).

the reflexive adj. $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ closely resembles Niya *tanu(vaga)* in its usage and (ii) that Bactrian, like Niya Prakrit, uses a threefold system with a reflexive adj. ($\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$), an intensifier ($\chi\omicron\alpha\delta\omicron$), and a canonical reflexive also used as an intensifier ($\chi\omicron\beta\iota\sigma\alpha\omicron$; later $\chi\omicron\beta\omicron\sigma\alpha\omicron$).

5.3.4.1 $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ ‘one’s own, property’

I will first describe the morphosyntax of the Bactrian reflexive adjectives $\chi\omicron\beta\omicron$ / $\chi\omicron\upsilon\nu\grave{\alpha}$ / and $\chi\omicron\beta\iota\gamma\omicron$ / $\chi\omicron\upsilon\nu\grave{\iota}\gamma\grave{\alpha}$ /. Their usage has already been described by Gholami (SFBG: 111f.; 128), but her treatment does not go much beyond the entries on these adjectives in Sims-Williams’ glossary (BD II: 279). Therefore, a more extensive discussion seems useful, also because Gholami does not discuss the co-referentiality patterns shown by $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$, which in §5.3.7 will be used as arguments that they were mutually intertranslatable with Niya *tanu(vaga)*.

Like *tanu(vaga)*, Bactr. $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ can be used both adjectivally, as in English ‘one’s own’, and as a noun meaning ‘property’. As first noted by Sims-Williams (1994), $\chi\omicron\beta\omicron$ etymologically derives from **hwa(i)-paθya-*,⁷⁸⁵ thus being a cognate of MP *xwē(ba)š*, Parth. *wxēbēh*, Sogd. *xypθ* / *xypt*, Khot. *hāvya-* / *hivya-*, and so forth.⁷⁸⁶ $\chi\omicron\beta\iota\gamma\omicron$, on the other hand, is an example of the pleonastic addition of the adjectival suffix *-ιγῶ* / *īgā*/ to words that are already adjectives (BD II: 217).

There seems to be no functional distinction between $\chi\omicron\beta\omicron$ and $\chi\omicron\beta\iota\gamma\omicron$, but the latter is much less frequent. When $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ is not co-referential, a preposed complement indicates the possessor, e.g. the obl.pl. $\sigma\alpha\lambda\alpha\rho\alpha\nu\omicron$ ‘leaders’ in (5.17).

(5.17) V 13’

ασο μροσανο κινῶ οδο παροκινῶ ἀγγαραγῶ ασιδο σαλαρανο $\chi\omicron\beta\omicron$.

⁷⁸⁵ There is a homonym $\chi\omicron\beta\omicron$, meaning ‘good’. Sims-Williams (BD II: 279) argues that this adjective and the reflexive are etymologically identical, which is possible given the parallel of English ‘proper’, ultimately going back to Latin *proprius* ‘one’s own’. However, the alternative derivation from **h(u)w-apah-* ‘with a good work > good’ does not necessarily seem less likely to me (*pace* Sims-Williams), as derivatives of **h(u)w-apah-* are attested in most neighbouring Iranian languages, e.g. Pers. *xūb* ‘good’ or Sogd. *xwp* ‘idem’.

⁷⁸⁶ For the Middle Persian and Parthian cognates, see Brunner (1979: 73–78) and GW (§780). Cf. also TB *waipēcce* ‘possession’, a loan from the “Old Steppe Iranian” outcome of **hwai-paθya-* (Bernard 2023: 73f.).

“... to the east (is) a ditch, and on the farther side of the ditch the property which belongs to the leaders.” (BD I²: 118).

As most evidence for *χοβο* / *χοβιγο* comes from post-Kušāṇa Bactrian with its reduced case system, the original case of the complement is not deducible from examples like (5.17). Personal pronouns are helpful in this respect since *χοβο* / *χοβιγο* combines with *μανο* < **mana* (dd 5) and *ταο* < **tawa* (U 13 = U 16’),⁷⁸⁷ i.e. the old genitives. These instances suggest that the original case of the complement was the genitive, whose use became generalised in Bactrian to that of an oblique.⁷⁸⁸

If there is no complement, *χοβο* and *χοβιγο* are, like *tanu(vaga)*, most often co-referential with the agent of the sentence.⁷⁸⁹ (5.18) is an example whereby the adj. *χοβο* modifies *ασπο* ‘horse(s)’ and co-refers with *ρωβιγο* ‘the men of Rob’, the agent (= subject) of subj.3pl. *χωζινδαδο* ‘will demand’.

(5.18) cm 12f.

τακαλδ[o] ασφαγο ρωβιγο χοβο ασπο χωζινδαδο ταδο ...

“When the men of Rob demand their horses from you, then ...” (BD II: 90).

Hardly different is the occasional co-referentiality between *χοβο* / *χοβιγο* and the indirect object in impersonal constructions, as, for instance, in (5.19). Here, the adj. *χοβο* is co-referential with *το χοηο* ‘your lordship’, possibly the indirect object of an impersonal verb subj.3sg. *σινδαδο* ‘will please’ (cf. BD II: 264).⁷⁹⁰

(5.19) cg 9f.

ταδο το χοηο σινδαδο πιδο χοβο ιιζγο ταδηιο ταρο πιδοροβο.

“So, (if) it should please your lordship in your goodness, receive him there (with you).” (BD II: 80).

⁷⁸⁷ Note also *ταουηλο* in J 14 = J 11’; *τωιουηλο* in L 15 = L 12’; and *τηιο* in Tt 13.

⁷⁸⁸ Enclitic pronouns can be used too, e.g. *χοβομο μαρηγανο* ‘my own servants’ in Tt 8f.

⁷⁸⁹ An enclitic pronoun is sometimes pleonastically added to *χοβο* where the co-referentiality would already be clear were *χοβο* used on its own (e.g. Uv 3–5; Sims-Williams & de la Vaissière 2015: 43).

⁷⁹⁰ For the phraseology, cf. also I 5’ *πιδο μο χοβο σιν[δο]* “according to (our) own wish” and the adjective *χοασινδο* ‘out of one’s own wish’.

Besides, *χοβο* / *χοβιγο* can co-refer with the recipient in a ditransitive construction; in (5.20), *αβο χοβο*, literally ‘for his own’ (BD II: 279), is co-referential with *φαρο χοαδηοοανινδο* ‘to Khwadew-wanind’.

(5.20) bg 11f.

ταδανο [το] χοηο πιδονωγαρο φαρο χοαδηοοανινδο λαδηιο αβο χοβο.

“then [your] lordship again gave it to Khwadew-wanind for his own” (BD II: 64).

It appears that *χοβο* / *χοβιγο*, like *tanu(vaga)*, tends to be co-referential with a noun (phrase) or a pronoun at the same clause level.⁷⁹¹

When reduplicated, *χοβο* and *χοβιγο* have distributive sense. Note, for instance, sentence (5.21), where not only *χοβιγο* but also *δρουμινο* ‘enemy’ is repeated.

(5.21) N 30f.

στο δρουμινο δρουμινο εβκαραμο οδο χοβιγο χοβιγο ληραμο σαγονδο πιταδαμο.

“... and may we chase off all enemies and keep all our own (household) as we have guaranteed.” (BD I²: 72).

The low number of examples of *χοβο* / *χοβιγο* from Kuṣāṇa sources renders it difficult to find an instance of *χοβο* / *χοβιγο* pleonastically attached to a noun in the genitive. However, an example as the following is similar in structure and conceivably derives from an older structure whereby the noun in front of *χοβο*, i.e. *βαγο* ‘god’, originally still had case marking: *ειδο μαναιο βαγο χοβο αδογαμο* “This (is) the income belonging to/of the god Mana” (Sims-Williams 2013: 194).

⁷⁹¹ The only counterexample would be the restored *χοβο* in xp 7: *μισιδο [το χοη]ο ζανο κοαδο πορλαγγοζινο αλο χοασραο [χοβο οσι]ρδοβιδο οαρο οδο λαδο κιρδο* “moreover, [your lordship] should know that Purlang-zin, together with Khwasraw [your *usi*]rd-bid, made an oath and disposition ...” (BD II: 162). According to this reading, *χοβο* in the complement clause introduced by *κοαδο* ‘that’ should be co-referential with *το χοηο* in the main clause and not, as grammatically more logical, with the PN *πορλαγγοζινο*. Contrast L 20’f. *οτηιο παδοαχβανηιο ασο μαβαρο απαρσο τοι βαζανκο αλο ι χοβο καδγιγαγο αβο ι μασκο ναβιχτιγο αγγαργο παραλαδο ...* “And you, Bazanuk, together with the members of your household, have authority (over) it for the future, to sell the property described herein ...” (BD I²: 62), where *χοβο* is co-referential with *τοι βαζανκο* ‘you, B.’ in front of it. Therefore, I suggest to restore in xp 7 rather the oblique pronoun *ταοο* / *ταιοι* ‘you’ in possessive function (SFBG: 101f.).

Finally, there is one unusual instance of $\chi\omicron\beta\omicron$ in W 29' where it is used as an intensifier, corresponding to $\chi\omicron\alpha\delta\omicron$ 'oneself' in the parallel W 29. In this case, I would opt for a scribal mistake.

5.3.4.2 $\chi\omicron\alpha\delta\omicron$ 'oneself'

Bactr. $\chi\omicron\alpha\delta\omicron$ / $xwad\epsilon$ / 'oneself' < **hwatah* is only used as an intensifier (cf. BD II: 278; SFBG: 108–110), corresponding on this point with Niya Pkt. *sveya* 'idem' (§5.3.3.2).⁷⁹²

A typical example of the use of $\chi\omicron\alpha\delta\omicron$ can be seen in (5.22), one of the many variants of the Bactrian epistolary greeting formula.

(5.22) ch 3–5

οτανο οαλο βαταρανο καλδανο αζο μαρηγο μαρδο αβο το χοηο $\chi\omicron\alpha\delta\omicron$
λρογο οηνανο.

"And then I would be more happy when I myself, (your) serving man, might see your lordship healthy." (BD II: 82).

In this formula, $\chi\omicron\alpha\delta\omicron$ is arguably an inclusive intensifier, given that the author of the letter implies that it is insufficient for him to hear from others that his lordship is healthy but wants to verify this with his own eyes (cf. e.g. doc. bg).

Bactr. $\chi\omicron\alpha\delta\omicron$ also occurs in the function of an exclusive intensifier. One such case is cited in (5.23), where the implication is that Paroz (παρωζο) and nobody else will have to pay the taxes (pres.3sg. $\tau\omega\zeta\iota\delta\omicron$ 'pays').

(5.23) je 8–11

οιδρο καλδο αμαχο ι τωγιγο πιδοσησαμο τασιδο σασκο παρωζο $\omega\zeta\alpha\delta\omicron$
τωγο αστο ταδο $\chi\omicron\alpha\delta\omicron$ $\tau\omega\zeta\iota\delta\omicron$.

"Until we determine the tax arrangements, whatever tax is due on the part of Paroz he (will) pay (it) himself." (BD I²: 130).

⁷⁹² Its Middle Persian and Parthian cognates *xwad* and *wxad* are also used as a clause-level and a discourse anaphor (Meyer 2013: 405–414; 2023: 184–190). "Clause-level anaphor" refers to instances where MP *xwad* and Parth. *wxad* are used in a relative clause taking up an earlier-mentioned noun phrase that is within the domain of the relative clause. "Discourse anaphor" means that the reflexive marker works as an anaphor for the last pragmatically likely subject.

5.3.4.3 *χοβισαρο* (later *χοβοσαρο*) ‘oneself’

The pronoun *χοβισαρο* (later *χοβοσαρο*) is etymologically based on a univerbation of the obl.sg. *χοβι* ← *χοβο* ‘one’s own’ and *σαρο* ‘head’ < OIr. **sarah-* (cf. Psht. *xpasar*).⁷⁹³ The rarely attested *χοβισαρο* can be used as a canonical reflexive (BD II: 279f.; SFBG: 110), as in (5.24), where it is co-referential with the agent, i.e. the 3sg. clitic *-ηια* ‘by him’ (in *στηια*).

(5.24) Rab. 11–14

στηια φρομαδο αβειμοανο βαοναγο κερδι αβο κοζουλο καδφισο βαο ...
οδο αβο ι *χοβισαρο* κανηηκε βαο.

“... and he gave orders to make (images of) these kings: King Kujula Kadphises ..., and himself, King Kanishka.” (Sims-Williams 2008c: 56f.).

The exact function of *χοβοσαρο* in bc 12–13 στο ιωγο μαρδο *χοβοσαρο* εδρηδο “and you shall ... one man yourselves” (BD II: 56) is more challenging to evaluate because we do not know the meaning of the verb *εδρ-* (2pl. *εδρηδο*). Still, the use of a 2pl. verb suggests that ιωγο μαρδο ‘one man’ should be the direct object, in which case *χοβοσαρο* cannot be a canonical reflexive, but should be an intensifier like *χοαδο*.⁷⁹⁴

In brief, *χοβισαρο* (*χοβοσαρο*), like Niya *apana* (§5.3.3.3), most likely had a double use as a canonical reflexive and an intensifier.

5.3.5 Summary: the reflexive system in Niya Prakrit and Bactrian

The scheme below summarises the grammatical descriptions of §§5.3.3–5.3.4. It illustrates the threefold distinction that both Niya Prakrit and

⁷⁹³ The title *λοιχοβοσαρο* / *αλιχοβοσαρο* (SK₄M 8; SK₄A 11; SK₄B 12) probably also contains *χοβοσαρο* as its second element (Sims-Williams 2008c: 65).

⁷⁹⁴ In addition, there are two nearly identical instances of *χοβο* combined with *σαρο* (F 6(’); F 15 ~ F 14’), where one can doubt between translating as ‘own head’ or ‘oneself’. Cf. e.g. F 6–7 *ταδομο ωσο ασαφαγο ζηρο πιδο χοβο σαρο οαναγο σποριγο αγγιτο* (F 6’ *πιδοροβδο*), translated by Sims-Williams in an etymological way, i.e. “... and (that) now the full price has been received on (my) own head by me from you, Zer” (BD I²: 38 with fn. †). For this translation, Sims-Williams (1999: 197) cites Sogd. *pr srw ptyrβ-* ‘to receive on the head > to receive respectfully’ (MacKenzie 1970: 41). Another possibility would be to compare Sogd. *prw γr’γw ptyrβ-* (AN 107f.) and ZMP *ō grīw padīr-* ‘to take upon oneself > to accept’ (Filippone 2017: 146; 151). Whereas the Bactrian phrase refers to a price received, the Sogdian and Middle Persian ones refer to a burden one takes on oneself. As Sogd. *γr’γw* and MP *grīw* can be used as reflexives, *χοβο* + *σαρο* could probably still be reflexive in this type of formula.

Bactrian make, and it lists the commonalities shared by the different pronouns, in particular Niya *tanu(vaga)* and Bactr. *χοβο / χοβιγο*.⁷⁹⁵

	Niya Prakrit	Bactrian
1	<i>tanu(vaga)</i> adj. ← Ved. <i>tanū-</i> 'body, person, self' – adj. 'one's own' + noun 'property' – co-referential with agent or recipient – co-referential at the same clause level – distributive sense when reduplicated – can be pleonastically added after a gen.	<i>χοβο / χοβιγο</i> < OIr. <i>*hwa(i)-paθya-</i> (+ adj. suffix -ιγο)
2	<i>sveya</i> < OIA <i>svayam</i> – in- or exclusive intensifier 'oneself'	<i>χοαδο</i> < OIr. <i>*hwatah</i>
3	<i>apana</i> < OIA <i>ātman-</i> – canonical reflexive + intensifier 'oneself' – only rarely used in extant text corpus	<i>χοβισαρο; χοβοσαρο</i> obl.sg. <i>χοβι</i> and <i>σαρο</i> 'head' < OIr. <i>*sarah-</i>

5.3.6 A case of contact-induced change?

The next point to consider is whether, to what extent, and in which way the commonalities listed in the preceding section result from language contact.

Poplack and Levey (2010: 398) argue that three criteria should be satisfied to make a compelling case for contact-induced change:

"A candidate for contact-induced change in a contact variety is present in the presumed source variety and either 1) absent in the pre-contact or non-contact variety, or 2) if present ..., is not conditioned in the same way as in the source, and 3) can also be shown to parallel in some non-trivial way the behavior of a counterpart feature in the source." (cf. also Thomason 2001: 91–95).

⁷⁹⁵ The examination above did not reveal any significant divergences in usage between the reflexives in Niya Prakrit and Bactrian.

Unfortunately, the Niya Prakrit and Bactrian reflexives cannot meet these criteria.⁷⁹⁶ Our knowledge of how Niya *tanu(vaga)* and the other reflexive markers developed from earlier forms in the local Vedic dialects remains incomplete, so it is hardly possible to compare Niya Prakrit with a pre-contact variety, as would be necessary to satisfy the first and second criterion of Poplack and Levey. Assessing how significant the parallels between the Niya Prakrit and Bactrian reflexives are (cf. the third criterion) would require one also to compare the syntax of reflexives in other MIA languages. Again, we face a difficulty: there is no comprehensive syntactic study of MIA reflexives on which to base such a comparison (cf. §5.3.3). The absence of such a study makes it tricky to decide whether, for instance, the co-referentiality of *tanu(vaga)* and $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ with both agent and recipient and the fact that co-referentiality needs to be at the same clause level are characteristic features of Niya Prakrit and Bactrian or also found in closely related languages.⁷⁹⁷

In any case, the morphosyntactic parallels count as cumulative evidence at best; when taken individually, most could be explained away as due to inheritance or language-internal developments. To begin with, the reflexive pronouns in Niya Prakrit and Bactrian are all inherited, so the tripartite system occurring in either language can be a language-internal phenomenon. The distributive sense that *tanu(vaga)* and $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ obtain when reduplicated is also not necessarily significant. After all, distributive reduplication is also known elsewhere in Indo-Aryan (cf. the *āmreḍita* compounds).⁷⁹⁸ Similarly, the pleonastic addition of a possessive adj. after a gen. also occurs in later MIA, where it may be due to increasing case syncretism.⁷⁹⁹ An Apabhraṃśa example is *aṇaṅgaḥ keraū toraṇu* ‘the arch of Kāma’ (*Paūmacariu* 14.7.8), where the possessive adjective *keraū* ‘one’s own’ is added between the preposed gen.sg. *aṇaṅgaḥ* ‘of Kāma’ and the dir.sg. *torāṇu* ‘arch’.⁸⁰⁰

⁷⁹⁶ Meyer (2023: 219f. fn. 13) observes that “corpus languages frequently cannot live up to the modern methodological standards propounded by Poplack and Levey and others.”

⁷⁹⁷ Intuitively, these two features of *tanu(vaga)* and $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ seem the most important parallels.

⁷⁹⁸ Within Iranian, distributive reduplication is also not limited to Bactrian; cf. e.g. GW (§559) on Middle Persian and Parthian, and GMS (§1633) on Sogdian.

⁷⁹⁹ The same phenomenon is moreover also attested in Iranian languages other than Bactrian. Cf. §5.2.1 on Khot. *hāvya-* / *hivya-* ‘own’.

⁸⁰⁰ On these possessive adjectives in later Indo-Aryan, cf. Schwarzschild (1954).

In conclusion, I would not claim that the parallels shared between *tanu(vaga)* and $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ and the other reflexive pronouns in Niya Prakrit and Bactrian are necessarily due to contact-induced change.

5.3.7 A more cautious proposal: mutual intertranslatability

Even when positing large-scale contact-induced change may go too far, the data still allow for a more cautious proposal. In my view, the Niya Prakrit and Bactrian reflexives exemplify Heine and Kuteva's (2005) concept of "mutual intertranslatability". This notion means that when the grammatical structures of two languages overlap significantly, "the task of the translator or language learner is confined to inserting the appropriate lexical and grammatical forms to move from one language of the area to another" (Heine & Kuteva 2005: 180). Applied to our case study, this would mean that the Bactrian reflexives could be translated almost mechanically into the Niya Prakrit ones (and vice versa) by bilingual speakers (cf. also Chapter 7).

I see two main arguments to support that the Niya Prakrit and Bactrian reflexives were mutually intertranslatable, i.e. the structural similarities noted above and the existence of phraseological parallels. In what follows, I will elaborate on both.

Regarding the first argument, the shared tripartite division between (i) a reflexive adj. 'one's own > property' (*tanu(vaga)* ~ $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$), (ii) an intensifier (*sveya* ~ $\chi\omicron\alpha\delta\omicron$), and (iii) a canonical reflexive pronoun, also used as an intensifier (*apana* ~ $\chi\omicron\beta\iota\sigma\alpha\rho\omicron$; $\chi\omicron\beta\omicron\sigma\alpha\rho\omicron$), makes that each pronoun has an equivalent in the other language. While mainly the result of common inheritance (cf. *supra*), this shared structure renders it easy to translate a reflexive marker in one language into its counterpart in the other.

Largely the same can be said about the morphosyntactic parallels concerning, for instance, word class and co-referentiality shared between *tanu(vaga)* and $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ (§§5.3.3–5.3.5). Although, as noted above, one can explain the individual parallels as due to inheritance or language-internal developments, their existence would allow a speaker of Bactrian to translate $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ into Niya Pkt. *tanu(vaga)* (and vice versa) without having to worry that the resulting translation would be syntactically ungrammatical or unidiomatic.

The second argument to back up the idea that the Bactrian and Niya Prakrit reflexives were mutually intertranslatable is the presence of phraseological parallels, whereby at least $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ and *tanu(vaga)*

occupy the same syntactic slot in nearly-identical contexts. Three examples of this kind will be discussed below.

The first parallel, illustrated by examples (5.25) and (5.26), concerns a legal formula ‘to pay out of one’s own property’. Both times, the default word for ‘to pay’ is used, i.e. fut.2sg. *śodheyiṣyaṣi* in (5.25) and subj.1sg. τωζανο in (5.26). In addition, the Niya Pkt. abl.sg. *tanuvade* ‘out of one’s own (property)’ equals Bactr. ασο χοβο ‘idem’.

(5.25) CKD 635 reverse 4f.

yati eta ahuṃno anatha na kariṣyaṣi eta aṃna puna tuo tanuvade śodheyiṣyaṣi.

“If you do not do this carefully now, you will later have to pay this corn out of your own.” (after TKD: 132).⁸⁰¹

(5.26) K 13–14

καλδο πιω νατωζ(α)δο ταδαζο τητο ασο χοβο τωζα[v]ο.

“so, if Piy should not pay, then I, Tet, shall pay from (my) own (property)”. (BD I²: 56).⁸⁰²

Bactr. ασο χοβο ‘out of one’s own (property)’ is likely an inherited combination, given the existence of an exact cognate in Parth. *až wxēbē* < **hačā* ‘from’ + **hwa(i)-paθya-* ‘own’ (on which cf. Brunner 1979: 77; GW: 365). Niya Prakrit, on the other hand, can express the same idea in one word by using its abl. case in *-ade*.

Secondly, one can observe a parallel between the two languages in sentences which express that person X gives Y to person Z as his/her own. (5.27) is a Niya Prakrit example, (5.28) a Bactrian one. In both instances, the verb means ‘to give, to hand over’ (Niya pres.2sg. *picavesi*; Bactr. past.opt.3sg. λαδηιο) and governs an indirect object indicating the recipient (Niya gen.sg. *Budhamitraṣa*, a PN; Bactr. φαρο χοαδηοοανινδο, also a PN). In addition, the reflexive pronominal adj., i.e. Niya *tanu* and Bactr. (αβο) χοβο, co-refers with the recipient.

⁸⁰¹ Cf. also CKD 165 and 714, where *tanu goṭhade* ‘out of one’s own farm’ is combined with the verb √*vyoṣ* ‘to reimburse’. *tanu goṭhade* has an exact parallel in Bactr. ασο χοβο καδγο (ca 7f.). In CKD 305, two other instances of the abl.sg. *tanuvagade* in the meaning ‘out of one’s own (property)’ are attested.

⁸⁰² Additionally note ασο χοβο οδο ασο ανδαρουανο “from their own (property) and from (that of) the others” (ef 15f.). When χοβο is not co-referential with the agent of the sentence, a genitival complement is necessary, as in ασο υμανο χοβο ‘out of my property’ (dd 5).

- (5.27) CKD 553 obverse 3

ahuno eda uneyaga tanu Budhamitraṣa picavesi.

“Now (however) you are handing over this adopted child to Budhamitra as his own.” (TKD: 110).⁸⁰³

- (5.28) bg 11f.

ταδανο [το] χοηο πιδωνωγαρο φαρο χοαδηοοανινδο λαδηιο αβο χοβο.

“then [your] lordship again gave it to Khwadew-wanind for his own” (BD II: 64).

Whereas Bactrian uses the prepositions αβο and φαρο to mark the inanimate patient and the animate recipient respectively (Sims-Williams 2011b: 31f.), Nīya Prakrit by default puts the recipient in the genitive case. The overall meaning is the same, however: person X gives Y to person Z “as/for his own” (*tanu* ~ αβο χοβο), i.e. “as his/her property”.

A third and final parallel has to do with stock phrases with which one promises to take care of somebody else’s people as of one’s own. I cite two instances from Nīya Prakrit, i.e. (5.29)–(5.30), and one from Bactrian, i.e. (5.31).

- (5.29) CKD 292 obverse 5

/// na tanu saṃñā paripālitaṃ.

“... are to be looked after as if they were your own.” (TKD: 53).

- (5.30) CKD 331 under-tablet obverse 6

yath[ā] tanu dita saṃñā janidavo.

“She is to be regarded as his own daughter.” (TKD: 63).⁸⁰⁴

- (5.31) ec 8–10

οδαλο ποσανανο μαρο φορτιο ταδηνο ασκαδαρο παροβαλανο σαγονδο
ιχοβο οδαλινο ναφορτιο τασιδομο ταο ασταδο ταδινο ταρο υαμγηλο
παροβαλανο σαγονδο το χοηο χοαδο.

“And if you were to send the princes(?) hither, then I would take care of them more than my own; and if you should not send them, then (with)

⁸⁰³ For further examples, see CKD 235; 366; 471; 545; 568; 719.

⁸⁰⁴ Additional examples in CKD 161 and 585 (2x). Note also *eṣa Upaṣena tatra goṭhaṃmi yatha uneyagaputra saṃñā janidavya* “this Upaṣena is to be regarded as an adopted son in that family” (CKD 31 + 764 cover-tablet reverse 1f.; TKD: 7). Here, *tanu* is missing before *uneyagaputra* ‘adopted son’, but *yatha* ‘as’ is again added as in CKD 331.

whatever means I may have I would take care of them there just like your lordship yourself.” (BD II: 112).

Three linguistic features of the Niya Prakrit examples are mirrored in the Bactrian sentence: (i) the gerv. *paripālita*vo ‘to be looked after’ in (5.29) can be compared with subj.1sg. παροβαλανο ‘I will take care’, especially since the Bactrian verb παροβαλ- is a loan from Pkt. *paripāl-* (BD II: 252); (ii) the conjunction *yathā* meaning ‘as’ in (5.30) corresponds to σαγονδο ‘idem’; and (iii) the reflexive *tanu* in both (5.29) and (5.30) equals χοβο.⁸⁰⁵ In other words, also in this type of formula, a more or less mechanical translation of one language into the other would have been possible, thus being a further illustration that the reflexive systems in Niya Prakrit and Bactrian were mutually intertranslatable in a bilingual context.

5.3.8 Conclusion

The preceding sections were devoted to an investigation of possible contact influence on Niya Prakrit reciprocals and reflexives.

As concerns reciprocals, I elaborated on Burrow’s hypothesis that the Niya Prakrit reciprocal *eka bitī* ‘one the second > one another’ was calqued on an Iranian pattern, suggesting that the direct source may have been Bactr. ωγο βιδδιγο ‘idem’ (§5.3.2).

Regarding reflexives, I hope to have shown that Niya Prakrit and Bactrian use a tripartite macro-structure with a reflexive pronominal adjective, an intensifier, and a canonical reflexive. The individual forms used in both languages are moreover also parallel in their morphosyntactic behaviour (§§5.3.3–5.3.5). How to explain these commonalities is a more intricate question. Due to the difficulty distinguishing between inherited features, language-internal developments, and contact-induced changes, one should be cautious not to jump to far-reaching conclusions (§5.3.6). Based on phraseology, it can, however, be plausibly argued that the reflexives in both languages and the pronominal adjectives *tanu(vaga)* and χοβο / χοβιγο in particular were mutually intertranslatable (§5.3.7).

These conclusions still need to be substantiated further by a more detailed discussion of the historical context of potential bilingualism

⁸⁰⁵ The combination of *tanu* with (*saṃñā*) *janidavo* ‘to be regarded’ is also reminiscent of ταδοιανο χοβο ναζανηιο “and then you would not recognise (it as) his property” (bg 9; BD II: 64), where χοβο co-occurs with the Bactrian cognate of *jan-* ‘to know, recognise’, i.e. ζαν- ‘idem’.

between Niya Prakrit and Bactrian. I will return to this issue in Chapter 7, when it will be possible to include additional data from the case study on the preterite formations treated in the next section.

5.4 Preterite formations

5.4.1 Introduction

The focus of this case study is on the preterite formations in Niya Prakrit. As in the preceding case study, syntax will play an extensive role in the argumentation, as it will be necessary to examine the alignment patterns of the preterite formations in Niya Prakrit compared to those of neighbouring Middle Iranian languages. But at the same time, the morphology of these preterite formations will—much more so than with the reflexives—be at the core of the argument too.

The formation of the preterite in Niya Prakrit has two noteworthy features. On the one hand, traces of the inflectional past tenses known from OIA have hardly left a trace in Niya Prakrit: they have been replaced by an innovative formation based on the verbal adjective in *-ta-* that lacks a counterpart in other varieties of MIA. On the other hand, the new preterite is not patient-oriented, as would be expected morphologically, but agent-oriented. Concomitantly, an innovative patient-oriented formation in *-taga* (*-tae*) < **-taka-* was created, synchronically analysable as a resultative (“perfect”). See in more detail §5.4.2, also for the terminology adopted here.

In cases such as these, where the morphosyntax of Niya Prakrit differs from that of other MIA languages, the first impetus should always be to search for an explanation involving language contact. It thus is no surprise that more than one scholar has pointed to the possibility of Iranian influence on the formation of the Niya preterite, even when not every author subscribes to the idea with equal force (Weber 1997: 30f.; Wright 1998: 236f.; von Hinüber 2001²: §97; Ollett 2022: 283f.). In a recent paper, Barchi and Peschl (2022) have taken up the question in considerable detail. In their view, the formation and morphosyntactic behaviour of the new preterite tense in Niya Prakrit are most likely attributable to substrate interference from Khotanese.

Given that Barchi and Peschl’s conclusion is potentially at odds with one of the central claims made in this book, viz. that Bactrian had a much more profound impact on Niya Prakrit than Khotanese, I will reinvestigate

potential Iranian influence on the morphosyntax of the Niya preterite, arguing that Bactrian seems a more likely source of influence for the Niya preterite formation than Khotanese for morphological and other reasons. Barchi & Peschl (2022: 417; 422) rejected this option because of the difference in morphosyntactic alignment between Bactrian and Niya Prakrit. §5.4.10 will, however, adduce cross-linguistic evidence suggesting that this syntactic difference is not a serious obstacle to positing Bactrian influence on the Niya preterite.

The investigation consists of the following steps: §5.4.2 examines the synchronic behaviour of the preterite formations in Niya Prakrit; §5.4.3 summarises the main arguments used by Barchi and Peschl to substantiate their claim of a Khotanese substrate influence on the Niya preterite tense; §§5.4.4–5.4.7 discuss the four problems which I see with Barchi & Peschl’s approach; §5.4.8 summarises my counter-arguments; §§5.4.9–5.4.10 present my alternative view on the topic; and §5.4.11 draws conclusions.

5.4.2 The morphosyntax of the Niya preterite formations

This section concerns the synchronic behaviour of the Niya preterite formations. Four topics will be discussed: (i) the synchronic morphology of the Niya preterite; (ii) the diachronic derivation of this preterite; (iii) its syntactic alignment; and (iv) the morphology and syntax of the verbal adj. in **-taka-*.⁸⁰⁶

5.4.2.1 Synchronic morphology

In this first subsection, I introduce the synchronic morphology of the Niya preterite, which is necessary for the comparison with similar preterite formations in Khotanese and Bactrian in §§5.4.3–5.4.4 and §5.4.9.

As typical for a MIA language, Niya Prakrit has two productive present classes, one in *-a-* and one in *-e-* (< *-aya-* + analogical transfers). The finite preterites derived from the OIA aorist, imperfect, or perfect found in some other MIA languages are hardly ever used.⁸⁰⁷ They were replaced by an

⁸⁰⁶ On Niya Prakrit’s verbal morphology, see mainly LKD (§§93–116), with corrections in Schoubben (2022c). For the preterite in particular, see also Jamison (2000: 66) and Barchi & Peschl (2022: 409–411).

⁸⁰⁷ One exception is the pret.3sg. *asi* / *aśi* ‘(s)he/it was’ < OIA impf.3sg. *āsīt*. In South Asian Gāndhārī, this archaic type of preterite still occurs more often, but

innovative preterite synchronically consisting of a stem in *-t/-d* (and variants)⁸⁰⁸ and personal endings which, except for the 3sg., are essentially the same as in the present. See the (partially reconstructed) paradigms of *dena-* ‘to give’ and *kare-* ‘to do’ below with the accompanying notes.

	Presents in <i>-a</i>	Presents in <i>-e</i>	Preterite
1sg.	<i>denami</i> ‘I give’	<i>karemi</i> ‘I do’	<i>ditemi</i> ‘I gave’
2sg.	<i>denasi (denaṣi)</i> ‘you give’	<i>karesi (kareṣi)</i> ‘you do’	<i>ditesi (diteṣi)</i> ‘you gave’
3sg.	<i>denati (denadi)</i> ‘(s)he gives’	<i>kareti (karedi)</i> ‘(s)he does’	<i>dita</i> ‘(s)he gave’
1pl.	<i>denama</i> ‘we give’	<i>karema</i> ‘we do’	<i>ditama</i> ‘we gave’
2pl.	<i>denatu (denadu)</i> ‘you (should) give’	<i>karetu (karedu)</i> ‘you (should) do’	<i>ditetha / ditetu</i> ‘you gave’
3pl.	<i>denaṃti</i> ‘they give’	<i>kareṃti</i> ‘they do’	<i>ditamti</i> ‘they gave’

ad 1sg. Presents in *-e-* can have longer forms with *-eya-*, in which case they are difficult to distinguish from optatives. For the 1sg. of the preterite, there are occasional Sanskritic forms in *-osmi*, e.g. *prihitosmi* ‘I am pleased’ (LKD: §106).

ad 1pl. As argued in LKD (§109), apparent examples of 1pl. preterites in *-ema* are most likely mistakes for 1sg. *-emi*.

ad 2pl. See Schoubben (2022c) for the view that the ending *-tu (-du)* does not mark 2sg. but 2pl. In that article (see pp. 9–13), it is also pointed out that presents in *-tu (-du)* can have a deontic force and that the ending *-tha* is restricted to preterites. *-atha* in *kiṭatha* ‘you did’ (CKD 213) is most likely a mistake for *-etha*.

ad 3pl. There seems to be an orthographic rule to write *-ati* instead of *-aṃti* when the final consonant of the preterite stem is written with ⁵ *da* and not with ⁵ *ta* (LKD: §105; §109).

mainly in texts translated from “Buddhist Middle Indic”. See e.g. Salomon (2008: 153–159) on the evidence from the Gāndhārī *Anavatapta-gāthā*.

⁸⁰⁸ On the formation of the past stem, see in more detail LKD (§107).

5.4.2.2 Diachronic morphology

This subsection introduces the diachronic morphology of the Niya preterite, following Burrow (LKD: §§105f.). In §5.4.9.3, I propose to understand the mechanism behind these morphological developments as “contact-facilitated grammaticalisation”.

The Niya preterite is based on the univerbation of the OIA verbal adj. in *-ta-* with present forms of the verb ‘to be’. In the 3sg., there is no copula: forms such as *dita* ‘(s)he/it gave’ and its Khotan Prakrit cognate *dhitu* point to a neut.sg. **dittam* ‘given’ that was reanalysed as an unmarked 3sg. form.⁸⁰⁹ The 1sg., 2sg., and 1pl. can be derived from the combination of a nom.masc.sg. **dittaḥ* (for 1sg. and 2sg.) or a nom.pl. **dittāḥ* (for 1pl.) and the relevant form of the copula with regular sound changes: *abhinihita sandhi*; **-aḥ* > **-e* as in nom.sg. *se* ‘this’ < OIA *saḥ* (cf. §5.4.7); and **-sm-* > **(m)m-* as in loc.sg. *-a(m)mi* < OIA **-asmin* (LKD: §49).

1sg. *ditemi* ‘I gave’ < **ditte* ‘*m(m)i*’ < **ditte* ‘*smi*’ < OIA **dittaḥ asmi*

2sg. *ditesi* (*diteṣi*) ‘you gave’ < **ditte* ‘*si*’ < OIA **dittaḥ asi*

1pl. *ditama* ‘we gave’ < **dittā* ‘*(m)ma*’ < **dittā sma* < OIA **dittāḥ sma*

The 2pl. and 3pl. are slightly more complicated: from OIA 2pl. **dittāḥ stha*, we would expect something like Niya ***ditastha* instead of *ditetha* / *ditetu* ‘you gave’, and to arrive from 3pl. **dittāḥ santi* to Niya *ditam̐ti* ‘they gave’ requires a special treatment of the **s-* in **santi*. Burrow (LKD: §105) therefore assumed analogical influence from the presents in *-e-*, while admitting that there are no examples of pret.3pl. forms in ***-em̐ti*.

As a rule, the translation of a periphrasis of the verbal adj. in *-ta-* and a form of the copula depends in Sanskrit and most MIA languages on whether the verbal root the adjective in *-ta-* is derived from is transitive or intransitive. Examples of the latter category are always agent-oriented, e.g. Skt. *aham̐ bhūto’smi* ‘I have been’, where the nom.sg. *bhūtaḥ* agrees with the subject nom.sg. *aham* ‘I’. Examples of the former are by default patient-oriented, e.g. Skt. *datto’smi* ‘I have been given’, i.e. ‘somebody gave me (to

⁸⁰⁹ I follow Burrow (1936: 431), *pace* CDIAL (no. 6140), in reconstructing a proto-form **ditta-* with a geminate **-tt-*, because of Torwali *dit* ‘given’ < **ditta-* and other such forms in NIA languages and because the *-t-* in Khotan Pkt. *dhitu* also stands for a geminate (see §5.4.7). For the change of *-am* to *-a* in Niya Prakrit, cf. e.g. the dir.sg. ending in *-a* < acc.sg. *-am* (LKD: §53).

somebody)'.⁸¹⁰ In such transitive constructions, a potential agent must be marked with the ins. or, less frequently, the gen. case.⁸¹¹ Yet, the Niya preterite does not make such a distinction: both intransitive *hudemi* 'I was' and transitive *ditemi* 'I gave' are agent-oriented.

To account for this peculiar situation, Burrow (LKD: §105) argued that "the development [of the new preterite] must have started from the intransitive verbs". Intransitive verbs were agent-oriented in both the present and the preterite, and given that the endings of the preterite closely resembled those of the present, the agent-orientation which transitive verbs had in the present tense could, in Burrow's view, easily have spread to the preterite tense as well (cf. also Jamison 2000: 66; Barchi & Peschl 2022: 410f.). I will come back to this analogy in more detail in §5.4.10.2.

5.4.2.3 The alignment patterns of the Niya preterite

This subsection describes the syntactic alignment of the Niya preterite. In the contact linguistic examination, I will base two interdependent arguments on this alignment: (i) the agent-orientation of the Niya preterite is, *pace* Barchi & Peschl (2022), insufficient reason to posit Khotanese substrate influence (§5.4.4); and (ii) the different alignment of the Niya preterite does not exclude contact influence from Bactrian (§5.4.10).

The syntactic analysis presented below is essentially that of Jamison (2000), who investigated whether the Niya preterite is "lurching towards" ergativity (like other MIA languages) or perhaps "beyond" or "around" it (cf. p. 67).⁸¹² Based on her analysis, I understand the alignment of the Niya

⁸¹⁰ For the terms agent-orientation and patient-orientation and their application to the verbal system of Sanskrit, see Hock (1986).

⁸¹¹ A vast amount of literature exists on the synchronic status of this verbal adj. in *-ta-* in OIA and the resulting shift from nom.-acc. to split-ergative alignment in MIA and NIA. Cf. e.g. Bubeník (1998: 133–160); Butt (2001); Bynon (2005); Condoravdi & Deo (2015); Dahl (2021); Dahl & Stroński (2016); Peterson (1998; 1999); Stroński (2009); Verbeke (2013). A detailed discussion of this literature exceeds the scope of this work.

⁸¹² Although she is not very explicit on this point, the implied conclusion of her article seems to be that the Niya preterite is indeed "lurching beyond" or "around" ergativity. As Michaël Peyrot (p.c.) pointed out, one could also say that the Niya preterite is "lurching away" from ergativity. For more on Jamison's account, see also Bynon (2005: 33–35) and Barchi & Peschl (2022: 411–413).

preterite to be a mix of three systems, i.e. nom.-acc. alignment, neutral (or direct) alignment, and semantic alignment.⁸¹³

The first type of alignment shown by the Niya preterite concerns demonstrative pronouns and is not very common. Unlike nouns, adjectives, and non-demonstrative pronouns, demonstratives still distinguish between nominative and accusative, at least in the singular (LKD: §§80f.). As a result, the agent (= subject) can be marked in the nom. and the patient in the acc. With demonstratives, we can accordingly speak about “nom.-acc. alignment”.

(5.32) and (5.33) are two instances where the nom.sg. or acc.sg. of a demonstrative, be it on its own or as part of a nominal syntagm, is used for either the agent or the patient of the sentence. In (5.32), the nom.masc.sg. *eṣa* ‘he’ is the agent (= subject) of the pret.3sg. *liṣita* ‘dispatched’, while the patient is the dir.sg. *uṭa* ‘camel’.

(5.32) CKD 52 under-tablet obverse 2

eṣa iśa klasenadharmena mahi maharayaṣa uṭa liṣita.

“he dispatched a camel to me the great king according to the *klasena* arrangements.” (TKD: 12).

In (5.33), the 1pl. agent is encoded in the verb pret.1pl. *nidama* ‘we brought’, while acc.sg. *eda uṭa* ‘this camel’ acts as the patient of *nidama*.

(5.33) CKD 644 reverse 4

eda uṭa paruvārṣami iśa nidama.

“Last year we brought this camel here.” (TKD: 134).

The second and most frequent alignment system is a direct result of the merger of nom. and acc. to become the direct case. Because of this development in the case system, the agent (= subject) and patient of a preterite verb are, as with agent-oriented constructions in other tenses, usually marked in the same way. A system where the marking of the agent equals that of the patient also occurs in languages like English, where it is commonly referred to as “neutral alignment”. Yet, given that in Niya Prakrit, the agent and patient are in this type of construction both marked in the direct case, one can alternatively speak about “direct alignment”.⁸¹⁴

The following three sentences, taken from Barchi & Peschl (2022: 411f.), exemplify the use of “neutral” or “direct” alignment in Niya Prakrit. In (5.34),

⁸¹³ For these types of alignment, see Coghill (2016: 6–12), Dahl (2021: 414–419; 2022: 3–13), and Meyer (2023: 61–68).

⁸¹⁴ Meyer (2022: 280) uses the same terminology with reference to Armenian.

the dir.pl. *khakhordi stri 3* ‘three witch-women’ is the patient of pret.3pl. *nikhalitaṃti* ‘they took out’, the 3pl. agent being encoded in the verb form.

(5.34) CKD 63 under-tablet obverse 2

atra khakhordi stri 3 nikhalitaṃti.

“there they took out three witch-women.” (after TKD: 13).

In (5.35), the agent of the pret.2sg. *giḍesi* ‘you received’ is marked overtly with the dir.sg. *tu* ‘you’, and the patient is the dir.sg. *anati* ‘command’.

(5.35) CKD 63 under-tablet obverse 2f.

eda prace tu Ap[ge]yade anati giḍesi Līpeyaṣa stri patena stavidavya hoati.

“About this matter you received a command from Apgeya that recompense was to be made to Līpeya for this woman.” (TKD: 14).

In (5.36), finally, the dir.sg. *śramaṃna Yipiya* ‘the monk Yipiya’ is the agent and the dir.pl. *aśpa tre* ‘three horses’ the patient of the pret.3sg. *giḍa* ‘he received’.

(5.36) CKD 582 under-tablet obverse 3

taha ṣoṭhaṃgha Raṃṣotsaṣa paride bhumāṣa muli śramaṃna Yipiya giḍa aśpa tre.

“From the *ṣoṭhaṃgha* Raṃṣotsa the monk Yipiya received as price of the land three horses.” (TKD: 120f.).

As Niya Prakrit does not have a fixed word order, the agents and patients of sentences with a 3sg. verb should be distinguished based on context and other pragmatic factors. In most cases, this is easily done, as the agent will usually have a higher level of animacy than the patient. A monk is, for instance, more likely to receive three horses than the other way around (cf. (5.36)). But if the agent and patient possess the same degree of animacy and are marked in identical ways, confusion may arise as to which is which.

In order to avoid such confusion, the agent of a pret.3sg. form is put in the ins. case when the patient is as high on the animacy hierarchy as the agent. In other words, Niya Prakrit employs a form of differential agent marking (see Jamison 2000: 71–74).⁸¹⁵ With this third alignment system, in essence a

⁸¹⁵ For exceptions to the animacy rule, including archaic instances of agent marking with the ins. in colophons and introductions to royal proclamations, cf. Jamison (2000: 74f.; 78f.). The use of instrumental agents sometimes spread to sentences where the verb is not a preterite (LKD: §118; Jamison 2000: 76f.), e.g.

subtype of the second, argument marking is thus not only determined by syntactic criteria but also by semantic factors such as animacy. We can therefore refer to it as “semantic alignment” (for which cf. e.g. Dahl 2022: 7-10).⁸¹⁶

To illustrate how this semantic alignment system works in practice, I briefly discuss two relevant sentences below (adopted from Jamison 2000: 73). In example (5.37), both the agent and the patient of pret.3sg. *vijida* ‘wounded’ are humans. As a result, the agent, i.e. the PN *Aūgalena*, is marked in the ins.sg. but the patient, i.e. *stri* ‘woman’, in the dir.sg.

(5.37) CKD 29 under-tablet obverse 3

aṃṇa Līypeyaṣa stri Kolīṣaṣa bhratu Aūgalena vijida.

“Moreover, Aūgala, the brother of Kolīṣa, wounded a woman of Līypeya.” (tr. Barchi & Peschl 2022: 413).

In example (5.38), the agent of the first pret.3sg. *dita* ‘gave’ is likewise put in the ins.sg., i.e. *Priyavagena* (a PN), because the patient is once again the word for ‘woman’, dir.sg. *stri*. The agent of the second pret.3sg. *dita* ‘gave’ is, however, the dir.sg. *Suḡuta* (also a PN). In this case, the patient is the dir.sg. *tavastaga* ‘carpet’, so there is no need for an ins.sg. ***Suḡutena*. The contrast in animacy between the PN *Suḡuta* and the inanimate noun *tavastaga* namely suffices to discriminate between the agent and patient of the sentence.

(5.38) CKD 578 under-tablet obverse 4–6

*tena Suḡutaṣa stri Koloae naṃma Priyavagena dita striyae pratiprahuḍa
Priyavagaṣa Suḡuta dita tavastaga hasta 4 4.*

Paginena aloṭa viloṭade purva Mokṣapriyaṣa vaṃti suṣarnaṇa nikhaleti “Pagina (ins.sg. *Paginena*) is now trying to recover a debt of gold from Mokṣapriya (lent) before the plundering of the kingdom.” (CKD 494 under-tablet obverse 2f.; TKD: 96). Occasionally, the ins. case is also used for the patient, e.g. *[ade]hi Ca[smi]nena viṣajideṣi asmagena caragena* “From there you sent Casmīna our agent (ins.sg. *Ca[smi]nena* ... *asmagena caragena*)” (CKD 86 reverse 3 TKD: 17). Such instances deserve further study.

⁸¹⁶ In this respect, the morphosyntax of Niya Prakrit resembles but at the same time differs from that of NIA languages. In the latter, animacy likewise plays an extensive role in case marking and alignment patterns. In contrast to Niya Prakrit, it is, however, the marking of the object and typically not that of the agent which is influenced by animacy (cf. Verbeke 2013: 254 *et passim*).

“Therefore Priyavaga gave a woman called Koloae to Suḡuta. As a counter-gift for the woman Suḡuta gave to Priyavaga a carpet eight hands (in length).” (after TKD: 118).

With patient-oriented formations, such as gerundives and the verbal adj. in **-taka-*, the agent is by contrast marked in the gen. case and not in the ins. (cf. LKD: §119).⁸¹⁷ In sentence (5.39), the agent of the gerv. *gaṃdavo* ‘must come’ is, for instance, the gen.sg. *Caṃpeyaśa* (a PN).

- (5.39) CKD 83 under-tablet obverse 4
dena śadha Caṃpeyaśa iśa gaṃdavo Naṃtaśrṃma śadha.
 “With him Caṃpeya must come here along with Naṃtaśrṃma.” (TKD: 16).

Occasionally, the agent of a gerundive can, however, also be put in the direct case, because the alignment shift the Niya preterite underwent also started to affect the gerundive (cf. Caillat 1990: 17–21, 1992: 115–117).

5.4.2.4 The verbal adjective in **-taka-*

When the verbal adjective in *-ta-* developed into a synthetic preterite, the functional gap which it left in the system was filled by a new formation in **-taka-*. I will now treat the morphosyntax of the latter because in §5.4.9 I argue that its morphosyntax underwent Bactrian influence at the same time that contact with Bactrian influenced the course taken by the synthetic preterite.⁸¹⁸ The main take away point is the three syntactic uses of the

⁸¹⁷ This (nearly) consistent usage in Niya Prakrit of the gen. for the agent of a patient-oriented construction is clearly an innovation, perhaps in part due to contact with Iranian languages that also mark the agent in the gen. or a case derived therefrom. In OIA and most MIA languages, the gen. is used less frequently than the ins. for the agent of a patient-oriented construction, and, according to some scholars, the occasional use of a gen. rather than an ins. may, at least in some languages, have to do with morphosyntactic and/or pragmatic factors. See e.g. Jamison (1979: 133–136) and Dahl (2016: 93–95) for Vedic and Andersen (1986) for Aśokan Prakrit (with criticisms in Bubeník 1998: 138; Bynon 2005: 32f.; Stroński 2009: 102f.; Dahl 2016: 105).

⁸¹⁸ The verbal adj. in **-taka-* will also play a role in §5.4.5, where I will point to some instances of this formation in South Asian sources when arguing that Niya Prakrit is not as isolated from South Asian Gāndhārī, as assumed in Barchi & Peschl (2022).

verbal adj. in **-taka-*, viz. as (i) a (substantivised) adjective; (ii) a resultative (“perfect”); and (iii) a component of periphrastic constructions.

The periphrases have been noted since at least Burrow (LKD: §114). Yet, he does not much discuss which auxiliaries are used and how these periphrastic constructions fit into the tense-aspect system of Niya Prakrit. Therefore, it seemed worthwhile to discuss these periphrases in slightly more detail than strictly necessary for the contact linguistic argument made in §5.4.9.⁸¹⁹

Synchronically, the verbal adj. in **-taka-* is made by adding *-aga*, *-aya*, or *-ae* (rarely *-aka*) to the past stem of a verb. Examples are *asitaga* ‘dwelled’, *ditaga* ‘given’, *gadaya* ‘gone’, *kiḍaya* ‘done’, *hudae* ‘been’, and *lihitaē* ‘written’ (cf. LKD: §§110f.). In contrast to the preterite, the verbal adj. in **-taka-* makes a distinction in gender: feminines end in *-i*, e.g. *aniti* ‘taken in marriage’ or *kriti* ‘bought’ (LKD: §113).

Although not that frequently attested, the first and most basic usage of the formation in **-taka-* is as an adjective modifying a noun. An example of this kind is *mṛtaga potaga* ‘a dead animal’ (CKD 215, also *mṛta potaga*). More often, adjectives in **-taka-* are used as a noun that can take on case endings (LKD: §112). In CKD 144, *taḍitaga* ‘beaten > beating’ occurs, for instance, twice in the ins.sg., i.e. *tena taḍitagena* ‘because of this beating’ and *Soganaṣa taḍidagena* ‘because of Sogana’s beating’, and once in the abl.sg., i.e. *taḍitagade paṭa* ‘after the beating’.

The second function for which one can use a **-taka-* form is as the main verb of a sentence. I concur with Barchi and Peschl (2022: 431) that this “construction essentially seems to serve as an innovative analytic perfect”, although “(present) resultative” seems a still more appropriate term than “perfect”. The resultative aspect is evident for intransitive verbs, such as *mṛtaga* ‘(has) died’ in (5.40). *mṛtaga* not only indicates that Anaṣena (ins.sg. *Anaṣenena*) died at some undetermined point in the past; it also highlights the result of this past event, i.e. Anaṣena being dead now.⁸²⁰

⁸¹⁹ Nevertheless, their syntax still requires further study (as also pointed out in Jamison 2000: 71 fn. 30). Such an examination would require a comparison with similar formations involving the verbal adj. in *-ta-* in other MIA languages. For the latter, see e.g. Bubeník (1998: 104–117) and Peterson (1998: 22–25; 92–96; 178–186; 1999: 237f.; 247–249).

⁸²⁰ Burrow (LKD: §115) wrote that for intransitive verbs, “the difference is that the forms in *-taka* have a participial, those in *-ta* a verbal sense”.

(5.40) CKD 399 reverse B1f.

evaṃ ca ahuno iśa veyā pa[pa]śra[ve]na śrudemi Anaṣeṇena mṛtaga.

“And now here I have heard the bad news that Anaṣeṇa has died (is dead).” (after TKD: 81).

With transitive verbs, one could be tempted to analyse a verbal adj. in **-taka-* as a passive preterite instead. Yet, also with transitives, **-taka-*forms can concern the present result of a past event. In (5.41), for example, the *pravaṃnaga* ‘invoice’ referred to (loc.sg. *pravaṃnagaṃmi*) is the direct result of the writing process implied by *lihitaga* ‘(has been) written’.

(5.41) CKD 59 reverse 2f.

paḷī aṃṇa jaṃṇaṣa nama nama pravaṃnagaṃmi lihitaga.

“As regards the tax of corn, the names of the people (paying it) have been written individually on an invoice.” (TKD: 13).

A third option is to employ the verbal adj. in *-taka-* as a component of periphrastic constructions. To begin with, the verbal adj. in **-taka-* can be combined with a present tense copula, i.e. 3sg. *hoati* (*huati*; *uhati*) ‘is’ and 3pl. *huamti* ‘are’.⁸²¹ Although more research is required to determine more nuanced aspectual differences, it seems that this periphrasis can be functionally equivalent to the use of a **-taka-*form on its own as a present resultative.⁸²²

This equivalence can be shown by comparing example (5.42) to (5.41). Whereas *lihitaga* is not combined with a copula in example (5.41), it is in (5.42). Yet, in both cases, the context suggests an interpretation of the verb as a resultative. In (5.41), the result of the writing process is explicitly

⁸²¹ Balbir (1990) argues that *hoati* (*huati*) is a pret.3sg., etymologically consisting of the addition of the 3sg. ending *-ti* to **hua* < pret.3sg. *huda* ‘was’ (see pp. 31f.). In my view, it is more attractive to compare *hoati* (*huati*) with SA Gandh. pres.3sg. *hovadi* ‘is’ (Lenz 2003: 140; 264; 2010: 47; 174) and pres.3pl. *hovati* ‘are’ (CKI 249 *te ma[ye] Seṇavarmeṇa kiḍa hovati* “These (stūpas) have been repaired by me, Seṇavarma”). The stem *hova-* (Niya *hoa-*; *hua-*) continues *bhava-* with labialisation of the first *-a-* to *-o-* (> *-u-*) due to the following *-v-*; cf. also opt.3sg. *huve* ‘may be’ (CKD 100, 2x) < OIA *bhavet* and opt.3pl. *huveyu* ‘may be’ (MĀN XII 7) < OIA *bhaveyuh*. There is only one example of a **-taka-*form being combined with *bhavati* ‘is’, i.e. *ciṃtitaga bhavati* ‘is reckoned’ in CKD 435. I did not find an example with pres.3sg. *hoti* or *asti* ‘is’.

⁸²² Studying other MIA languages, Hoose (2020: 222f.; 2022: 44f.; 55) has suggested that the presence of a copula excludes that the verbal adj. in *-ta-* has perfective rather than anterior (resultative) aspect.

referred to by the loc.sg. *pravamṇagaṃmi* ‘on an invoice’. In (5.42), the same function is fulfilled by the loc.sg. *eda lekhami*.

(5.42) CKD 770 under-tablet obverse 3f.

*yaṃ ca Yakana[śa u]pajiva jivita Puṣga[ri](*yaṃmi)⁸²³ paryaṃta sarva
eda [lekhami] lihitaga huati.*

“Everything that lived in dependence on Yakana, as far as Puṣgari (?), all has been written in this letter.” (after Burrow 1937: 118).

Secondly, verbal adjectives in **-taka-* can also co-occur with a preterite copula, i.e. 3sg. *huta* (*huda*) or *asi* (*āsi*; *aṣi*) ‘was’ and 3pl. *hutaṃti* ‘were’. The morphological makeup of this periphrastic construction suggests it to be a past resultative (“pluperfect”), although the difference with a present resultative is often quite subtle.

Combinations of a verbal adj. in **-taka-* with a past copula chiefly occur in main clauses. Yet, in sentence (5.43), the 3pl. *palayitae hutaṃti* ‘(had) fled’ is part of a subordinate clause dependent on *viñayeti* ‘informs (that)’.⁸²⁴

(5.43) CKD 632 obverse 1–3

*ahuno i[śa Jha]gimoya viñayeti bhutartha eṣa bharya śadha Kucirajaṃmi
palayitae hutaṃti mahi maharayaṣa pritiyena iśa ayitaṃti.*

“Jhagimoya informs us that it happened that he had fled with his wife to the kingdom of Kuci. Through love of me the great king they came back here.” (after TKD: 131).

A third possibility is to combine the verbal adj. in **-taka-* with the optative of the copula, i.e. *siya-*, *bhaveya-*, or *(h)akṣa-*.⁸²⁵ The function and translation of this formation depend on whether it is used in a main or a subordinate clause. If the latter, the combination of a verbal adj. in **-taka-* with the optative of the copula typically co-occurs with a main verb with future time reference, such as gerundives or future tense forms. As the reference point of the periphrastic construction is anterior to that of the main verb, one can interpret it as some form of future (or sometimes conditional) perfect (so

⁸²³ The restoration is mine. There are no other examples of *paryaṃta* ‘as far as’, but the related adverb *acaṃta* ‘to the end of’ governs a loc. in CKD 253; 367, so I suppose the same for *paryaṃta*. For the form *Puṣga[ri](*yaṃmi)*, cf. abl.sg. *Puṣgariyāde* (CKD 660).

⁸²⁴ For another example in a subordinate clause, see *dutiyae gataga āsi* ‘was gone on an embassy’ in CKD 637.

⁸²⁵ On the use of *(h)akṣa-* as an opt. (and a fut.) of ‘to be’ in Niya Prakrit, cf. LKD (§99). For its etymology, cf. Turner (1936 = 1975: 340–356).

also Barchi & Peschl 2022: 430f.). Interestingly, this periphrastic formation is treated as an agent-oriented construction with the agent in the direct case and not in the genitive (LKD: §114).

Two examples of the future perfect are given below. In (5.44), the 2pl. *viṣarjīdae hakṣatu* ‘(will) have sent’ occurs in a conditional clause introduced by *yadi*; the main verb is the gerv. *viṣajīdavo* ‘must be sent’.

(5.44) CKD 4 under-tablet obverse 2f.

yadi uṭa na viṣarjīdae hakṣatu tade ede uṭa cavala Lýipeyaṣa hastami Calmadanaṃmi viṣajīdavo.

“If you have not sent the camels, then the camels must be quickly sent to Calmadana in the hand of Lýipeya.” (TKD: 1).

In sentence (5.45), the 3sg. *dharitaga siyati* ‘(will) have held’ shows up in a relative clause starting with *yo* ‘who’, while the main verb is the gerv. *picavidavo* ‘are to be handed over’.

(5.45) CKD 439 under-tablet obverse 4

yo draṃga na dharitaga siyati taṣa rayaka gavi picavidavo.

“The king’s cows are to be handed over to a man who has not held (any other) offices.” (TKD: 91).

When used in a main clause, the same type of periphrastic construction indicates that some action must be performed in the future, thus being comparable in sense to a gerundive. Morphologically, one could call such cases passive optatives, a formation otherwise absent from the language.⁸²⁶

A pertinent example is (5.46). The 3sg. *ditae siyati* ‘must be given’ used in this sentence can be compared in function to the gerv. *dadavo* ‘to be given’ in CKD 797 *anati dadavo ... uṭa cavala tasyati* “a command must be given ... that he will quickly give the camel” (tr. mine).

(5.46) CKD 385 obverse 5

avaṣa teṣa piḍita anati ditae siyati cavala eda iṣa preṣeyamti.

⁸²⁶ The absence of synthetically formed passive optatives may be due to the optative *-(e)ya-*; *-(e)yā-* and passive *-(ya-)* marker being nearly identical to each other. The situation in Niya Prakrit is not unlike that of Vedic Sanskrit, where passive optatives were likewise avoided and functionally replaced by gerundives and analytical formations consisting of the verbal adj. in *-ta-* and optative forms of the copula (Jamison 1984).

“By all means a command must expressly be given to them, that they should send them here quickly.” (after TKD: 78).

Finally, verbal adjectives in **-taka-* can also combine with the imp.3sg. *hotu* (and variants) ‘it should be’. This construction, seemingly restricted to main clauses, is yet another way to express a deontic future. See, for instance, *varidāe hotu* ‘are to be prevented’ in (5.47), corresponding in sense to Skt. pass.imp.3sg. *vriyatām* ← $\sqrt{vr}$ ‘to prevent’.⁸²⁷

(5.47) CKD 272 obverse 9

ede samṛdhae jaṃna varidāe hotu ma iṃ ci darāṃnagena jaṃnasya upedemti.

“These well-to-do people are to be prevented from persecuting the debtor people.” (TKD: 50).

5.4.3 A Khotanese substratum? The Barchi-Peschl hypothesis

This section outlines Barchi and Peschl’s arguments (2022) for Khotanese substrate influence on the Niya preterite tense. The starting point for their hypothesis is the peculiar agent-orientation of transitive verbs. Because of this agent-orientation, Barchi and Peschl find it unlikely that the Niya preterite tense is solely the result of language-internal developments, even though they otherwise accept Burrow’s account of the history of the preterite (§5.4.2.2). Another premise of theirs is that Niya Prakrit “developed in relative isolation from South Asian Gāndhārī” (cf. pp. 405; 415; 421). Therefore, they assume that the preterite underwent contact influence in the multilingual environment of the Tarim Basin, viz. from Khotanese.

Morphologically, Khotanese distinguishes between an intransitive and a transitive preterite, also called “perfect” (SGS: 220–228; Emmerick 1989: 222; HK: 310f.).⁸²⁸

The intransitive preterite is made by adding enclitic forms of the copula to the nom. of the verbal adj. in *-ta-*. This formation thus approximately parallels that of the preterite in Niya Prakrit, although Khotanese also

⁸²⁷ Cf. examples where, in similar contexts, the gerv. *varidavo* ‘to be prevented’ is used instead of *varidāe hotu*, e.g. *jaṃna varidavo ma iṃ ci bhuya naṅira gachamti* “people are to be prevented from going hunting again” (CKD 13 under-tablet obverse 4; TKD: 3).

⁸²⁸ A few transitive verbs are inflected as if they were intransitive, and some intransitive ones as if they were transitive. See Barchi & Peschl (2022: 415f.) for some notes on these exceptions.

differentiates between masculine and feminine forms. See the (partly reconstructed) paradigm of *hām-* ‘to be(come)’ below.

The transitive preterite consists of a synchronically opaque⁸²⁹ type of verbal noun or participle agreeing in person, number, and gender⁸³⁰ with the agent and endings usually identifiable with present forms of the copula. Compare the (partly reconstructed) paradigm of *dai-* ‘to see’ given infra.⁸³¹

	Intransitive preterite	Transitive preterite
1sg.	masc. <i>hāmātāmā</i> fem. <i>hāmātamā</i> ‘I became’	masc. <i>dātaimā</i> < <i>dāte</i> + 1sg. <i>īmā</i> masc. <i>dātemā</i> < <i>dāte</i> + 1sg. <i>mā</i> (clitic) fem. <i>dātāmā</i> < <i>dātātā</i> + 1sg. <i>mā</i> (clitic) ‘I saw’
2sg.	masc. <i>hāmātī</i> (< *-tā + 2sg. -ī) fem. — ‘you became’	masc. <i>dātai</i> < <i>dāte</i> + 2sg. -ī fem. — ‘you saw’
3sg.	masc. <i>hāmātā</i> (-tā < *-tah) fem. <i>hāmāta</i> (-ta < *-tā) ‘(s)he became’	masc. <i>dāte</i> fem. <i>dātātā</i> ‘(s)he saw’
1pl.	masc. <i>hāmāta mā</i> fem. — ‘we became’	<i>dātāndā mā</i> ‘we saw’
2pl.	masc. <i>hāmāta sta</i> fem. <i>hāmāte sta</i> ‘you became’	<i>dātāndā sta</i> <i>dātānda</i> ‘you saw’
3pl.	masc. <i>hāmāta</i> (-ta < *-tā) fem. <i>hāmāte</i> (-te < *-tāh) ‘they became’	<i>dātāndā</i> ‘they saw’

Barchi and Peschl (p. 421) remark that “the participle-like formation combined with the copula” of both the intransitive and transitive preterite make it attractive to assume that the Khotanese formation provided a model

⁸²⁹ No consensus exists on the etymological origin of the transitive preterite. See Sims-Williams (1997c) and Tremblay (2005b) for the most recent theories. As rightly stressed by Barchi and Peschl, the morphological opacity of the construction testifies to a considerable antiquity of the formation in Khotanese.

⁸³⁰ There is no gender distinction in the plural.

⁸³¹ For more detailed notes on the occurrence of specific forms and their historical derivations, see Barchi & Peschl (pp. 419f. with fnn. 34–39) and the secondary literature cited there.

for the innovative preterite in Niya Prakrit. At the same time, they do not undertake a detailed comparison between the morphology of the Khotanese and the Niya preterite, merely noting that their proposal of a substrate influence “does not necessarily imply that the new preterite was directly calqued on a parallel formation in the substratum language” (p. 421). See further §5.4.4.

Barchi and Peschl’s choice for Khotanese as the most likely donor language is dictated more by syntactic considerations than morphological ones (see pp. 417–420). When encoding past tense with transitive verbs, Khotanese does not have (split-)ergative alignment, this in contrast to most other Middle Iranian languages. In other words, the alignment of intransitive and transitive verbs in the past tense is the same in Khotanese; the distinction is expressed by morphological means instead (cf. *supra*).

Two examples from the *Book of Zambasta* will clarify the alignment of the Khotanese preterite.⁸³² In (5.48), nom.sg. *balysä* ‘Buddha’ is the agent of intr.pret.3sg. *āstā* ‘he remained’.

(5.48) Z 2.2

rājagṛhā āstā gṛddhrakūtu ttu scātu ggaru vāte balysä.

“The Buddha remained at Rājagṛha at that time, on Mount Gṛddhrakūṭa.”

In (5.49), nom.sg. *balysä* ‘Buddha’ is the agent of tr.pret.3sg.masc. *naljsonde* ‘he finished’; the patient is expressed by acc.sg. *ttū hvanau* ‘this speech’.

(5.49) Z 22.334

balysä ttū hvanau naljsonde.

“The Buddha concluded this speech.”

Bactrian is, in Barchi and Peschl’s view (p. 417), a less plausible model for the agent-oriented Niya preterite because, unlike Khotanese, the Bactrian preterite shows split-ergative alignment in the past, whereby the agent of transitive verbs is expressed in the oblique case, and the patient encoded on the verb. One such example is sentence (5.50), where the 1sg. obl. pronoun -ομο⁸³³ marks the agent, and the patient is marked by dir.2sg. το ‘you’ and the ending -ηιο in the verb υορτηιο, pret.2sg. of υορζ- ‘to let go’.

⁸³² In this section, the example sentences and their translations are borrowed from Barchi and Peschl.

⁸³³ I follow Jügel (2015: 222 with fn. 542) in positing the 1sg. enclitic pronoun as -ομο (cf. MBactr. -wm) rather than as -μο.

(5.50) F 7f.

στ=ομο το ζηρο αζαδο ... υιρτηιο.

“And I have set you free, Zēr.”

Since the nom.-acc. alignment of the Khotanese transitive preterite could have been an impetus for the observed change in alignment in Niya Prakrit, Barchi and Peschl see the syntactic alignment of the Niya preterite as the result of substrate interference from Khotanese (cf. pp. 420f.). In their hypothesis, native speakers of Khotanese who had imperfectly learnt Niya Prakrit would have applied features of their own language, including the alignment patterns of their preterite, to Niya Prakrit, their target language.⁸³⁴ The adoption of this type of structural element by native speakers of Niya Prakrit would be less plausible, as this would require a rather intense level of contact preferably also visible in other domains of the language, most notably the lexicon.⁸³⁵ Opting for substrate interference has the advantage that this form of contact tends to affect syntax and phonology first.

Indeed, Barchi and Peschl (pp. 426f.) believe that Khotanese substrate influence is also visible in two phonological features shared by the *Khotan Dharmapada* and the Niya documents: the voicing of unvoiced consonants after nasals and the loss of originally voiced consonants in the same phonetic environment (see §2.1.5 and §4.3.29). These phonological processes, ascribed by them to Central Asian Gāndhārī as opposed to South Asian Gāndhārī, would be parallel to Khotanese examples such as *pande* ‘path’ < **pantāh* and *haṃber-* ‘to fill’ < **ham-pāraya-* (voicing of unvoiced consonants) or *hana-* ‘blind’ < *(*H*)*anda-* and *škīm-* ‘to create’ < **skambaya-* (loss of originally voiced consonants; cf. also Emmerick 1989: 215).

Finally, Barchi and Peschl look for further confirmation of their sociolinguistic scenario in recent scholarship on the spread of MIA literacy to the Tarim Basin and the dialectal relationship of Niya Prakrit to other forms of (Central Asian) Gāndhārī (cf. pp. 422ff.). Subscribing to Høisæter’s (2017; cf. also 2020: 124–131) proposal that MIA spread into the Tarim Basin through long-term interregional exchange networks, Barchi and Peschl take

⁸³⁴ Cf. the distinction made between “adoption” and “imposition” in §3.1.1. Barchi and Peschl use “substrate interference” more or less as a synonym of “imposition”, and they employ “borrowing” in the sense of “adoption”.

⁸³⁵ Barchi and Peschl do not explicitly address the small number of identifiable loanwords from Khotanese (for which cf. §4.2.5).

Khotan to be the centre of diffusion of MIA literacy to other parts of the Tarim Basin.⁸³⁶ In their view, the linguistic implication of this historical scenario would be that Niya Prakrit is “an offshoot of a variant that had previously been used in Khotan” (p. 423) like the variety of Prakrit employed in document CKD 661.

In my view, there are some problems with Barchi and Peschl’s argument of a Khotanese substrate influence, principally (i) their focus on the alignment patterns, due to which they partially neglect the morphological aspects of the formation (§5.4.4); (ii) their assertion that Niya Prakrit developed in isolation from South Asian Gāndhārī (§5.4.5); (iii) the phonological arguments which they use as further support for their substrate scenario (§5.4.6); and (iv) their notion of Niya Prakrit being a descendant of Khotan Prakrit (§5.4.7).

5.4.4 Morphological and syntactic mismatches with Khotanese

The gist of Barchi and Peschl’s argument is that native speakers of Khotanese would have transferred the consistent nom.-acc. alignment of their native preterite to the corresponding formation in Niya Prakrit. In other words, the syntax of the Khotanese preterite would have been the pivotal or “marked” feature that Khotanese speakers replicated when learning Niya Prakrit.

One is still left wondering about the morphology of the Niya preterite. Barchi and Peschl recapitulate and largely accept Burrow’s account of the history of the formation (2022: 409ff.) and they note that the participle-like formation combined with enclitic forms of the copula in both Niya Prakrit and Khotanese could have facilitated the syntactic influence (2022: 421). They do, however, not specifically discuss to what extent language contact additionally influenced the morphological makeup of the Niya preterite and how any such influence would relate to their argument about the syntactic alignment.

To my mind, the differences between the Khotanese and Niya preterite are too many to make morphological influence plausible: (i) Khotanese makes a morphological distinction between transitive and intransitive verbs, while every verb is conjugated in the same way in Niya Prakrit; (ii) both types of preterite in Khotanese distinguish between masculine and feminine forms,

⁸³⁶ They do not argue in detail why they opted for Høisæter’s account and only note that it is “most sophisticated from a historical and sociolinguistic perspective” (Barchi & Peschl 2022: 423).

but there is no gender distinction in Niya Prakrit; (iii) the construction of especially the intransitive preterite is synchronically still analysable in Khotanese as a combination of the verbal adj. in *-ta-* with the copula,⁸³⁷ whereas the level of univerbation in Niya Prakrit is much higher, and the endings of the preterite and the present are, except for the 3sg., practically the same; and (iv) outside of passages influenced by Sanskrit, the verbal adj. in *-ta-* has been replaced in Niya Prakrit by a new formation in **-taka* when used as an adjective or as a patient-oriented resultative; in Khotanese, no such change has occurred, which, in contrast to some contemporary Middle Iranian languages, does not have a grammaticalised verbal adj. in **-taka-*.

Even if Khotanese may not be the best source, the differences in morphology between the Niya preterite and comparable formations in other MIA languages make the assumption of foreign influence on the morphology of the Niya preterite still sufficiently likely. Considering this point, I will argue in favour of a Bactrian model in §5.4.9.

Which repercussions do these morphological considerations have on the probability of a Khotanese influence on the alignment of the Niya preterite? Barchi and Peschl could still be right that the superficial morphological similarity between the Niya Prakrit and Khotanese preterite was sufficient for a syntactic transfer. The morphological differences do not speak in favour of their scenario, however.⁸³⁸ One should further take into account that the hypothesised syntactic influence should come from the transitive paradigm, which resembles the Niya preterite morphologically even less than the intransitive paradigm. In Khotanese, there is no distinction in alignment between the transitive and intransitive preterite. Yet, there is no need to assume any syntactic influence from the intransitive paradigm, as it is the transitive and not the intransitive verbs whose alignment changed in Niya Prakrit.

There is finally a syntactic issue with Barchi and Peschl's proposal. Khotanese morphologically distinguishes between a nominative and an accusative case, and the alignment of its preterite is thus strictly nom.-acc. Niya Prakrit, by contrast, makes a morphological distinction between nom. and acc. only in the case of demonstrative pronouns: these cases have merged otherwise. As a result of this morphological change, the alignment of

⁸³⁷ Note in particular the 2pl. auxiliary *sta* 'you are', which can hardly be mistaken for an ending.

⁸³⁸ In general, "clear-cut cases of borrowing [of alignment patterns] seem to be comparably rare" (Dahl 2022: 13).

the Niya preterite is, as argued in more detail in §5.4.2.3, a mix between nom.-acc. alignment for demonstratives, direct (or neutral) alignment for nouns and non-demonstrative pronouns, and semantic alignment dependent on the level of animacy of the agent and patient. Consequently, even the alignment of the preterite, Barchi and Peschl's main argument for their substrate scenario, is not a one-to-one match between Niya Prakrit and Khotanese.⁸³⁹

5.4.5 The Niya-type preterite and South Asian Gāndhārī

Barchi and Peschl's thesis that it was Khotanese which influenced the Niya preterite partly follows from their view that "Niya Prakrit developed ... in relative isolation from North-Western Prakrit as written and spoken in Gandhāra proper" (2022: 405). In other words, contact with Tarim Basin languages would have caused most linguistic peculiarities of Niya Prakrit as opposed to South Asian Gāndhārī, including the formation and alignment of the preterite. This section investigates the validity of this premise.

One of the conclusions of Chapter 4 concerns the near complete absence of lexical borrowings adopted by Niya Prakrit after its spread to the Tarim Basin: Khotanese loanwords are very scarce; there are no borrowings securely ascribable to Sogdian; and the Bactrian words in Niya Prakrit can have been borrowed outside the Tarim Basin.⁸⁴⁰ Therefore, the least costly hypothesis would be to attribute foreign-looking grammatical features such as the preterite to the same source(s) as the lexical borrowings, viz. to Bactrian and other Iranian languages spoken in Gandhāra.⁸⁴¹

A potential drawback to this view is the lack of examples of the Niya-type preterite in South Asian Gāndhārī. This absence may not be too significant, however. Barchi and Peschl (2022: 428) connect the lack of such preterites

⁸³⁹ In theory, one could argue that the ancestor of Niya Prakrit developed nom.-acc. alignment due to contact with Khotanese and that a later merger of nom. and acc. caused a further change to the direct + semantic alignment seen in the attested stage of the language. Such a scenario is, however, made unlikely by the fact that nom. and acc. had already merged in most varieties of South Asian Gāndhārī that we know of (cf. also Barchi & Peschl 2022: 408 with fn. 7). The Khotan Prakrit of CKD 661 still distinguishes between these two cases, but presumably due to influence from Khotanese (see also §5.4.7).

⁸⁴⁰ See further Chapter 6, where I argue that there is likewise hardly any compelling evidence for language contact between Niya Prakrit and Tocharian.

⁸⁴¹ This conclusion was anticipated by Wright (1998: 237), who also compared the Niya situation to Dardic active preterites historically derived from passive participles.

from the *Khotan Dharmapada* with the fact that this text was translated quite literally or even “transposed” from a *Vorlage* in another MIA language lacking such preterites (cf. Brough 1962: 113). I concur with them on this point, but one can make the same argument about Buddhist sutras or poetic texts that have been translated from earlier versions in “Buddhist Middle Indic” into South Asian Gāndhārī (cf. e.g. Salomon 2000: 48–52; 2002: 122–124; Allon 2001: 38f.). Niya-type preterites are likewise absent from Gāndhārī inscriptions, but “their value as specimens of the colloquial language is limited by their stereotyped character, which often consists of little more than a patchwork of standardized ritual phrases” (Salomon 1999a: 139).

The only text genres where one could reasonably expect Niya-type preterites to occur are administrative documents and literary or doctrinal texts directly composed in Gāndhārī, e.g. *avadānas*. These genres are, however, not that well represented in the currently available corpus, making it possible that the non-occurrence of Niya-type preterites in South Asian Gāndhārī is another illustration of the oft-repeated adage that absence of evidence does not necessarily equal evidence of absence.⁸⁴²

There is further reason to believe that the lack of attestations of Niya-type preterites in South Asian Gāndhārī could be due to chance. These preterites are, as pointed out in §5.4.2.4, closely related to an innovative type of resultative made from an extended verbal adj. in **-taka-*. As there are occasional instances of these verbal adjectives in South Asian sources, it stands to reason that also the Niya-type preterites were not an exclusive feature of Central Asian Gāndhārī.

Not every instance of an adjective in **-taka-* in South Asian Gāndhārī is grammaticalised to the same degree as in Niya Prakrit. In sentence (5.51) cited below, *grahidiga* and the non-extended variant *grahida* ‘taken’ occur, for instance, right next to each other and in the same grammatical function: both verbal adjectives are used in a patient-oriented construction whereby the agent is marked by the ins.sg. *keno śamaneno* ‘by a certain monk’ and ins.pl. *corehi* ‘by thieves’ (cf. also Lenz 2010: 65).

(5.51) Av^{L1} verso 143f.

kam[a] keno śamaneno [du]ve thaviga grahi[di]ga corehi grahida.

⁸⁴² The *avadānas* do contain some verbal adjectives in *-ta* made from transitive verb which have an active meaning (see Lenz 2010: 80f.), but no synthetic preterite has surfaced so far.

“Out of desire, two purses were taken by a certain monk. By thieves they were taken.” (Lenz 2010: 63).

There are, however, clear indications of an incipient grammaticalisation process of these verbal adjectives in **-taka-* already in South Asian Gāndhārī.

One of the most frequent verbal adjectives in **-taka-* in Niya Prakrit is *lihitaga* (and variants) ‘written’ < **likhitaka-*. A South Asian Gāndhārī cognate of this form, i.e. *likhidago* (and variants), occurs, without any noticeable difference in meaning from its Niya cognate, in several interlinear notations added to *avadāna* and *pūrvayoga* texts of the British Library collection (Salomon 1999a: 71–76; Lenz 2003: 105–110; 148–150).

In Bajaur fragments 4 and 6, verbal adjectives in *-dae* < **-taka-*—i.e. *aṣivaṣidae* ‘endured, accepted’, *uekṣidae* ‘looked at with an even mind’, *paricatae* ‘given up, let gone’, *karavidae* ‘caused to be made’, *vitrae* ‘acquired’, and *saṃthidae* ‘composed’—can moreover be combined with opt.3sg. *hakṣadi* / *siadi* ‘it may be’ to form the same type of periphrastic constructions as discussed for Niya Prakrit in §5.4.2.4. I cite the relevant passages below in (5.52) and (5.53).⁸⁴³

(5.52) BC 4 recto 20

edeṇa dukhaṇaṇaṇisamarthaṇaṇeṇa sarve dukha uadiṇae aṣivaṣidae hakṣadi uekṣidae hakṣadi <.> sarve suhe paricatae aṣivasidae hakṣadi.*

“By this knowledge of [what is] painful and this knowledge of [what is] useless, every suffering [that will be] taken up should be accepted [and] looked at with an even mind. Every happiness [that will be] given up should be accepted.” (after Schlosser 2022: 125).

(5.53) BC 6 verso 4f.

*tatra ca purve bahu taṇua saṇa karavida(*e) + + ? ? vitrae ca siadi <*.> tatra ca purve suhe vitrasua ṇa karavidae siadi <*.> saṃthida ca pura vi saṃthidae siadi.*

“And thereby the notion, which was plentiful before, (*should be) reduced ... and [...] should be acquired (?). And thereby happiness due to acquired possessions (?), which was [known as] happiness before,

⁸⁴³ Unlike Schlosser (see also 2022: 174; 256f.), I translate the combination of the verbal adj. in **-taka-* + *hakṣadi* / *siadi* in a main clause as a deontic future and not as a future perfect, which is the function of these periphrastic constructions in subordinate clauses, as pointed out in §5.4.2.4.

should not be caused. And also [what was] scattered (?) before should be made composed.” (after Schlosser 2022: 151).⁸⁴⁴

These examples allow us to conclude that grammatical phenomena hitherto only known from Niya Prakrit may also have existed in South Asian Gāndhārī, even when they do not (so far) occur in actual texts (cf. also §5.4.6).⁸⁴⁵ Thus, there is a distinct possibility that examples of the Niya-type preterite will at some point also be found in South Asian Gāndhārī.

5.4.6 On the phonological arguments for a Khotanese substrate

As briefly mentioned in §5.4.3, Barchi and Peschl (2022: 426f.) adduce, besides their main argument about the preterite, two phonological arguments which would lend further support to their claim of a Khotanese substrate influence on Niya Prakrit. They point out that in the position after nasals both Khotanese and Central Asian Gāndhārī voice originally unvoiced consonants and lose originally voiced ones. Continuing the discussion on these Gāndhārī sound changes in §2.1.5 and §4.3.29, I will now try to determine whether these changes indeed result from a Khotanese substrate.

This section mainly concerns the question whether the relevant sound developments are necessarily an exclusive feature of Central Asian Gāndhārī, a necessary condition for Barchi and Peschl’s argument. At a more general level, one can also question the inherent value of these two sound changes as potential evidence for a Khotanese substrate in Niya Prakrit. Especially the voicing of unvoiced consonants after nasals is typologically so common, and, as Barchi and Peschl (2022: 427) admit, also found in Middle Iranian

⁸⁴⁴ There may be another instance of such a periphrastic future in Av^{L1} verso 182f. *yadi sadharma atarahide hakṣa[di] ? aha pracageboṣ(*i) praūni[śa]*. Lenz (2010: 82–84) translates this sentence as “If the true law has disappeared, I would have attained individual enlightenment”, interpreting *atarahide hakṣadi* and fut.1sg. *praūniśa* as conditionals. One can also interpret *atarahide hakṣadi* as the same type of periphrastic future perfect as discussed above. The translation would then be “(Even) if the true law will have disappeared, I will (still) attain individual enlightenment”.

⁸⁴⁵ The fragments edited by Schlosser contain more examples of linguistic features previously only attested in Niya Prakrit, including lexical items like *ithu* (Niya *imthu*) ‘thus’, *picara* ‘(mark of) honour’, and *yahi* ‘if’. These commonalities between the Bajaur fragments and the Niya documents could be due to both having been “written directly in Gāndhārī and not translated from a Buddhist Middle Indic source text” (Schlosser 2022: 99).

languages other than Khotanese⁸⁴⁶ that one can already legitimately doubt its probative value for the postulation of a Khotanese substrate on internal grounds.

Barchi and Peschl's principal reason to attribute the sound changes under review to a Khotanese substrate is because these are largely restricted to Gāndhārī materials from the Tarim Basin, in particular the *Khotan Dharmapada* and the Niya documents. Gāndhārī loanwords into Khotanese also tend to show these phonetic tendencies. Postnasal voicing is observable in loanwords such as *arahanda-* 'Arhat' (-nt- > -nd-) or *vaysambata-* 'ordination, *upasampadā*' (-mp- > -mb-).⁸⁴⁷ Instances of voiced consonants being assimilated to a preceding nasal include *Samñia-* 'the *deva* Sañjaya' (Bailey 1942: 912), *Mañūsria-* 'the bodhisattva Mañjuśrī' (Habata 2007: lxiv with ref.), and the verb *van-* 'to honour', if I am correct (*apud* Dragoni 2023b: 127 fn. 251) that this is a borrowing from Gandh. **van-* < Skt. *vand-* 'to pay homage'. This evidence from Gāndhārī loanwords into Khotanese would still be consistent with Barchi and Peschl's view that the relevant sound changes are restricted to Central Asian Gāndhārī, as it is historically and geographically conceivable that such loanwords were adopted from a variety of Gāndhārī spoken in the Tarim Basin.

Salomon (1999a: 129f.) has, however, expressed doubts as to whether the phonological developments under scrutiny were an exclusively Central Asian feature. Indeed, there is sufficient evidence, albeit often indirect, to support Salomon's suggestion that they could also be due to dialectal or orthographic variation within South Asian Gāndhārī.

First, Salomon points to the example of *sabratu* (earlier read as *sabradu*) 'arrived' < OIA *saṃprāpta-* in graffiti from Hunza and the Alam bridge as an example for voicing after a nasal in South Asian Gāndhārī.⁸⁴⁸

In addition, he mentions that there is variation in the treatment of consonants after nasals within the *Khotan Dharmapada* itself. The relevant

⁸⁴⁶ Bactrian examples are *νακανδο* 'dug' < **ni-kanta-* (*-nt- > -vδ- /nd/) and *αμβαρο* 'store' < **ham-pārV-* (*-mp- > -μβ- /mb/).

⁸⁴⁷ See e.g. LKD (§46) and Brough (1962: 100).

⁸⁴⁸ The form *sabratu* is attested in CKI 274; 291 (2x); 413; 417; 430; 432; 433. Cf. also the variants *sabatu* in CKI 272; 273; 302; 308; 310; 313; 316; 418; 484; 495 and *sabato* in CKI 317; 493. Konow (KI: civ) cited additional instances of stops being voiced after nasals in South Asian Gāndhārī inscriptions. Yet, his examples are based on by now obsolete readings and/or interpretations of the relevant texts.

changes are consistently observed in the central portion of this text, but in the colophon and two supplementary verses added in a different hand OIA *-nd-* becomes Gandh. *-d-* and not ***n-* as in other parts of the *Khotan Dharmapada*.⁸⁴⁹

Finally, Salomon refers to Bloch (1912), who pointed out that the same sound changes occurred in various Indo-Aryan languages currently spoken in Pakistan and the NW parts of India, which suggests that there were also dialects of Gāndhārī spoken in these regions that had undergone these sound developments.

One hitherto unnoticed piece of evidence yields further support for Salomon's conclusion. This evidence takes the form of two Gāndhārī loanwords into Bactrian found in the Buddhist text za (BD II: 174f.).⁸⁵⁰

The first word is *μανοσιρο*, to be compared with the aforementioned Khotanese form *Mañuśria-* (BD II: 230). *μανοσιρο* is evidently borrowed from a Gāndhārī outcome of Skt. *Mañjuśrī-*, where *-j-* had been assimilated to the preceding palatal nasal *-ñ-*, as one would otherwise have expected ***μανζοσιρο* or the like.

The second word is *κοβανο**, a type of supernatural being, attested through its obl.pl. *κοβανανο*. Sims-Williams (BD II: 224) writes that this Bactrian word is a loanword from BSkt. *kumbhāṇḍa-*. Yet, if a direct borrowing from Buddhist Sanskrit, one wonders why the Bactrian form is *κοβανο* and not something like ***κομβανδο*. In my view, *κοβανο* is more likely borrowed from Gāndhārī. A Gāndhārī cognate of *kumbhāṇḍa-* is attested as *kuvhaḍa** (dir.sg. *kuvhaḍe*) in CKI 249, and I would argue that Bactr. *κοβανο* comes from a dialect form **kuvhaṇa*. In *kuvhaḍa*, OIA *-ṇḍ-* has resulted in Gandh. *-ḍ-*, while **kuvhaṇa* → *κοβανο* would show a development from OIA *-ṇḍ-* to Gandh. **-ṇ-*. In other words, **kuvhaṇa* would be another example of the loss of an originally voiced consonant after a nasal.⁸⁵¹

⁸⁴⁹ The examples are the PN *Budhaṇadi* < OIA *Buddhanandin-* and the abs. *vaditva* 'having praised' < OIA *vanditvā* (Brough 1962: 177; 281).

⁸⁵⁰ In general, many Buddhist terms and names in this document are Gāndhārī rather than Sanskrit. The name of a bodhisattva *σιγγοβικρητιδο* is, for instance, plausibly interpreted by Sims-Williams (BD II: 263) as *Simha-vikrīḍita-* 'play of the lion', but the phonetic appearance of the Bactrian form suggests that it was borrowed from a Gāndhārī form **Siṃg(h)avikreḍida* or the like with substitution of Gandh. *-ḍ-* /*r*/ with Bactr. *-p-* /*r*/ . Gandh. *siṃg(h)a* < Skt. *siṃha* occurs in CKD 511 (Gāndhārī Hybrid Sanskrit) and CKM 105.

⁸⁵¹ Also noteworthy is Bactr. *κινδαρο* 'a mythical being, *kinnara*', where Bactr. *-vḍ-* /*nd*/ corresponds to IA *-nn-* (cf. also TB nom.fem.sg. *kindarñā* 'of the

As said above, the Gāndhārī loanwords in Khotanese could well be derived from a variety spoken in the Tarim Basin. With Gāndhārī loanwords into Bactrian, it is for geographical and historical reasons much less likely that they were borrowed from a specifically Central Asian type of Gāndhārī rather than from one of the dialects of Gāndhārī spoken in South Asia at the border with Bactria.

Based on data from the modern languages of the region, Bloch (1912: 335f.) concluded that the sound changes under discussion were a feature of western Punjab, the mountainous regions of the NW, and perhaps also some areas to the north of them. Although necessarily speculative, Bloch's localisation of the relevant sound changes makes sense in my opinion, as Bactrian could easily have borrowed words from dialects of Gāndhārī spoken in these areas, and the same dialects could have been the precursors of the Central Asian type of Gāndhārī reflected in the *Khotan Dharmapada* and the Niya documents.

To conclude, the voicing of unvoiced consonants after nasals and the loss of originally voiced consonants in the same environment are not necessarily restricted to Central Asian Gāndhārī, and hence unlikely due to a Khotanese substrate. In other words, the alignment of the Niya preterite would thus far be the only linguistic argument to support the rather far-reaching historical consequences which a Khotanese substrate would entail. It therefore seems fair to judge Barchi and Peschl's proposal as a rather costly hypothesis. The ensuing section hopes to strengthen that conclusion further.

5.4.7 Is Niya Prakrit a descendant of Khotan Prakrit?

Barchi and Peschl (2022: 426; 429) remark that their hypothesis of Khotanese substrate interference on the preterite implies Niya Prakrit to be “a derivative” of Khotan Prakrit. In support of this linguistic scenario, they refer to Høisæter's (2017; cf. also 2020: 124–131) idea that long-term interregional exchange networks between the Kuṣāṇa empire and the western parts of the Tarim Basin around Kashgar and Khotan would have been the driving force behind the cultural influences of Gandhāra and Bactria on the Tarim oases.⁸⁵² In this section, I try to show that the linguistic features

kinnaras' in THT 2996 + 2999). Perhaps, κινδαρο is based on a hypercorrect Gāndhārī form **kiṃdara* or the like where *-nn-* was “reversed” to an etymologically unjustified **-ṃd-* /*nd-*.

⁸⁵² Høisæter's view differs from the “domination theory” which posits a direct Kuṣāṇa rule over (parts of) the Tarim Basin (e.g. Brough 1965 = 1996: 276–308;

of Khotan Prakrit render it improbable that it is the direct ancestor of Niya Prakrit.

If we understand Barchi and Peschl's remark very literally and take the language of CKD 661 as a proxy for Khotan Prakrit,⁸⁵³ Niya Prakrit cannot descend from it, given that the language of CKD 661 is characterised by innovative features that do not occur in Niya Prakrit. Most importantly, Khotan Prakrit has undergone vowel raising of *-e-* to *-i-* and *-o-* to *-u-*, of which there is barely a trace in Niya Prakrit (Burrow 1934: 515; 1936: 430). In addition, the language of CKD 661 shows a development of word-final *-am* to *-u* (also *-o*), e.g. *avhiñanu* 'recognition mark' < *abhijñānam* (l.3), whereas *-am* became Niya Pkt. *-a*, as, for instance, seen in the dir.sg. which goes back to the OIA acc.sg. in *-am* (LKD: §53). Neither feature allows for Niya Prakrit being a descendant of the Khotan Prakrit as found in CKD 661.

According to Burrow (1936: 430–434), the linguistic differences between Niya Prakrit and CKD 661 are principally due to (i) the Khotan variant being more archaic than the Niya one and (ii) both dialects having undergone a different type of substrate interference within the Tarim Basin. A Khotanese substrate would, amongst other things, account for the vowel raising and the nom.sg. and acc.sg. endings in *-ā* (*-ä*) and *-u* (*-o*) in Khotan Prakrit. A Tocharian substrate would, in Burrow's opinion, help explain the phonological and morphological idiosyncrasies of Niya Prakrit, e.g. confusions between voiced and unvoiced stops. Both dialects would nevertheless still originate from the same source.

Pulleyblank 1968: 254f.; Hitch 1988a; 2009) and from the competing "migration theory" according to which people would have migrated from Bactria and Gandhāra to the Tarim oases when the Kuṣāṇa empire declined (e.g. Lin 1996: 188–190; Hansen 2004; 2012: 25–55; Bertrand 2012: 3–5; Baumer 2014: 52f.; 157). The main problem with the domination theory is that there is insufficient evidence in Chinese historical sources for a direct Kuṣāṇa control over the Tarim Basin, making its exact dating quite tricky. Also for the migration theory, conclusive evidence from Chinese literary sources seems lacking. Numismatics and archaeology moreover suggest that the influence is to be dated to the heydays of the Kuṣāṇa empire during the reigns of Kaniṣka and Huviṣka in the 2nd century AD and not to the later period of decline.

⁸⁵³ As long as we do not have more evidence for Khotan Prakrit than CKD 661 (and the poorly understood CKD 843), taking the language of CKD 661 to be representative is the only methodologically justified option. In what follows, only the relevant linguistic features of CKD 661 will be commented upon. For a more detailed overview, see Appendix 3 (p. 525).

If one now combines Burrow's account⁸⁵⁴ with Barchi and Peschl's proposal that Niya descends from Khotan Prakrit, one ends up with a scenario whereby the last common ancestor of the two dialects is to be located in a Khotanese-speaking area. This common ancestor would already have undergone the alignment shift in the preterite due to Khotanese substrate interference. Yet, vowel raising, the nom.sg. and acc.sg. endings in *-ā* (*-ä*) and *-u*, and other linguistic features of CKD 661 attributable to a Khotanese substrate would have to be dated after the split of Niya Prakrit from the common ancestor of the two dialects. Otherwise, one would run into the same type of problems when assuming that Niya Prakrit is a direct descendant of the type of Khotan Prakrit found in CKD 661.

While theoretically possible, I see some difficulties with this chronology. It, for instance, dates the alignment shift in the preterite before the more obvious morphological influence of Khotanese on the nom. and acc. in Khotan Prakrit. In addition, it implies that the Niya-type preterite existed in a common ancestor of Niya and Khotan Prakrit.

However, none of the five verbal adjectives in *-ta-* in CKD 661 (see the passage in (5.54)) can be taken as conclusive proof that this type of preterite was as developed in Khotan as in Niya Prakrit, because we are left in the dark as to "whether the application of the personal endings to the past participle had taken place in the Khotan dialect as it has in Niya", for "no example happens to occur" (Burrow 1936: 433). Moreover, most verbal adjectives in *-ta-* in CKD 661 are construed with an agent in the ins. or gen., thus agreeing with the syntax of OIA and most MIA languages.

(5.54) CKD 661 obverse 4–7

*tasya uṭasya kidā Vagiti Vadhagā niravaśiṣo mulyo maṣā dhitu
Khvarnarsasya grahidu śudhi uvagadu aji uvadayi so uṭā Vagiti
Vadhagasya tanuvagā saṃvritā yathagama garaniyā sarva kica karaniyā
... maya dhalavagu Bahudhivā likhidu Khvarnarsasya ajiṣanayi.*

"On behalf of that camel Vagiti Vadhaga paid (*dhitu*) the whole price in *māṣa*. Khvarnarse received (*grahidu*) it [the price] and (thus) obtained (*uvagadu*) his payment. From now on this camel has become (*saṃvritā*) the property of Vagiti Vadhaga, to do as he likes with it, to do everything

⁸⁵⁴ Except that I do not accept the existence of a Tocharian substrate in Niya Prakrit (see Chapter 6), Burrow's account seems consistent with the available evidence. See, however, below for a still different interpretation of the data.

he likes. ... By me Bahudhiva this document (?) was written (*likhidu*) at the request of Khvarnarse.” (after TKD: 137).⁸⁵⁵

As often with derivatives of $\sqrt{\text{likh}}$ ‘to write’ in Gāndhārī (cf. the examples in Baums 2022), the agent of *likhidu* ‘written’ is in the ins.sg., i.e. *maya*, with which the nom.sg. *Bahudhivā* stands in apposition in some form of group inflection. The agent of *grahidu* ‘received’ and potentially also *uvagadu* ‘reached, obtained’ stands in the gen.sg., i.e. *Khvarnarsasya*, the case most commonly used for patient-oriented sentences in Niya Prakrit (cf. §5.4.2.3). Only *dhitu* ‘given’ is constructed with an agent in the nom.sg., i.e. the Sogdian PN *Vagiti Vadhagā*, and it seems best not to draw far-reaching conclusions from one stray example of this kind.

Furthermore, transitive and intransitive verbs are, in contrast to Niya Prakrit, morphologically differentiated in CKD 661. The transitive verbs, i.e. *dhitu* ‘given’, *grahidu* ‘received’, *uvagadu* ‘reached, obtained’, and *likhidu* ‘written’, all end in *-u* < neuter *-am* (Burrow 1936: 432; cf. also the Old Persian *manā kṛtam* construction). The one example of an intransitive verb, i.e. *saṃvritā* ‘been’, agrees in gender, number, and case with its subject nom.sg. *so utā* ‘this camel’.⁸⁵⁶

I find it difficult to decide whether this distinction between transitive and intransitive verbs in Khotan Prakrit is an archaism, or if we should compare it to the existence of two types of preterite in Khotanese, one for transitives and one for intransitives. Yet, irrespective of this, one can conclude that there are too many doubts about the preterite in Khotan Prakrit to confidently

⁸⁵⁵ I have adapted Burrow’s translation of *śudhi uvagadu*. He renders this phrase as “the matter has been settled”, but there is no need for a passive interpretation. Burrow writes elsewhere (LKD: 126 s.v.) that Niya *śudha*, the equivalent of Khotan *śudhi*, has a more specific meaning, i.e. “cleared off, clearing off (of payments, debts, obligations)”. Therefore, I take the gen.sg. *Khvarnarsasya* to be the agent of both *uvagadu* ‘reached, obtained’ and *grahidu* ‘taken’. *śudhi* ‘payment’ would then be the object of *uvagadu*, whose morphology suggests it to be transitive (cf. below on the difference with *saṃvritā* ‘been’). This analysis admittedly does not work for all examples of Niya *śudha* + derivatives of OIA *upagata-*, but note the parallel *asti śramamṇa Dharmaladha nama se vikrida bhuma eka milimi tivira Līpatgaṣa vaṃti giḍa muli masu khi 10 aḡiṣḍha 3 śudha uvagada* (CKD 652 under-tablet obverse 2–5), which I would translate (after TKD: 135) as “there is a monk called Dharmaladha. He sold land (with a capacity) of one *milima* to the scribe Līpatga. He received as price ten *khi* of wine and three *aḡiṣḍha*. He obtained his payment”.

⁸⁵⁶ The same is true about the (transitive) gerv. *garaniyā* / *karanīyā*.

reconstruct the existence of a Niya-type preterite for a potential common ancestor of Niya and Khotan Prakrit.

As an alternative to his proposal that Niya and Khotan Prakrit shared an ancestor, Burrow (1936: 433) briefly considered the possibility that the divergent linguistic features of Khotan and Niya Prakrit resulted from “original dialect differences in their Indian sources”. He thought this to be an unnecessary assumption, however. While not enough to prove Burrow wrong, some linguistic features make one still wonder whether the two variants really derive from a common source.

Burrow (1936: 432) regretted that CKD 661 does not contain conclusive evidence for the development of OIA *-aḥ*, a crucial criterion in classifying dialects of MIA (and Gāndhārī in particular; cf. also Barchi & Peschl 2022: 424f.). The Niya abl.sg. in *-ade* (*-āde*) < **-ātaḥ* and the nom.sg. of the demonstrative pronoun *se* < *saḥ* ‘this’ leave little doubt that Niya Prakrit is a so-called *e*-dialect. As discussed above, the Khotan Prakrit nom.sg. ends in *-ā/-ā* (some *e*-sound), which is, however, likely due to influence from the Khotanese nom.sg. in *-ā*, and hence unusable for establishing the outcome of OIA *-aḥ* in Khotan Prakrit (Burrow 1936: 433f.). There are also no examples of an abl.sg. in CKD 661.⁸⁵⁷ Yet, there are at least two occurrences of the nom.sg. of the demonstrative pronoun, which, in contrast to Niya Prakrit, is not *se* but *so* < OIA *saḥ*.⁸⁵⁸ Thus, we have some evidence, however flimsy, that *-aḥ* may have developed to *-o* in the Khotan Prakrit used in CKD 661 and not to *-e* as in Niya Prakrit.

The final *-o* in the demonstrative pronoun is not the only linguistic feature of CKD 661 that could point to Khotan and Niya Prakrit being derived from different dialects of South Asian Gāndhārī. Elsewhere (Schoubben in prep.), I will argue that the synthetic locative case in Niya Prakrit can, notwithstanding a few exceptions, only be used with inanimate nouns. For animates, the scribes of the Niya documents used a locative postposition *vaṃti* ‘in, at, to’ < OIA loc.sg. *upānte* ‘in the proximity of’. In Khotan Prakrit, the postposition *sagaji* is used instead (cf. already Noble 1931: 453). As *sagaji* is derived from the OIA loc.sg. *sakāṣe* ‘in the proximity of’, it would have

⁸⁵⁷ As noted by Burrow, an adverbial form like *puradu* ‘in front of’ < *purataḥ* (CKD 661, line 7) is of little significance in establishing the outcome of *-aḥ* because such adverbs can end in *-o* even in *e*-dialects. Contrast, however, *purade* < *purataḥ* in Bajaur fragment 15, line 12 (CKM 278).

⁸⁵⁸ There is also one instance of *so* as an acc.sg. I agree with Konow (1936: 236 fn. 1) that this *so* is most likely a mistake for ***to* < OIA *tam*.

undergone the same type of grammaticalisation process as Niya *vaṃti*, but the animate locative case would be formed differently in the two dialects under discussion.⁸⁵⁹

There are also minor differences in vocabulary between the two variants of Central Asian Gāndhārī. Note, for instance, doublets such as Khotan Pkt. *kidā* ‘on account of’ < loc.sg. *kṛte* vs. Niya ins.sg. *kritena* / *kridena* ‘idem’ or Khotan Pkt. *puradu* ‘in front of’ < *purataḥ* vs. Niya *puraṭha* ‘idem’ < *purastāt*.⁸⁶⁰

Are morphosyntactic and lexical differences of this kind all due “to recent developments in their Central Asian environment”, which is how Burrow (1936: 434) proposes to explain all divergences between Niya and Khotan Prakrit?⁸⁶¹ This question cannot be conclusively answered with the data at hand. Yet, it is at least worth keeping in mind that Niya and Khotan Prakrit could derive from separate sources that had undergone contact influence in different places at different times so that there would be no need for Niya being a descendant of Khotan Prakrit.

If correct, one would still need to work out in more detail a historical scenario of when, why, and from where more than one dialect of Gāndhārī would have been introduced to the Tarim Basin. I cannot do so here for reasons of time and space, but the following point seems worth making. According to Peyrot (2018b: 276f.), “we might conceive of the legendary foundation of Khotan in the time of Aśoka as referring to the arrival of Indians in the southern Tarim Basin, possibly speakers of Gāndhārī.” This proposal is mentioned by Barchi and Peschl (2022: 422), but they reject it in favour of Høisæter’s account. In my view, Peyrot’s idea is not necessarily excluded by Høisæter’s exchange networks during Kuṣāṇa times; if there were two (or more) dialects of Gāndhārī introduced to the Tarim Basin, they could have come at different periods in time.

⁸⁵⁹ Another noteworthy morphological distinction between Niya and Khotan Prakrit is that the latter has gen./dat.sg. *mayi* ‘I’ < OIA *mahya(m)* and not *mahi* as in Niya. One can, however, argue that the common ancestor of both had **mahi*, which could have developed in Khotan Prakrit to *mayi* due to loss of intervocalic *-h-* (cf. LKD: §28). The *-y-* in *mayi* would then be a hiatus filler.

⁸⁶⁰ For more lexical differences between CKD 661 and the Niya documents, see Appendix 3 (p. 525).

⁸⁶¹ The palaeography of CKD 661, described by Noble (1931: 445) as “very stiff and archaic”, needs to be re-examined from this perspective as well, now that we have much more data on the historical development of the Kharoṣṭhī script.

In case Gāndhārī and the Kharoṣṭhī script were first introduced to Khotan in Aśokan times, one could moreover draw a parallel with the spread of (Sinhala) Prakrit and the Brāhmī script to Sri Lanka. According to Buddhist legends, Aśoka and his family would not only have brought Buddhism to Khotan but also to Sri Lanka, and inscriptions in Sinhala Prakrit dating back to the 3rd century BC can be seen as proof that MIA literacy was already introduced to the island by Buddhist missionaries of the Mauryan empire (cf. e.g. Geiger & Jayatilaka 1935; Salomon 1998b: 79f.; 150f.). Accordingly, the same may be true of Khotan.

In brief, the exact relationship between Niya and Khotan Prakrit is a complex topic, and the data are insufficient to come up with definitive answers. It is, however, clear enough that Niya Prakrit is not easily interpreted as a descendant of Khotan Prakrit. Due to linguistic innovations of CKD 661, Niya Prakrit cannot descend from the type of Khotan Prakrit as attested in this document. Possibly, Niya and Khotan Prakrit derive instead from a common source (so Burrow). Yet, if so, Barchi and Peschl's substrate theory needs this ancestor language to have already undergone substrate interference in Khotan to account for the alignment of the preterite. For their scenario to work, this influence on the preterite would have to be dated before vowel raising and other contact-induced changes visible in CKD 661 but not in Niya Prakrit. While not entirely impossible, this chronology seems hard to accept. In my view, Khotan and Niya Prakrit may also descend from different dialects of South Asian Gāndhārī, although this hypothesis needs further testing.⁸⁶² With this scenario, the assumption of a Khotanese substrate in Niya Prakrit would be superfluous.

5.4.8 Summary: counterarguments against Khotanese influence

Based on §§5.4.4–5.4.7, four counterarguments can be formulated against Barchi and Peschl's idea of a Khotanese substrate influence on the formation and alignment of the Niya preterite.

Counterargument 1 (§5.4.4): there are morphological discrepancies between the Khotanese and Niya preterite and even their alignment systems, Barchi and Peschl's key argument, are no one-to-one match.

⁸⁶² One could, for instance, investigate whether the Gāndhārī loanwords in Khotanese continue some linguistic features which are typical of Khotan Prakrit, but not of Niya Prakrit.

Counterargument 2 (§5.4.5): linguistic differences between Niya Prakrit and South Asian Gāndhārī, including the formation and alignment of the preterite, may have more to do with text types than with geography. In other words, one of Barchi and Peschl's main reasons to opt for Khotanese influence on the Niya preterite is based on an argument from silence.

Counterargument 3 (§5.4.6): the phonological arguments adduced by Barchi and Peschl to support their claim of a Khotanese substrate are not compelling, and the alignment of the Niya preterite cannot bear the burden of proving a Khotanese substrate on its own.

Counterargument 4 (§5.4.7): Barchi and Peschl take their sociolinguistic scenario, itself based on Høisæter's idea of long-term interregional exchange networks during Kuṣāṇa times, to imply that Niya Prakrit would be a descendant of Khotan Prakrit. When, however, taking the linguistic differences between Niya Prakrit and the Khotan Prakrit of CKD 661 into account, it is difficult to see in which way Niya Prakrit could descend from the Khotan variant without having to resort to ad hoc assumptions.

5.4.9 Arguments in favour of a Bactrian source

In light of these four issues with Barchi and Peschl's proposal, it seems worth examining whether Bactrian rather than Khotanese influenced the Niya preterite. In this section, I argue that this alternative hypothesis is indeed supported by morphological arguments. How to account for the syntactic alignment of the Niya preterite vis-à-vis its Bactrian counterpart forms the topic of the next section (§5.4.10).

5.4.9.1 Two general arguments

I start with two general arguments why Bactrian seems a more plausible source of influence than Khotanese.

The first argument is an application of Ockham's razor. In the preceding parts of this book, we have seen that there is not only a substantial amount of Bactrian loanwords in Niya Prakrit, but there is also evidence that two derivational suffixes were borrowed from Bactrian into Niya Prakrit (§5.2). Therefore, it would be a less costly hypothesis to ascribe the morphosyntax of the Niya preterite to this already known form of contact rather than having to postulate a Khotanese substrate for which there is not much decisive evidence otherwise.

Second, assuming Bactrian influence on the preterite bypasses two of Barchi and Peschl's questionable premises. On the one hand, the Niya-type preterite need in this alternative scenario not be the result of a development occurring solely in the Tarim Basin, as Bactrian influence can have been exerted before the spread of Niya Prakrit to its new habitat. As the ancestor of Niya Prakrit was, as I argue in §§7.3–7.4, conceivably used as a chancellery language of the Kuṣāṇa empire, a possible reason why Niya-type preterites have not yet been found in South Asian Gāndhārī may be that language contact with Bactrian was more intense or at least more visible in administrative documents than in other text genres. On the other hand, we would be freed from the assumption of Niya Prakrit being a descendant of Khotan Prakrit because, as argued in §5.4.7, these two dialects may derive from different South Asian sources not necessarily influenced by Bactrian to the same degree.

5.4.9.2 Morphological similarities with the Bactrian preterite

The key reason to suspect Bactrian and not Khotanese influence concerns the many morphological similarities shared by the Bactrian and Niya preterite. The paradigm of the latter has been presented in §5.4.2.1. For the Bactrian paradigm, see below.⁸⁶³

	Copula	Intransitives	Transitives
1sg.	-ημο (-ιμο) 'I am'	αγαδ(δ)ημο (-ιμο) 'I came'	λαδ(δ)ημο (-ιμο) 'X gave (to) me'
2sg.	-ηιο 'you are'	αγαδ(δ)ηιο 'you came'	λαδ(δ)ηιο 'X gave (to) you'
3sg.	-ιστο; αστο '(s)he is'	αγαδο '(s)he came'	λαδο 'X gave (to) him/her'
	νιστο '(s)he is not'	νιστο αγαδο '(s)he did not come'	νιστο λαδο 'X did not give (to) him/her'
1pl.	-αμο 'we are'	αγαδαμο 'we came'	λαδαμο 'X gave (to) us'
	ναμο 'we are not'	ναμο αγαδο 'we did not come'	ναμο λαδο 'X did not give (to) us'

⁸⁶³ The paradigm is an idealisation; not every form given occurs in actual texts.

2pl.	-ηδο 'you are'	αγαδ(δ)ηδο 'you came'	λαδ(δ)ηδο 'X gave (to) you'
3pl.	-ινδο; αστινδο 'they are'	αγαδ(δ)ινδο 'they came'	λαδ(δ)ινδο 'X gave (to) them'
	νινδο 'they are not'	νινδο αγαδο 'they did not come'	νινδο λαδο 'X did not give (to) them'

ad 1sg. In Kuṣāṇa sources, there are some archaic forms in -ημι / -ημε, viz. σταδημι / σταδημε 'I was' (NPlate 1; 3) and ωσταδημι 'X established me' (NPlate 2); cf. Sims-Williams (2015: 259f.).

ad 3sg. There is one example of an archaic negated pret.3sg. with νιστι < **nai(d)* *asti*, i.e. νιστι χοτο 'it was not needed (?)' in SK₄B 5f. (the parallel versions SK₄A 4 and SK₄M 3 have νιστο χοτο).

ad 1pl. The only occurrence of a negated pret.1pl. is ναμο βιαδο 'we were not able' (P 13').

ad 3pl. In Kuṣāṇa Bactrian, there are occasional examples of archaic pret.3pl. in -ινδι, like αγδινδι 'they followed (?)' (DilT₅ 11) or φροχορτινδι 'X brought them away' (SK₄B 8). There is also one instance of a negated pret.3pl. with νινδι < **nai(d)* *hanti*, i.e. νινδι ρατο 'X did not call them' (DilT₅ 11).

Like Niya Prakrit but unlike Khotanese, Bactrian makes, when forming preterites, no morphological distinction between transitives and intransitives or between masculine and feminine gender. The endings of the Bactrian preterite are except for the 3sg.—as in Niya Prakrit, an unmarked form—synchronically still analysable as enclitic forms of 'to be'. Yet, these endings are, very much in the same way as in Niya Prakrit, clearly unverbated with the preterite stem and practically identical with the present endings 1sg. -ημο (and variants), 2sg. -ηιο, 1pl. -αμο, 2pl. -ηδο, and 3pl. -ινδο.

In addition, the Bactrian and Niya Prakrit endings resemble each other phonetically. In the 1sg., Niya *-emi* is identical to early Kuṣāṇa Bactrian -ημι / *ēmi*/ (later -ημο / *ēmā*/) and in the 1pl., Niya *-ama* matches Bactrian -αμο / *āmā*/. While not an exact fit, one also cannot deny a certain resemblance between the 2pl. -ηδο / *ēdā*/ and Niya *-etha* / *-etu* and the Kuṣāṇa 3pl. -ινδι / *indi*/ (later -ινδο / *indā*/) and Niya *-amti*. Another noteworthy feature is that, when the ending in Bactrian starts with -η- / *ē*/, the Niya ending starts with -e- as well; in the 1pl., the Bactrian ending begins with -α- / *ā*/ and Niya has likewise -a-.

The only noticeable difference in morphology between the Bactrian and Niya preterite is the way they are negated. In Niya Prakrit, one only has to put *na* ‘not’ in front of the relevant verb form. In Bactrian, there is a specific construction whereby 3sg. *νιστο* ‘(s)he is not’, 1pl. *ναμο* ‘we are not’, and 3pl. *νινδο* ‘they are not’ are placed in front of the 3sg. form of the preterite (cf. BD II: 47). The fact that this construction does not occur in Niya Prakrit is no forceful counterargument against the assumption of Bactrian influence on the morphology of the Niya preterite, as at least the Bactrian 2sg. *ναυιρτιο* ‘X did not let you go’ (F 16) structurally agrees with how preterites are negated in Niya Prakrit.⁸⁶⁴

5.4.9.3 “Contact-facilitated grammaticalisation” and the Niya preterite

At a diachronic level, I propose to interpret the morphological similarities between the Bactrian and Niya Prakrit preterite as an instance of “contact-facilitated grammaticalisation”.⁸⁶⁵ Following Burrow (LKD: §§105f.), §5.4.2.2 argued that, when taking the Niya outcome of OIA *-sm-*, *-ah*, and *-am* into consideration, all singular forms and the 1pl. of the preterite can be derived straightforwardly from the combination of the OIA nom.sg. or pl. of the verbal adj. in *-ta-* plus the verb ‘to be’ used as a copula. This historical process can be seen as an instance of grammaticalisation, whereby (i) the verb ‘to be’ lost its lexical semantics (desemanticisation ~ semantic bleaching); (ii) the auxiliary got reinterpreted as a verbal ending (deategorialisation); and (iii) certain phonological developments facilitated the univerbation of the verbal adj. in *-ta-* with the copula (erosion ~ phonetic reduction).⁸⁶⁶

⁸⁶⁴ Also the Niya cognate of Bactr. *νιστο*, i.e. *nasti* ‘(s)he is not’, can at times be used to negate another verb form (cf. Balbir 1990: 25f.). While vaguely similar to the Bactrian construction, I doubt that there is a historical connection between the two, because (i) not only *nasti*, but also Niya *asti* ‘(s)he is’ can be added in front of another verb form; (ii) this use of *nasti* is not restricted to the preterite; and (iii) *nasti* only combines with other forms of ‘to be’, whereas *νιστο* (and *ναμο*; *νινδο*) can be put in front of any verb.

⁸⁶⁵ The inspiration for this term comes from Heine and Kuteva’s (2003; 2005: 79–122) concept of “contact-induced grammaticalisation”, which is a type of grammaticalisation that is “due to the influence of one language on another” (2003: 533 = 2005: 80). I use “contact-facilitated” here because contact with Bactrian need not have initiated, but only furthered the grammaticalisation process that led from a periphrastic construction consisting of the verbal adj. in *-ta-* and a copula to the synthetic preterite found in Niya Prakrit.

⁸⁶⁶ For these grammaticalisation mechanisms, see e.g. Kuteva et al. (2019²: 3).

To account for the form of the 2pl. and 3pl. of the Niya preterite, Burrow (LKD: §105) hypothesised analogical influence from the presents with a stem in *-e-*. This type of analogy would indeed explain why the 2pl. ends in *-etha* (and *-etu*) and not in ***-astha* as expected from OIA *-āḥ stha*. Yet, it is not entirely clear, as Burrow admits, why the 3pl. still ends in *-aṃti* (rather than ***-eṃti*) if there has been analogical influence from the *e*-class presents.

The assumption of Bactrian influence on the grammaticalisation of the Niya preterite allows for an alternative scenario involving three steps.

First, regular sound changes can have initiated the grammaticalisation of the periphrastic past tense in (the ancestor of) Niya Prakrit, resulting in forms such as 1sg. **ditte 'mi* < **ditte 'smi* < **dittāḥ asmi*.

Subsequently, bilingual speakers may, due to the similarities between the two formations, have identified the morphology of Niya forms, such as 1sg. **ditte 'mi*, with Bactrian preterites such as 1sg. **λαδημι* (later *-ημο*).⁸⁶⁷ These speakers were moreover likely aware that the Bactrian preterite is also based on the combination of the verbal adj. in *-ta-* with forms of the verb 'to be' (cf. *supra*). This could have given an extra impulse for the grammaticalisation of the originally periphrastic past tense in Niya Prakrit into a synthetic preterite.

In a third phase, the morphology of the Niya preterite can have been influenced by that of its Bactrian counterpart. An analogy with *e*-class presents is one way to account for the 2pl. in *-etha* (and *-etu*), but the Bactrian 2pl. in *-ηδο* /*ēdā*/ could also have been a contributing factor. Contact with Bactrian could likewise help explain the formation of the 3pl. The analysis of a Bactrian 3pl. form such as **λαδινδι* as **λαδ-* plus enclitic copula *-ινδι* 'they are' could have facilitated the univerbation of **dittāḥ santi* over something like **dittā anti* to the attested *ditaṃti*. This explanation admittedly needs an abnormal loss of the initial *s-* of *santi* to have occurred, but this type of irregular phonological development is not untypical of clitics such as *santi* and grammaticalisation processes in general.

5.4.9.4 A Bactrian source for the verbal adjective in **-taka-*

Contact with Bactrian can also help to account for the form and function of the Niya verbal adjective in **-taka-*. At a language-internal level, this verbal adj. can be explained as an allomorph of the verbal adj. in *-ta-* that eventually

⁸⁶⁷ For more discussion on potential bilingualism between Bactrian and (the ancestor of) Niya Prakrit, see Chapter 7.

became specialised as a patient-oriented adj. and a component of compound tenses (see Jamison 2009: 317f.; cf. also Balbir 1990: 31).

However, the absence of a grammaticalised verbal adj. in **-taka-* in other MIA languages suggests that the Niya formation is once again the result of language contact, and there is indeed a likely model for it in Bactrian. Formally, the Niya verbal adj. in **-taka-* can be compared to the Bactrian verbal adj. (“ppp”) in *-δογο / -τογο* (and variants; fem. in *-ισο*) < **-taka-* with cognates in other Middle Iranian languages.⁸⁶⁸ Also functionally, the Niya and Bactrian verbal adjectives in **-taka-* resemble each other closely, as I will try to show below.⁸⁶⁹

First, these verbal adjectives can in Bactrian, as in Niya Prakrit, be used either attributively or as a noun: for the former option, compare, for example, *-μο κηδδικο δδηβδαρμο* ‘the *deyadharma* made (κηδδικο) by me’ (TiS 4f.) and for the latter, *φρητογο* ‘messenger’ < **fra-išta-ka-* ‘sent’ (cf. MP *frēstag*, Parth. *frēstag*).

Second, both languages use these verbal adjectives to make compound tenses. In Bactrian, the perf.3pl. is, for instance, made by adding the enclitic 3pl. *-ινδο* ‘they are’ to the verbal adj. in **-taka-*, e.g. *ναβιχτιγινδο* ‘they are written’ (archaic form *νιβιχτιγινδο*). There is also one occurrence of a plpf.3pl. *κηδδικο ασταδινδο* ‘they had been made’ (M 4f.) consisting of the verbal adj. *κηδδικο* ‘made’ and the pret.3pl. *ασταδινδο* ‘they were’.⁸⁷⁰

Third, the verbal adj. in **-taka-* can, without the addition of a copula, be used as a perf.3sg. This can be best exemplified by *ναβιχτογο* (and variants) ‘written’.⁸⁷¹ In (5.55), *ναβιχτογο* ‘written’ is the main verb of a subordinate clause introduced by the conjunction *σαγωνδο* ‘as’ and functionally largely equivalent to the passive 3sg. *ναβισιδο* ‘it is written’⁸⁷² more frequently

⁸⁶⁸ See e.g. GW (§354; §506) for the Middle Persian and Parthian cognates of Bactr. *-δογο / -τογο*.

⁸⁶⁹ For the morphosyntactic usage of the Niya verbal adj. in **-taka-*, cf. §5.4.2.4. For Bactrian, see also Jügel (2015: 91f.; 2020: 288–290).

⁸⁷⁰ On *κηδδικο ασταδινδο*, cf. also Jügel (2020: 289), who interprets it as a past stative.

⁸⁷¹ Regarding this last point, my analysis of Bactrian verbal morphology differs slightly from that of Sims-Williams, as he writes that the perf.3pl. is “the only form attested” (BD II: 46).

⁸⁷² Etymologically, “it is not clear whether it [*ναβισιδο*] represents a middle form (**ni-pinsatai*) or is derived from a distinct passive pres. stem (e.g. **ni-pisya-*)” (BD II: 236). For the argument made here, it is sufficient that *ναβισιδο* can be synchronically analysed as a passive.

found in this type of context; see example (5.56) and note that αβο μασκο ‘herein’ is used in both sentences.

(5.55) C 19f. ~ C 21’f.

στο φιβαοσο μο λαβνοβωστογο χοζο οδο οαοαραδο σαγωνδο αβο
μασκο ναβιχτογο.

“And may (this) document, this deed of gift be (considered) good and
valid as (it is) written herein.” (BD I²: 34).

(5.56) N 26ff. ~ N 18’ff.

στο ιθασο παρσο τογδο ταοανο πιτανοβωστιγο μολραγο χοζο οαοαρο
αβοδηιο σαγονδαβο μασκο ναβισιδο ασωσαβο ιασηδανο ζοριγο.

“And so, after the fine has been paid, may (this) guarantee-contract
(this) sealed document, be (considered) good and valid as (it) is written
herein, from now to eternity.” (BD I²: 70).

In my opinion, the functional equivalence between ναβιχτογο and an inflected form such as ναβισιδο counts as an argument that the former can also be an unmarked perf.3sg. and not only a “ppp” as it is labelled in Sims-Williams’ glossary (BD II: 237).⁸⁷³

The following examples provide still more evidence for this conclusion. In (5.57), νιβιχτιγο ‘written’ is the main verb of a relative clause introduced by the inanimate relative pronoun σιδι ‘which’, itself dependent on the singular antecedent εμο κηρι ‘this work’.

(5.57) NPlate 3f.

ταδι εμο κηρι μανο οαρο κηρδ[ο] ... σιδι αβο μαζδηγγο νιβιχτιγο.

“Then I performed there this work [...] which (has been) written in the
records(?)” (Sims-Williams 2015: 257).

The animate relative pronoun κιδι ‘who’ has a plural antecedent obl.pl. βαγανο ‘gods’ in (5.58) and dir.pl. βαγε ‘idem’ in (5.59), and here the verb νιβιχτιγενδι ‘they are written’ is used in the relative clause. As νιβιχτιγενδι is a perf.3pl., one can thus easily interpret νιβιχτιγο in the same type of context as a perf.3sg. (or perhaps more precisely a resultative).

⁸⁷³ Niya *lihitaga* ‘written’ (~ Bactr. ναβιχτογο) can also interchange with passive 3sg. *lihyati* ‘it is written’ (~ Bactr. ναβισιδο) in the same type of context, as can be seen from a comparison between CKD 701 reverse 1 *potge ra[kṣam]na jamna lihitaga* “the people guarding the *potge* were written down.” (TKD: 141) and CKD 224 reverse 1 *S(*u)namta Bimna uvatae jamna lihyati* “Beginning with Sunamta and Bimna the people are written down.” (TKD: 42).

(5.58) Rab. 11

εἰμοανο βαγανο κιδι μασκα νιβιχτιγενδι.

“... of these gods who are inscribed hereupon ...” (Sims-Williams 2008c: 56).

(5.59) Rab. 17

εἰμιδβα βαγε κιδι μαρο νιβιχτιγενδι.

“May these gods who are inscribed here ...” (Sims-Williams 2008c: 57).

This use of the unmarked form in **-taka-* as a perf.3sg. (resultative) is another parallel with Niya forms such as *lihitağa* ‘written’ and therefore one more indication that Bactrian did not only influence the morphology of the Niya preterite, but also that of the closely related verbal adj. in **-taka-*.

5.4.10 The alignment of the Bactrian and Niya preterite compared

Barchi and Peschl’s main argument not to opt for Bactrian influence on the Niya preterite was the difference in alignment between the two languages (cf. §5.4.3): the Bactrian preterite is patient-oriented and characterised by ergative patterns, whereas the Niya preterite “lurched” away from ergativity and is agent-oriented. Drawing on cross-linguistic evidence, this section tries to show that this difference in alignment is not too strong an obstacle to the assumption of a Bactrian influence on its formation.

In a recent article, Meyer (2019) contrasted three instances of pattern replication of an ergative structure in the past tense from an Iranian into a non-Iranian language, viz. (i) the *qṭyl l-* construction in Achaemenid Official Aramaic and its Old Persian origin (2019: 581–586); (ii) the structural influence exerted by the Parthian preterite on the Armenian periphrastic perfect with the verbal adjective in *-eal* (2019: 586–594); and (iii) the transfer of past tense constructions with postverbal clitics from Kurdish into North-Eastern Neo-Aramaic (2019: 595–599).⁸⁷⁴ These cases have in common that the ergative structure is not copied without change: the three recipient languages all “lurch” away from ergativity.

According to Meyer (2019: 572; 577; 599–601; cf. also 2023: 233), there are essentially three factors at work here: (i) the frequency of the borrowed element (centrality); (ii) a decline in the intensity of contact with the donor

⁸⁷⁴ For Aramaic *qṭyl l-*, see also Gzella (2004: 184–194), Ciancaglini (2008: 30–37), and Coghill (2016: 162ff.). On the Armenian periphrastic perfect, see additionally Meyer (2021; 2022; 2023: 80–104; 126–169). For alignment in Neo-Aramaic, cf. e.g. Coghill (2016: 55ff.) and Noorlander (2021).

language (constancy); and (iii) language-internal pressure from more dominant patterns (consistency).

To my mind, the last factor is often the most crucial one. In Armenian, for instance, the change from ergative over tripartite⁸⁷⁵ to nom.-acc. alignment coincides with the decrease in contact with Iranian languages after the fall of the Sasanian empire in the 7th century. Nonetheless, the alignment shift is probably in the main due to pressure from the nom.-acc. patterns found in other tenses and the fact that nom. and acc. are morphologically not distinguished in many paradigms. Phrased differently, “replicated patterns are adapted to fit the grammatical categories and material available in the replica language” (Meyer 2019: 570 fn. 2).

Inspired by this cross-linguistic evidence, this section argues that morphological and syntactic differences between Bactrian and Niya Prakrit were responsible for the alignment shift of the Niya preterite. The investigation will start with a discussion of the alignment of the Bactrian preterite and its relationship to developments in the case system and the adoption of differential object marking (DOM). Subsequently, I will compare the alignment patterns of the Niya preterite with those of its Bactrian counterpart to determine where exactly the differences lie and to see which factors may have motivated the alignment shift in Niya Prakrit. The focus will be on three elements: (i) developments in the Bactrian case system; (ii) the absence of pronominal clitics in Niya Prakrit; and (iii) an analogical influence of the Niya present tense on the alignment of the preterite.⁸⁷⁶ At the end of this section, I will additionally draw a parallel with the Persian preterite and attempt to reconstruct the history of the Niya preterite.

⁸⁷⁵ Tripartite alignment means that the subject, agent, and patient of a sentence are all marked differently. See (5.67) for a Bactrian example of such a structure.

⁸⁷⁶ There are surely more factors to consider, e.g. tense/aspect oppositions between the new preterite and the resultative in **-taka-*, so my investigation lays no claim to exhaustivity. Another topic worthy of future research is how the drift towards agent-orientation of the Niya preterite relates to sporadic examples of such a change in other Indo-Aryan languages. In a note added to his copy of LKD, Burrow e.g. compared the agent-oriented Sanskrit form *vijñātāsmi* ‘I recognised’ in a line from the *Ubhayasārikā*: *cireṇa vijñātāsmi bhavantam. abhivādayāmi*. “It took long before I recognised you, sir. (Now) I salute you with reverence.” (tr. mine; cf. the syntactic notes in Dezső & Vasudeva 2009: 436). See further Ollett (2022) on the use of *mhi* ‘I am’ < OIA *asmi* in the meaning ‘by me’ in the Mahārāṣṭrī *Līlāvāī* (he compares Niya Prakrit on pp. 283f.).

5.4.10.1 Bactrian cases, DOM, and the alignment of the preterite

What follows is a synchronic description of the alignment patterns of the Bactrian preterite, with a focus on Kuṣāṇa Bactrian, the stage of the language most pertinent to the comparison with Niya Prakrit. Also included are brief notes on the case system and differential object marking (DOM) because they help to explain how the alignment works.

It will be argued that the alignment of the Bactrian preterite is not strictly ergative but a mix of different patterns. On this point, I basically follow Gholami (2009), but her analysis can be simplified.⁸⁷⁷ Where she posits ten types in total, i.e. an ergative + neutral type with seven subtypes and a tripartite + nominative type with three subtypes (see p. 139), I will divide the data into three categories: (i) ergative alignment; (ii) direct alignment; and (iii) semantic alignment (manifesting itself as a nom.-acc. or a tripartite pattern). Structuring the data in this way makes it also more easy to see in which contexts the alignment of the Bactrian and Niya Prakrit preterite correspond and where they diverge. In turn, this will point to possible language-internal reasons why there are these syntactic divergences between the two types of preterite.

Due to the gradual loss of final vowels, the Bactrian case system was simplified over time. In Kuṣāṇa Bactrian, there was still a distinction between a dir.sg. in -o and an obl.sg. in -ε (sometimes -ι) and between a dir.pl. in -ε and an obl.pl. in -αvo. In later Bactrian, the system consisted of an unmarked singular in -o and a plural in -αvo, without further case distinctions.⁸⁷⁸

⁸⁷⁷ On the alignment of the Bactrian preterite, see further BD II (46f.) and the relevant parts of Jügel (2015; see also his data pp. 579–594). Barchi and Peschl (2022: 417 fn. 33) mention Gholami's (2009) study, but they do not openly consider the possibility that the existence of non-ergative patterns in Bactrian could be significant for the alignment of the Niya preterite.

⁸⁷⁸ On the Bactrian case system (including pronouns and clitics), see also BD II (40f.); SFBG (73–76; 99–105); Jügel (2015: 167f.; 182–185; 219–222); and Michetti (fthc.). There are occasional remnants of feminines in -α, e.g. λιζα 'fortress' or λογδα 'daughter', but gender distinction is lost early on. Some words, mainly kinship terms, preserve traces of archaic types of inflection, e.g. obl.sg. πιπο 'father' < gen.sg. *πιθρα next to dir.sg. πιδα (later πιδο) < nom.sg. *πιτā (Sims-Williams 2015: 259). In addition, there are traces of a nom.sg. in -ι /i/ < *-ah (Michetti fthc.: §5) and an abl.-ins.sg. in -α /ǎ/ in Kuṣāṇa Bactrian. The latter can be used after prepositions or as the agent of a transitive preterite (Sims-Williams 2015: 258; Halfmann et al. 2024: 27f.; Kreidl 2024; Michetti fthc.: §5).

1sg. and 2sg. personal pronouns continued to differentiate between a dir. and an obl. form, i.e. *αζο* vs. *μανο* and *τοο* (and variants) vs. *ταοο* (and variants). In the plural, no differentiation is made between dir. and obl. The 1pl. form is *αμαχο* (*μαχο*), the 2pl. *τωμαχο* (and variants).

In addition to these orthotonic pronouns, Bactrian had a range of pronominal clitics used in the functions of an oblique: 1sg. *-ομο* (MBactr. *-wm*); 2sg. *-δηιο* (archaic *-δο*); 3sg. *-ηιο* (also *-ηια*, *-ηο*, *-ηιο*, *-υο*; MBactr. *-yh*, *-yyh*, *-yyh*, *-y*); 1pl. *-μηνο*; 2pl. *-δηνο*; and 3pl. *-ηνο* (also *-ηνο*).

Bactrian treats intransitive and transitive preterites differently. For intransitive preterites, the agent (= subject) of the sentence agrees with the verb. In (5.60), for example, the 1sg. agent is marked both by the dir.sg. *αζο* ‘I’ and the 1sg. verb ending *-ημι* in intr.pret.1sg. *σταδημι* ‘I was’.

(5.60) NPlate 1

ταδηο αζο μο νοκονζικο ι πιορο μαρηγο σταδημι αμβουκαο.

“I, Nukunzik, his father’s servant, was then *amboukao*.” (Sims-Williams 2015: 257).

In the case of transitive preterites, the verb does not agree with the agent but with the patient of the sentence. In many instances, an enclitic pronoun takes up the role of the agent. In (5.61), the 1sg. ending *-ημι* in the tr.pret.1sg. *ωσταδημι* ‘X established me’ marks the patient and not the agent of the sentence—as it did with the intransitive verb *σταδημι* ‘I was’ in (5.60). The agent is instead marked by the 3sg. pronominal clitic *-ηο* ‘(by) him’, hence the translation with ‘he established me’.

(5.61) NPlate 2

ταδηο αλο ι πιοριβτειγανο οδο αλο ι νιαγοβτηγανο μαρηγανο αμσασογο ωσταδημι αλο ι φαρδαμγανο.

“he [Kanishka] established me [Nukunzik] (as) equal(?) with (his) father’s and with (his) grandfather’s servants, with the foremost (people).” (Sims-Williams 2015: 257).

In (5.62), the verbs *πορογατο* ‘surveyed (?)’, *κανδο* ‘dug’, *οζοοαστο* ‘brought out’, and *οιλιρδο* ‘fitted’ agree with the patients *μα λιζο* ‘the citadel’, *ειο σαδο* ‘this well’, and *αβο* ‘water’, all of them being dir.sg. The 3sg. clitic *-ηιο* ‘by him’ functions once again as the agent of the sentence.

(5.62) SK4M 11–13

ταδηιο μα λιζο πορογατο ταδηιο ειο σαδο κανδο οτηιο αβο οζοοαστο οτηιο πιδο ασαγγε ιθο οιλιρδο.

“then he [Nukunzuk] surveyed(?) the citadel, he dug this well, and he brought out the water, and he fitted it with stones.” (Sims-Williams 2012b: 79).

When nouns and certain demonstrative pronouns fulfil the role of the agent, they are, at least in early Kuṣāṇa Bactrian, put in the oblique case. For orthotonic 1sg. and 2sg. personal pronouns, this pattern holds throughout the attested history of Bactrian.

In example (5.63), the dir.sg. ειο βαγολαγγο ‘this sanctuary’ is the patient of the sentence and thus in agreement with the verb, the tr.pret.3sg. κηδο ‘made’. The obl.sg. βαφαρε καραλαργγε ‘Shafar the lord of the marches’ takes up the function of the agent.

(5.63) Rab. 15

ταδι βαφαρε καραλαργγε κηδο ειο βαγολαγγο.

“Shafar the lord of the marches made this sanctuary.” (Sims-Williams 2008c: 57).

The preceding examples are prototypically ergative: the patient equals the subject of the sentence and is put in the direct case, while the agent is an oblique form of a (pro)noun or an enclitic functioning as an oblique.

Yet, the situation is different with 1pl. and 2pl. pronouns, as these do not distinguish between direct and oblique forms (cf. *supra*). In (5.64), neither the agent of tr.pret.3sg. λαδο ‘gave’, i.e. μαχο ‘we’, nor the patient (= subject), i.e. βοβο οαρζιαο ‘the farming of the estate’, are overtly marked for case.

(5.64) U 6f.

ταδο μαχο ωσο λαδο αβοφαγο βηκο βοβο οαρζιαο.

“So now we gave the farming of the estate to you, Bek.” (after Gholami 2009: 136).

In other words, the agent, patient, and subject are not morphologically distinguished, and we are dealing with an instance of neutral alignment (so also Gholami 2009: 139).⁸⁷⁹

The loss of case marking in nominal morphology created a second environment where neutral alignment was possible. One such case is (5.65),

⁸⁷⁹ “Wenn die Aktanten gar nicht oder nur durch unveränderliche Wörter ausgedrückt werden, ist die ergativische formal nicht von der aktivischen Konstruktion zu unterscheiden.” (GW: 396). Cf. also Nyberg (1974: 282f.).

where το χοηο ‘this lordship’, the agent of tr.pret.3sg. φοβταδο ‘sent’, and ι γασικο ‘the concubine’, the patient, are not differentiated morphologically.

(5.65) cf 7

ταδομο νιγατο κοοαδο ι γασικο το χοηο αβο ρωβο φοβταδο.

“I have heard that your lordship sent the concubine to Rob.” (BD II: 78).

In examples of this type, the context is our primary guide in distinguishing between agents and patients.

Often, contextual information is indeed sufficient to do so, but the lack of a fixed word order⁸⁸⁰ could still create ambiguities in discriminating subjects from objects or agents from patients. Such ambiguities were avoided by using DOM, which means that speakers of Bactrian put the preposition αβο ‘in, to, etc.’ < **abi* in front of direct objects that were both animate and definite (cf. Gholami 2009: 137; Sims-Williams 2011b; Jügel 2015: 332f.).⁸⁸¹

(5.66) and (5.67) exemplify the consequences which the use of DOM had on the alignment patterns of the Bactrian preterite. The unmarked form ι χοηο ‘the lord’ is the agent of sentence (5.67). At the same time, it is interpretable as the subject of tr.pret.3sg. φοβταδο ‘sent’, because the patient ιαμροσπαλο βορνικανο (a PN) is overtly marked as the direct object of the sentence by the addition of the DOM marker αβο.

(5.66) ca 3–5

μισιδο ι χοηο αβο ιαμροσπαλο βορνικανο ταρο αβιδο καρανο φοβταδο.

“Moreover, the lord has sent Yamsh-spal Burnikan thither to you.” (BD II: 68).

(5.67) shows a similar, although still distinct, pattern. In this example, the 1sg. oblique pronoun -ομο functions as the agent, the preposition αβο marks the patient ρωβιγο ‘men of Rob’ as the direct object of the sentence, and the 3pl. subject encoded in the verbal ending -ινδο (tr.pret.3pl. βαστινδο ‘X bound them’) does not agree with either the agent or the patient.

(5.67) cm 9f.

ταδομο πιδο ταμαχο σαχ[οανο] [αβο ρ]ωβιγο ... βαστινδο.

“Because of your sta[tement], I bound the men of Rob.” (BD II: 90).

⁸⁸⁰ For Bactrian word order, see SFBG (201–215).

⁸⁸¹ Most examples of DOM come from later Bactrian, but there are indications that DOM was already in use in Kuṣāṇa Bactrian (Sims-Williams 2011b: 36).

I concur with Gholami (2009: 137) that (5.66) would be an example of nom.-acc. alignment and (5.67) one of tripartite alignment. As the presence or absence of DOM is, however, determined by semantic factors such as animacy, one could also classify such sentences under the heading of semantic alignment (cf. §5.4.2.3 for similar patterns in Niya).

From the above, one can conclude that the alignment of the Bactrian preterite is not consistently ergative.⁸⁸² As in many other Middle and New Iranian languages (cf. e.g. Haig 2008: 117), the alignment of the Bactrian preterite is rather a mixed system.

First, there is ergative alignment, whereby the agent is marked in the direct case and the patient (= subject) in the oblique. This pattern holds for pronominal clitics, for 1sg. and 2sg. orthotonic pronouns, and, until the case distinction between direct and oblique was lost, also for nouns.

Second, direct alignment could occur. In this case, there is no morphological distinction between the agent, patient, and subject of a sentence. This structure is possible with 1pl. and 2pl. orthotonic pronouns and nouns no longer distinguishing between a direct and oblique case form.

A third possibility is semantic alignment, which can manifest itself in two ways: either the patient became, due to DOM, explicitly marked as the direct object, and the agent could be reinterpreted as the subject, i.e. a nom.-acc. type of structure, or the agent, patient, and subject of the sentence were, because of DOM, all treated differently, resulting in a tripartite pattern.

5.4.10.2 The loss of ergative patterns in Niya Prakrit

With the revised analysis of the morphosyntactic alignment of the Bactrian preterite above, the question arises how its adaption to fit the typological structure of the recipient language, i.e. Niya Prakrit, could have caused the loss of ergative patterns in the latter.

To facilitate the discussion of this point, the three alignment patterns of the Niya preterite detailed in §5.4.2.3 are given again below:

⁸⁸² Alleged cases of agent-oriented preterites in the Bactrian documents jh and O (BD II: 47) have been explained differently by Jügel (2015: 808–810), so they cannot be used as further evidence for this conclusion. The same is true about some Kuṣāṇa Bactrian forms in -δανι/-δανε (βαοδανι ‘kingship’ in Rab. 2; βαοδανε in DN₁ 6; χααδοδανι ‘lordship’ in NPlate 1) which have been argued to be obl.sg. used as the patient of agent-oriented preterite verb forms (cf. Sims-Williams & Cribb 1996: 89f.) but probably belong to a special declension with dir.sg. in -ι/-ε (see Michetti fthc.: §5).

- (i) neutral or “direct” alignment
 - default pattern
 - agent and patient both marked in the dir. case
- (ii) nom.-acc. alignment
 - for demonstrative pronouns
 - agent in the nom. and patient in the acc. case
- (iii) semantic alignment
 - agent and patient are both animate
 - differential agent marking in the ins. case

Accounting for the alignment of the Niya preterite vis-à-vis its Bactrian counterpart in essence boils down to addressing the following two questions. First, is there a direct connection between the prominence of neutral/direct alignment in Niya Prakrit and the existence of such a pattern in Bactrian? In other words, did the dir. and obl. case in Bactrian fall together early enough to have impacted the way in which the Bactrian type of preterite and its alignment were taken over in Niya Prakrit? And second, could we identify language-internal reasons why the ergative patterns of the Bactrian preterite had to be given up to comply with the typological profile of Niya Prakrit? In what follows, I will take up these two topics in turn.⁸⁸³

Above, it was pointed out that once nouns and certain pronouns did no longer distinguish between the dir. and obl. case, the alignment of the Bactrian preterite was in certain sentence types no longer ergative but neutral. For the Niya preterite, neutral (or “direct”) alignment is the default pattern. Therefore, one could hypothesise that, when replicating the Bactrian type of preterite, speakers of Niya Prakrit generalised the neutral alignment patterns because these fitted better into the typological structure of their language than the ergative ones (cf. *infra*).

The viability of this hypothesis crucially depends on how old neutral alignment with transitive preterites is in Bactrian. Chronological questions as these obviously cannot be answered very precisely. Yet, there is at least circumstantial evidence suggesting that neutral alignment patterns did exist

⁸⁸³ Niya Prakrit’s nom.-acc. and semantic alignment do not require further discussion. The first type of alignment merely results from the fact that demonstratives, unlike nouns and most pronouns, still distinguish between nom. and acc. case and is hence not too relevant for the comparison with Bactrian. The second type avoids ambiguities when the agent and patient of a sentence are both animate and thus shares its *raison d’être* with Bactrian’s DOM and the alignment patterns caused by it.

early enough in Bactrian, so that they may have played a role in the historical development of the Niya preterite.

To start with, there are no longer any traces of case distinctions in the Bactrian administrative documents. The earliest texts in this corpus date back to the first half of the 4th century AD (SCBD: 82f.), consequently providing us with a firm terminus ante quem for the reduction of the Bactrian case system.

In addition, Sims-Williams (1989b: 234f.) observed that the interchange between dir. and obl. case forms started for the first time on coins from the reign of Huviṣka. By the time of Huviṣka's successors, only uninflected forms in -o were still used. If we take these data at face value, the loss of case distinctions could therefore have happened already in the second half of the 2nd century AD, perhaps even slightly earlier, given that written manifestations of linguistic change usually lag behind their first occurrence in speech.

The earliest known example in Bactrian of a non-overtly marked nominal agent of a transitive preterite also dates back to the reign of Huviṣka: it occurs in the colophon of version B of the Surkh Kotal inscription (Tremblay 2003: 128 fn. 23), here cited as (5.68). The different versions of the Surkh Kotal inscription still distinguish dir. from obl. case forms, as also shown by the obl.sg. κοζαρκι 'of Kuzgashk' and νοκονζικι καταλραγγι 'of Nukunzuk the lord of the marches' in (5.68). Yet, the agent of the pret.3sg. κιδι 'made', i.e. the PN βορζομορο, is morphologically not distinguished from the patient of the sentence, i.e. μο σαδο 'this well'. The nouns in apposition with βορζομορο, i.e. π[ο]υρο 'son', υασιλγανζ[ε]ιγο 'inhabitant of Hastilgan', and μαρηγι 'servant', are, except the last one, likewise not marked in the expected obl. case.

(5.68) SK₄B 24–27

οτ[ο]μο σαδο βορζομορο κιδι ι κοζαρκι π[ο]υρο υασιλγανζ[ε]ιγο
νοκονζικι καταλραγγι μαρηγι πιδο χοαδηο φρομανο.

"And Burzmihir the son of Kuzgashk, the inhabitant of Hastilgan, the servant of Nukunzuk, the lord of the marches, made this well according to the lord's command." (tr. mine, cf. Sims-Williams' 2012b: 79 translation of SK₄M 20–25).

The above fragment is accordingly one other indication that already in Kuṣāṇa times neutral alignment patterns were possible for the Bactrian preterite.⁸⁸⁴

If the chronology suggested above is correct, prototypically ergative structures were, at the time Bactrian influenced the Niya preterite, essentially limited to sentences in which the agent was either an orthotonic 1sg. or 2sg. pronoun or a pronominal clitic. Of these, structures with a 1sg. or 2sg. pronoun most likely did not significantly influence the development of the Niya preterite.

First, the use of such orthotonic pronouns as the agent of a preterite tense verb was probably not so frequent in Bactrian. Jügel (2015: 583) records only six examples of a 2sg. pronoun used in this function in the Bactrian corpus. For 1sg. pronouns, he lists 49 instances. Yet, this number is slightly skewed because it includes formulaic examples of the type $\mu\alpha\nu\omicron \nu\alpha\beta\iota\chi\tau\omicron$ ‘I have written’ or $\mu\alpha\nu\omicron \alpha\gamma\gamma\iota\tau\omicron$ / $\pi\iota\delta\omicron\rho\omicron\beta\delta\omicron$ ‘I have received’.

Second, these Bactrian pronouns were most commonly combined with a 3sg. verb form. Consequently, they are formally comparable to the pan-Indo-Aryan construction with a personal pronoun in the ins. (or gen.) and the verbal adj. in *-ta-*. The aforementioned $\mu\alpha\nu\omicron \nu\alpha\beta\iota\chi\tau\omicron$ < OIr. **manā nipixštam*, for instance, matches, except for the case of the pronoun, with Niya *maya lihita* (and variants) < OIA *mayā likhitam* ‘I have written’. Being still preserved in high-register portions of the Niya documents, e.g. in royal proclamations and colophons (Jamison 2000: 74), formations of this kind may have been ousted from the language relatively late. Put differently, if phrases such as *maya lihita* were still in everyday use at the time of the Bactrian influence on the Niya preterite and seen as translation equivalents of $\mu\alpha\nu\omicron \nu\alpha\beta\iota\chi\tau\omicron$, there would have been no substantial difference in alignment between Bactrian and (the ancestor of) Niya Prakrit in the case of 1sg. and 2sg. pronouns.⁸⁸⁵

⁸⁸⁴ An attentive reader may object that this scenario potentially contradicts the suggestion made in §4.2.1 that some of the Bactrian loanwords in Niya Prakrit may have been adopted when final vowels had yet to be lost entirely in Bactrian. As structural borrowing typically requires more intense contact over a prolonged period, it is not unlikely that the structural influence on the preterite postdates the adoption of (some of) the Bactrian loanwords, so there need not be a contradiction.

⁸⁸⁵ The replacement of *maya lihita* and similar forms by synthetic, agent-oriented 1sg. and 2sg. preterites could be a later inner-Prakrit development. For the mechanism behind such replacements, see below.

Pronominal clitics present us with a different story. Jügel (2015: 584) counted 136 examples of clitics used as the agent of a preterite tense verb, so they are, in contrast to orthotonic pronouns, quite frequently used in this function.⁸⁸⁶ Moreover, “clitics were ... on their way to becoming ... agreement forms for cross-referencing person features” (Haig 2008: 106), and “in ergative Iranian languages without case inflection”, such as later Bactrian, “they are the only way to maintain the ergative pattern” (Scheucher 2019: 15). Without the clitics, ergative structures would have become indistinguishable from neutral alignment patterns in which the agent, patient, and subject of a sentence are morphologically marked in the same way (cf. *supra*).

This crucial role of clitics in retaining the ergative alignment of the Bactrian preterite gives us an idea of why the Niya preterite “lurched” away from ergativity: pronominal clitics do not exist in Niya Prakrit.⁸⁸⁷ For *ditemi* ‘I gave’ to keep the same type of alignment as its supposed model **λαδημι* (later *λαδδημι*) ‘X gave (to) me’, speakers of Niya Prakrit had to find a functional equivalent for the Bactrian clitics, e.g. in the form of orthotonic pronouns. Else, they needed to find a different solution to accommodate the Bactrian-type preterite into the typological makeup of their language.

One way of fitting the new preterite into Niya Prakrit’s typological structure was by aligning its alignment with that of the present tense, which in my view is what actually happened. As said in §5.4.2.2, Burrow (LKD: §105) already suggested that the agent-orientation of the Niya preterite was due to an analogical influence from the present tense, whose endings were, except for the 3sg., basically the same as those of the preterite.⁸⁸⁸

⁸⁸⁶ Cf. also Haig (2008: 95), whose observations on Middle Persian and Parthian generally also hold for Bactrian: “Throughout Middle Iranian, the use of pronominal clitics is by far the most frequently employed strategy for expressing an A-past [the agent of a past tense verb]”. For other functions of the pronominal clitics in Bactrian, see Jügel (2015: 222ff.; 588–590).

⁸⁸⁷ There was a general, although not entirely consistent, tendency in the history of Indo-Aryan to lose the enclitic pronouns inherited from OIA. In Apabhramśa, for instance, these clitics had also all but disappeared from the language (cf. e.g. Scheller 1967: 41f.).

⁸⁸⁸ Burrow’s analogy is also typologically plausible, as there is a cross-linguistic “tendency to generalize a particular type of case and/or agreement pattern to all verbal predicative constructions in a language” (Dahl 2021: 422; cf. also Haig 2008: 193). The preterite was moreover morphologically less opaque in Bactrian than in Niya Prakrit. In Bactrian, the endings of the preterite were still

In Burrow's language-internal approach, the diachronic origin of the Niya preterite leads one to expect ergative alignment for transitive verbs, while systemic pressure from the present and the intransitive preterite caused the non-fulfilment of these expectations. In the contact linguistic approach advocated here, the alignment of the Bactrian preterite is a further reason to expect ergatively aligned transitive verbs, whereas the presence of neutral alignment patterns with certain (pro)nouns in Bactrian and the absence of pronominal clitics in Niya Prakrit are additional motives why ergative alignment did not survive in the end. The mechanism behind the alignment shift is the same in both approaches: an extension of the alignment of the presents and intransitive preterites to the transitive preterites.⁸⁸⁹

5.4.10.3 A comparison with the Persian preterite

The *Paradebeispiel* of a language which analogically extended the alignment of its present tense to the preterite is Persian.

As in Bactrian, the Middle Persian preterite was formed by adding enclitic forms of the verb 'to be' to the descendant of the Old Iranian verbal adj. in *-ta-*, i.e. 1sg. *kard ham* 'X did (to) me'; 2sg. *kard hē* 'X did (to) you'; 3sg. *kard* 'X did (to) him/her'; 1pl. *kard hēm* 'X did (to) us'; 2pl. *kard hēd* 'X did (to) you'; and 3pl. *kard hēnd* 'X did (to) them'. Transitive verbs were characterised by ergative alignment (cf. the translations), in which pronominal clitics played a pivotal role, e.g. 1sg. *=m kard* 'I did'; 2sg. *=t kard* 'you did'; 3sg. *=š kard* '(s)he did'; 1pl. *=mān kard* 'we did'; 2pl. *=tān kard* 'you did'; and 3pl. *=šān kard* 'they did'.

By the time of New Persian, the loss of *h-* and the univerbation of the enclitic forms of the copula with the verbal adj. had resulted in a synthetic preterite, i.e. 1sg. *kard-am* 'I did'; 2sg. *kard-ī* 'you did'; 3sg. *kard* '(s)he did'; 1pl. *kard-īm* 'we did'; 2pl. *kard-īd* 'you did'; and 3pl. *kard-and* 'they did'. As the translations make clear, the New Persian preterite is, unlike its Middle Persian predecessor, no longer ergative for transitive verbs like *kardan* 'to do'. Instead, transitive preterites adopted the same type of alignment as

synchronically analysable as enclitic forms of the verb 'to be' (cf. §5.4.9.2), whereas such clitics did not exist in Niya Prakrit, making it easy to reanalyse *-emi*, *-esi* (*-eši*), etc. as being the same endings as in the present tense.

⁸⁸⁹ For more notes on this type of analogical extension, cf. Harris & Campbell (1995: 251) and Coghill (2016: 28f.). As briefly noted in §5.4.2.3, the neutral alignment of the Niya present was, at the time of our evidence, also spreading towards other originally patient-oriented constructions, especially gerundives.

intransitive preterites and present tense forms such as 1sg. *kun-am* 'I do'; 2sg. *kun-ī* 'you do'; 3sg. *kun-ad* '(s)he does'; 1pl. *kun-īm* 'we do'; 2pl. *kun-īd* 'you do'; and 3pl. *kun-and* 'they do'.

This Persian development provides an instructive parallel for the loss of ergativity in the Niya preterite tense, as the same sort of factors seem to have operated in both cases.⁸⁹⁰

First, the loss of case endings and the adoption of DOM in Persian enabled the reanalysis of originally ergative patterns as neutral or nom.-acc. alignment (cf. what happened in Bactrian). As neutral and nom.-acc. alignment were also the default patterns for present tense verbs and intransitive preterites, the morphosyntactic structures of present and past were harmonised. In other words, the ergative pattern of past transitive verbs went out of use (cf. e.g. Noda 1999; Jügel 2015: 462).

Secondly, as in Niya Prakrit, the univerbation of the copula with the verbal adj. in *-ta-* probably played a role in the loss of ergativity in Persian (cf. e.g. GW: §841; Maggi & Orsatti 2018: 36f.). Due to this univerbation, the endings of present and past were, except for the 3sg. (cf. Niya!), more or less identical to each other, thereby facilitating a transfer of the alignment patterns of the present tense to the past tense.

Third, pronominal clitics changed their scope in the history of the Persian language. In contrast to Niya Prakrit, these clitics continued to exist in Persian. They, however, ceased to be used as the agent of a sentence (cf. Bubeník 1994: 113), and here lies the parallel with Niya Prakrit: due to this syntactic change, Persian clitics lost their function as the maintainers of ergative alignment, comparable to how the absence of clitics in Niya Prakrit may have played a role in the ousting of ergative alignment.

5.4.10.4 The history of the Niya preterite

Building on the preceding discussion, I would like to close this section with a reconstruction of what I think are the broad outlines of the history of the Niya preterite.

At an early stage in its development, (the ancestor of) Niya Prakrit inherited a periphrastic construction consisting of the verbal adj. in *-ta-* and inflected forms of the verb 'to be'. For transitive verbs, this construction was

⁸⁹⁰ Burrow (LKD: 50) already briefly compared New Persian when discussing the Niya preterite. For some notes on the loss of ergativity in Persian and Parthian, see now also Meyer (2023: 121f.).

patient-oriented with an agent in the ins. or gen. case. Due to phonological developments and in tandem with the loss of more archaic types of preterites, the forms of the copula started to merge with the verbal adj. to form a new type of synthetic preterite.

Subsequently, intensified bilingualism with Bactrian⁸⁹¹ may have led to the identification of the Niya preterite with its morphologically similar counterpart in Bactrian, in turn further facilitating the grammaticalisation of the originally analytic construction into a synthetically formed tense. Concomitantly, an innovative verbal adj. in **-taka-* took over the resultative function from the verbal adj. in *-ta-*. Here too, bilingualism with Bactrian seems to have played a role, as it is unlikely to be a coincidence that this verbal adj. in **-taka-* overlaps in both form and function with the Bactrian verbal adj. in *-δογο / -τογο* (and variants; fem. in *-ισο*) < **-taka-*.

Because of their diachronic origin and the alignment patterns in Bactrian, one would expect transitive preterites to align ergatively in Niya Prakrit. Yet, this expectation is not fulfilled, and, at some point in its development, the Niya preterite must have “lurched” away from ergativity. Several factors could have motivated this change. First of all, it is possible that when bilingualism with Bactrian influenced the course taken by the Niya preterite, ergative patterns were already becoming less prominent in Bactrian due to developments in its case system. Probably, a still more determining factor was that Bactrian ergativity was largely dependent on clitics, a class of pronouns missing from the grammatical arsenal of Niya Prakrit.

Faced with this typological discrepancy between Niya Prakrit and Bactrian and out of a desire to harmonise syntactic patterns across various tenses, transitive preterites became agent-oriented in Niya Prakrit. The process behind this change was probably an analogy with the syntactic alignment of the morphologically comparable present and the morphologically identical intransitive preterite. The last remnants of patient-oriented constructions with transitive verbs were to be combinations of a pret.3sg. and a pronoun in the ins. case, e.g. *maya lihida* ‘I have written’ ~ Bactr. *μανο ναβιχτο* ‘idem’.

5.4.11 Conclusion

In the preceding sections, the synchronic and diachronic analysis of the Niya preterite formations formed the principal topic of investigation. The

⁸⁹¹ See Chapter 7 for further discussion on Bactrian-Niya Prakrit bilingualism.

examination started in §5.4.2 with a language-internal approach that focussed on the morphology and syntax of the agent-oriented preterite tense and the patient-oriented verbal adj. in **-taka-*. §§5.4.3–5.4.10 were devoted to a contact linguistic approach to the preterite formations because it had been suspected before that the morphosyntactic differences between these formations and comparable ones in other MIA languages are to be attributed to foreign influence.

According to Barchi and Peschl (2022), the agent-orientation of the Niya preterite would be due to a substrate interference from Khotanese, where preterites are likewise agent-oriented and characterised by nom.-acc. alignment (§5.4.3). In my view, their hypothesis needs to be rejected for the reasons detailed in §§5.4.4–5.4.7 and summarised in §5.4.8. Morphological mismatches between the preterite formations in Niya Prakrit and Khotanese make a syntactic influence from the latter rather unlikely (§5.4.4). It also remains to be proved that Niya Prakrit acquired most of its distinctive linguistic features due to language contact in the Tarim Basin (§5.4.5). Barchi and Peschl's rather far-reaching hypothesis of a Khotanese substrate in Niya Prakrit is moreover not supported by additional linguistic arguments (§5.4.6) and chronologically not easily reconciled with the Khotan Prakrit evidence from CKD 661 (§5.4.7).

When approaching the Niya preterite from a morphological point of view and taking the verbal adj. in **-taka-* into consideration too, Bactrian presents itself as a more likely source of influence than Khotanese (§5.4.9). Yet, it would probably be a mistake to attribute the defining features of the Niya preterite formations to language contact alone. More likely, the morphological makeup of these formations results from a mix of language-internal developments and contact-induced change, in other words, from “contact-facilitated grammaticalisation”.

Language-internal developments were probably also the driving motor behind the alignment shift that the Niya preterite underwent (§5.4.10). Drawing on cross-linguistic evidence, I have argued that the agent-orientation of the Niya preterite is due to developments in the nominal morphology of (Kuṣāṇa) Bactrian, the absence of enclitic personal pronouns in Niya Prakrit, and generalisation of the alignment pattern of the agent-oriented presents to the preterites.

CHAPTER 6 The “Tocharian C” hypothesis

The data presented in Chapters 3–5 allow for the conclusion that Bactrian and other Iranian languages had a profound influence on Niya Prakrit. Yet, scholars believe that Niya Prakrit has also been influenced by non-Iranian languages, most famously by a hypothetical substrate language known as “Tocharian C”. After a brief introduction to the topic (§6.1), this chapter re-examines the lexical, phonological, morphological, and syntactic arguments that have been used to justify the assumption of contact with Tocharian (§§6.2–6.5). This re-examination will enable us to conclude that there is, with the potential exception of one loanword, so far no compelling evidence in favour of Tocharian influence on Niya Prakrit, be it as the result of a substrate or an adstrate type of contact (§6.6).

6.1 Introduction

6.1.1 A research history

Burrow (1935b; LKD: viii–ix) seems to have been the first scholar seriously to consider the possibility of language contact between Tocharian and Niya Prakrit. According to him, a language related to, but different from, Tocharian A and B was the native language of the people inhabiting the Shanshan kingdom in the first centuries of our era (cf. §1.1.2). This hypothetical substrate language, the so-called “Tocharian C”, would account for otherwise unexplained nouns and personal names in the Niya documents (§6.2); Niya Prakrit’s phonological idiosyncrasies (§6.3); and some grammatical features not easily explained as inherited from OIA (§§6.4–6.5).⁸⁹²

If correct, Burrow’s hypothesis would have “major implications for ... the problem of Tocharian origins” (Mallory 2015: 7). Yet, despite its potential, it has not been the subject of any extensive scrutiny ever since (cf. §§1.1.2–1.1.3). A few scholars have tried to augment the evidence in favour of Burrow’s theory (e.g. Harmatta 1967: 11ff.; van Windekens 1971); some authors have accepted it without much reserve (Lin 1996: 196; Carling 2005:

⁸⁹² Burrow (LKD: viii) proposed to call the substrate language “Krorainic”, after the ancient name of Loulan, the capital of the Shanshan kingdom. Burrow’s hypothesis should not be confused with Schmidt’s (2018: 161–271) unpersuasive proposal that some fragments in Formal Kharoṣṭhī are written in a third variety of Tocharian, on which see Dragoni, Schoubben & Peyrot (2020).

47; Adams 2017²: 453; Kogan 2017: 232); and still others, including me, have taken a more cautious stand in the debate (e.g. Hitch 2009: 5; Schoubben 2021; Peyrot 2022: 86f.).

An unpublished handout by Giorgio Banti (2000) represents an exception to this lack of serious scholarly debate with Burrow's theory. Even though a precious contribution to the topic, Banti's study can still be refined on various levels. Banti did, for example, not discuss every argument in the amount of detail it deserves, and he left out some potentially relevant pieces of evidence, e.g. the feminine marker *-s-* (§6.4.4). Besides, a few of Banti's own suggestions can be further improved upon by paying more attention to philological details in Niya Prakrit and by including pertinent material from Bactrian published in the past two decades. There is thus more than sufficient reason to re-examine Burrow's "Tocharian C" hypothesis.

6.1.2 "Tocharian C" and Niya onomastics

While I have tried to collect all the relevant arguments for "Tocharian C" proposed by Burrow and others,⁸⁹³ I will tacitly ignore Tocharian etymologies for Niya Prakrit personal names.

§3.4.1 already briefly treated the methodological issues inherent in the study of onomastic material. The problems involved are, however, still more pronounced in the present case, as the principles of Tocharian onomastics are not yet well understood (cf. Krause 1953; Pinault 1987b). Whereas Iranian onomastics has been studied in depth over the past decades based on a considerable body of evidence, onomastic material in Tocharian has long been limited by the lack of publications of secular documents. In Tocharian literary texts, one mainly encounters Buddhist names of Sanskrit or Prakrit origin, and even in the secular documents, one has to carefully distinguish genuine Tocharian names from those of Indian, Iranian, Chinese, Turkic, or unknown origin. Due to these methodological difficulties, etymologising personal names as Tocharian generally does not exceed mechanical comparisons with Tocharian lexical material matching phonetically more or less with the name in question.

⁸⁹³ Because some of the potential Tocharian elements in Niya Prakrit are more easily explained as borrowings from Bactrian, they have already been discussed more extensively in Chapters 3–5. Therefore, it suffices to summarise the issues with their Tocharian etymologies here.

Besides, even if a couple of Tocharian personal names were attested in the Niya documents, these do not need to point to a Tocharian substrate. Contact between the Shanshan kingdom and the Tocharian-speaking areas in the north of the Tarim Basin is known to have existed (Høisæter 2020: 367–369). Therefore, travellers or even immigrants from these northern areas may be mentioned in the Niya documents, and, if so, the occurrence of some Tocharian names in the Niya corpus is no conclusive proof that the natives of the Shanshan kingdom spoke a form of Tocharian.

6.2 Lexicon

This section critically reviews Burrow's lexical arguments in favour of "Tocharian C" as well as Tocharian etymologies for Niya Prakrit words proposed by other scholars.⁸⁹⁴ One of the proposed etymologies, i.e. Burrow's idea to compare the tile *kitsaitsa* with TB *ktsaitse* 'old' (and TA *ktsets* 'perfect, accomplished'), seems conceivable. All the others are, in my view, too uncertain to base any conclusions on.

1. *aṃklatsa*, a type of camel

Attestations of the base form

DIR.SG. *aṃklatsa*: CKD 163; 195; 383; 561; 590; 592; 897; *aklatsa*: CKD 569;
agiltsa: CKD 422

DIR.PL. *aklatsa*: CKD 330

The technical term *aṃklatsa*⁸⁹⁵ is always used to denote a specific type of camel. The currently available evidence does, however, not permit more precise conclusions on its semantic range (cf. also Lüders 1936b: 647–652).

⁸⁹⁴ I leave aside TA *ṣoṣṭaṅk** 'finance officer' and Niya *ṣvaṭhaṃgha* / *ṣoṭhaṃga* (LKD: ix), as, in this case, the Tocharian form is most likely borrowed from Niya Prakrit; cf. §3.2.4 s.v.

⁸⁹⁵ In early secondary literature, the reading of this word was still *a(m)kra'tsa* (e.g. KD: 329). *kla* is the current transliteration of Ꞥ, an uncommon Kharoṣṭhī sign that consists of a default Ꞥ *ka* and an additional stroke crossing the stem of the Ꞥ *ka* horizontally. In CKD 897, the same akṣara occurs in a word which Jiang (2020: 135f.; 140f.) has read as *kulaśukra* and interpreted as a compound of *kula* 'family' and *śukra* 'bright' < Skt. *śukla*-. As the context is about marriage, I think that Jiang's reading should be corrected to *kulaśulka* 'bride-price'. If this interpretation is correct and Ꞥ could also stand for *lka*, one can compare the character Ꞥ *lpa*, which is formed by adding a St. Andrew's cross to the stem of a standard Ꞥ *pa*.

As part of his argumentation on “Tocharian C”, Burrow (1935b: 675; LKD: 71 s.v. *aṃkra'tsa*) proposed to equate *aṃklatsa* with TA *ākṇats* / TB *aknātsa* ‘stupid, foolish’ (DoT: 3; DTTA: 27). His idea was that *aṃklatsa*, formed with the negative prefix **en-* and the verbal root **kna-* ‘to know’, would refer to an “untrained camel”. As an alternative for the semantics, Banti (2000: 6) hypothesised that ‘foolish’ would be a way to characterise young camel bulls who tend to act foolishly due to sexual excitement in their first rutting period. Somali *waal-ay* ‘the fool one’, also used for young male camels, would count as a semantic parallel.

I nevertheless agree with Peyrot (2022: 86 with fn. 3) that Burrow’s Tocharian etymology is “not convincing”. For his derivation to work, Burrow has to resort to the ad hoc assumption that the source of *aṃklatsa* would have undergone a dissimilation from **-nkn-* to **-nkl-*. In addition, the by-form *agiltsa* is not easily explained from the supposed Tocharian source.⁸⁹⁶ While being attested only once, this alternative form requires due attention because it occurs in CKD 422, the earliest Niya document at our disposal and one displaying a number of archaic linguistic features (cf. Brough 1965: 594 = 1996: 289). It therefore seems quite possible that *agiltsa* represents a more original form of the word than *aṃklatsa*, which would make the comparison with TA *ākṇats* / TB *aknātsa* formally even less attractive.

For historical reasons, one may want to consider that *aṃklatsa* is instead a Bactrian word. The association of camels with Bactria reflected in the term “Bactrian camel” goes back all the way to Aristotle (*Historia animalium* 498b.9), and camels were even used as a symbol for Bactria on Indian coins (Falk 2015–19: 18).⁸⁹⁷ Yet, no convincing etymology has presented itself so far.

2. *ogana*, an agricultural product

Attestations of the base form

DIR.SG. *ogana*: CKD 154; 207; 713 (2x); 714

⁸⁹⁶ Thomas’ (1944: 65) alternative proposal that *agiltsa* would instead be the opposite of *a(m)klatsa* and connected to TA *āklye* ‘learning’ (TB *akalye*) has little to recommend itself.

⁸⁹⁷ Note also that another unexplained term for camels, i.e. *putgetsa*, contains the typically Bactrian cluster *-tg-* (← *-δγ-* / *dg-*), perhaps also the same element *-tsa* as *aṃklatsa*.

Attestations as a PN

DIR.SG. *Ogana*: CKD 286; 701

GEN.SG. *Oganaṣa*: CKD 562 (2x)

Although the exact semantics of *ogana* remain unclear, there is sufficient reason to believe that it refers to an agricultural product. Because of its meaning, Burrow (1935b: 673; LKD: 81 s.v.) connected *ogana* to TB (→ TA) *oko* ‘fruit’ (DoT: 115; DTTA: 78f.) and TA *okar* ‘herb, plant’ (DTTA: 76). Yet, this etymology is unconvincing, as it leaves the element *-ana* in *ogana* without an explanation.⁸⁹⁸

According to Bailey (1946a: 794f.), *ogana* would be a hypercorrect spelling of **oyana* < Skt. *odana-*, which he translates as ‘rice’. *odana-* means, however, more precisely ‘porridge, boiled rice’, whereas *ogana* seems to be an unprocessed food product.⁸⁹⁹ In addition, there are no good parallels for the phonological development assumed by Bailey.⁹⁰⁰ Consequently, also his etymology is not persuasive.⁹⁰¹

3. *kitsaiṣa*, a title

Attestations of the basic form

DIR.SG. *kitsaiṣa*: CKD 187 (2x); 245; 327; 377; 437 (2x); 495 (2x); 549; 571; 572; 579; 580; 581; 582; 586; 587; 589; 590; 606; 640; 648 (2x); 654; 655; 656; 666; 715; 719; 730; 797 (2x); 809; 849; *kitsayitsa*: CKD 436; 561 (2x); 859; 879; *kimtsayitsa*: CKD 415 (2x); *kitsatsa*: CKD 574 (2x); 652; 704; 808

GEN.SG. *kitsaiṣaṣa*: CKD 579

⁸⁹⁸ *oko* is mainly used metaphorically as the Tocharian equivalent of BSkt. *phala-* ‘fruit of an action’ (DTTA: 78f.; DoT: 115). Yet, Ching (2016: 56) points to a few passages in administrative texts where *oko* refers to actual cereals.

⁸⁹⁹ The normal Sanskrit word for ‘rice’ is *vr̥hi-*. Although the Chinese Annals and Xuanzang’s travelogue record the existence of local rice cultivation, references to rice in administrative texts from the Tarim Basin are scarce to non-existent (Ching 2010: 67f.). TA/TB *klu* ‘rice’, for instance, never occurs in administrative texts (Ching 2016: 55 fn. 55; Peyrot 2018a: 254f.).

⁹⁰⁰ Bailey cites Gāndhārī loanwords into Khotanese that show a loss of intervocalic **d*. As **d* is, however, also lost in inherited words, as in Khot. *pāa-* ‘foot’ < **pāda-*, Bailey’s examples are not necessarily informative on Gāndhārī.

⁹⁰¹ Formally, it would be attractive to derive *ogana* from a cognate of Oss. D. *(w)ogæn* ‘secret hiding-place, stock’ < **awa-kana-* (Cheung 2002: 243). Yet, I have not found evidence for **awa-kana-* in the required agricultural sense.

GEN.PL. *kitsaṭṣaṃna*:⁹⁰² CKD 671

Being an official title from the judicial sphere, *kitsaṭṣa* has been compared since Burrow (1935b: 673; LKD: 82 s.v.) with TB *ktsaitse* ‘old’ and TA *ktsets* ‘perfect, accomplished’ (DoT: 263; DTTA: 175). As this etymology is semantically and formally conceivable, various scholars have accepted it, be it with more or less hesitation.⁹⁰³

Also approving of Burrow’s etymology, Peyrot (2022: 86) has recently discussed what the exact source form of *kitsaṭṣa* may have looked like. He sees three options. First, *kitsaṭṣa* may reflect an archaic form **kət^sait^st^se* with a rendering of **ə* as *i* and adoption of the word into the productive *a*-class declension in Niya Prakrit. Second, a source comparable to TB *ktsaitse* may have been borrowed with *i*-epenthesis in the first syllable (similarly Banti 2000: 6). Third, depending on the chronology of monophthongisation in Tocharian A, the Niya title may also come from an earlier form of *ktsets* where **ai* was still preserved.

Irrespective of which scenario one opts for, *kitsaṭṣa* need not be the result of substrate borrowing from an unattested “Tocharian C”: it could instead be due to some form of adstrate borrowing.

4. *kilme* ‘family estate’

According to Burrow (1935b: 674f.; LKD: 83 s.v.), *kilme* ‘family estate’ is to be compared to TA *kālyme* and TB *kālymiye* ‘region, direction’ (DoT: 186f.; DTTA: 131f.). While this etymology poses no major problems on the formal side, *kilme* is no decisive evidence in favour of Tocharian influence on Niya Prakrit because of the existence of competing etymologies. See §3.2.4 s.v. for a more detailed discussion.

5. *tasuca*, a title

Attestations of the base form

DIR.SG. *tasuca*: CKI 170; CKD 26; 78; 103; 126; 143 (2x); 147; 157; 160; 187; 259; 375 (2x); 390; 422 (2x); 436; 494 (2x); 495; 506; 507; 517; 525; 531 (2x); 533; 552 (2x); 554; 558; 580; 588; 637 (3x); 639 (2x); 648; 676 (2x); 709; 749; 774; 788; 805; 808 (2x)

⁹⁰² This plural form proves that Atwood (1991: 176 fn. 11) was mistaken in claiming there to have been only one *kitsaṭṣa* at a time.

⁹⁰³ Cf. e.g. Thomas (1944: 66), Banti (2000: 6), Padwa (2007: viii; 271; 280), and DoT (263).

GEN.PL. *tasucana*: CKD 884

Compounds

DIR.SG. *rajyatasuca* ‘*tasuca* of the kingdom’: CKD 883 (2x)

Despite a wealth of attestations of this official title, there is still no good evidence for the exact meaning of *tasuca* (cf. LKD: 94 s.v.). Loukota (2020: 110) tentatively proposed to explain *tasuca* as an agent noun in *-uca* derived from the Tocharian B root *tās-* ‘to put, to place’.⁹⁰⁴

There are a number of linguistic problems with this suggestion. First, ‘placer’ is a semantically not entirely satisfactory denomination of an official title. In addition, the root *tās-* is not known to form an *uca*-agent noun in Tocharian, the agent noun of this verb instead being construed with the synonymous suffix *-ñca*, i.e. *taṣ(ṣ)eñca*. As a rule, agent nouns in *-uca* are moreover derived from the subjunctive V stem, which is *tättā-* for the root *tās-* (Malzahn 2010: 641f.; Peyrot 2013: 757).⁹⁰⁵ In the unlikely case that an agent noun in *-uca* to the root *tās-* existed, the required form would thus have been **tättauca* or the like, which is clearly incompatible with *tasuca*.

6. *pāke* ‘allotment, share’

Burrow identified *pāke* ‘allotment, share’ with TB *pāke* ‘parcel, share’ (LKD: 102 s.v.). This etymology does, however, not account for the consistent spelling of *pāke* with 𑖔 *ka*, and *pāke* can be more easily derived from Bactr. *παρκο /pəškə/ ‘share’ < *pišta-ka- ‘that which is cut’. Compare Schoubben (2021: 52f.) and §3.2.3 s.v.

7. *maķa* ‘bean’

Burrow (1935b: 673; LKD: 110 s.v.) connected *maķa* to TA *malke* ‘milk’ (DTTA: 332). Yet, this proposal suffers from both phonological and semantic problems, discussed in more detail in Schoubben (2021: 50–52) and §3.2.2 s.v. A more likely source is provided by Bactr. *μαρκο /māškə/ ‘bean’ < *māša-kā-.

⁹⁰⁴ For the Tocharian B agent nouns in *-uca*, see now Friis (2024: 271–276).

⁹⁰⁵ Michaël Peyrot (p.c.) kindly points out that the subjunctive V stem an *uca*-participle is derived from usually also forms a pair with a nasal present, a formation likewise unattested for the root *tās-*.

8. *śuka*, a type of wine

Attestations of the base form

ADJ. *śuka*: CKD 272 (2x); 283 (?); *śuki*: CKD 169; 349; 431 = 432 (2x); *śukha*: CKD 387⁹⁰⁶

In all its attestations, *śuka* modifies the noun *masu* ‘wine’ (for which cf. §3.7.1 s.v.). On this basis, we may presume that *śuka* was an adjective specifying a particular type of wine (LKD: 125f. s.v.).

According to Burrow, *śuka* would be an inherited word, namely from OIA *śuṣka-* ‘dry’ (LKD: 125f. s.v.).⁹⁰⁷ The variant *śukha* could then be the phonologically regular outcome and *śuka* a deaspirated form (cf. *nikhal-* next to *nikal-* ‘to take out, provide’ < *niṣkālaya-*).⁹⁰⁸

There is, however, a problem with Burrow’s idea, in that there is no parallel for the concept of ‘dry wine’ (as in French *un vin sec*) in the Tarim Basin languages of the first millennium. Aware of this issue, Burrow points to the mentioning of dry grapes in Tibetan documents from the region (citing Thomas 1934b: 475), to which may be added the Khotanese collocation *haṣka gūra* ‘dry grapes’ (DKS: 87; 494). *Pace* Burrow, it would, however, be unwarranted to assume on this basis that *masu* means ‘grape’ when combined with *śuka*, given that in all other instances the meaning of *masu* is clearly ‘wine’ (as admitted by Burrow).

An additional drawback to Burrow’s idea is that other adjectives describing types of ‘wine’, such as *potga* (*potgoña*) and *ṣamiyo*, are clearly not inherited (§3.7.2 and §6.2 s.vv.). It therefore seems worth considering that *śuka* is a loanword too.

The possibility of a loanword was also entertained by van Windekens (1971; 1976: 538), who proposed that *śuka* was borrowed from a “Tocharian C” cognate of TA *śuk* and TB *śuke* ‘taste, juice, nectar’ (~ Skt. *rasa-*, cf. DoT:

⁹⁰⁶ The compound *śukamuli* ‘dues payment’ (CKD 59; 211; 309) should be put aside. In this case, *śuka-* may instead come from *śulka-* ‘price’ (TKD: 13; 40; 56).

⁹⁰⁷ Burrow mentions two more possibilities, i.e. OIA **śukna-* ‘fermented’ next to *śukta-*, like Pkt. *mukka-* ‘released’ < **mukna-* next to Skt. *mukta-*, and *śukla-* ‘bright’. The derivation from **śukna-* would be semantically understandable, as *śukta-* can also mean ‘vinegar’ (cf. also Romani *šuk* ‘idem’); but because of the absence of other MIA and/or NIA derivatives of the variant form **śukna-*, I find this etymology not fully persuasive. With *śukla-*, there is the problem that in other varieties of Gāndhārī this word is continued as *śukra* rather than as ***śuka* /*śukka*/ (cf. Baums & Glass 2002a– s.v.).

⁹⁰⁸ Burrow does not account for the variant *śuki*.

692f.; DTTA: 472); *śuka masu* would thus literally mean ‘tasty wine’, i.e. ‘wine of a high quality’. Formally, this etymology could work (it is accepted by Lin 1996: 196); but it can hardly be called compelling seeing that the meaning attributed to *śuka* is solely based on etymology, and *śuka* is an adjective, while the Tocharian words are nouns. Moreover, even if van Windekens’ idea would turn out to be correct, this etymology can still not be used as a conclusive indication of a “Tocharian C” substrate, for a word of this kind could easily have been borrowed as the result of trade.

9. *ṣamiyo*, a type of wine/corn

Attestations of the base form

DIR.SG. *ṣamiyo*: CKD 225

INS.SG. *ṣamiyena*: CKD 637; 703 (2x); 796; 797⁹⁰⁹

ṣamiyo (ins.sg. *ṣamiyena*) is always combined with either *aṃna* ‘corn’ (so in CKD 703) or *masu* ‘wine’ (so elsewhere). Therefore, this adjective presumably indicates a specific type of corn and wine, but it is a “completely obscure term” otherwise (LKD: 126f. s.v. *ṣamiyena*).

According to Harmatta (1967: 13f.), *ṣamiyo* would come from **ṣmeyo*, a derivative of TA *ṣme** ‘summer’ (DTTA: 502) with a suffix *-o*.⁹¹⁰ The variant *ṣamiyena*, by contrast, would be borrowed from **ṣmeyem*, an adjective derived from the same word for ‘summer’ with the suffix *-em*, as in TA *oṃkalmeṃ* ‘of the elephant’ ← *oṃkalām* ‘elephant’ (DTTA: 80). These etymologies require two phonetic substitutions to have happened. The un-Indic initial cluster **ṣm-* must have been broken up with a prop vowel *-a-*, so as to result in Niya Prakrit *ṣam-*, and the vowel *-e-* must have been raised to *-i-*, as we do not have Niya ***ṣameyo* or ***ṣameyena*.

Harmatta’s etymology is to be rejected for several reasons. To begin with, it is unwarranted to posit both **ṣmeyo* and **ṣmeyem* for the donor language, none of which is attested. In fact, it seems more likely that *ṣamiyena* is an ins.sg. in *-ena*, and *ṣamiyo* the basic form (cf. §3.7.2 s.v. *potge*; *potga* / *potgoṇa*). Moreover, the resulting meaning ‘summer wine’ or ‘summer corn’

⁹⁰⁹ *ṣamiya* in CKD 770 is probably unconnected.

⁹¹⁰ Although Harmatta is not very explicit, it seems he is referring with this suffix *-o* to Tocharian A adjectives like *ekro* ‘poor’ ← *ekār* ‘empty, deprived’ (DTTA: 68), *mkälto* ‘little, small’ (DTTA: 355), and *tālo* (cf. TB *tallāu*) ‘miserable’ (DTTA: 208).

does not receive any support from the contexts (cf. *supra*). I therefore conclude that a convincing etymology for *ṣamiyo* remains to be found.

10. *ṣilyōga* ‘document, written tablet’

Attestations of the base form

DIR.SG. *ṣilyōga*: CKD 470

INS.SG. *ṣilyōgena*: CKD 492

LOC.SG. *ṣilyogaṃmi*: CKD 140; 359

Compounds

DIR.SG. *ṣilyogalihitaga* ‘document, written tablet’: CKD 470; *ṣilyogalihidaga*: CKD 471; *ṣilyokalihitaga*: CKD 359; *ṣilyokalihidaga*: CKD 312; 561 (2x); *ṣulgalihidaga*:⁹¹¹ CKD 582

DIR.SG. *ṣilyogahastalekha* ‘idem’: CKD 729

The available contexts leave no doubt that the general meaning of *ṣilyōga* is ‘document, written tablet’. According to Lüders (1936b: 652–654; so also LKD: ix; 127 s.v. *ṣilpōga*), *ṣilyōga* needs to be compared with TA *ṣlyok* ‘strophe’, next to *ślok* ← Skt. *śloka*- (DTTA: 484; 503).⁹¹² As *śloka*- would have resulted in Niya **śiloga*,⁹¹³ Lüders proposed that Niya Prakrit reborrowed this word from Tocharian.

However, not only is such a reborrowing *a priori* implausible (Tremblay 2001: 35 fn. 54), there is the additional problem that neither TA *ṣlyok* nor Skt. *śloka*- or one of its MIA/NIA derivatives ever means ‘official document’ or the like (CDIAL: no. 12748). It thus seems advisable to disconnect TA *ṣlyok* and Niya *ṣilyōga*, the etymology of which remains to be clarified.

6.3 Phonology

Burrow (1935b: 667–671) started his article about potential Tocharian elements in Niya Prakrit with an overview of eight phonological features

⁹¹¹ The variant *ṣulgalihidaga* is most likely a lapse of the pen. The last few lines of CKD 582 contain two other scribal mistakes, i.e. loc.sg. *Caḍotaṃtimi* instead of *Caḍotaṃmi* ‘in Caḍota’ and the personal name *Ramaṣṭso* (also gen.sg. *Ramaṣṭsoaṣa* instead of *Ramṣotsa* (also gen.sg. *Ramṣotsaṣa*).

⁹¹² There is no immediately obvious distinction between TA *ślok* and *ṣlyok*, and both forms occur in parallel sentences in A 353. Tocharian B invariably has *ślok* ‘stanza, strophe’.

⁹¹³ Cf. the SA Gandh. ins.sg. *śilogano* in Av^{L6} recto 25.

which the supposedly non-Indian and non-Iranian nouns and personal names in the Niya documents would seem to share with Tocharian.⁹¹⁴

At first sight, Burrow's comparisons with Tocharian phonology seem solid evidence in favour of his substrate theory. Yet, most of the features he listed are not exclusive to Tocharian: they are also found in other potentially relevant languages, notably Bactrian. Another methodological problem with Burrow's approach is that the unexplained nouns and personal names in Niya Prakrit probably do not all derive from the same source. For instance, Burrow's supposedly non-Iranian nouns also include words now explainable as Bactrian, making it difficult to decide which features are representative of the phonology of the supposed substrate language and which are not.

In what follows, I shall present and comment on each of Burrow's arguments individually. The conclusion will be that none of them is compelling evidence for a Tocharian substrate.

6.3.1 The devoicing of voiced stops

Burrow's first phonological argument for "Tocharian C" concerns the devoicing of voiced stops in Niya Prakrit (1935b: 667f.). In §2.1.4 and §4.3.28, I pointed out that, both in inherited lexemes and in loanwords, voiced and unvoiced stops can sporadically interchange in Niya Prakrit. Burrow used this phonological peculiarity as evidence that the language of the Shanshan people lacked voiced stops, if correct, a remarkable isogloss with Tocharian, as the latter too has only unvoiced stops in its phonemic inventory.

Devoicing initial consonants is probably the strongest phonological argument in favour of a Tocharian substrate in Niya Prakrit.⁹¹⁵ Yet, it can hardly bear the burden of proof on its own, especially since there are

⁹¹⁴ Burrow's ninth item, i.e. "no attempt is made to represent the reduced vowel *ä*, which is common in Tokharian" (1935b: 671), is only an observation and not really an argument in support of "Tocharian C". I therefore leave it aside.

⁹¹⁵ It would be difficult to argue that contact with Bactrian caused this type of devoicing, seeing that, in the case of Sanskrit and Gāndhārī loanwords into Bactrian, original voice distinctions are usually well preserved (cf. e.g. βoδδo / βουδο ← *buddha*- or δηβο 'divinity' ← *deva*-). In non-initial position, there are some peculiar forms in Bactrian, e.g. βοτο (also MBactr. *bwt*) ← *buddha*- or the name βατρο ← *Bhadra*- (BPN: no. 75). I doubt, however, that these are connected to the devoicing in Niya Prakrit. Loanwords from other Iranian languages into Bactrian also preserve the original voicing; note e.g. Δηβαρο 'arrest' ← Parth. *dēbahr* or MBactr. *b'gyg* 'having a share' ← Parth. (?) **bāgīg* (cf. Sims-Williams 2009a: 258).

sporadic instances of initial devoicing in South Asian Gāndhārī, e.g. *caṇa* ‘meditation’ next to *jaṇa* / *jāṇa* / *jhāṇa* < OIA *dhyaṇa*- (cf. Silverlock 2015: 166). Because of such examples, it is possible that devoicing was not an exclusive feature of Central Asian Gāndhārī, which makes the assumption of a Tocharian substrate origin less attractive.

6.3.2 The loss of aspiration

A second, equally well-known, characteristic of Tocharian is its lack of aspirated consonants, including simple *h*. These sounds are also rare to non-existent in the corpus of foreign nouns and personal names in Niya Prakrit, which Burrow (1935b: 669) considered as another argument in favour of a Tocharian substrate.⁹¹⁶ The loss of aspiration is, however, already found in South Asian Gāndhārī, conceivably due to contact with Iranian languages (cf. §5.1), so Tocharian does not need to have played a role here.

As concerns the loss of simple *h*, it bears mentioning that this sound also frequently drops in Bactrian, e.g. in *αζαπο* next to *υαζαπο* ‘thousand’ < **hazahra*-. If one wants to attribute the irregular treatment of *h* in Niya Prakrit to foreign influence, Bactrian is therefore as good a source for it as Tocharian.

6.3.3 The rarity of the fricatives -x-, -θ-, and -f-

Other sounds absent from Tocharian phonology are the fricatives -x-, -θ-, and -f-, an absence compared by Burrow (1935b: 669) to the rarity of such fricatives in Niya Prakrit. In Iranian names, -f- is rendered as *ʾ* *vha*, but Burrow noticed that -x- and -θ- are largely absent from the onomastic corpus. Yet, once again, the rarity of -x- and -θ- does not necessarily imply a Tocharian substrate. First, OIr. *-θ- by default developed to -h- in Bactrian (cf. SFBG: 38), so this could be an alternative explanation for the general absence of -θ- in Niya loanwords and foreign names. Second, the rarity of -x- in Niya Prakrit could possibly result from its being substituted by a sibilant, a sound substitution I discussed in more detail in §4.3.27.

⁹¹⁶ Aspiration is sometimes dropped in inherited words too, resulting in forms such as *buma* ‘grounds, land’ next to *bhuma*, or *asta* ‘hand’ for *hasta* (see also LKD: §28).

6.3.4 The absence of retroflex consonants

The fourth phonological feature Burrow observed is the non-occurrence of retroflex consonants in the unexplained vocabulary in Niya Prakrit (1935b: 669f.). Retroflexes are, however, not only absent in Tocharian, but also in many Iranian languages, including Bactrian.⁹¹⁷ Their absence in loanwords into Niya Prakrit is hence no forceful argument in favour of a Tocharian substrate.

6.3.5 The semivowel -w-

In §2.1.6, it was stated that the Niya akṣara 𑖶 *ya*, phonologically /w/, occurs in non-Indic personal names, e.g. *Varpa*, while at the same time also interchanging with 𑖶 *va* in inherited words like *viṃṇaveti* (also *viṃṇayeti*) ‘(s)he orders’ < Skt. *viṃṇāpayati*. As this akṣara is seldomly used in South Asian Gāndhārī, Burrow (1935b: 670; cf. also LKD: §29) argued that its more frequent use in Niya Prakrit resulted from contact with Tocharian, given the existence of a phoneme /w/ in the latter. Contact with Bactrian is, however, an at least equally likely explanation, given that there are Niya Prakrit loanwords in which 𑖶 *ya* can be shown to render Bactrian -o- /w/ (see §4.3.22).

6.3.6 A palatalised lateral

Burrow’s sixth phonological argument has to do with the Niya akṣara *lyā* (1935b: 670f.). As I discuss in more detail in §2.1.6, this akṣara can be taken as evidence that in Niya Prakrit, *l* could be palatalised in front of *ī*, a type of palatalisation connected by Burrow to the existence of a phoneme /l̥/ (written <ly>) in Tocharian. Palatalisation is, however, a typologically so widespread phenomenon (cf. Kümmel 2007: 250–266) that it is no cogent argument for contact between Niya Prakrit and Tocharian. One should moreover note that the phonemic inventory of Pāli, a MIA language that has certainly never been in contact with Tocharian, may also have included a palatalised /l̥/ (so Oberlies² 2019: 133 who speaks about “a *l mouillé*”).⁹¹⁸

⁹¹⁷ The Bactrian sibilant 𑖧 /š/ may have been a retroflex (cf. §2.2.4.1 and §4.3.18), but the same is true about Tocharian <ṣ>.

⁹¹⁸ The Graeco-Bactrian and Manichaean scripts are regrettably uninformative whether there was a (phonematic) palatalised lateral in Bactrian. In any case, the Niya PN *Lýaka* ← Bactr. *liako* /l(i)yākə/ < **dahyu-k(k)a-* (SA Gandh. *Liaka*, cf.

6.3.7 The affricate *-ts-*

Burrow (1935b: 671) further remarked on the presence of an affricate *-ts-*, a common phoneme in Tocharian, in Niya Prakrit loanwords and foreign names. Two Niya examples are *tsamgina*, a type of corn, and the PN *Tsina*. As /ts/ is, however, one of the commonly accepted values of Bactrian σ (cf. §2.2.4.2 and §4.3.15), its occurrence in Niya Prakrit cannot be conclusively attributed to Tocharian.

6.3.8 Syncope and heavy consonant clusters

Finally, there is, due to syncope, a variety of heavy consonant clusters in Niya Prakrit, e.g. in the word *crorma* (also *curorma* / *cirorma*), an agricultural product, or in the inherited PN *Butsena* (cf. also *Butsenga*) < Skt. *Buddhasena*-. Burrow (1935b: 671) ascribed such syncopes to Tocharian. His argument is, however, not compelling, as syncope and heavy clusters are as much a feature of Bactrian phonology as they are of Tocharian.

6.4 Morphology

As already briefly indicated in §6.1, Burrow based his “Tocharian C” hypothesis not only on phonological and lexical arguments; he also thought to recognise some traces of Tocharian derivation and inflection in Niya Prakrit. In my view, none of his proposals stands closer scrutiny. Some of the topics to be discussed still lack a convincing analysis, e.g. the plural form *paḱeyu* ‘allotments, shares’ (§6.4.5). Yet, at least some features are more likely Bactrian in origin than Tocharian, i.e. the adjective suffix *-ci* (§6.4.2) and the feminine marker *-s-* (§6.4.4). Still others need not be due to language contact in the first place, e.g. the adjective suffix *-i* (§6.4.3).

6.4.1 The suffix *-ina*

A few loanwords into Niya Prakrit contain a suffix *-ina* (sometimes *-im*), most likely a marker of (substantivised) adjectives. Examples include the title *cuyala(y)ina*, *cilaṃḍhina* ‘shared’, and *koyimaṃḍhina* ‘an official in charge of *koyimaṃḍha* corn’.

According to Burrow (1935b: 672; LKD: §77), *-ina* (*-im*) would correspond to a Tocharian A adjective suffix *-im*, for which he refers his

§3.4.1) shows that *l̥ya* could also occur in Bactrian names occurring in the Niya documents.

readers to TG (21f.). However, none of the words where *-ina* occurs is easily analysable as a borrowing from Tocharian. In addition, the Tocharian words ending in *-im* cited in TG (21f.) are adjectives in *-i* in the oblique case, e.g. *āriñciṃ* (A 338 b7; THT 1646.c a6), the obl.sg. of *āriñci** ‘belonging to the heart’ ← *āriñc* ‘heart’, and *ṣulyim* (A 77 b3), the obl.sg. of *ṣuli** ‘mountainous’ ← *ṣul* ‘mountain’.⁹¹⁹ In other words, a suffix *-im* does not exist in Tocharian, and it would be far from plausible that *-ina* represents a borrowing from the obl.sg. of the adjective suffix *-i*.

Incidentally, the suffix *-ina* (*-im*) occurs in two of the potential Bactrian loanwords in Niya Prakrit discussed in §§3.2.3–3.2.4. These are *acoviṃna* from *aco* ‘frontier, border post’ ← *αδοβαοο /adšāwə/ < **ati-čyāwa-* and *vaṣḍhigaiṃ* from *vaṣḍhiga*, festival on the mountain ← *βαγδιγο /vaγdīgə/ ‘tribute’ from βαγδο ‘distributed’ < **baxta-* + *-ιγο* < **-iya-ka-*.

The question arises whether the suffix *-ina* could also be Bactrian in origin. This option seems indeed conceivable, given the existence of an adjective suffix *-ηvo/-ιvo* in Bactrian.⁹²⁰ This suffix is attested in some personal names, e.g. ραβτηvo < **rāšt-aina-* ‘related to justice’, in the adjective σιμvo ‘made from silver’ based on *σιμο ‘silver’ ← Gr. ἄσημος, and perhaps in the place name σαγγιvo (Korn & Olsen 2012: 214).⁹²¹ Nevertheless, there is so far only little evidence that *-ηvo/-ιvo* was an inherited suffix in Bactrian. Sims-Williams (BPN: no. 125) noted that all of the personal names ending in *-ηvo/-ιvo* possibly come from Middle Persian or Parthian, and in these languages *-ēn* < **-aina-* is a frequent suffix (GW: §325), whereas in Bactrian the suffix *-ηγγο/-ιγγο* < **-aina-ka-* occurs more often (BD II: 213).⁹²² In order

⁹¹⁹ Of *āriñci**, there are no other forms attested (cf. DTTA: 42f.). For *ṣuli**, cf. additionally the nom.pl. *ṣuliñi* (A 75 a1; A 318 + 319 b4) and the obl.pl. *ṣulinās* (A 200 a3).

⁹²⁰ The raising of *-η-* to *-ι-* is probably due to the following nasal (so also Korn & Olsen 2012: 215). Cf. the derivation of Bactr. πριγγο* < **pir-aina-ka-* discussed in §3.2.1 s.v. *prigha*.

⁹²¹ It seems conceivable that σαγγιvo is a derivative from σαγγο* ‘stone’, indirectly attested in personal names (cf. BPN: no. 401 and note also dir.pl. ασαγγε ‘stones’ in SK₄M 13; SK₄A 18; SK₄B 17).

⁹²² The suffix **-aina-* is frequently used in Iranian languages as a “material suffix”, forming adjectives from nouns denoting substances. *-ηγγο/-ιγγο* and its Khotanese equivalent *-īnaa-* also have a more general meaning ‘affected with, related to’ (cf. Degener 1989: 138–152; Korn & Olsen 2012: 205f.). Therefore, if *-ηvo/-ιvo* was also a native Bactrian suffix, its general meaning may also have been ‘related to’, fitting with *-ina* in Niya Prakrit.

to confirm -ṇvo/-ivo as the origin of Niya *-ina*, one would need not only more evidence for this suffix in Bactrian, but also further Bactrian etymologies for Niya Prakrit words containing this suffix *-ina*.⁹²³

Whatever its correct etymology, one can safely conclude that the suffix *-ina* (*-im*) is unlikely to be Tocharian in origin, and this conclusion is sufficient for the purposes of this chapter.

6.4.2 The suffix *-ci*

The appurtenance suffix *-ci* has been treated in §5.2.2. There, I argued against Burrow's comparison with the TA adjective suffix *-ñci* and proposed an alternative derivation from Bactr. -σ(ε)ivo /tśīgə/.

6.4.3 The suffix *-i*

In Niya Prakrit, a common way to derive adjectives from nouns is by deleting the stem vowel *-a* and replacing it with the suffix *-i* < OIA *-ika-* (cf. LKD: §75). A good example is *goṭhi karma* 'work related to the farm', *goṭhi* being a derivation from *goṭha* 'farm, household'.

In his article about "Tocharian C" (1935b: 672), Burrow noted that the use of the suffix *-i* got "much extended compared with ordinary Sanskrit and Prakrit, at the expense of the Tatpuruṣa compound". This observation, in turn, induced Burrow to compare the default Tocharian translation of Indo-Aryan tatpuruṣa compounds by the combination of an adjective and a noun, e.g. TB *pelaikneṣṣe cākār* 'wheel of the dharma' ~ Skt. *dharmacakra* 'idem'.⁹²⁴

It seems, however, unnecessary to assume Tocharian influence on the *i*-suffix. First of all, the more extensive use of compounds in Sanskrit probably had more to do with literary taste than with the actual linguistic situation, as Aśokan Prakrit and the modern languages likewise have a more restricted use of compounds (Bloch 1965: 107). Moreover, if the spread of the *i*-suffix was due to contact influence, there is a more likely source than Tocharian in the form of the Bactrian adjective suffix -ivo /īgə/ < *-iya-ka-. As the usage of -ivo closely resembles that of *-i* in Niya Prakrit (cf. BD II: 217

⁹²³ In case the Bactrian etymology turns out to be correct, it is still not to be included under the heading of "grammatical borrowings" from Bactrian, as the suffix *-ina* never attaches to native words (cf. §5.2.3 for this criterion).

⁹²⁴ In fact, the translation of Sanskrit compounds into Tocharian is more complicated than Burrow presents it. See recently Meunier (2015).

on -iyo), it may have contributed to its spread, although there is still no absolute necessity to maintain that the *i*-suffix underwent foreign influence in the first place.

6.4.4 The feminine marker -s-

Some Niya female PNs of non-Indic origin end in *-(i)sa* (*-(i)śa*). Examples include *Smagasa* (CKD 71), *Apiśa* next to masc. *Apika* / *Apita* (CKD 11), and *Kuñiśa* next to masc. *Kuñita* (CKD 110). Outside personal names, another instance of a feminine marker -s- may occur in the otherwise unexplained adjective *tirsa*.⁹²⁵ This form is twice combined with *vaḍavi* ‘mare’ (CKD 39; 771), whereas the similarly looking *tirśa* by default modifies *aśpa* ‘horse’ (CKD 39; 45; 434; 573). Put differently, *tirsa* is probably the feminine equivalent of masculine *tirśa* (cf. LKD: 95 s.v.).⁹²⁶

Burrow (1935b: 672) included the feminine marker -s- in his list of possible Tocharian elements in Niya Prakrit. Although he made no explicit comparison, Burrow was presumably thinking of the feminine preterite participles in Tocharian. Whereas, for instance, the nom.masc.sg. of the preterite participle of *yām-* ‘to do’ is TA/TB *yāmu* ‘done’, its nom.fem.sg. is TA *yāmus* / TB *yāmusā*.⁹²⁷ Yet, preterite participles are the only place in Tocharian grammar where -s- marks feminines: names borne by females are not characterised in this way, which renders Burrow’s idea unconvincing.

Sims-Williams (1996: 52) observed that “[a] more plausible source can be found in Bactrian, where *-(i)s(a)* is the expected outcome of the Old Iranian feminine suffix **-čī-*” (cf. also Tremblay 2001: 35 fn. 54).⁹²⁸ The Bactrian

⁹²⁵ Sylvain Lévi’s (*apud* Bloch 1937: 52) suggestion that *tirsa* means ‘three years old’ does not receive strong support from the available contexts.

⁹²⁶ In a handwritten note added to his copy of LKD (106), Burrow suggested the adjective *pursa(ka)*, like *tirśa* / *tirsa* used for animals, to be another feminine form containing the same suffix -sa. That *pursa(ka)* could be used for female animals is shown by CKD 383, where the gen.fem.sg. *taya* < *tasyāḥ* ‘her’ is co-referential with an aforementioned *pursaka* camel.

⁹²⁷ On the formation of the Tocharian preterite participles, including the feminine, see Peyrot (2010).

⁹²⁸ Not having spread to the inherited lexicon, the suffix *-(i)sa* (*-(i)śa*) is, however, not to be included among the “morphological loans” from Bactrian into Niya Prakrit studied in Chapter 5 (for this criterion, cf. §5.2.3).

suffix referred to typically occurs as -σο (-ζο after nasals).⁹²⁹ Yet, the Kuṣāṇa Bactrian adjective αβαβσα ‘waterless’ (Ayrtaṃ 4, cited in fn. 374), a feminine counterpart of masc. αβαβγο ‘idem’ < *apāpa-ka-, additionally evidences a more archaic variant -σα. The latter may be the direct source of Niya -(i)sa (-(i)śa), as some Bactrian loanwords into Niya Prakrit were observably borrowed at a time when (certain) final vowels were still preserved (see §4.2.1).

-σα is derived by Sims-Williams (1994: 173) from *-čī+ā- based on a comparison with Sogd. -č / -čī (heavy stems) and -čā / -čyā (light stems) and Khot. -kyā- / -cā- (-gyā- / -jā-) (cf. Sims-Williams 1982: 15 with fn. 15; Degener 1989: 199–208). Alternatively, *-čī- could have been remade into *-čā- in the ancestor of Bactrian by analogy with the feminines in *-ā-.

In either case, -σα presumably stands for /tsǎ/. Unless /ts/ could occasionally be simplified to /s/ in Bactrian (e.g. in certain clusters),⁹³⁰ one consequently has to presume a simplification (and subsequent voicing) of Bactr. /ts/ to Niya -s- / -ś- /z/. If one derives it out of Bactr. παρασο /parātsə/ ‘away’ < *parāčā, Niya paraśa ‘abduction, plundering’ (also 1x with -s-) would be a parallel for this sound substitution (on which see §3.3.2 s.v. paraśa and §4.3.15).

In brief, Sims-Williams’ idea to derive Niya -(i)sa (-(i)śa) out of the Bactrian feminine suffix -σα (later -σο) is to be preferred over Burrow’s comparison with Tocharian.

6.4.5 The plural/collective in -u in pakeyu ‘allotments, shares’

Compare §3.2.3 s.v. paḱe for a rejection of Burrow’s comparison between the plural/collective paḱeyu ‘allotments, shares’ and the rare Tocharian A plural in -u, as in cmolu ‘births’ ← sg. cmol.

⁹²⁹ Cf. e.g. the female PN βαγοαζιασο < *baga-āzāyata-čī- ‘dear to god’ (BPN: no. 45) and the adjective φορομανζο ‘commanding, possessing authority’, seemingly a feminine to *φορομαγγο < *fra-māna-ka-.

⁹³⁰ A comparison with MBactr. ’s /as/ ‘from’ < *hačā should probably be resisted since the occasional spelling of ασο with <σσ> in the newly discovered birchbark letters suggests that this word still had /ts/ in earlier forms of Bactrian. Cf. §2.2.4.2 with fn. 116.

6.4.6 The plurals in *-aṃca*

As first observed by Thomas (1927), in Niya Prakrit, a few nouns can form their dir.pl. in *-aṃca* (12 types; 22 tokens; see below), even when in other contexts, they are attested with the default dir.pl. ending *-a*.

Attestations of this plural formation⁹³¹

aśpaṃca 'horses': CKD 387; 681

uṭaṃca 'camels': CKD 132; 387;⁹³² 665; 681; 696

jaṃdunaṃca 'worms': CKD 565

dajhaṃca 'slaves': CKD 133

paṭaṃca 'silk rolls': CKD 660 (2x)

paśunaṃca 'sheep': CKD 683

bhumaṃca 'lands': CKD 366 (2x); 713 (2x)

makaḍaṃca 'monkeys': CKD 565

mahatvaṃca 'magistrates': CKD 696

śaḍaṃca 'enclosures, vineyards': CKD 85

storaṃca 'horses': CKD 13

striyaṃca 'women': CKD 552 (2x)

Forms in *-aṃca* combine with (i) dir.pl. *ede* 'these';⁹³³ (ii) numerals higher than one;⁹³⁴ and (iii) verbs with unambiguous plural morphology.⁹³⁵ There is consequently no doubt that they are indeed plurals. Leaving aside that *-aṃca* is much less frequently attested than *-a*, it has, however, proved impossible to discern a difference in usage or distribution between the two plurals.⁹³⁶

⁹³¹ I have excluded *valagaṃ ca* (CKD 367, 2x) from this list of attestations, as this probably means 'and a guard' rather than 'guards'. In CKD 797, Lin's (1999: 231) reading *ayanaṃ ca*, theoretically interpretable as a dir.pl. **ayanaṃca* 'villages', is clearly mistaken. Based on the hand copy of CKD 797 in Hasuikē (1996: 307), I would read and translate the relevant sentence as *tuo aṭa naṃdha goṭhaṃmi thaviteṣi* 'you deposited a load of flour in the farm' (cf. also §3.3.2 s.v. *aṭa*).

⁹³² Boyer et al.'s (KD: 139) reading *uṭa ca* can be corrected to *uṭa[m]ca*; on the photograph, one can see a clear trace of a floating anusvāra below the *ṭa*.

⁹³³ CKD 366: *ede bhumaṃca* 'these lands'; 387: *ede uṭa[m]ca* 'these camels'.

⁹³⁴ CKD 660: 4 3 *paṭaṃca* 'seven silk rolls'; *paṭaṃca* 2 'two silk rolls'; 665: *uṭaṃca* 10 'ten camels'. Cf. also CKD 85: *śaḍaṃca sarva* 'all enclosures, vineyards'.

⁹³⁵ CKD 681: *aśpaṃca ... khayitaṃti* 'horses ... ate'; 696: *mahatvaṃca ... kareṃti* 'magistrates ... do'.

⁹³⁶ As is the case with *-a*, *-aṃca* can be used for both the subject and object of a sentence; plurals in *-aṃca* can be definite or indefinite, animate or inanimate; they can occur in both main and sub-clauses; they can be negated or not; they occur both with and without numerals; and so forth.

Another unsolved problem is the etymological derivation of *-aṃca*. Thomas' (1927: 546) proposal to etymologically compare *-aṃca* to the pluralising suffix *ca* / *can* found in later Tibeto-Burman languages is unattractive, as there are no secure parallels for lexical or grammatical borrowings from Tibeto-Burman into Niya Prakrit.⁹³⁷

Burrow (1935b: 673) made an alternative comparison with the Tocharian A nom.pl. in *-āñ*. To account for the evident mismatch between this ending and *-aṃca*, Burrow had, however, to hypothesise that "a palatal consonant might have dropped off at the end [of *-āñ*]". As a parallel for the supposed consonant loss, he pointed to TA *pāñ* 'five' (~ TB *piś*) < PToch. **pāñśa* < PIE **penkʷe* (DTTA: 275). By now, it is nevertheless commonly agreed that *-āñ* comes from the PIE nom.pl. ending **-ōn-es* (so e.g. Pinault 2008: 499). Burrow's proposal is thus phonologically impossible.

More recently, Banti (2000: 3f.) has argued that the plural in *-aṃca* originated in Prakrit-internal developments. He maintained that these plurals resulted from a reanalysis of coordinated acc.pl. forms of masculine *a*-stems of the type *dāsān aśvāṃśca* 'slaves and horses' (ex. mine). First, *dāsān aśvāṃśca* underwent a phonological development to **daśaṃ aśpaṃ ca*. In an unprotected environment, i.e. when no clitic was following, *-aṃ* further developed to *-a*, resulting in **daśa aśpaṃ ca*. Once nominative and accusative merged to become the direct case, **daśa aśpaṃ ca* would, according to Banti, be reanalysed to **daśa aśpaṃca*. A potential motivation for such a reanalysis would be the Niya Prakrit tendency to avoid using *ca* 'and' when coordinating two or more nouns (§6.5.2). Once this process resulted in the creation of a new ending *-aṃca*, it could have spread further to other syntactic environments.

In my view, also Banti's scenario is not compelling. First, one wonders how likely it is that these plurals came about in sequences of nouns coordinated by *ca* 'and'. After all, as Banti writes, Niya Prakrit rarely uses *ca* to conjoin noun phrases. There are moreover only two instances where a plural in *-aṃca* occurs in such a coordinated sequence.⁹³⁸

Besides, if Banti is correct that *-aṃca* originates in the acc.pl. of masculine *a*-stems, this implies that the *u*-stem forms *jaṃdunaṃca* 'worms' (CKD 565) and *paśunaṃca* 'sheep' (CKD 683) are later analogical formations. Yet, if so, it is not entirely clear how one can account for their morphology. According

⁹³⁷ See Barnett (1927) and Thomas (1928) for further debate on this proposal.

⁹³⁸ CKD 13: *vaḍavi storaṃca* 'mares and horses'; 387: *khulaūṭa aśpaṃca* 'camels from the herd and horses'.

to Banti, final nasals should have dropped before the creation of the new ending *-aṃca* (cf. supra). So, to explain the *-n-* in between *-u* and *-aṃca* in the forms just quoted, one would probably need to assume that *-aṃca* was secondarily added to the old acc.pl. *jantūn* and *paśūn*. This assumption contradicts, however, Banti's own chronology.⁹³⁹

Finally, Banti's preference for a language-internal derivation is primarily based on the fact that *-aṃca* most frequently attaches to inherited nouns. A borrowed morpheme, by contrast, is expected first to appear in loanwords before spreading to inherited nouns. Nevertheless, at least one Bactrian loanword is attested with a plural in *-aṃca*, i.e. *stora* (see §3.2.1 s.v.), and the Indo-Aryan etymology of some of the other words combined with *-aṃca* is less secure than Banti seems to believe.⁹⁴⁰ In other words, we should perhaps not too quickly dismiss the possibility that *-aṃca* is a borrowed morpheme after all.

Everything taken together, Banti's proposal needs to be treated with caution too, and a convincing explanation of the Niya Prakrit plurals in *-aṃca* remains to be found. Anyhow, *-aṃca* is unlikely to be Tocharian in origin, so also this morpheme cannot be used as evidence for a Tocharian substrate in Niya Prakrit.

6.5 Syntax

Syntactic arguments were lacking in the original formulation of the "Tocharian C" hypothesis by Burrow, but Banti (2000: 5f.) adduced two syntactic similarities between Tocharian and Niya Prakrit. In this section, I argue that neither of them is necessarily the result of language contact.

⁹³⁹ Irrespective of whether this is diachronically also the correct analysis, *jamdunaṃca* and *paśunaṃca* look more like a gen.pl. followed by *-(ṃ)ca* (cf. gen.pl. *paśuna* < Skt. *paśūnām* in CKD 725).

⁹⁴⁰ First, *uṭa* is probably not the phonologically regular outcome of *uṣtra-*. Given its semantics (cf. §6.2 s.v. *aṃklatsa*), it could be a Bactrian loanword, perhaps from *οτρο /utrə/ < **uṣtra-*, with *-ṣt- to Bactr. -τ- /t/ (SFBG: 47). As there is, however, no parallel for the development of *-ṣtr- in Bactrian, this cannot be proved for now. Second, *śaḍa* 'enclosure, vineyard' is commonly derived from Skt. *śālā-* 'enclosure' (see e.g. LKD: 111 s.v. *masu śaḍā*). Yet, this etymology is not very attractive as *śaḍa* would be the only instance of *-ḍ-* /r/ corresponding to Skt. *-l-*. Third, the etymology of *paṭa* 'silk roll' and its IA cognates remains uncertain (EWAia III: 298), so this may also be a recent loanword.

6.5.1 Group inflection in noun phrases

In Niya Prakrit, case endings only need to be attached to the last element in a noun phrase. This noun phrase may consist of the combination of (i) an adjective or a pronoun with a noun; (ii) a noun in apposition with another noun; or (iii) two or more coordinated nouns (LKD: §136; Jamison 2000: 68 fn. 22; Barchi & Peschl 2022: 413 fn. 21).

Banti (2000: 5) compared this phenomenon to Tocharian group inflection citing as an example *kokleṃ oṅkolmaṃnpā* ‘with chariots and elephants’ (THT 362 b9).⁹⁴¹ In this example, the comitative ending *-mpā*, here written as *-ṃnpā*, is only visible in *oṅkolmaṃnpā*, whereas *kokleṃ* is obl.pl. Such group inflection occurs in various languages from the region, including Sogdian and Tibetan. It may hence be an areal feature.

Nevertheless, Niya Prakrit group inflection does not need to result from contact-induced change. Though it has not always been described as such, there are instances of the same phenomenon in various forms of MIA, including South Asian Gāndhārī and Buddhist Hybrid Sanskrit.⁹⁴² Incidentally, group inflection occurs relatively frequently in Apabhraṃśa (de Vreese 1959), which, like Niya Prakrit, represents a more vernacular and grammatically more advanced type of MIA. In addition, some Prakrit grammarians, e.g. Rāmaśarman in his *Prākṛtakalpataru* (1.6.2), prescribe group inflection as a characteristic feature of the language. This counts as another argument that Niya Prakrit’s group inflection may be due to language-internal developments.

6.5.2 Asyndetic coordination of noun phrases

As mentioned in §6.4.6, Niya Prakrit prefers asyndetic coordination of noun phrases. The conjunction *ca* ‘and’, so frequently found in other forms of early Indo-Aryan, including South Asian Gāndhārī, has largely fallen out of use.

According to Banti (2000: 5f.), one should compare this feature of Niya syntax to the use of asyndetic constructions in Tocharian, e.g. in the TB example THT 31 b6 loc.pl. *riṃne k_uṣaiṃne ostwane* ‘in/to towns, villages, and houses’. Yet, once again, there is no need to invoke external influence. The conjunction *ca* has hardly left a trace in NIA (cf. Bloch 1965: 310; CDIAL: no.

⁹⁴¹ Sieg, Sieglings & Schulze (TG: 205ff.) discuss Tocharian A group inflection in detail. The situation in Tocharian B is largely comparable.

⁹⁴² See Caillat (1990: 11ff.; 23 n. 18) and von Hinüber (2001²: §295) with the references listed there.

4533), and its infrequency in Niya Prakrit may merely be an early sign of its general disappearance.⁹⁴³ The more colloquial nature of some of the Niya Prakrit documents may have acted as a contributing factor in this regard.

6.6 Conclusions and open questions

To conclude, hardly any argument so far adduced in favour of “Tocharian C” stands closer scrutiny. Some of the supposedly Tocharian features in Niya Prakrit are more easily explained as language-internal developments; others are probably due to contact with Bactrian and thus in line with the conclusions of Chapters 3–5. Of the evidence cited so far, the official title *kitsaïtsa* has the best chance of being of Tocharian origin. This one word can, however, not bear the burden of proving a Tocharian substrate. As official titles can be borrowed quite easily, *kitsaïtsa* may merely be a linguistic vestige of the contacts between the southern and northern parts of the Tarim Basin which have to be assumed on non-linguistic grounds in any case (Høisæter 2020: 367–369).

The question remains which language the native people of the Shanshan kingdom spoke. As it would be historically unlikely that there were more than a few speakers of Bactrian in the region before Kuṣāṇa times, the Bactrian elements in Niya Prakrit should not make us believe that Bactrian was the substrate language spoken by the Shanshan people.⁹⁴⁴ A more sensible, though admittedly not quite exciting, conclusion would be that the available evidence does not permit us to deduce with an acceptable degree of certainty which language was spoken. The onomastic record in Niya Prakrit possibly contains names that find their etymology in the language of the Shanshan people. Yet, building large-scale conclusions on such inherently ambiguous evidence would be methodologically too hazardous.

Recently, Peyrot (2018b: 275–277) has hypothesised that the Aqtala archaeological culture, which spread over large parts of the Tarim Basin from about 1000 BC to 650/550 BC, can be identified with the arrival of speakers of Proto-Tumshuqese-Khotanese to the region.⁹⁴⁵ Based on this

⁹⁴³ Cf. the disappearance in Niya Prakrit of the particle *hi* ‘for’, which is still used in some other forms of Gāndhārī (Ollett 2022: 274). Another parallel is the loss of enclitic personal pronouns discussed in §5.4.10.2.

⁹⁴⁴ Even during Kuṣāṇa times, it seems unlikely that a large part of the population had shifted their language to Bactrian.

⁹⁴⁵ Dragoni’s examination of Proto-Tumshuqese-Khotanese loanwords in Tocharian has added linguistic evidence to this hypothesis (2023b: 254f.).

identification, he suggests that the area east of Khotan and the Keriya river “was Iranian-speaking before Middle Indian was introduced there”, although “the details and consequences of this hypothesis need further study” (Peyrot 2018b: 276).⁹⁴⁶ In other words, the Shanshan language may have been closely related to Tumshuqese and Khotanese. However, also this theory, while attractive in itself, has yet to find linguistic support in Niya Prakrit or elsewhere. Given our still imperfect knowledge of the linguistic prehistory of the Tarim Basin, caution is therefore called for.

⁹⁴⁶ Peyrot’s theory should not be confused with Barchi and Peschl’s hypothesis of a Khotanese substrate in (an earlier form of) Niya Prakrit, against which I argued in §5.4.

CHAPTER 7 A sociolinguistic scenario

This chapter briefly addresses the fourth research question formulated in §1.2: which sociolinguistic scenario accounts best for the Bactrian influence on Niya Prakrit? In §7.1, the conclusions reached in Chapters 3–6 are summarised. Based on them, I will in §7.2 distinguish two levels of language contact, viz. (i) a casual form of contact between Bactrian and Gāndhārī at large that resulted from the Kuṣāṇa conquest of Gandhāra, and (ii) a more intense type of contact between Bactrian and the predecessor of Niya Prakrit. §7.3 argues that this second level of contact is due to Kuṣāṇa officials using dialects of Gāndhārī for written administration, a hypothesis which, as pointed out in §7.4, receives further support from a comparison with the Old Persian influence on Achaemenid Official Aramaic.

7.1 Summary of Chapters 3–6

As Chapters 1–2 were introductory, the actual investigation into traces of language contact in Niya Prakrit started in Chapter 3. In this chapter, I aimed to compile an updated corpus of Iranian loanwords in Niya Prakrit, in which the words studied were classified according to their most likely donor language and the trustworthiness of the etymology. Importantly, of the 97 words with a possible Iranian etymology, it turned out that 56 were probably, and another 24 potentially borrowed from Bactrian (respectively 57,7% and 24,7%). Thus, the Bactrian influence on Niya Prakrit appears more extensive than previously realised, while influence from other Iranian languages seems to have been restricted. The corpus of foreign names in the Niya documents remains to be examined in depth. Yet, we saw that some previously unetymologised names could likewise originate in Bactrian.

Chapter 4 concerned Iranian loanwords in Niya Prakrit as well. The focus lay, however, no longer on individual etymologies but on the chronological layering of these loans and the phonology, morphology, and semantics of loanwords securely or possibly ascribable to a Bactrian source. We arrived, amongst others, at the following conclusions: the Bactrian loanwords were adopted in the Kuṣāṇa period (1st–3rd century AD), presumably before Niya Prakrit was introduced to the Tarim Basin; overall, these loans are well integrated phonologically and morphologically; and the majority of them are administrative, political, military, and economic terms.

Chapter 5 was a non-exhaustive study of grammatical borrowings from Bactrian. I first examined the Niya Prakrit appurtenance suffixes *-ani* and *-ci* and interpreted both as loans from Bactrian. Subsequently, I concluded (i) that the reciprocal pronoun *eka b(h)iti*, literally ‘one another’, is calqued from Bactr. *ωγο βιδδιγο* ‘idem’, less likely from a cognate in another Iranian language and (ii) that morphosyntactic parallels between the Niya Prakrit and Bactrian reflexives suggest them to have been mutually intertranslatable. Finally, I proposed that the Niya preterite and the verbal adj. in **-taka-* are instances of “contact-facilitated grammaticalisation” inspired by morphologically comparable formations in Bactrian. Barchi and Peschl’s (2022) proposal that the agent-orientation of the Niya preterite points to Khotanese substrate influence was shown to be unlikely.

Chapter 6 dealt with Burrow’s idea that Niya Prakrit underwent substrate influence from “Tocharian C”, an undocumented language which Burrow considered to be the native language of the Shanshan people. Critically reviewing the lexical, phonological, morphological, and syntactic arguments adduced to support Burrow’s hypothesis, I aimed to show that none is compelling proof of a Tocharian substrate in Niya Prakrit. We further saw that some loanwords and grammatical features previously ascribed to the Shanshan substrate are more likely attributable to Bactrian. It obviously cannot be excluded that the undocumented Shanshan language did exert substrate influence on Niya Prakrit. Yet, so far, it has proved impossible to safely ascribe specific loanwords or grammatical features in Niya Prakrit to this presumed substrate or to determine to which language family the Shanshan language would belong.

Based on the various observations made in Chapters 3–6, one can draw a more general conclusion: language contact between Bactrian and Niya Prakrit was more extensive than has been recognised so far, whereas, according to my findings to date, contact with other languages (Iranian and non-Iranian) seems to have been limited to the occasional adoption of loanwords. The next question is how this Bactrian influence should be defined in sociolinguistic terms.

7.2 Two levels of language contact

To assess the intensity of a particular contact situation, Thomason and Kaufman (1988: 74–76) have developed a borrowing scale in which they distinguish five stages of contact: (i) casual contact; (ii) slightly more intense contact; (iii) more intense contact; (iv) strong cultural pressure; and (v) very

strong cultural pressure. Adopting this model, I will now argue that we should distinguish between two levels of contact: (i) a casual contact situation between Bactrian and Gāndhārī at large (stage 1); (ii) a more intense contact between Bactrian and the predecessor of Niya Prakrit (stage 2 or 3).

A stage 1 type of contact is characterised by lexical borrowing, especially the adoption of content words that belong to the non-basic vocabulary of a language (Thomason & Kaufman 1988: 77f.). Since the Bactrian loanwords in Niya Prakrit are typically cultural borrowings—administrative, political, military, and economic terms; textiles and clothing; or fauna, flora, and food—one could think it sufficient to posit a casual contact situation, i.e. stage 1.

If, however, it is accepted that Bactrian influence on Niya Prakrit was not limited to lexical borrowing (cf. Chapter 5), a stage 1 type of contact will not suffice. Borrowing grammatical morphemes like the suffixes *-ani* and *-ci* and the occurrence of slight structural borrowing, as with the reciprocal pronoun *eka b(h)iti* ‘one another’ or the Niya preterite formations, would suggest that the Bactrian influence on Niya Prakrit represents the second or third stage of Thomason and Kaufman’s borrowing scale (1988: 78–83).⁹⁴⁷

Significantly, the reciprocal pronoun *eka b(h)iti*, the synthetic preterite, and the suffixes *-ani* and *-ci* are restricted to Niya Prakrit; they are not (yet) attested in other forms of the Gāndhārī language. Although the Bactrian elements in these types of Gāndhārī should still be studied systematically, traces of structural influence have not yet been detected there. Yet, the same cannot be said about loanwords: some of the Bactrian loanwords in Niya Prakrit likewise occur in South Asian Gāndhārī (see §4.2.1), and there are Bactrian loans (including names) in Gāndhārī inscriptions of the Kuṣāṇa period not occurring in Niya Prakrit but covering the same type of semantic domains.⁹⁴⁸

⁹⁴⁷ Thomason and Kaufman (1988: 74) mention the addition of foreign derivational affixes to native vocabulary as one of the features that are typical of stage 3, but not stage 2. If the Niya suffixes *-ani* and *-ci* are loans from Bactrian (§5.2), they would be examples of this kind. I nonetheless hesitate to use these suffixes as the sole evidence that the contact between Bactrian and Niya Prakrit was truly of a stage 3 rather than a stage 2 type; in any case, the difference between these two stages is one of degree, not of kind.

⁹⁴⁸ Falk (2010b: 76–79 = 2013a: 247–250) gives an overview of Kuṣāṇa titles and names attested in Gāndhārī inscriptions and other Indian sources. For Iranian loanwords in Indian languages, see now also Ollett (2024: 89–98), who likewise

Because structural influence from Bactrian is only visible in Niya Prakrit and not in other forms of Gāndhārī, I would like to distinguish between two levels of language contact, one between Bactrian and Gāndhārī as a whole, the other between Bactrian and the ancestor of Niya Prakrit.

The first would have been a casual contact situation (Thomason and Kaufman's stage 1), in which Bactrian functioned as a politically dominant and prestigious superstrate language because of the conquest of Gandhāra in the early-mid 1st century AD by the Kuṣāṇa emperor Kujula Kadphises. As a result of his conquest, Gandhāra was ruled by the Kuṣāṇa dynasty for about two centuries.⁹⁴⁹ During this period, a Kuṣāṇa administration was established, which could explain why Bactrian administrative and political vocabulary, e.g. bureaucratic titles, entered various dialects of Gāndhārī, not only the ancestor of Niya Prakrit.⁹⁵⁰ The Kuṣāṇa kings also facilitated trade over the land routes connecting northern India with Bactria and other parts of Central Asia.⁹⁵¹ Textile products produced in Bactria could, together with their Bactrian names, have spread via these trade routes. Since travelling caravans needed pack animals for transport, a similar argument may be made about an animal term such as *stora* 'large animal, horse, camel' (cf. Schoubben 2022b: 353).

Under this scenario, native speakers of Gāndhārī would have borrowed words from Bactrian because of the prestige enjoyed by the latter as a superstrate language spoken by a politically dominant elite. In other words, the borrowing mechanism responsible for these loanwords would be adoption rather than imposition.⁹⁵²

The contact between Bactrian and the predecessor of Niya Prakrit would be a second, (slightly) more intense contact situation that resulted in more

emphasises that these loanwords are often administrative and/or military terms.

⁹⁴⁹ On the conquests of Kujula Kadphises and the Kuṣāṇa rule in South Asia, see e.g. Sims-Williams & Cribb (1996: 107); Neelis (2011: 132–135); Falk (2015b: 88); Benjamin (2018: 185).

⁹⁵⁰ On the administration of the Kuṣāṇa empire, see in more detail §7.3.

⁹⁵¹ Cf. Neelis (2011: 144): "From about the second half of the first century CE to the middle of the third century CE, the Kuṣāṇas maintained control over important nodes on a network of overland routes connecting Bactria in western Central Asia with the heartland of northern India." The role of the Kuṣāṇa empire in facilitating long-distance trade is also highlighted in Benjamin (2018: 176ff.).

⁹⁵² For the difference between these two mechanisms, see §3.1.1 and the references mentioned there.

loanwords as well as structural borrowings (Thomason and Kaufman's stage 2 or 3). A hypothesis as to why the latter contact was more intense and how we should conceptualise it will be offered in the next section.

7.3 An administrative language of the Kuṣāṇa empire

In my opinion, the Bactrian influence on Niya Prakrit should be interpreted against the backdrop of the Kuṣāṇa administration system. The Kuṣāṇa dynasty ruled over a vast empire, which brought with it a need for an efficient official administration of its culturally and linguistically diverse territories. Although our knowledge of how this administration worked is sketchy at best, it has been plausibly suggested that, by taking over a patchwork of already existent regional administrations, the Kuṣāṇas continued pre-existing administrative traditions (Bracey 2020: 115–125). Dating formulae were, for instance, not standardised in the different parts of the empire, and local eras in use before the Kuṣāṇas survived the change of dynasty (Bracey 2020: 128f.).

Gāndhārī literacy goes back at least to Aśokan times (3rd century BC), and the continuation of formulaic phrases and writing practices from Achaemenid Official Aramaic, the earlier chancellery idiom of the region,⁹⁵³ suggests that Gāndhārī was used for administrative purposes in, for example, monasteries long before the Kuṣāṇa conquest. When the Kuṣāṇa rulers took over previously established administrative structures, it would have fitted their pragmatic policy likewise to continue the use of Gāndhārī as an administrative language (cf. Harmatta 1994: 434).

Indeed, it is widely accepted that Gāndhārī was used for official purposes by the Kuṣāṇas.⁹⁵⁴ There are good reasons to think so: Gāndhārī inscriptions have been found in the heartland of the Kuṣāṇa empire in Afghanistan, where

⁹⁵³ For the Aramaic heritage in Gāndhārī, see §2.1.1 and the references cited there.

⁹⁵⁴ “The language used by the Bactrian-speaking Kushans in administrative documents was Prakrit [i.e. Gāndhārī]” (Hitch 2009: 19); “It was ... particularly under the Kuṣāṇas in the first to third centuries A.D. that Gāndhārī came to be ... an international language of administration and diplomacy” (Salomon 2011b: 180); “The Gandhari Prakrit in its Kharoshthi script ... came to dominate the administration of the Kushan Empire” (Baumer 2014: 52). See also Cribb (1998: 86).

Bactrian was the main vernacular;⁹⁵⁵ when conquering Gandhāra in the early-mid 1st century AD, Kujula Kadphises continued to mint coins with Kharoṣṭhī script legends;⁹⁵⁶ the Bactrian inscription erected by Vima Taktu in Dasht-e-Nawur is accompanied by a Gāndhārī version (CKI 231); a ledger recording gifts of Vima Kadphises to a Buddhist monastery is written in Gāndhārī (CKM 297; Allon 2019); and so is the Khalatse inscription (CKI 62; Falk 2015b: 109), which could have officially demarcated the northeastern extent of the Kuṣāṇa dominions at the time of Vima Kadphises (Skinner 2017: 63f.; Salomon 2024: 524).⁹⁵⁷

More than likely, Niya Prakrit is an offshoot of a type of Gāndhārī used for administrative documents by the Kuṣāṇas. This conclusion is, *inter alia*, supported by the official titulature of the Shanshan kings, which, especially in the earliest Niya documents, undoubtedly continues a Kuṣāṇa prototype (see Brough 1965: 596f. = 1996: 291f.). If the ancestor of Niya Prakrit was used by the Kuṣāṇas, this may also explain some of the palaeographic peculiarities of Niya Kharoṣṭhī; the modified akṣara 𑀭𑀸𑀓𑀾, for instance, is so far only attested in the Niya documents and on Kuṣāṇa coins (cf. Glass 2000: 98; Falk 2009: 111 = 2013a: 190) and may have been created by the Kuṣāṇa chancellery to represent the Bactrian sound /w/ (cf. §4.3.22).⁹⁵⁸

Orthography and grammar are also somewhat more standardised in Niya Prakrit than in other forms of Gāndhārī, and its phraseology is characterised by formulaic phrases, which suggest that it has been used as a chancellery idiom for a considerable time. Indeed, in the form as we have it, Niya Prakrit

⁹⁵⁵ CKI 50; 152; 155; 159; 174; 179; 181–183; 223; 227; 231; 233; 238; 362; 368; 370; 447; 448; 455; 460; 481; 508–511; 542; 551; 557; 600; 688–690; 698–706; 1118. Cf. Salomon (2011b: 181f.).

⁹⁵⁶ Adopting Gāndhārī as an administrative language may have happened concomitantly. The use of the Kharoṣṭhī script on Kuṣāṇa coins was discontinued during the reign of Kaniṣka I in the 2nd century AD, but this does not prevent that accounts, letters, and contracts continued to be written in Gāndhārī.

⁹⁵⁷ Kuṣāṇa inscriptions in Kharoṣṭhī script have been found as far east as Mathura (CKI 48; 49; 157; 440), but most of the contemporary inscriptions from this findspot are in Epigraphical Hybrid Sanskrit written in Brāhmī script.

⁹⁵⁸ Some of the ligatures not found in other Kharoṣṭhī sources (collected in Glass 2024), e.g. -pg- (~ Bactr. -βγ-) and -tg- (~ Bactr. -δγ-), may also have been developed by the Kuṣāṇas. One could make the same argument about the Niya Kharoṣṭhī sign 𑀹𑀸𑀓𑀾 *kṣa*, if Hitch (1984: 199f.; cf. also Brough 1962: 72f.) is correct that 𑀹𑀸𑀓𑀾 *kṣa* developed from an earlier conjunct 𑀹𑀸𑀓𑀾𑀭𑀸𑀓𑀾 *khkṣa* (e.g. attested in the *Khotan Dharmapada*), and both signs were originally intended to write the Iranian cluster xš.

probably was not anybody's native language, even when we should not dismiss it as an artificial hybrid jargon (Jamison 2000: 64f. fn. 7 *contra* Fussman 1989: 440). It is therefore conceivable that (the ancestor of) Niya Prakrit was also used by Kuṣāṇa officials, who had to fulfil official duties in Gandhāra and lived there, but whose mother tongue was Bactrian.⁹⁵⁹

Against this background, it becomes understandable why the ancestor of Niya Prakrit underwent more profound influence from Bactrian than other types of Gāndhārī seem to have. The many administrative and political terms borrowed may have belonged to an institutionalised legal code in Bactrian authorised by the Kuṣāṇa dynasty. Since exact equivalents for these terms were not available in Gāndhārī, they had to be adopted as loanwords from Bactrian, which, as the official language of the Kuṣāṇa dynasty, should at least have been a spoken medium in the imperial chancellery.⁹⁶⁰

If it is accepted that native speakers of Bactrian used Niya Prakrit as a chancellery idiom as well, morphological and syntactic convergences become understandable too. The morphological parallels between the Bactrian and Niya preterite or the mutual intertranslatability of the Bactrian and Niya reflexives would have made it easier for speakers of Bactrian to learn and eventually use Niya Prakrit as a second language for administrative purposes.

The exact modalities of the type of bilingualism assumed here await a more detailed investigation, as they are hard to disentangle. Loanwords from Bactrian found both in Niya Prakrit and South Asian Gāndhārī or another

⁹⁵⁹ Some Iranian names occurring in Indian inscriptions can also be linked to Kuṣāṇa administrators working in these parts of the empire (cf. Falk 2010b: 81 = 2013a: 252). Ollett (2024: 85) likewise postulates the existence of an "Iranicised" Gāndhārī employed by speakers whose native tongue was an Iranian one. As noted in §7.1, it should still be investigated how many foreign names in the Niya documents can be Bactrian in origin and if people having Bactrian names also functioned as scribes.

⁹⁶⁰ Salomon (2011b: 187), too, connects the presence of Iranian loanwords in Gāndhārī, including Niya Prakrit, to its being employed as an administrative language by Iranian-speaking dynasties such as the Kuṣāṇas. For the idea that Bactrian was used as a spoken medium in the imperial administration, cf. Tavernier's (2017: 344–347) argument that Old Persian loanwords and calques in Aramaic, Elamite, and Demotic imply that Old Persian was used as a non-written administrative language of the Achaemenid empire. More parallels between the sociolinguistics of the Kuṣāṇa and Achaemenid empires are given in §7.4.

Indic language are, as noted in §7.2, probably examples of adoptions by native speakers. Yet, it does not follow from this that all the Bactrian elements in Niya Prakrit are due to adoption from a prestigious superstrate. There could also be instances of imposition from Bactrian-speaking scribes who had imperfectly learnt Niya Prakrit and, for example, calqued their reciprocal pronoun $\omega\gamma\omicron\beta\iota\delta\delta\iota\gamma\omicron$ ‘one another’ as Niya *eka b(h)iti* ‘one another’. In this case, Bactrian would not be the superstrate but the substrate language.⁹⁶¹

7.4 A comparison with Achaemenid Official Aramaic

The idea that the use of Gāndhārī for administrative purposes by Kuṣāṇa officials was responsible for the Bactrian influence visible in Niya Prakrit can be strengthened further by comparing the language policy of the Achaemenid empire and the role played therein by Achaemenid Official Aramaic.⁹⁶² The official language of the Achaemenid dynasty was Old Persian, an Iranian language documented on monumental inscriptions commemorating politically important events. Yet, Aramaic served as a nation-wide chancellery language for official correspondence, legal documents, financial accounts, and so forth.⁹⁶³ Other languages spoken in the empire, such as Elamite or Demotic, were used for bookkeeping at a more local level of the administrative structure.

The language policies of the Kuṣāṇa and Achaemenid empires have been compared to each other by Tassob (2018: 74f.). Drawing attention to the Bactrian legends on coins that were used throughout the Kuṣāṇa empire, Tassob emphasises the use of Bactrian as a nation-wide official language. She

⁹⁶¹ A future study on phonological influence from Bactrian on Niya Prakrit may help to clarify this issue, as phonology is frequently affected in an imposition situation (cf. Haspelmath 2009: 50 and see Matras 2020²: 241–253 for a general treatment of contact-induced changes in phonology). A possible example of substratal phonological influence from Bactrian and other Iranian languages on Niya Prakrit is writing unaspirated consonants where aspirated ones are expected historically (cf. §2.1.3 and §5.1.2 with further ref.).

⁹⁶² The term “Achaemenid Official Aramaic” is taken from Gzella (2015: 158–160). Other names for the same language are “Official Aramaic”, “Imperial Aramaic” (calqued from German *Reichsaramäisch*), or “Achaemenid Imperial Aramaic” (Folmer 2011: 577f.). On the use of different languages in the administration of the Achaemenid empire, see e.g. Tavernier (2017).

⁹⁶³ On the available text corpus in Achaemenid Official Aramaic, see e.g. Folmer (2011: 588–590) and Gzella (2015: 165–168; 2023: 156–171; 177–183).

also compares the use of Aramaic as the *lingua franca* of the Achaemenids. However, Aramaic was not the official language of the Achaemenid dynasty but a language used for official administration in different parts of the empire. Therefore, the role played by Bactrian in the Kuṣāṇa empire is, I suggest, more closely paralleled by that of Old Persian in Achaemenid times; like Old Persian, Kuṣāṇa Bactrian was the official language of the ruling dynasty;⁹⁶⁴ used in their stylistically refined inscriptions;⁹⁶⁵ and only understood by people in the heartland of the empire, not in conquered territories.

Whether Kuṣāṇa Bactrian was also used to write official correspondence and financial accounts remains uncertain because all the administrative texts in Bactrian discovered so far date from after the Kuṣāṇa period. If Bactrian was used in the written administration of the Kuṣāṇa empire, this does, however, not invalidate the comparison with Old Persian, for at least one administrative tablet in Old Persian has been discovered in the Persepolis archive (Stolper & Tavernier 2007; Tavernier 2017: 343).

Achaemenid Official Aramaic can be more fruitfully compared to Gāndhārī in its function as a chancellery language of the Kuṣāṇa empire. Salomon (2011b: 187) aptly remarks that “in both cases, what was originally (like all languages) a local dialect became, through various accidents of history and geography, the administrative language of a vast super-regional empire”. With its written tradition tracing back to Aśokan times, Gāndhārī was probably used for administrative purposes long before the Kuṣāṇa dynasty ruled over Bactria and conquered Gandhāra (cf. §7.3). As the Achaemenids did with Aramaic, the Kuṣāṇa rulers took over an already existing administrative tradition in a language that was spoken by a significant part of the population of their empire.⁹⁶⁶ For the Kuṣāṇa officials, Gāndhārī was not their mother tongue, but nor was Aramaic the native

⁹⁶⁴ Bactrian may have taken over its function as the official language of the Kuṣāṇa empire from Greek during the reign of Kaniška I (cf. e.g. Fussman 1976; Sims-Williams & Cribb 1996: 110f.; Cribb 1998).

⁹⁶⁵ The phraseology of the Old Persian and Kuṣāṇa Bactrian inscriptions likewise resembles each other (Sims-Williams & Cribb 1996: 83; Skjærvø 1998: 654–656).

⁹⁶⁶ After all, “it would have been an obvious decision for the chancellery of any newly-emerging imperial power to embrace such an already widely-used means of communication and incorporate its infrastructural underpinnings, such as scribal schools and administrative centres, rather than to replace them” (Gzella 2015: 162).

language of Achaemenid administrators (cf. e.g. Gzella 2023: 146–149). Achaemenid Official Aramaic may have been “a written norm to which no spoken variety of Aramaic corresponded exactly” (Gzella 2015: 164), precisely how Niya Prakrit and its immediate predecessor may have been a more standardised form of Gāndhārī only used for administrative texts.⁹⁶⁷

Unsurprisingly given these parallels, the semantics of the Old Persian loanwords in Achaemenid Official Aramaic resemble those of the Bactrian loans in Niya Prakrit. In §4.5.2, we saw that “administrative, political, military, and economic terms” make up the lion’s share of the Bactrian loanwords in Niya Prakrit. The same holds for the Old Persian loans in Aramaic (Folmer 2011: 595; Gzella 2015: 179f.; Tavernier 2020: 77; 82).⁹⁶⁸ Examples include Aram. *ʾzgnd* ‘messenger’ ← OP **azganda-*; *hmrkr* ‘accountant’ ← **hamāra-kara-*; *hndyz* ‘garrisoned’ ← **han-daiza-*; *hndrz* ‘instruction, order’ ← **han-darza-*; *krtnk* ‘bodyguard’ ← **kāra-tanū-ka-*; *ptgm* ‘message, report’ ← **pati-gāma-*; *ptp* (also *ptp*; *ptw*) ‘ration’ ← **piθfa-*; and *ʾsprn* ‘in full, entire’ ← **us-prna-*.

In addition, Niya Prakrit borrowed words for “textiles and clothing”, “fauna, flora, and food”, and “emotions and values” from Bactrian (§4.5.3–4.5.5). These semantic domains are likewise represented among the Old Persian loans in Aramaic, as can be exemplified by Aram. *ʾkrst*, a type of garment ← OP **ā-kṛsta-* (textile); *ʾspmng* ‘horse-hemp’ ← **aspa-manga-* (plant name); *dwg* ‘yoghurt, sour milk’ ← **dūga-* (food); and *yʾsšt* ‘in the most desirable manner’ ← **yāsišta-* (value).

As with the Bactrian influence on Niya Prakrit, the Old Persian influence on Achaemenid Official Aramaic was not restricted to loanwords. There is additional evidence that Old Persian expressions and idioms were being calqued into Aramaic; the use of Aram. *ʾhr* ‘then, afterwards’ in Achaemenid-period texts has, for instance, been argued to be modelled after OP *pasāva*

⁹⁶⁷ A minor difference between Achaemenid Official Aramaic and Gāndhārī is that the latter was never used throughout the whole territory of the Kuṣāṇa empire; cf. e.g. the use of Epigraphical Hybrid Sanskrit rather than Gāndhārī in the Kuṣāṇa inscriptions from Mathura, and note Strauch (2012: 164 fn. 32): “What we know of the language policy [of the Kuṣāṇa empire] seems to indicate that the language and script of the respective region was used in administrative affairs”.

⁹⁶⁸ For an up-to-date overview of the Old Persian loanwords in Achaemenid Official Aramaic, see Tavernier (2020: 77–82), especially his tables and fn. 6. The examples given below have been taken from there.

‘idem’.⁹⁶⁹ Morphosyntactic influence has been posited too, a plausible case being the occasional occurrence in Achaemenid Official Aramaic of a word order object-infinitive which is atypical for a Semitic language but the default pattern in Old Persian.⁹⁷⁰

The most well-known example of Old Persian influence on Aramaic morphosyntax is the *qṭyl l-* resultative construction, which is generally assumed to be based on the Old Persian *manā kṛtam* construction.⁹⁷¹ This example is particularly relevant when assessing language contact between Bactrian and Niya Prakrit, as it provides a parallel for the hypothesised Bactrian influence on the Niya preterite and the resultative constructions involving the verbal adj. in **-taka-*.

To summarise, the influence exerted by Old Persian on Achaemenid Official Aramaic is in many respects comparable to the Bactrian influence on Niya Prakrit. A plausible reason for these commonalities is that Achaemenid Official Aramaic and the predecessor of Niya Prakrit fulfilled a similar role in respectively the Achaemenid and the Kuṣāṇa empire, i.e. that of a chancellery language.

⁹⁶⁹ For a list of Old Persian expressions and idioms calqued into Aramaic, including *ʾhr*, see Tavernier (2017: 344–347; 2020: 84–87).

⁹⁷⁰ On the word order object-infinitive in Achaemenid Official Aramaic, see recently Folmer (2023: 343–345), who notes that “it is especially frequent when the object of the infinitive is a loanword from Old Persian, which can be interpreted as a clear clue to the origin of this specific word order”.

⁹⁷¹ Cf. e.g. Gzella (2004: 184–194), Ciancaglini (2008: 30–37), and Coghill (2016: 162ff.).

CHAPTER 8 Concluding remarks

This monograph set out to investigate traces of language contact in Niya Prakrit: loanwords, borrowed morphemes, and grammatical phenomena that could be contact-induced. The presence of Iranian loanwords had long been apparent, and, over the past decades, it became clear that the once barely attested Bactrian language is one source of Iranian loanwords in Niya Prakrit. A novel conclusion of this study is that the majority of the previously identified Iranian loanwords in Niya Prakrit has or could have been adopted from Bactrian. Another of its results is the identification of formerly unrecognised loans from Bactrian (Chapter 3). Thus, Bactrian influence on Niya Prakrit seems to have been more intense than realised so far—especially if one further accepts that the influence was not limited to loanwords but also manifested itself in the adoption of grammatical morphemes (the suffixes *-ci* and *-anī*) and structural influences, e.g. on the Niya preterite (Chapter 5).

Since administrators of the Shanshan kingdom used Niya Prakrit as a chancellery language, it would be a reasonable inference that also their native language exerted influence on the vocabulary or grammar of Niya Prakrit. However, such influence has never been positively proved, and Burrow's proposal that the otherwise undocumented Shanshan substrate language was a form of Tocharian rests on questionable ground (Chapter 6). More generally, one cannot easily find loanwords or foreign-looking grammatical features whose adoption into Niya Prakrit is securely datable to after the spread of the latter to the Tarim Basin, an occasional loanword from Khotanese left aside (§4.2.5).

Most of the Bactrian loanwords are administrative, political, military, and economic terms. They probably were borrowed when the Kuṣāṇa dynasty (1st–3rd century AD) conquered Gandhāra and other parts of northern India (Chapter 4). That the Bactrian influence on Niya Prakrit seems more profound than on other varieties of Gāndhārī is explainable when assuming that the predecessor of Niya Prakrit was used as a chancellery language by the Kuṣāṇa dynasty, whose official language was Bactrian. Put differently, the ancestor of Niya Prakrit would be comparable to Achaemenid Official Aramaic, which has undergone the same type of influence from Old Persian as Niya Prakrit from Bactrian (Chapter 7).

Because my conclusions are not affected by them, I intentionally put aside two contentious issues, viz. (i) the question whether the Kuṣāṇa dynasty ever ruled over the Tarim Basin and (ii) the original homeland of Niya Prakrit.

Direct rule over (parts of) the Tarim Basin by the Kuṣāṇa dynasty used to be more widely accepted (see e.g. Brough 1965 = 1996: 276–308; Pulleyblank 1968: 254f.). These days, the main proponent of this theory is Doug Hitch, who argues that the use in the Tarim Basin of Gāndhārī as an administrative language containing Bactrian loanwords and legal formulae “implies political control ... and for a long enough period for a legal tradition to take root” (Hitch 2009: 12).

Although Kuṣāṇa rule over the Tarim Basin is not inconceivable, there is but meagre support for it from archaeology and Chinese historical texts (Høisæter 2017: 81f.; Vorderstrasse 2020: 186–191). There also is a viable alternative. Høisæter (2017: 87–90; cf. also 2020: 124–131) notes that Latin literacy spread to Scandinavia and Ireland and Chinese literacy to Japan, even though these regions were not subject to direct political control from the Roman and Chinese empires, respectively. He therefore hypothesises a scenario whereby long-term interregional exchange networks between the Kuṣāṇa empire and the western Tarim Basin would have caused the introduction of Gāndhārī literacy to the Tarim Basin (cf. also §5.4.3; §5.4.7).

The hypothesis that the Kuṣāṇas ruled over the Tarim Basin and Høisæter’s alternative proposal should both be thoroughly re-examined. Yet, if one accepts that Bactrian influenced Niya Prakrit before the latter spread to the Tarim Basin, the exact modalities of this spread are inconsequential for the overall conclusions of this book.

Another unresolved issue is where the ancestor of Niya Prakrit was originally spoken. According to Burrow (1936: 434f.), its original home was located “to the west of the Indus round Peshawar, which was the centre of the Kushan dominions” (cf. also Kogan 2017: 229; 235f.). A possible alternative would be that Niya Prakrit originated in the Gilgit-Baltistan area, a region where Gāndhārī inscriptions have been found⁹⁷² and which is connected to the Tarim Basin via the Karakorum mountain range. For my results to remain unaffected, it suffices that the predecessor of Niya Prakrit originated in a region under Kuṣāṇa rule (as is almost inevitable).

⁹⁷² CKI 258; 268–269; 271–279; 282–324; 337; 350–357; 406–439; 482–502; 515–532; 567–593. The land-sale contract partially preserved on the silk fragment CKM 430 may also come from the Gilgit area (Falk 2021: 10).

The homeland issue and the sociopolitical context behind the introduction of Niya Prakrit to the Tarim Basin are not the only possible topics for further study. This book has, for instance, hardly dealt with calques from Bactrian and other Iranian languages. Morphosyntactic influence on Niya Prakrit is another under-researched topic, as I have only investigated reciprocals/reflexives and the preterite formations from this perspective. Further desiderata are systematic studies of Bactrian loans in South Asian Gāndhārī and Gāndhārī loanwords in Bactrian and the Tarim languages. Some of the questions to ask are (i) if Iranian loanwords in South Asian Gāndhārī traditionally ascribed to “Indo-Scythian” were not more likely borrowed from Bactrian; (ii) whether the Gāndhārī loanwords in Bactrian, Khotanese, and Tocharian were all borrowed at the same time and from the same dialect; and (iii) if Bactrian loanwords in the Tarim languages may have passed through a Gāndhārī intermediary.

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Abbreviations

AAH	<i>Acta Antiqua Academiae Scientiarum Hungaricae</i>
AM	<i>Asia Major</i>
AO	<i>Acta Orientalia</i>
AOH	<i>Acta Orientalia Academiae Scientiarum Hungaricae</i>
ARIRIAB	<i>Annual Report of The International Research Institute for Advanced Buddhology at Soka University</i>
BAI	<i>Bulletin of the Asia Institute</i>
BSL	<i>Bulletin de la Société de linguistique de Paris</i>
BSO(A)S	<i>Bulletin of the School of Oriental (and African) Studies</i>
CAJ	<i>Central Asiatic Journal</i>
HS	<i>Historische Sprachforschung</i> (since 1988, the name of the journal previously known as ZVS)
IF	<i>Indogermanische Forschungen</i>
IJ	<i>Indo-Iranian Journal</i>
JA	<i>Journal Asiatique</i>
JAOS	<i>Journal of the American Oriental Society</i>
JLC	<i>Journal of Language Contact</i>
JRAS	<i>Journal of the Royal Asiatic Society</i> (until 1990, <i>The Journal of the Royal Asiatic Society of Great Britain and Ireland</i>)
JSALL	<i>Journal of South Asian Languages and Linguistics</i>
MSS	<i>Münchener Studien zur Sprachwissenschaft</i>
SPAW	<i>Sitzungsberichte der (Königlich) Preußischen Akademie der Wissenschaft, Philosophisch-historische Klasse</i>
SRAA	<i>Silk Road Art and Archaeology</i>
TIES	<i>Tocharian and Indo-European Studies</i>
TPS	<i>Transactions of the Philological Society</i>
ZDMG	<i>Zeitschrift der Deutschen Morgenländischen Gesellschaft</i>
ZVS	<i>Zeitschrift für vergleichende Sprachforschung (auf dem Gebiete der Indogermanischen Sprachen)</i>

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APPENDIX 1

Greek loanwords in Niya Prakrit

Chapter 3 treated the etymology of two Niya Prakrit words which seem to have originated in Greek but must have been borrowed via a Bactrian intermediary, i.e. *kṣuna* ‘date, reign, regnal year’ (§3.2.1 s.v.) and the measure of weight *milima* (§3.2.2 s.v.).⁹⁷³ For five other Greek loanwords in Niya Prakrit, a Bactrian intermediary cannot be proved. Their etymology is briefly examined in this appendix.⁹⁷⁴

1. *khi*, a unit of measure

Attestations of the base form

DIR.SG. *khi*:⁹⁷⁵ CKD 2 (10x); 108 (8x); 131; 142; 151; 154 (2x); 167 (5x); 196, etc.

INS.SG. *khiyena*: CKD 580

DIR.PL. *khi*: CKD 25; 60 (2x); 67 (2x); 76 (7x); 89; 93 (20x); 94 (4x); 98; 104; 108 (11x); 115; 131 (11x); 137 (16x); 140 (2x); 146; 148; 151 (2x); 154 (10x); 162; 167 (2x); 168 (6x); 181 (47x); 196 (9x); 207 (3x); 210 (28x), etc.; *khi[y]*. (*khi[y](*)e*?): CKD 656

khi is a frequently attested measure in the Niya documents, mainly but not exclusively used for weighing corn and wine. In CKD 465, twenty *khi* is shown to equal one *milima*, a ratio confirmed by CKD 108, where 43 *khi* of corn correspond to two *milima* and three *khi* (cf. KD: 341; 363).

A few scholars have compared *khi* to the Khotanese measure *kha* (e.g. Bailey 1946: 767; Yoshida 2008: 106 fn. 21).⁹⁷⁶ Yet, this comparison is doubtful, as *kha* has been argued to be a Tibetan loanword (Emmerick 1985:

⁹⁷³ In §3.2.4 s.v., I additionally rejected the derivation of *kilme* ‘household’ from Gr. κλίμα ‘slope of a mountain, (large) region’ on semantic grounds.

⁹⁷⁴ Personal names of Greek origin are conspicuously absent from the Niya documents (Baums 2018c: 43 fn. 2; 2023: 115 fn. 1). For a detailed study of the Greek political offices attested in Gāndhārī inscriptions, see Candotti & Giudice (2024).

⁹⁷⁵ For the attestations of *khi*, I adopt the same principle as for the related unit of measurement *milima* (§3.2.2 s.v.): instances followed by the numeral signs “1” and “½” are classified as dir.sg., and the remaining ones (also debatable cases) as dir.pl.

⁹⁷⁶ The same unit of measurement may also be attested in Tumshuqese (cf. Ogihara & Ching 2024: 310 fn. 27).

301f.), in which case the word would have been adopted too late into Khotanese for it to be relevant for Niya Prakrit.

Burrow (1935b: 669; LKD: 86 s.v.) made a more attractive comparison with the Greek unit of measurement χοῦς. This etymology is supported by the fact that the related measure *milima* can also be traced back to a Greek term, i.e. μέδιμνος. *milima* can be shown to have passed through a Bactrian intermediary, as the *-l-* in *milima* would otherwise remain unaccounted for (§3.2.2 s.v.). Consequently, it is worth considering that *khi* also passed through Bactrian. As there is, however, no conclusive linguistic argument to prove a Bactrian intermediary for *khi*, I did not include this word among the Bactrian borrowings discussed in Chapters 3–4.⁹⁷⁷

The main issue with Burrow's etymology is why χοῦς, phonologically /kʰūs/ or /xūs/, should have been rendered as *khi* and not as ***khu* (cf. Bailey 1946: 767). In an attempt to solve this problem, Burrow (1935b: 669; LKD: 86 s.v.) compared the Khotanese palatalisation of **-ū-* < **-au-* to *-ī-* before **-x-* in **tauxma(n)-* 'seed' > **tūxma-* > *ttīma-*. He thus implicitly assumes that *khi* was borrowed via a Khotanese intermediary, but it seems quite implausible that a Greek word would be borrowed first into Khotanese and only subsequently into Gāndhārī.

Until more evidence may appear, the *-i-* in *khi* is likely to remain a moot point. As units of measurement are frequently used with numbers higher than one (cf. the list of attestations above), I cautiously suggest that *khi* may derive from χοεῖς, an innovative nom.pl. of χοῦς attested since Hellenistic times next to the more archaic form χόες.⁹⁷⁸ <ει> started already in the 4th

⁹⁷⁷ Accepting Burrow's etymology, Tóttösy (1980: 133) assumes that χοῦς was borrowed as the result of trade. In my view, units of measurement were more likely borrowed when Greek acted as the administrative language in Hellenistic Bactria. There is evidence for this role of the Greek language in the form of a few fragmentary Greek administrative documents discovered in the region; see Rea, Senior & Hollis (1994), Clarysse & Thompson (2007), and also Mairs (2014: 27–56) and Wallace (2016: 223–225).

⁹⁷⁸ The earliest literary attestation of χοεῖς seems to be in fragment 23 Verhasselt of philosopher Dicaearchus of Messene (4th century BC), quoted by Athenaeus *Deipnosophistae* IV 141 a ff.: ... συμφέρει δ' ἕκαστος εἰς τὸ φιδίτιον ἀλφίτων μὲν ὡς τρία μάλιστα ἡμιμέδιμνα Ἀττικά, οἴνου δὲ χοεῖς ἑνδεκά τινας ἢ δώδεκα παρὰ δὲ ταῦτα τυροῦ σταθμόν τινα καὶ σύκων, ἔτι δὲ εἰς ὀψωνίαν περὶ δέκα τινὰς Αἰγιναίους ὀβολούς "each man contributes to the common meal at most about three Attic half-*medimnoi* of barley groats, about eleven or twelve pitchers of wine, and besides this a certain weight of cheese and figs, and also about ten

century BC to be pronounced as /ī/ (see VG³: 69–75), meaning that χοεῖς was probably pronounced at the time as /k^hoĩs/ or /xoĩs/.

The assumption that *khi* is borrowed from χοεῖς /k^hoĩs/ or /xoĩs/ would provide a straightforward explanation for the *-i-* in *khi*, and the assumed loss of final -ς /s/ can be paralleled in other Greek loanwords into Gāndhārī, including *stratega* ‘general, commander’ ← στρατηγός and *meridarkha* (and variants) ‘district official’ ← μεριδάρχης.⁹⁷⁹ My proposal requires that the *-o-* /*o-* in Gr. χοεῖς was also lost during the borrowing process. I admittedly have no cogent explanation for this peculiarity, but one could conjecture that the /*o-* coalesced in speech with the accented long /ī/ which followed.

If one wants to posit a Bactrian intermediary, the sound substitutions could be explained along the following lines. Final -ς /s/ is not only lost in Greek borrowings into Gāndhārī but also in those into Bactrian (cf. Scarborough 2021: 604), and Gr. *-o-* /*o-* is substituted with Bactr. *-o-* /*u-* in χρονο /xšunə/ ‘(calendar/regnal) year’ ← χρόνος ‘time (period)’ (§3.2.1 s.v. *kṣuna*). Consequently, χοεῖς /k^hoĩs/ or /xoĩs/ would most likely have been rendered in Bactrian as **xuī*, which in turn could have developed to **xwī* to avoid an atypical vowel hiatus, just as in native Bactrian words initial χο- was in all likelihood pronounced as /*xw-* in front of another vowel (e.g. χοην- /*xwēn-* ‘to declare’ < **hwānya-*). If so, one could assume that the semivowel *-w-* in a Bactrian word *χοει / *χοι /*xwī-* was lost when the word was borrowed as Niya Prakrit *khi*. This loss of **-w-* would square well with the absence of Niya clusters such as ***khvi* or ***khvi* and the fact that *-yi-* /*wi-* is only found after another vowel, never after another consonant.⁹⁸⁰

In sum, Burrow’s etymological derivation of *khi* from Gr. χοῦς ‘unit of measure’ is semantically convincing and supported by the Greek origin of the related term *milima*. Although tentative, one way to account for the unexpected vocalism is to say that *khi* continues the Hellenistic nom.pl. χοεῖς rather than the nom.sg. χοῦς.

Aiginetan obols to buy the food.” (Verhasselt 2018: 127). Observe the combination of χοεῖς ‘pitchers’ with the numerals ἑνδεκά ‘eleven’ and δώδεκα ‘twelve’.

⁹⁷⁹ The loss of final -ς can be attributed to the general MIA constraint against final consonants other than *-m*. Deriving *khi* from the nom.sg. χοῦς of course also necessitates the final -ς to have been lost.

⁹⁸⁰ In addition, one may compare the Niya Prakrit rendering of Iranian *-wā-* as *-o-* (§4.3.1). In this case, the loss of *-w-* is accompanied by the colouring of the following *-ā-* to *-o-*, but for *-wi-*, one could assume that *-w-* was lost without any effect on the following vowel.

2. *drakhma*, a unit of measure

Attestations of the base form

DIR.SG. *drakhma*: CKD 702

DIR.PL. *drakhma*: CKD 702; *trakhma*: CKD 324 + 328

abbr. *dra*: CKI 90; 173; 190; 241; 260; 450; 716; 722; 729; *tra*: CKI 721

drakhma is borrowed from Gr. δραχμή, originally a type of coin, but later also used as a measure of weight.⁹⁸¹ There is no concrete indication, phonological or other, to assume that *drakhma* was not borrowed directly from Greek.

3. *parampula* ‘military camp’

Attestations of the base form

ABL.SG. *parabulade*: CKD 415 (cf. TKD: 83f.)

LOC.SG. *parampulaṃmi*: CKD 586

Thomas (1936b) plausibly connected Niya *parampula* to Gr. παρεμβολή in its Hellenistic meaning ‘military camp’.⁹⁸² Endorsing Thomas’ conclusions, Bailey (1946a: 778; 1946b: 9–11; 1946c: 205) made the additional suggestion that παρεμβολή would likewise survive as a postposition ‘around’ in Ossetic, i.e. I. *alfambylai*; D. *falæmbulai* (so also Weber 1997: 35).

Including these Ossetic forms would raise all kinds of questions on the chronology of the Ossetic sound change of **p > f* (for which cf. Lubotsky 2002: 190). The main problem is that a more likely borrowing from Bactrian into both Ossetic and Niya Prakrit presents us with a different picture: in the case of I. *byru*; D. *buru* ‘enclosure, castle’ ← **πιρωβο* /*pirōvə*/ ‘fortress’, Bactr. *π* /*p*/ would be substituted with *b* in Ossetic and not as ***f* (cf. §3.2.3 s.v. *piro*). Due to the uncertainty of the Ossetic evidence, I will leave it out of consideration here.

There is no concrete evidence favouring a Bactrian intermediary for this word: the final *-a* in *parampula* contrasting with the *-η* /*ē*/ in παρεμβολή merely means that the word has been adopted into the productive *a*-declension and has no phonetic relevance; the apparent substitution of Gr. *-ε-* /*e*/ with Gandh. *-a-* is paralleled by, amongst others, *Arthamisiya*, a

⁹⁸¹ Cf. Bailey (1949a: 128f.); Tóttössy (1980: 131f.); Wang (2004: 67). An additional Gāndhārī measure of weight derived from Greek is the abbreviation *o* in CKI 190, probably a borrowing from ὀβολός ‘obol’. See further s.v. *sadera*.

⁹⁸² For this meaning, cf. e.g. Polybius 3.74.5.

month name borrowed from Gr. Ἀρτεμίσιος (CKI 152; 159; 509),⁹⁸³ and the required rendering of Gr. -o- /o/ as Gandh. -u- finds parallels in the calendrical term *yambulima* ‘intercalary’ ← Gr. ἐμβόλιμος ‘idem’ (CKI 328) and Skt. *kunta-* ‘spear, lance’ ← Gr. κοντός ‘pole, pike’ (used in a military context in Lucian *Alexander* 55; cf. Burrow 1973³: 387; EWAia III: 105).

4. *sadera*, a unit of measure

Attestations of the base form

DIR.SG. *sadera*: CKD 431 = 432

DIR.PL. *sadera*: CKD 702; 808 (?); *satera*: CKD 324 + 328

abbr. *sa*: CKI 91; 190; 241 (2x); 260; 262; 450; 716; 717; 718; 722; 724; 725; 727; 728; 729; *s[y]a* (*sa* intended by the scribe?): CKI 90; 263; 714; *s[r]a*: CKI 715; *sade*: CKI 173; *śa*: CKI 241; *dra* (probably as a mistake for *sa*; cf. Falk 2001: 314 = 2013a: 53): CKI 721

Compounds

DIR.SG. *suyarnasadera* ‘golden stater’: CKD 419; 889

DIR.PL. *suyarnaśadera* ‘idem’: CKD 12 + 43

abbr. *susadera* ‘idem’: CKM 430

As first noted by Thomas (1924), *sadera* is another Greek loanword.⁹⁸⁴ Its source, i.e. Gr. στατήρ, initially referred to a coin but became secondarily also used as a weight measure (cf. s.v. *drakhma*). Other derivatives of the same term in Asian languages include Arm. *sater*, Georgian *satiri*, MP *satēr* (as per Bailey 1930: 17), Sogd. *st’yr*, Old Khot. *satīra-*, TB *satera*, and Old Uyghur *sītir*.⁹⁸⁵

All forms simplify the initial *st-* to *s-*, presumably due to a dissimilatory effect of the *-t-* in the next syllable. Because the dissimilated form is found consistently from Georgian to Old Uyghur, one suspects that the dissimilation happened in one specific language, conceivably an Iranian one, and spread from there throughout Asia (*pace* Thomas 1926a). As, however, it seems hardly possible to determine the exact source of the dissimilated form, I have considered it best to discuss *sadera* in this section and not as part of the discussion on Iranian loanwords in Chapters 3–4.⁹⁸⁶

⁹⁸³ For the alternative rendering of Gr. -ε- /e/ as Gandh. -i-, cf. §3.2.2 s.v. *milima*.

⁹⁸⁴ See also Agrawala (1953c); Falk (2001: 309–314 = 2013a: 48–53); Wang (2004: 66f.).

⁹⁸⁵ For its use as a weight in Bactrian and Sogdian, see Sims-Williams (2016a).

⁹⁸⁶ In the case of Gandh. *stratega* ‘general, commander’ ← Gr. στρατηγός, dissimilation may have been blocked by the additional *-r-*.

5. *sotira*, a title

Attestations of the base form

DIR.SG. *sotira*: CKD 580

While attested only once, the context suggests that *sotira* is another official or honorific title. Burrow (LKD: 94 s.v. *tasuca*; 132 s.v. *sotira*) reasonably connected this word to Gr. σωτήρ ‘saviour, protector’, a word undoubtedly known in Gandhāra, as it is attested on bilingual coins.⁹⁸⁷

If Burrow’s etymology is correct, the *-i-* in *sotira* could either be due to the Gāndhārī interchange between *-i-* and *-e-* (LKD: §1) or *sotira* could have been borrowed from a pre-form that had already undergone iotacism in Hellenistic Greek.

⁹⁸⁷ The usual Gāndhārī equivalent of σωτήρ is *tradara* (and variants) < OIA *trātṛ-* ‘protector’. In a later article (1970), Burrow added Pkt. *soḍīra-* / *soṇḍīra-* and Skt. *śauṭīra-* / *śauṇḍīra-* ‘heroic’ as potential further derivatives from σωτήρ (accepted by EWAia III: 498).

APPENDIX 2

A new join in the Niya documents: CKD 324 + 328

Niya document CKD 324 is a rectangular under-tablet registering the sale of a man called Saṃrpina; its corresponding cover-tablet is generally assumed to be missing. See, for instance, Høisæter (2020: 395), who remarks that this absence “is very unfortunate, as it would likely have contained valuable details about who ended up storing the document and further details about the parties involved as well as whom oversaw the exchange and where”.

It seems that CKD 328 is the missing cover-tablet. This conclusion is supported by the matching content of CKD 324 and CKD 328, and by the fact that the two documents fit regarding their size: the under-tablet (CKD 324) measures 8,8 × 19,6 cm, whereby the raised edges of the long side of the rectangle measure 2 cm in width each; the size of the cover-tablet (CKD 328) is 8,9 × 15,6 cm, thus fitting precisely in between the raised edges of the under-tablet. A glance at the available images moreover shows the handwriting of both documents to be the same.

To show that CKD 324 and 328 can be joined, both texts are presented below as one document. The Prakrit text is accompanied by a modified version of Burrow’s translation (TKD: 60–62).

Obverse of the cover-tablet (part of CKD 328)

- 1 + + + + + [śa] ? ? prace ka ? ? ?⁹⁸⁸
- 2 [dharidavo]
- 3 eṣa guśurana Ca(*k)urata Aśogaṣa [ca mudra]

Obverse of the under-tablet (CKD 324)

- 1 saṃvatsare 4 mahanuava maharaya Maīri devaputraṣa maṣe 3
divaṣe 10 3 iśa
- 2 kṣuṇaṃmi mahap[o] ? ? bulena kuṣena Supiya Calmadanaṃmi
agataṃti raja para-
- 3 sitaṃti maṃnuśarupa paraṣa kiḍaṃti yasū⁹⁸⁹ Yonuaṣa dajha
maṃnuśa Saṃrpina nama Supiya
- 4 ṣayitaṃti Cina Ṣgaṣiyaṣa prahuḍa prahitaṃti Cina Ṣgaṣi imade
maṃnuśaṣa prati-

⁹⁸⁸ *ka* ? ? ? can perhaps be restored as *Ka(*tgeyaṣa)*.

⁹⁸⁹ Here and in line 5f, I read *yasu* instead of KD’s (118) *vasu*.

- 5 kara suṽarna satera 2 trakhma 2 ṣe maṁnuṣa Ṣgaṣiyaṣa tanuṽaga
 huda tanu bhaṭaraga ṽa-
 6 su Yonu na ichita maṁnuṣa tanu nikhalamṁnae parihara oḍita amṁṇeṣa
 vaṁṭi vikrinana-
 7 e udhiṣa e[da] maṁnuṣa Cina Ṣgaṣi Katgeyaṣa vaṁṭi vikrita
 maṁnuṣamuli Supi-
 8 [ya] ? [ṭa] dhamṁnu 1 lamcaga huati Cina Ṣgaṣiya suvikrita Katgeya
 sukritā aja kṣu-
 9 na uvatae

Reverse of the cover-tablet (part of CKD 328)

- 1 eda maṁnuṣami Katgayaṣa eṣvarya siyati sarva karaṁnena tatra
 sakṣi oguana Caku-
 2 rata Aśoga Cakuraya Śamaṣena kala Kunalaṣa ca puri .utaṣa kridena
 devaputraṣa
 3 ciṁtidavo lihida maya Vutsayena

Translation

... concerning ... should be hold ... This is the seal of the princes (*guṣuras*)
 Ca[k]urata and Aśoga.

In the 4th year of the great king of great Nuava Mairi the son of heaven, on the 13th day of the 3rd month, at this date (?) the Supis came to Calmadana; they plundered the kingdom and carried off the inhabitants. The Supis seized a man called Saṁrpina, a slave of the *yasu* Yonu and sent him as a present to the Chinese Ṣgaṣi. The Chinese Ṣgaṣi (provided) from here, as a recompense for the man, two golden staters and two drachmas. (Consequently) that man became the rightful property (?) of Ṣgaṣi. His own master, the *yasu* Yonu, did not wish to remove the man himself, and permission was given to Ṣgaṣi to sell him to others. Considering this the Chinese Ṣgaṣi sold this man to Katge. As the price of the man [] and one bow was right. The Chinese Ṣgaṣi has sold well and Katge has bought well. From now on Katgaya shall have ownership over this man for all matters. Witnesses there (are) the *ogus* Cakurata, Aśoga, Cakuraya and Śamaṣena, and the *kala* Kunala. On the matter of (?) his majesty must think. (This) has been written by me, Vutsaya (?).

APPENDIX 3

Linguistic features of CKD 661 (Khotan Prakrit)

This appendix contains a list of the linguistic features in which the Khotan Prakrit document CKD 661 differs from Niya Prakrit (cf. §5.4.7). Although most of these features can be found elsewhere,⁹⁹⁰ I thought it helpful to include this list here to allow for easy access to this information. The features are divided into three categories: (i) lexicon; (ii) orthography and phonology; and (iii) morphology.

1. Lexicon

- (i) *kidā* ‘on account of’ (2x, ll.4; 6)
kidā < loc.sg. *kṛte*, whereas Niya Prakrit always has ins.sg. *kritena* / *kridena* in the meaning ‘on account of’.
- (ii) *dhalavagu* ‘document (?)’ (l.7)
A hapax of uncertain etymology not used in Niya Prakrit.
- (iii) *dheva* ‘god, lord’ (l.1)
This term is used in Khotan Prakrit as a king’s title instead of the usual *devaputra* ‘son of god’.
- (iv) *nagaragā* ‘city-dweller’ (l.2)
This adjectival formation does not occur in the Niya documents, but cf. the gen.sg. *[na]garaka[sa]* in CKI 78.
- (v) *puradu* ‘in front of’ (l.7)
The corresponding postposition in Niya Prakrit is *purāṭha* ‘in front of’ < *purastāt*, like Khotan Pkt. *puradu* frequently used to identify witnesses (cf. LKD: §92). Boyer et al. (1920–29) read a Niya form *purata* ‘in front of’ in CKD 377, a possible cognate of Khotan Pkt. *puradu* (cf. LKD: 106 s.v.), but Burrow (TKD: 76) corrected this reading to *purāṭha*.

⁹⁹⁰ See Noble (1931); Burrow (1934: 514f.; 1936: 430–434); Konow (1936); Salomon (2011b: 182f.); Dragoni, Schoubben & Peyrot (2020).

- (vi) *śudhi* 'clearing, payment' (l.5)

i-stem < OIA *śuddhi*-, whereas the Niya equivalent is *śudha* < OIA *śuddha*-.

- (vii) *saṃvritā* 'been' (l.5)

Derivatives of OIA *sam* + $\sqrt{vrt}$ are not used as a copula in Niya.

- (viii) *hinajha* 'general' (l.1)

A Khotanese loanword absent from other Kharoṣṭhī sources; see §3.5.1 s.v. and §4.2.5.

2. Orthography and phonology

- (i) Vowel raising: *-e-* > *-i-* and *-o-* > *-u-* (Burrow 1934: 515; 1936: 430)

Cf. loc.sg. *kali* 'at the time' < *kāle* (2x; ll.2; 6); *sagaji* 'to' < *sakāṣe* 'in the proximity of' (l.4); *niravaśiṣo* 'without remainder' < *niravaśeṣa*- (l.4); opt.3sg. *cudiyadi* 'he would complain' (~ *codeyati*) (l.6); opt.3sg. *vidiyadi* 'he would inform' (~ *vedeyati*) (l.6); opt.3sg. *uthaviyadi* 'he would stir up' (~ *uthaveyati*) (l.6); pres.3sg. *dhinadi* 'he gives' (~ *denati*) (l.7); and ins.sg. *ajiṣanayi* 'at the order of' < *adhyeṣaṇā*- (l.7).

Note also that <ā> can sometimes be used instead of <e>, so in pres.3sg. *madrādi* 'he says' (~ *ma(m)tretī*) (l.2); ins.sg. *mulyāna* 'price' (~ Niya *muliyena*) (l.3); *kidā* 'on account of' < *kṛte* (2x; ll.4; 6); and ins.sg. *tāna* 'this' (~ *tena*) (l.6).

- (ii) Spelling of dentals (Burrow 1936: 430f.; Konow 1936: 234ff.)

The outcome of OIA #*d-* is consistently written with 𑖅 *dha* in CKD 661. The examples are *dhivajha* 'day' < *divasa*- (l.1); *dheva* 'god, lord' < *deva*- (l.1); *dhahiaghi* 'a branded mark' with first element continuing $\sqrt{dah}$ 'to burn' (l.3); *dhitu* 'given' < **ditta*- (l.4); *dhaḍu* 'punishment' < *daṇḍa*- (l.7); and pres.3sg. *dhinadi* 'he gives' ~ *denati* (l.7). The etymology of *dhalavagu* 'document (?)' (l.7) is unknown (cf. supra).

Intervocally, OIA *-t-* and *-d-* merge. Unlike in Niya Prakrit, the result of this merger is consistently written with 𑖅 *da* in CKD 661, as exemplified by gen.sg. *Vijidasimhasya*, PN < *Vijita-simha*- (l.2); pres.3sg. *madrādi* 'he says' (l.2); pres.3sg. *haradi* 'he carries' (l.3); *idani* 'now' < *idānīm* (l.3); *kidā* 'on account of' < *kṛte* (2x; ll.4; 6); *grahidu* 'taken' < *grhīta*- (l.5); *uvagadu* 'approached' < *upagata*- (l.5); *uvadayi* 'starting from' < *upādāya* (l.5); opt.3sg. *cudiyadi* 'he would complain' < $\sqrt{cud}$ (l.6); opt.3sg. *vidiyadi* 'he would inform' < $\sqrt{vid}$ (l.6); acc.sg. *vivadu* 'dispute' < *vivāda*- (l.6); opt.3sg. *uthaviyadi* 'he would stir up' < *ud* + $\sqrt{sthā}$ (l.6); pres.3sg. *dhinadi* 'he gives' (l.7); opt.3sg. *syadi* 'he would be' (l.7); *likhidu* 'written' < *likhita*- (l.7); and *puradu*

‘in front of’ < *purataḥ* (l.7). In the introductory part of the document, where Sanskrit influence is generally more visible (cf. Burrow 1936: 422), there are two exceptions: *Khotana* ‘Khotan’ and *rayatiraya* ‘king of kings’ < *rājātirājan-*.

A geminate /tt/ is spelled with ʼ ta in the case of *dhitu* ‘given’ < **ditta-* (l.4) and *saṃvritā* ‘been’ < *saṃvṛtta-* (l.5).

(iii) The use of ʼśa and ʼṣṭa

Niya Prakrit never uses the special sign ʼśa to write /z/, whereas this is the normal practice in CKD 661. See *maṣa* ‘coin’ (l.3); *niravaśiṣo* ‘without remainder’ (l.4); and *ajiṣanayi* ‘at the request of’ (l.7). Cf. also §2.1.2.

The cluster /ṣṭ/ is spelled with ʼṣṭa in Khotan Pkt. *aṣṭi* ‘eight’ and not with ʼṭha, of which there is no example in CKD 661. The final -i in *aṣṭi* ‘eight’ (l.3) may be due to influence from Khot. *haṣṭi* ‘idem’ (cf. Burrow 1936: 431).

(iv) Minor observations

In Niya Prakrit (and many other forms of Gāndhārī), the outcome of OIA *iha* ‘here’ is normally written as *iśa*. Khotan Pkt. *ija* (l.1) is the only time this word is spelled with ʼja.

Intervocalic -bh- normally develops to -h- in Niya Prakrit, but the labial element is still preserved in Khotan Pkt. acc.sg. *avhiñānu* ‘recognition mark’ < OIA *abhijñāna-*.

CKD 661 has *aji* ‘today’ < OIA *adya*. In the Niya variant, the default spelling of this word is *aja* (cf. Noble 1931: 453).

3. Morphology

(i) Nominative

In contrast to Niya Prakrit (and most forms of Gāndhārī), nominative and accusative are still kept distinct in the Khotan Prakrit of CKD 661 (see also Burrow 1936: 431f.).

The nom.sg. ends, except for neuter nouns, by default in -ā or -ā. The transliteration -ā was proposed by Konow (1936: 237f.), whom I follow here, against Noble, Burrow, and others, who write -aḥ and interpret this ending as a Sanskritism. The examples are *manuśā* ‘man’ (l.2); *nagaragā* ‘city-dweller’ (l.2); *uṭā* ‘camel’ (3x; ll.2; 5); *tanuvagā* ‘own’ (2x; ll.2; 5); *Vagiti Vadhagā*, PN (l.4); *saṃvritā* ‘been’ (l.5); *garaniyā* / *karaniyā* ‘to be done’ (ll.5; 6); *Bahudhivā*, PN (l.7); *Nani Vadhagā*, PN (l.9); *Śaśivakā*, PN (l.9); and *Spaniyakā*, PN (l.9).

Interestingly, the nom.sg. of the demonstrative pronoun is *so* and not *se* < *saḥ*, as in Niya Prakrit (LKD: §80). Cf. 2x *so uṭā* (ll.2; 5) and 1x as acc.sg. in *so uṭo* (l.3).

(ii) Accusative and neuter nouns

The acc.sg. and nom. / acc.neut.sg. ending is *-u*, sometimes *-o*. Cf. *avhiñanu* ‘recognition mark’ (l.3); *tadriju* ‘such’ (l.3); *uṭo* ‘camel’ (l.3); *niravaśiṣo* ‘without remainder’ (l.4); *mulyo* ‘price’ (l.4); *dhitu* ‘given’ (l.4); *grahidu* ‘taken’ (l.5); *uvagadu* ‘reached, obtained’ (l.5); *vivadu* ‘dispute’ (l.6); *dhaḍu* ‘punishment’ (l.7); *rajadharmu* ‘the state’s law’ (l.7); *dhalavagu* ‘document (?)’ (l.7); and *likhidu* ‘written’ (l.7).

(iii) Genitive

CKD 661 exclusively uses the Sanskritic gen.sg. ending *-sya*. Cf. *Vijidasimhasya*, PN (l.2); *Vagiti Vadhagasya*, PN (2x; ll.4; 5); *tasya* ‘this’ (2x; ll.4; 6); *uṭasya* ‘camel’ (2x; ll.4; 6); and *Khvarnarsasya*, PN (2x; ll.5; 7).

The gen./dat.sg. of the 1sg. personal pronoun is *mayi*, contrasting with Niya *mahi* < *mahya(m)* (cf. LKD: §78).

(iv) Locative

The word for ‘time’, *kala* < OIA *kāla-*, forms its loc.sg. in *-i* < OIA *-e*, i.e. *kali* (2x; ll.2; 6), while in Niya Prakrit the loc.sg. of this word is regularly *kala(m)mi* < **kālasmin*.

More crucially, CKD 661 uses *sagaji* < *sakāśe* ‘in the proximity of’ (l.4) as the postposition for animate locatives and not *vaṃti* < *upānte* ‘in the proximity of’, as is always the case in Niya Prakrit (see §5.4.7 for more details).

(v) Preterite

For transitive verbs, the pret.3sg. ends in *-u* in Khotan Prakrit (*dhitu* ‘given’ (l.4); *grahidu* ‘taken’ (l.5); *uvagadu* ‘reached, obtained’ (l.5); *likhidu* ‘written’ (l.7)), but the intransitive pret.3sg. *saṃvritā* ‘been’ (l.5) agrees in number, gender, and case with the subject *so uṭā*. In Niya Prakrit, there is no morphological distinction between the preterite of transitive and intransitive verbs (Burrow 1936: 432).

NEDERLANDSE SAMENVATTING

Sporen van taalcontact in het Niya-Prakrit

In dit proefschrift wordt onderzocht welke sporen taalcontact heeft nagelaten in de woordenschat en grammatica van het Niya-Prakrit, een Middel-Indo-Arische taal die nauw verwant is aan het Sanskrit. Het Niya-Prakrit is bekend door administratieve documenten die gevonden werden in het Tarimbekken in Noordwest-China. Deze documenten dateren uit de derde en vierde eeuw n. Chr., wanneer het Niya-Prakrit dienst deed als kanselarijtaal in het plaatselijke Shanshan-koninkrijk.

De nadruk van dit proefschrift ligt op taalcontact tussen het Niya-Prakrit en het Bactrisch. Deze Middel-Iraanse taal werd eertijds gesproken in het noorden van Afghanistan (het oude Bactrië) en is geattesteerd in documentaire bronnen die het grootste deel van het eerste millennium n. Chr. bestrijken. In dit proefschrift bespreken we voorts contacten met andere Oud- en Middel-Iraanse talen alsook met het Tochaars, een onafhankelijke tak van de Indo-Europese taalfamilie.

De eerste twee hoofdstukken van deze dissertatie fungeren als inleiding. In hoofdstuk één worden alle relevante talen kort voorgesteld en in hun historische context geplaatst. In het tweede hoofdstuk worden de fonologie van het Niya-Prakrit en het Bactrisch ingeleid alsmede de spellingconventies van de schriften waarmee deze talen geschreven werden.

Het derde en vierde hoofdstuk betreffen de Iraanse leenwoorden in het Niya-Prakrit. In hoofdstuk drie hebben we getracht om een actueel leenwoordcorpus samen te stellen, waarbij voor elk leenwoord systematisch onderzocht wordt hoe betrouwbaar de voorgestelde etymologie is en welke Iraanse taal dan wel talen als donor in aanmerking komen. Uit dit onderzoek blijkt dat het merendeel van de Iraanse leenwoorden in het Niya-Prakrit uit het Bactrisch stamt, hetgeen aantoont dat de Bactrische invloed op het Niya-Prakrit veel diepgaander is dan eerder gedacht. In het vierde hoofdstuk wordt het leenwoordcorpus onderworpen aan een fonologische, morfologische en semantische analyse. Op basis van deze analyse kan men concluderen dat de Bactrische leenwoorden werden ontleend tijdens de Kuṣāṇa-periode (1^{ste}–3^{de} eeuw n. Chr.), waarschijnlijk voor het Niya-Prakrit geïntroduceerd werd in het Tarimbekken; dat deze leenwoorden aangepast werden aan de fonologie en morfologie van het Niya-Prakrit; en dat de

meeste leenwoorden tot het administratieve, politieke, militaire en economische lexicon van de taal behoren.

In hoofdstuk vijf betogen we dat de invloed van het Bactrisch op het Niya-Prakrit niet beperkt bleef tot leenwoorden, maar ook zichtbaar is in de grammatica. Meer bepaald beargumenteren we dat het Niya-Prakrit twee achtervoegsels ontleende aan het Bactrisch en dat het Bactrisch een structurele invloed uitoefende op de morfologie en syntaxis van de wederkerige en wederkerende voornaamwoorden en op het preteritum en het verbaaladjectief uitgaand op **-taka-*.

Volgens een beroemde hypothese van Thomas Burrow zou het Niya-Prakrit ook substraat-invloed hebben ondergaan van het "Tochaars C", een verder niet gedocumenteerde taal die in Burrows opinie gesproken werd door de plaatselijke bevolking van het Shanshan-koninkrijk. De conclusie van hoofdstuk zes is dat deze hypothese verworpen dient te worden. Immers, geen enkel van de aangedragen argumenten kan beschouwd worden als sluitend bewijs voor een Tochaars substraat in het Niya-Prakrit. Het blijkt bovendien dat enkele leenwoorden en grammaticale kenmerken van het Niya-Prakrit die voordien toegeschreven werden aan dit hypothetische substraat beter toegeschreven kunnen worden aan het eerder genoemde contact met het Bactrisch.

In hoofdstuk zeven wordt nagegaan binnen welke sociaalhistorische context het Niya-Prakrit beïnvloed werd door het Bactrisch. Als hypothese stellen we voor dat het Niya-Prakrit afstamt van een Gāndhārī-dialect dat gebruikt werd als kanselarijtaal door beambten van het Kuṣāṇa-rijk die het Bactrisch als moedertaal hadden. Dit zou betekenen dat de voorouder van het Niya-Prakrit een gelijkaardige rol vervulde in het Kuṣāṇa-rijk als het Rijksaramees in het Perzische Rijk van de Achaemeniden.

In hoofdstuk acht maken we ten slotte duidelijk dat twee van de meest netelige kwesties in de studie van het Niya-Prakrit geen directe consequenties hebben voor de conclusies van dit proefschrift: (1) de vraag of het Tarimbekken ooit onder directe controle van het Kuṣāṇa-rijk stond en (2) de vraag hoe en vanwaar precies het Niya-Prakrit zich naar het Tarimbekken verspreid heeft.

CURRICULUM VITAE ET STUDIORUM

Niels Schoubben was born on the 11th of September 1996 in Tongeren (Belgium). In 2014, he there obtained his high school diploma in Latin and Greek at VIIO Humaniora. Afterwards, he read for a BA and MA degree in “Linguistics and literature: Latin-Greek” at Ghent University and obtained both of them *summa cum laude* (2017; 2018), whilst also following extracurricular courses in Classical Indology. A revised version of his BA thesis on the Greek versions of the Aśokan inscriptions was published in *Indologica Taurinensia* (2018), and his MA thesis on the prehistory of the Homeric hexameter was awarded first prize by the Ghent Institute for Classical Studies (2019). Having subsequently moved to Leiden, he obtained in 2019 two additional MA degrees, one in “Classics and Ancient Civilizations” (*cum laude*) and one in “Comparative Indo-European Linguistics” (*summa cum laude*). His thesis for the latter on the phoneme /l/ in Rigvedic Sanskrit was awarded first prize by the *Indogermanische Gesellschaft* in 2020.

Immediately after finishing his MA degrees, Niels Schoubben was hired as a doctoral student in the Leiden ERC project “The Tocharian Trek” under the supervision of Prof. Michaël Peyrot and Prof. Alexander Lubotsky. While working on his dissertation, he gave fourteen talks; published five single-authored and two co-authored papers in peer-reviewed journals; followed regular and summer school courses in Leiden, Ghent, Oxford, and Venice; and taught BA/MA courses on Ancient Greek and summer school courses on Niya Prakrit and Aśokan Gāndhārī. Currently, he is employed as a postdoctoral researcher in the Leiden ERC project “The Silk Road Language Web”.