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**Traces of language contact in Niya Prakrit:
Bactrian and other foreign elements**
Schoubben, N.

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Niels Schoubben

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



Deutsche Morgenländische Gesellschaft
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Im Auftrag der Deutschen Morgenländischen Gesellschaft
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PREFACE

This book is a revised version of my doctoral dissertation, defended on 6 November 2024 at Leiden University (*cum laude*; Schoubben 2024). While the structure and overall content of the work have remained largely the same, numerous points of detail have been revised in light of recent publications, especially N. Sims-Williams' *Bactrian Documents IV* (BD IV). The most significant changes compared to the dissertation are the following. In Chapter 3, two lemmata have been removed (*apcira*; *reda*), as I no longer accept the etymologies which I suggested in Schoubben (2024: 157–160; 166). Two lemmata have been added (*aṃbaṃjaya*; *kavaji*), and one lemma has been substantially reworked (*vara*). The linguistic analysis of the Khotan Prakrit document CKD 661 included as Appendix 3 in Schoubben (2024: 523–526) is presented here in a revised and expanded version as Appendix 2 (pp. 467–474). Appendix 2 in Schoubben (2024: 521f.), in which I proposed that the Niya documents CKD 324 and CKD 328 can be joined, has been omitted from the present volume, since it will be published in a revised form elsewhere (Schoubben in prep.). In its place, a new Appendix 3 (pp. 475–481) provides a list of revised readings in the Niya documents. Finally, the book has been enlarged with an *index verborum* and an *index locorum potiorum* (pp. 529–584).

It is a pleasure to thank the institutions, teachers, colleagues, friends, and family who have contributed, each in their own way, to the completion of this work. To begin with, I gratefully acknowledge the financial support of the European Research Council. The doctoral dissertation was written as part of the project *The Tocharian Trek* (ERC-2017-STG 758855); the book manuscript was completed within the project *The Silk Road Language Web* (ERC-2022-COG 101088902), which also made its open-access publication possible. A special word of thanks is due to my *Doktorväter*, Michaël Peyrot and Sasha Lubotsky, for their continued guidance and their consistently insightful feedback on both the form and the content of this study. I have also benefitted, both academically and personally, from the camaraderie and collegiality of many (former) Leiden colleagues. I am particularly grateful to my fellow members of the aforementioned ERC projects and the related NWO project *Tracking the Tocharians*: Francesco Barchi, Chams Bernard, Federico Dragoni,

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During the revision of the manuscript, I was able to draw on the valuable comments of the members of the doctoral defence committee: Nicholas Sims-Williams, Stefan Baums, Georges-Jean Pinault, Federico Dragoni, Gabrielle van den Berg, Lucien van Beek, and Casper de Jonge. I am likewise indebted to Athanaric Huard for his incisive remarks on Chapters 1–3, and to Chams Bernard for several helpful suggestions and corrections.

My dear friend Julian Kreidl generously granted me access to his unpublished Bactrian dictionary, which proved an invaluable aid in my work on the Bactrian loanwords in Niya Prakrit. Fiona Wilkes, librarian of Wolfson College (Oxford), kindly permitted me to consult and scan Thomas Burrow's personal copy of his Niya Prakrit grammar (LKD) and to cite from the unpublished notes contained in it.

I also thank the series editor, Roland Steiner, and the team at *Harrassowitz Verlag* for their kind assistance throughout the publication process.

In Leiden, it is customary for PhD candidates to be accompanied during the defence of their theses by ceremonial assistants known as paranymphs. I remain sincerely grateful to Alan Avdagić and Reuben Riepma, two of my closest friends, for kindly serving in this role.

Finally, on a purely personal note, I wish to thank all my friends, as well as my dear mother, grandmother, and late grandfather, for their unfailing love and support.

Leiden, March 2026

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<i>špaša</i> ‘watching, guarding’	174
<i>sveya</i> ‘oneself’	358
<i>harga</i> ‘dues, tax’	176
<i>hastama</i> ‘quarrel, dispute’	211
<i>hinajha</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):

ABHIDH ^{L3}	Abhidharma text from British Library fragment 28 (Cox 2025) = CKM 30.
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 3	Bajaur fragment 3 (partial edition in Strauch 2014) = CKM 266.
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 (Hultsch 1925) = CKI 15–28
Nird ^{L2}	Nirdeśa from British Library fragments 7, 9, 13, and 18 (Baums 2009) = CKM 9; 11; 15; 20.
SĀ ^{S1}	Samyuktāgama sūtras from Senior fragment 5 (Glass 2007) = CKM 237.
SĀ ^{S5}	Samyuktāgama sūtras from Senior fragment 19 (Lee 2009) = CKM 251.
SHĀH	Aśokan inscriptions discovered at Shāhbāzgarhī (Hultsch 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 BD I² (10–21), BD II (17–34), BD III (12–31), SCBD (9), and BD IV (xix–xxii). For other types of texts (mostly inscriptions), I adopt the following sigla:

AG1	Almosi Gorge inscription 1, a Bactrian inscription in (Issyk-)Kushan script (Sims-Williams 2025b: 204).
Ayrtam	Ayrtam inscription (Sims-Williams 2025d).
DilT5	Fragment 5 (<i>olim</i> 4) from Dilberjin Tepe (Davary 1982: 131–133; 2023: 40–45).
DN1	Dašt-i Nāwur inscription 1, the monolingual Bactrian inscription in Greek script (Halfmann <i>et al.</i> 2024; Sims-Williams 2025b: 188–190 <i>contra</i> Palunčić, Palunčić & Maharaj 2023: 337–350).
h4	Hephthalite fragment 4 (Davary 1982: 119–121; Sims-Williams 2006; facsimile in Humbach 1966–67 II: Tafel 30).
h5	Hephthalite fragment 5 (Davary 1982: 121–123; Sims-Williams 2006; facsimile in Humbach 1966–67 II: Tafel 31).
h7	Hephthalite fragment 7 (Davary 1982: 125–128; Sims-Williams 2006; facsimile in Humbach 1966–67 II: Tafel 32).
h8	Hephthalite fragment 8 (Sims-Williams 2004b).
M 1224	Manichaean Bactrian fragment (Sims-Williams 2009a).
KSPlate	Kanishka's silver plate (Sims-Williams 2015).
Rab.	Rabatak inscription (Sims-Williams 2008c: 2012: 77f.).
SK4A	Surkh Kotal inscription 4, version A (Davary 1982: 53–64; Sims-Williams 2012: 78f.).
SK4B	Surkh Kotal inscription 4, version B (Davary 1982: 53–64; Sims-Williams 2012: 78f.).
SK4M	Surkh Kotal inscription 4, version M (Davary 1982: 53–64; Sims-Williams 2012: 78f.).
TiS	Tang-i Safedak inscription (Sims-Williams & Lee 2003).
Ur1	Uruzgan inscription 1 (Davary 1982: 68; facsimile in Humbach 1966–67 II: Tafel 22).
Ur2	Uruzgan inscription 2 (Davary 1982: 69; facsimile in Humbach 1966–67 II: Tafel 22).

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.

- BBB *Bet- und Beichtbuch* (MMP; MParth.; MSogd.; Sims-Williams, Sheldon & Gulácsi 2022).
- ŠKZ Trilingual inscription of Shapur I at Ka'ba-i Zardušt (MP; Parth.; Gr.; Huyse 1999).

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

Other abbreviations

co	cover-tablet obverse	r	reverse
cr	cover-tablet reverse	ref.	references
doc.	document	tr.	translation
fthc.	forthcoming	uo	under-tablet obverse
LW	loanword	ur	under-tablet reverse
o	obverse	v.l.	<i>varia lectio</i> (variant reading)
p.c.	personal communication		
PN	personal name		

Languages

Reconstructions of Late Han Chinese (1st–2nd cent. CE) come from Schuessler (2007), but with “a” written as “â” to avoid confusion with “a” (cf. Schuessler 2009: xix; 29). Superscript B and C (e.g. *sia*^B ‘depict, write’ > *xiě* 寫; *džan*^C ‘meditation’ >

chán 禪) note different Middle Chinese tones (cf. Schuessler 2007: 29–37; 2009: 29f.). The notation of Old Chinese follows Baxter and Sagart (2014).

For hypothetical Old Iranian forms reconstructed from Middle and/or New Iranian forms, I follow the notation of Sims-Williams (BD II: 179–286; BD IV: 103–132). For reconstructed Proto-Iranian (= the common ancestor of all Iranian languages), I adopt Dragoni's notation (2023: 16), with **č* and **ʃ* representing the outcome of the Proto-Indo-Iranian primary palatals. I leave it open whether **č* and **ʃ* represent palatal affricates (as, e.g., argued by Peyrot, Dragoni & Bernard 2022: 417f.) or dental ones (as, e.g., argued by Halfmann 2025b: 32ff.).

Aram.	Aramaic	MSogd.	Manichaean Sogdian
Arm.	Armenian	NIA	New Indo-Aryan
Av.	Avestan	NP	New Persian
Bab.	Babylonian	OAv.	Old Avestan
Bactr.	Bactrian	OChin.	Old Chinese
BSkt.	Buddhist Sanskrit	OIA	Old Indo-Aryan
BSogd.	Buddhist Sogdian	OIr.	Old Iranian
Chin.	Chinese	OP	Old Persian
CSogd.	Christian Sogdian	Oss. I.	Ossetic (Iron dialect)
Elam.	Elamite	Oss. D.	Ossetic (Digoron dialect)
EpSkt.	Epigraphical Sanskrit	Parth.	Parthian
Gāndh.	Gāndhārī	PIE	Proto-Indo-European
GBactr.	Graeco-Bactrian	PIIr.	Proto-Indo-Iranian
Gr.	(Ancient) Greek	PIr.	Proto-Iranian
Ir.	Iranian	Pkt.	Prakrit
Khot.	Khotanese	Psht.	Pashto
Khwar.	Khwarezmian	Skt.	Sanskrit
LHChin.	Late Han Chinese	Sogd.	Sogdian
MBactr.	Manichaean Bactrian	TA	Tocharian A
MIA	Middle Indo-Aryan	TB	Tocharian B
MIr.	Middle Iranian	Tib.	Tibetan
MMP	Manichaean Middle Persian	Tumsh.	Tumshuqese
MP	Middle Persian	YAv.	Young Avestan
MParth.	Manichaean Parthian	ZMP	Zoroastrian Middle Persian

Symbols

→ borrowed into

←	1) borrowed from 2) yielded through derivation from
/x/	phonological form
<x>	1) written form 2) letters secondarily added by the scribe in Bactrian
<*>	editorial addition of omitted text in Gāndhārī
(x)	1) letters or words omitted by the scribe in Bactrian 2) restorations of missing text in Tocharian 3) additions to the translation to aid comprehension
(*x)	editorial restoration of lost text in Gāndhārī
[x]	1) phonetic form 2) uncertain reading of text in Gāndhārī 3) restorations of missing text in Bactrian/Khotanese and translations from these languages 4) damaged, but reasonably certain reading of text in Tocharian 5) editorial addition to a citation from the secondary literature
ṡ	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	emended form in Vedic/Sanskrit
√	verbal root
C	cover symbol for consonants
N	cover symbol for nasals
V	cover symbol for vowels

CHAPTER 1 Introduction

The present study examines traces of language contact in Niya Prakrit. The focus lies on Bactrian influence, but I shall also study contact with other languages. This first 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 CE, 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, and 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 devoted two articles to the topic (1934; 1935a; 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

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.).

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* 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 to scholars 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' ← χρνο /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 do not know how many previously known Iranian loans came from Bactrian and whether 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? And 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 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

If Burrow’s theory were 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 Bactrian. Thus, the question arises whether substrate influence from the undocumented Shanshan language – be it “Tocharian C” or something else –

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.

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 Kushan domination over the Tarim Basin (p. 396, fn. 116; 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 study 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 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 a phonological analysis of Niya Prakrit and Bactrian words – 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 to identify 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

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

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 resulting from this procedure, see §3.1.4.

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 glossaries of Sims-Williams' edition of the Bactrian documents (BD II: 179–286; BD IV: 103–132) and in texts not excerpted in these glossaries 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 whether the Niya word could also be a loan from a cognate form in another Iranian language (cf. *supra*).

Regrettably, strict adherence to this methodology leads to 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' glossaries 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, 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, refine the translation and interpretation of certain passages, and correct erroneous readings (see Appendix 3, pp. 475–481).

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!

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 field of research, 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, since 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 shall 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 shall draw a comparison with a corresponding formation in Bactrian to see whether 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

To address 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 Kushan 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 Kushan 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.



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 Niya Prakrit and other varieties of Gāndhārī

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 As 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 CE.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 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 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 available online in 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 Kushan empire, in which Gāndhārī served both as a vehicle for the Buddhist message and as an administrative language” (Salomon 2002: 120; cf.

9 As noted by Jamison (2000: 64 fn. 7), Fussman (1989: 440; 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 as deducible from the Kharoṣṭhī materials are Atwood (1991), Padwa (2007), Hansen (2004; 2012: 25–55), van Schaik (2014), Høisæter (2020; 2023), Trombert (2020: 385–406), 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 Preliminary results had been made known in Rapson (1905), Boyer (1905), and Boyer, Rapson & Senart (1918).

also Salomon 2011b). Still, 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; §5.4.7).

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). In addition, we possess two administrative documents (CKD 661; 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 CE (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; 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). Yet, 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

13 On CKD 661, see §5.4.7 and Appendix 2, pp. 467–474. 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 CE. For a preliminary study of CKD 843, see Duan (2013b).

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).

in the Peshawar valley (Pakistan), the latter form of Gāndhārī is attested for more than six centuries: from the 3rd century BCE onwards in the form of the Aśokan Rock Edicts at Shāhbāzgarhī (SHĀH) and Mānsehrā (MĀN) until the 3rd or 4th century CE when Gāndhārī was 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 2025d: 311–314) and a loan contract preserved as Bajaur collection fragment 15 (CKM 278; to be published by Gudrun Melzer).¹⁷

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 CE 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 but 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

15 Cf. Salomon (1999a; 2003; 2006a; 2006b; 2014); Allon (2008; 2014; 2024); 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).

18 Bactrian was also written in Manichaean script and in the (Issyk-)Kushan script, a local abugida derived from the Aramaic script; see also below.

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 (2012: 78f.).

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, however, 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 2010: 204f.); the Hephthalite fragments from the Berlin Turfan collection (Sims-Williams 2004b; 2006); and a unique specimen of a Manichaean Bactrian folio written in an adapted form of the Manichaean script (M 1224; Sims-Williams 2009a; 2011a).²² Very recently, Sims-Williams (2025b) has been able to show that (some of) the inscriptions in the (Issyk-)Kushan script can also be interpreted as Bactrian texts.²³

The Bactrian corpus is divided into two parts: an older part dating back to Kushan times and written in a more archaic variant of the language, i.e. Kushan Bactrian (1st–3rd cent. CE), and a more recent part composed in the linguistically more innovative but better-known post-Kushan Bactrian language (3rd–9th cent. CE). The earliest longer text in Bactrian is DN1, found in Dašt-i Nāwūr and dated to 105 CE (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).

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

21 Julian Kreidl is preparing a Bactrian dictionary and kindly put a preliminary version of this dictionary at my disposal.

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

23 The article by Sims-Williams (2025b) builds further on other recent contributions to the decipherment of the (Issyk-)Kushan script (also known as the “unknown” script), namely Falk (2023; 2025), who likewise argued the language to be Bactrian, as well as Bonmann *et al.* (2023) and Lurje (2025), who proposed it to be a previously unknown Middle Iranian language closely related to Bactrian. As the decipherment of the Bactrian material in (Issyk-)Kushan script is still in progress, this book will reference this material only occasionally.

1.4.3 Bactrian loans into other languages

Because of the prestige which the Bactrian language enjoyed during the Kushan (1st–3rd cent. CE) and Hephthalite periods (5th–8th cent. CE), Bactrian words were not only borrowed into Gāndhārī, but also into (Buddhist) Sanskrit, Tocharian, Khotanese, Sogdian, Persian, Nuristani languages, and other languages currently spoken in the Hindukush area, e.g. Pashto, Munji-Yidgha, and Khovar.²⁴ 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 final section 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 in Gandhāra when various foreign people invaded this area.²⁵ These languages are Old Persian, Greek, “Indo-Scythian”, and Parthian. Secondly, I introduce languages that could have influenced Niya Prakrit in the Tarim Basin, i.e. 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

24 For Sanskrit, see Schoubben (2022b); for Tocharian, Schwartz (1974) and Tremblay (2005a: 435–437); for Khotanese, Weber (1985); for Sogdian, Sims-Williams (1979: 133 fn. 7; 1996a: 50f.; 2004a: 541 fn. 8; BD II: 184 s.v. αβινδαμο; BD IV: 125 s.v. σωλγο; 2025c); for Persian, Lurje & Yakubovich (2017), Cheung (2017: 35–38), and Halfmann (2025a); for Nuristani, Halfmann (2023) and Kreidl (fthc. c); for Pashto, Cheung (2017: 42) and Kreidl (fthc. a: §5.1.2); and for modern languages from the Hindukush, Kreidl (fthc. b). For loanwords into Bactrian, cf. Sims-Williams (2002; BD IV: 3f.), Gholami (2018), and Schoubben (2025b; 2025d: 298–307).

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

the 4th century BCE (Vogelsang 1990; Ruffing 2021), and Aramaic literacy was introduced to the area (cf. §2.1.1).

From the 3rd to 1st century BCE, 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 too (cf. §3.2.1 s.v. *kṣuna*; §3.2.2 s.v. *milima*; Appendix 1, pp. 461–464).

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 BCE and whose influence lasted in some parts of India until the 4th century CE (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).²⁶

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 CE when Gondophares, their first king, declared independence from the Parthian empire. It lasted until the first half of the 3rd century CE. Although the Parthian heartland in present-day NE Iran and Turkmenistan was geographically remote from Gandhāra, one accordingly expects there 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).

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

Therefore, Khotanese is one of the languages that can have contributed loanwords to Niya Prakrit (cf. §4.2.5).²⁷

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.²⁸ 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.).

Due to various military conflicts, there was additionally a Chinese influence on the Tarim Basin for most of the first millennium CE, 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) and Trombert (2020: 330–345; 401–404).²⁹ Potential linguistic influence from Chinese on Niya Prakrit has yet to receive a systematic

27 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.

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

29 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).

investigation and will only be tangentially touched upon in subsequent chapters.³⁰

³⁰ To my knowledge, there is so far only one secure example of a loanword directly adopted from Chinese, i.e. the political title *jītuṃgha* ← Chin. *shì zhōng* 侍中 ‘palace attendant’, LHChin. *džə^c tuŋ* (Brough 1965: 600ff.; 1970a = 1996: 295ff.; 351–357; Schuessler 2007: 467; 621f.). 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 intend to argue elsewhere that *hastalekha* is better explained as a calque from an Eastern Iranian, possibly Bactrian, cognate of MP *dast-nibēg* and Inscriptional Parth. *dst-nypyk*, which also literally mean ‘hand-document’.

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. Sometimes, though, 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. 36); for Bactrian, see Table 2 (p. 60).

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.¹ Brāhmī was from its beginnings conceived as a pan-Indian script. Kharoṣṭhī, by contrast, never lost its association with the

1 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 𑀧 *a*, 𑀅 *ra*, 𑀢 *pa*, 𑀆 *ca*, 𑀩 *na* (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. 𑀧𑀭 *ga* /y/ after 𑀧 *ga* /g/.

northwestern regions, whence the script spread to large parts of Central Asia.² Being attested from the 3rd century BCE until at least the 4th century CE,³ 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.⁴

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). Thus 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).⁵

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 (Fussman 1989).⁶ Inconsistencies include, for instance, writing an anusvāra (ṣ) where it is etymologically unjustified, e.g. in opt.2sg. *preṣeyamaṣi* ‘you should send’ for ***preṣeyasi* (CKD 399 rA2), or leaving it out where it is

- 2 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).
- 3 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 CE.
- 4 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).
- 5 The Aramaic heritage in Gāndhārī deserves more comprehensive research in the future.
- 6 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).

historically expected, e.g. in *abhyadara* ‘inside’ instead of ***abhyam̐dara* < *abhyantara*- (CKD 291 o3, cf. also LKD: §47).⁷

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. 𑀲 *ā* next to 𑀅 *a* or 𑀲 *kā* next to 𑀅 *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 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).

**

The ensuing sections will briefly introduce some of the phonological changes characteristic of Niya Prakrit and their relation to developments in Gāndhārī more generally.⁸ The discussion consists of two parts. The first four sections each present one feature of Niya (historical) phonology, i.e. the lenition of

7 Unetymological anusvāras are also common in Khotanese.

8 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) and Ryder (2024).

intervocalic consonants (§2.1.2); confusion of aspirated and unaspirated stops (§2.1.3); confusion of voiced and unvoiced stops (§2.1.4); and the treatment of stops after nasals (§2.1.5). The final two sections concern the phonological value of some selected *akṣaras* (§2.1.6) and the transliteration of the Kharoṣṭhī sign 𑀘 as *jha* (§2.1.7).

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; in other words, they became *-h-* (LKD: §27).⁹ Some examples are *suha* ‘pleasure’ < Skt. *sukha-*, *lahu* ‘light, small’ < *laghu-*, and *parihaṣa* ‘claim’ < *paribhāṣā-*. At the same time, it is possible to find historical spellings with the aspirates preserved, e.g. *lekha* ‘letter’ < *lekha-*.¹⁰

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* ‘thus’ < Skt. *tathā* and *gohoma* (*gohomi*, also contracted *goma*) ‘wheat’ < *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* ‘thus’ < Skt. *tathā* or *krosa* / *kroṣa* ‘anger’ < *krodha-* (cf. e.g. Salomon 2000: 85; 2008: 114; 339f.).¹¹ At least for *-dh-*, there are occasional instances of the same reflex in Niya Prakrit, i.e. *masu* ‘wine’ < Skt. *madhu-* (§3.7.1 s.v.); *asimatra* / *aṣimatra* / *aḥimatra* ‘above measure’ < *adhimātram*; and *anavarajhi* ‘faultless’ < *anaparādh(y)a-* (LKD: 110 s.v. *masu*; TKD: 74; also §2.1.7). Since *-dh-* > *-h-*

9 Aspirated 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).

10 Contrast *leharaga* ‘courier’ < **leharaga* < Skt. *lekhaḥāraka-*, whose haplogy must postdate the lenition of *-kh-* to *-h-*. For confusions between aspirated and unaspirated stops, see §2.1.3.

11 Possibly, *-dh-* (and *-th-*) first became a fricative *-ḍ-, before developing further to /z/ (Brough 1962: 95f.; Pinault 1987a: 143; Baums 2009: 144f.; Ryder 2024: 119f.). The dir.pl. *sasumate* ‘considered good’ < Skt. *sādhumata-* in SHĀH I 2 (the parallel in MĀN I 3 has *sādhumata*) 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* 𑀘 *su* in *sasumate* was intended as an approximation for *-ḍu- because intervocalic 𑀘 *da* probably still indicated a plosive /d/ in Aśokan Gāndhārī (cf. Fussman 1989: 464), and there was thus no straightforward way to write /ḍ/.

seems regular in Niya Prakrit, these examples might 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 𑀓 *ga* (older transcription *ḡa*). Two such examples are *anega* ‘many’ < Skt. *aneka-* and *aroga* ‘health’ < *aroga-* (LKD: §16).

The lenited outcome of OIA intervocalic *-c-* and *-j-* could be written with 𑀓 *śa* or 𑀔 *ja* (older transcription *ḡa*), thus suggesting a phonological value /ʒ/.¹² This lenition can be exemplified by words such as *praśura* ‘abundant’ < Skt. *pracura-* and *yajitaga* ‘requested’ < OIA **yācita-ka-* (LKD: §17). A special case is provided by the word for ‘king’, Skt. *rājan-* (nom.sg. *rājā*): this word is spelt as *raja* /rāḡa/ in the oldest Niya documents (CKD 422; 808), but as *raya* in the rest of the corpus. It thus seems that a further lenition from *-ḡ-* to *-y-* was underway at the time of our written evidence.

The sound resulting from intervocalic weakening of the retroflex stops *-ṭ-* and *-ḍ-* is spelt with 𑀓 *ḍa*, phonologically most likely /ɾ/ (see §2.1.6).¹³ This sound change is seen in *kukuḍa* ‘cock’ < Skt. *kukkuṭa-*, *vaḍavi* ‘mare’ < *vaḍavī-*, and other examples (LKD: §18). The aspirated *-ṭh-* of Skt. *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’ < Skt. *auṣadha-* (CKD 225 r5). In view of the lenition process undergone by the other intervocalic retroflexes, it is conceivable that *-ḍh-* stands here for /ɾʰ/ (so also Baums 2009: 144 on other forms of Gāndhārī).¹⁴

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

13 Because of this lenition to /ɾ/ and by lack of an example in initial position, 𑀔 *ta* 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’ (cf. BSkt. *coṭaka-*; CKD 316 o3) and *viheṭa* ‘injury’ < *viheṭha-* (CKD 621 o5, o6) can be corrected to *coḍaga* and *viheḍa*, respectively. For *guṭa* ‘hidden’ < *gūḍha-* (CKD 17 cr2), I propose to change the reading to *guḡa* ‘idem’ < *guhya-* (as in CKD 376 o2). The element *tera* in *saṃghaṭera* ‘community elder’ (CKD 419 uo6) is probably a mistake for ***thera* < *sthavira-* (cf. LKD: 93 s.v.).

14 The same lenition happened in NIA languages, e.g. Hindi *paurhā* ‘stomach’ < OIA **pauḍha-ka-* (CDIAL I: 505 no. 9021). Further support for the existence of /ɾʰ/ in (later forms of) Gāndhārī comes from the recent discovery of a Kharoṣṭhī sign 𑀓 *dha* in the Bajaur fragments (Schlosser 2022: 55). The sign *dha* found in foreign

For OIA intervocalic *-t-* and *-d-*, the *akṣaras* 𑀮 *ta* and 𑀭 *da* were used indiscriminately, e.g. *lihitaḡa* besides *lihidaḡa* ‘written’ < OIA **likhita-ka-* (LKD: §19). Because the other intervocalic consonants had been weakened to voiced fricatives, I assume, with Baums (2009: 141), that 𑀮 *ta* and 𑀭 *da* wrote /ḡ/ in this type of context.¹⁵ In some other forms of Kharoṣṭhī, intervocalic /ḡ/ could be written with the special signs 𑀮𑀭 *ṭa* and 𑀭𑀮 *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’ < Skt. *api* and pres.3pl. *pivamti* ‘they drink’ < *pibanti*. Historical spellings were nevertheless common (LKD: §20).¹⁶

Lenition also affected intervocalic sibilants. The outcome of OIA *-ś-* can, in between vowels, be written with either 𑀮 *śa* or 𑀭 *ja*, e.g. *daśa* / *daja* ‘ten’ < Skt. *daśa*. As the sign 𑀭 *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 spelt with 𑀮 *ṣa*, as in *śeṣa* ‘remainder’ < Skt. *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 𑀮𑀭 *ṣa* to write the phoneme /z/ unambiguously (cf. e.g. Baums 2009: 150; Ryder 2024: 144f.).¹⁷

Between vowels, OIA *-s-* became /z/ (cf. LKD: §22), a phoneme which could be spelt with 𑀮 *sa*, 𑀭 *ṣa*, or 𑀭 *jha* (see in more detail §2.1.7).¹⁸ A word appearing in all three spellings is *dasa* / *daṣa* / *dajha* ‘slave’ < Skt. *dāsa-*.

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

names in Niya Prakrit, e.g. *Dhagīya*, is palaeographically distinctive; it probably indicates a different, yet still undetermined sound (Burrow 1935b: 668).

15 See also Ryder (2024: 117). In a few frequent words, intervocalic dentals are sometimes weakened to Ø, e.g. in *caūra* ‘four’ < Skt. *catur-*.

16 Occasionally, *avi* ‘also, too’ < Skt. *api* results further into *ami* (e.g. CKD 189 o3). In this case, *-m-* conceivably stands for a nasalised labiodental approximant [ʋ]. Like Baums (2009: 138f.), I consider [ʋ] to be an allophone of /v/ and /m/.

17 For Khotan Prakrit, the use of a special sign 𑀮𑀭 *ṣa* was noted by Konow (1936: 237). Boyer *et al.*’s (1920–29: 249) readings *maṣā* ‘coins’ (CKD 661 o3, o4), *niravaśiṣo* ‘without remainder’ (CKD 661 o4), and *ajiṣanayi* ‘at the request of’ (CKD 661 o7) are to be corrected to *maṣā*, *niravaśiṣo*, and *ajiṣanayi*, respectively.

18 Very occasionally, 𑀭 *ṣa* occurs word-initially, mainly in words of an enclitic nature such as *ṣaca*. See LKD (§22) and Glass (2000: 107–109).

Asian Gāndhārī (Ryder 2024: 305f.), there is nonetheless an occasional tendency for the aspiration to be lost, both word-initially and in other positions (LKD: §§24f.). Examples include *gaṣa* besides *ghaṣa* ‘fodder’ < Skt. *ghāsa*-; *grida* besides *ghrida* ‘ghee’ < *ghṛta*-; *śavata* besides *śavatha* ‘oath’ < *śavatha*-; and *kum̐ba* instead of **kum̐bha* ‘jar’ < *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’ < Skt. *dūra*- or *upaśamgh*- besides *upaśamg*- ‘to suspect, to worry’ < *upa* + √*śam* (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* < Skt. *glāna*(-ka-); *can*- besides *jan*- ‘to know’ < √*jñā*; and *tura* besides *dura* ‘away, far’ < *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. *pal̐yi* ‘tax’ < Skt. *bali*- (ca. 90 attestations; cf. Burrow 1935b: 675; LKD: §14; Lüders 1936b: 647).¹⁹ At times, voiced stops can also be written instead of an etymologically expected unvoiced stop, e.g. ins.sg. *dena* besides *tena* ‘therefore’ < Skt. *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:

19 It is possible that *pal̐yi* was in its turn borrowed into Bactrian as παλο, but only if παλο in Tt12 (2×) and 14 means ‘tax’, which is not certain. See BD IV (98).

98f.).²⁰ Niya examples of the first change are *upaśaṃg(h)-* besides *upaśaṃk-* ‘to suspect, to worry’ < Skt. *upa* + $\sqrt{\text{śaṅk}}$ and *mahaṃda* besides *mahaṃta* ‘big’ < *mahat*.²¹ Instances of the second are *chīmṇ-* ‘to cut’ < $\sqrt{\text{chid}}$ (cf. Pāli *chindatī*) and *baṃn-* ‘to bind’ < $\sqrt{\text{bandh}}$.

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 (*kṣa*; *lyā*; *ya*; *ṣpā*; *śpā*); (ii) whose phonological value needs more extensive argumentation (*ṭha*; *ṭha*; *ḍa*); or (iii) which are used slightly differently than in other forms of Gāndhārī (*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.²²

𑖦 *ka*

The sign 𑖦 *ka* is formed by adding a vertical stroke on top of 𑖦 *ka* (Glass 2000: 52f.; Schoubben 2021: 48f.). *ka* most frequently corresponds to OIA *-sk-*, e.g. in *namaḥkaro* ‘homage’ < Skt. *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-*; compare *kalīṭa* / *kalamaṇa* ‘stumbling’ < $\sqrt{\text{skhal}}$ and *duḥkara* ‘difficult’ < *duṣkara-* (Schoubben 2021: 49f.). In Niya Prakrit, *ka* is further used to substitute Bactr. *-ḥk-* / *ṣk-*, as exemplified by *maḥka* ‘bean’ ← *μαḥκο / *māṣkə*/ 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 /*ṣk*/,²³

20 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.

21 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* < Skt. *saṃkhyāya* ‘having considered’ (DHP^K 68c).

22 Compound *akṣaras* whose transliteration has also changed over time but which are not discussed here are 𑖦 *tsa* (older transliteration *nka*); 𑖦 *tga* (*nḡa*); 𑖦 *spa* (*nṣa*); 𑖦 *rma* (*mā*); 𑖦 *kla* (*kra*); 𑖦 *pla* (*pra*); and 𑖦 *ṣla* (*ṣra*).

23 In contrast to Bajaur fragment 5 (CKM 268), there is no Niya example of 𑖦 *ka* standing for /*sk*^h/.

though one cannot exclude Brough's idea (1962: 75) that it stood instead for "a sound developed from an earlier *ska* [or *ṣka*]" (cf. also Ryder 2024: 212; 214).

𑀓𑀲 *kṣa*

In Niya Kharoṣṭhī, 𑀓𑀲 *kṣa* occurs much more often than 𑀓𑀲 *kṣa*, the sign commonly used in other forms of the script; the only palaeographic difference between the two is the horizontal line added on top of 𑀓𑀲 *kṣa*.²⁴ These signs are used to represent the outcome of OIA *-kṣ-*, e.g. *kṣetra* (*kṣetra*) 'field' < Skt. *kṣetra-*, and as a substitution of Ir. **-xš-*, e.g. *kṣuna* (*kṣuna*) 'date, reign, regnal year' ← Bactr. *χṣovo* /xšunə/ (§4.3.18). Given that *kṣa* and *kṣa* freely interchange in the Niya documents, both seem to have been pronounced in the same way (KD: 302; Glass 2000: 116). But it is possible that there originally was a distinction: *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 Gāndh. [ṣ].²⁵ This interpretation is, however, not universally accepted,²⁶ and I will offer some new arguments against it in §4.3.18.

𑀓𑀲𑀸 *ṭha*

In inherited words, the *akṣara* 𑀓𑀲𑀸 *ṭha* typically represents the outcome of OIA *-ṣt(h)-*, e.g. Niya *naṭha* 'destroyed' < Skt. *naṣṭa*-.²⁷ In contrast to the corresponding Brāhmī sign, *ṭha* probably does not indicate a voiceless aspirated retroflex /tʰ/, but the cluster /ṣtʰ(h)/. This is, first of all, suggested by foreign renderings of Gāndhārī words containing *ṭha*: e.g., Gāndh. *Caṭhana* (PN) → Gr. *τιαστάνης*, TB *Caṣtane*, Old Uyghur *Čaštane* (Brough 1962: 76); Niya *soṭhaṃga* 'finance officer' → TA *soṣṭaṅk**, nom.pl. *soṣṭāṅkāñ* (§3.2.4 s.v.); Gāndh. **saṃduṭha* 'content' < Skt. *saṃtuṣṭa-* → Khot. *saṃduṣṭa-* 'idem' (De Chiara 2014: 213).²⁸ Corroborating evidence for the value /ṣtʰ(h)/ comes from

24 Burrow still transliterated these signs as *čha* and *cha*, respectively.

25 E.g. Bailey (1946a: 774); Brough (1962: 72f.); Baums (2009: 168f.); Ryder (2024: 171f.).

26 Cf. Salomon (1998b: 75; 2008: 123); Cheung (2013: 624); Schoubben (2022a: 150 fn. 12).

27 OIA *-ḥsth-* is another source, cf. *puraṭhida* 'standing in front' < *paraḥsthita-*.

28 For the reconstruction **saṃduṭha*, cf. *saduṭhi* 'contentment' < *saṃtuṣṭi-* in DHPK 59c; 162b and *saduṣido* 'contented' < *saṃtuṣṭa-* in DHPK 53d. The reason that Khot.

(i) occasional spelling variations as between *suveṭha* and *suveṣṭa* (a title); (ii) the preservation of the dental cluster *-st-*, while in other MIA languages the sibilant in both *-st-* and *-ṣṭ(h)-* is lost with subsequent aspiration (> *-(t)th-*; *-(t)ṭh-*); (iii) the use of ७ *ṭha* to write Skt. *-ṣṭ-* in the Sanskrit Kharoṣṭhī document CKD 523 (nom.sg. *naṭhaḥ* = *naṣṭaḥ* in verse 3b);²⁹ and (iv) the preservation of the cluster *-ṣṭ(h)-* in some NIA languages from the northwest, e.g. Pashai *aṣṭ* < Skt. *aṣṭā* ‘eight’. For more details, see Bailey (1949a: 123–125; 1950a: 398), Brough (1962: 75–77), and Baums (2009: 164).³⁰

७ *ṭha*

७ *ṭha* is more or less consistently distinguished from ७ *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 *ṭha* is contended.³¹ Since, for reasons of space, I cannot delve very deeply into the debate here, I shall limit myself to the Niya evidence. In Niya Prakrit, only two words containing this *akṣara* have a secure etymology, i.e. *aḥovaga* ‘fit for a purpose, suitable’ < OIA **arthopāka-* and *vaḥayaga* ‘attendant’ ~ BSkt. *upasthāyaka-*.³² In the case of *aḥovaga*, *-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’ < *kartavya-*). In *vaḥayaga*, *-ḥh-* is the reflex of

saṃduṣṭa- is normally seen as a loan from Gāndhārī, and not from Sanskrit, is the postnasal voicing of the *-t-* of *saṃtuṣṭa-*. See for this criterion Maggi (2024: 301 with fn. 5 on Khot. *kṣāndi-* ‘patience’), though admittedly OIr. **-nt-* also yielded Khot. *-nd-* in inherited words.

- 29 As this Sanskrit document is otherwise free from Prakritisms, it would not be attractive to assume that the *ṭh* in *naṭhaḥ* stands for /ṭṭ^h/ due to Prakrit influence. Compare further *parituṭha*^o ‘contented’ for *parituṣṭa*^o in the Gāndhārī Hybrid Sanskrit document CKD 647 (o3).
- 30 Because he leaves out some important pieces of evidence, including the spelling variation between *suveṭha* and *suveṣṭa* mentioned above, I remain unconvinced by Halfmann’s (2024: 196–201) argument that Kharoṣṭhī ७ *ṭha* would after all stand for /ṭṭ^h/.
- 31 See e.g. Konow (1943: 68–72); Brough (1962: 75–77); Baums (2009: 164–167); Halfmann (2024: 202–207).
- 32 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 cr4; and the PN *Kruḥhaka* in CKD 513 oB2 is etymologically unclear as well. In CKD 422 o5 (perhaps also 852 1), there is a variant spelling *uḥha* for the more common *uṭa* ‘camel’, traditionally assumed to be from Skt. *uṣṭra-* but perhaps rather a loanword (see p. 442, fn. 50).

OIA *-sth-*.³³ The Pāli cognate of this word is *upaṭṭhāka-* (~ BSk. *upasthāka-*), which suggests that the *-ḥh-* in Niya *vaḥhayaga* could likewise stand for */ṭṭ^h/*. This view receives further support from (i) the variant spelling *vaṭayaga* (e.g. CKD 419 cr2), whose *-ṭ-* */ṭṭ/* could result from deaspiration of */ṭṭ^h/* (cf. §2.1.3); and (ii) from Khot. *vaṭhav-* ‘to produce’, whose *-ḥh-* is a rendering of the *-ḥh-* in Gāndh. **vaḥhav-* (attested *uvaḥhav-*) < Skt. *upasthāpaya-* (Skjærvø 2004 II: 337).

ᵛ ḍa

In older literature (e.g. LKD), ᵛ was transcribed as *ḍa*. Because this *akṣara* is distinguished from ᵛ ḍa by an extra line at the bottom right, *ḍa* is these days the preferred transliteration. Except for occurrences in loanwords, ᵛ ḍa ordinarily represents the outcome of a lenited intervocalic *-ṭ-* or *-ḍ-*, as in *kukuḍa* ‘cock’ < Skt. *kukkuṭa-* or *vaḍavi* ‘mare’ < *vaḍavī-*. ᵛ ḍa probably stood for a rhotic sound, here phonologically transcribed as */ṛ/* (cf. LKD: §18 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 TA/TB *kor* ‘myriad’ ← Gāndh. *koḍi* */kōṛī/* < OIA *koṭī-* (DoT: 215). Another indication of the value */ṛ/* is the spelling variation between loc.sg. *śarataṇṇmi* and *śaḍataṇṇmi* ‘in the autumn’ in CKD 574.³⁴ Phonetically, ᵛ ḍa may have been a retroflex flap [ɾ] as in NIA languages, including those spoken in the northwest (see von Hinüber 2001²: §201; Baums 2009: 141; Ryder 2024: 114; cf. also §4.3.26).

ṣ na

In Niya Kharoṣṭhī, there was a strong preference for writing dental ṣ *na* everywhere, also in places where retroflex ṣ ṇa would be expected etymologically (KD: 305).³⁵ In other words, the two types of nasal had probably merged in Niya Prakrit (LKD: §34), as they had in some other forms

33 The outcome of OIA *-sth-* can alternatively be written with *ṭ* *tha*, as in *thavitaḡa* ‘deposit’ < OIA **sthāpita-ka-*.

34 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 o5, which Burrow (1940: 46) interprets as a variant spelling of *paḍichitama* ‘we received’.

35 The *akṣara* ṣ ṇa is hardly used in Niya Kharoṣṭhī.

of Gāndhārī.³⁶ Because in Niya Prakrit the outcome of this merger is by default written as 𑖦 *na*, I phonologically represent it as /n/.³⁷

𑖦 *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 *lyā* (written 𑖦) interchange in the case of the PN *Kal̥yanadharmā* / *Kalyanadharmā* and because *l̥yi* and *li* alternate in examples such as *l̥yihida* ‘written’ (CKD 575 cr5) next to *lihida*, and *Lipe* (a foreign PN, CKD 754 oA6) next to *L̥yipe(ya)*. These alternations suggest that *l̥ya* indicates a palatal /j/. See further §6.3.6.

𑖦 *ya*

The *akṣara* 𑖦 *ya* (by Burrow transliterated as *ya*) is distinguished from 𑖦 *va* by the addition of a vertical line at the bottom right, the so-called *cauda* (Glass 2000: 98). Outside the Niya documents, 𑖦 *ya* has hitherto only been discovered on some Kushan-period coins. In Niya Prakrit, 𑖦 *ya* 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. *hetuṣena* ‘by reason’ < *hetu*-. Therefore, 𑖦 *ya* most likely represents a semivowel /w/, sufficiently distinct from /v/ to have warranted the creation of an additional grapheme. Nonetheless, scribes often confused 𑖦 *ya* and 𑖦 *va*; they did so in foreign words, such as *vasu* next to *vasu* (a title), but also in inherited words, such as *viṃṇāyēti* beside *viṃṇāveti* ‘(s)he orders’ < Skt. *viṃṇāpayati*. See also LKD (§29).

𑖦 *vha*

Boyer *et al.* (KD) and Burrow (LKD; TKD) transliterated the Kharoṣṭhī sign 𑖦 as *p̥h̥a*. 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*-undergoing intervocalic lenition, as in Khotan Pkt. *avhiṇanu* ‘recognition mark’ < Skt. *abhijñāna*- (CKD 661 o2f.). As argued in detail by Baums (2009:

36 Cf. Brough (1962: 97f.); Baums (2009: 134–136; 147f.); Ryder (2024: 136–138; 153; 313).

37 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].

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’ < Skt. *prābhṛta*- (cf. LKD: §27). Consequently, there are no inherited words in Niya Prakrit containing *vha*: this *akṣara* only occurs in proper names as a substitution of Ir. *-f-, e.g. *Tiravhara* (PN) ← Bactr. *τ(ε)ιροφαρρο /tīrəfarrə/ < *tīra-farnah- ‘glory of the god Tir’.³⁸ 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/.

𑖦 *ṣpa* and 𑖧 *śpa*

The Kharoṣṭhī signs 𑖦 *ṣpa* and 𑖧 *śpa* have so far not been discovered outside of the Niya documents. The element transcribed as -*ṣ*- “consists of a loop at the base of the character and crossing the stem slightly” (Glass 2000: 126). 𑖦 *ṣpa* only occurs in the foreign personal names *Ṣṣalu* (CKD 781 uo7) and *Ṣṣalīyaya* / *Ṣṣalīyaya*, the latter having a variant with 𑖦 *ṣva*, i.e. *Ṣvalīyaya* (CKD 709 co3). 𑖧 *śpa* can also be found in inherited vocabulary, e.g. in *paraśpara* ‘one another’ < *paraspara*-. Similar to how 𑖦 *ṣpa* can alternate with 𑖦 *ṣva*, 𑖧 *śpa* interchanges with 𑖧 *śva*, e.g. *śparna* ‘gold’ next to *svarna* (CKD 113 r1). It seems therefore likely that the element -*ṣ*- indicates a fricative close to /v/, possibly /f/. See also LKD (§49).

2.1.7 The transliteration of Kharoṣṭhī 𑖧 as *jha*

The transliteration of the Kharoṣṭhī script adopted in this book follows that used in the online Gāndhārī dictionary and text catalogue,³⁹ with one essential exception: the transliteration of the *akṣara* 𑖧. Whereas Baums and Glass (2002ab-) render 𑖧 as *za*, I use the older transliteration *jha*.

The most extensive justification for the transliteration *za* known to me is Brough’s (1962: 60–62), who advances three principal arguments (see also Glass 2000: 67; 110–112):

- (i) 𑖧 represents a foreign *z* in loanwords from Iranian and Greek.

38 There is one exception: the inherited proper name *Budhavarma* is once spelt with *vh* in Niya Prakrit (gen.sg. *Budhavharmaaṣa* in CKD 655 uo4).

39 When I cite from, e.g., Boyer *et al.* (KD), the transliteration system used in the original work is adapted to that of Baums & Glass (2002ab-).

- (ii) Where other MIA languages show *-(j)jh-*, the corresponding Gāndhārī sound is typically written as *ʎ ja* or *ȳ ĵa*, rather than *ɥ*.⁴⁰ A representative example is *uvaĵae* (CKI 46 4), also gen.sg. *upajayasa* (CKI 161 1), from Skt. *upādhyāya-* ‘teacher’ (cf. Pāli *upajjhāya-*).
- (iii) Using the transliteration *jha* may be confusing, since *ɥ* can also represent the outcome of intervocalic OIA *-dh-* and is sometimes interchangeable with *ʎ sa* and *ȳ sa* /*z/*, as in *asimatra* / *aṣimatra* / *ajhimatra* (or: *azimatra*) ‘above measure’ < *adhimātram* and similar examples.

This section argues that none of these points is decisive. Although it is undeniable that *ɥ* can stand for /*z/*, the combined evidence of spelling variation, chronological distribution, and palaeography bolsters the conclusion that the originally intended value of *ɥ* was /*j*^(h)/. For this reason, I prefer to transliterate *ɥ* as *jha* rather than *za*.

2.1.7.1 The substitution of foreign *z*

Brough’s first argument presupposes that *ɥ* has always functioned as a loan phoneme that exactly replicates a foreign *z*. Cross-linguistically, however, if a language lacks an exact phonemic equivalent, foreign sounds are more typically adapted to the phonological system of the recipient language rather than reproduced exactly (cf. also §4.3).⁴¹ This process of phonological adaptation is also evidenced in Gāndhārī, as *ɥ* is not the only way to approximate *z* in loanwords (see further §4.3.19).

Crucially, there are examples of *z* being substituted with *ʎ ja* in both Niya Prakrit and South Asian Gāndhārī. A Niya example is *jenavida* ‘armourer’ ← Bactr. ζηνοβιδο /*zēnəvidə*/ < **zaina-pati-* (§3.2.2 s.v.). An instance from South Asian Gāndhārī is the PN *Damijada* (CKI 42 1, gen.sg. *Damijadasa*) ← **dāmizād(a)* < OIr. **dāmi-zāta-* ‘born through (the will of) the creator’.⁴²

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

41 /*z/* was only added later to the phoneme inventory of Gāndhārī due to intervocalic lenition of OIA *-th-*, *-dh-*, and *-s-* (cf. §2.1.2). To my knowledge, the earliest evidence for *ɥ* substituting a foreign *z* are some coins from the middle of the 2nd century BCE, on which the name of the Indo-Greek king Zoilus I (ζωίλος) is rendered in Kharoṣṭhī as *Jhoila* (gen.sg. *Jhoilasa* in CKC 37; 38; 39).

42 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* (EpSkt.). 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 *ɥ*.

Otherwise, Iranian names containing *-zād(ə) < OIr. *-zāta- are usually rendered with 𐬵 (cf. e.g. Salomon 1997: 233).⁴³

Sanskrit likewise uses *j* to approximate foreign *z*.⁴⁴ The word *jagara*- ‘armour’, for instance, is generally regarded as a borrowing from a cognate of Khwar. *zγryk*; Oss. I. *zγær*, D. *æsqær*; and Psht. *zγəra* ‘idem’ (Abaev 1958–89 IV: 308f.; EWAia III: 205; EDP: 101). A second example is *jena-* / *jayana*- ‘saddle, armour (for a horse)’, which has been identified as a loanword from Mlr. *zēn(ə), e.g. Bactr. ζηνο, < OIr. *zainV- (EWAia III: 212; Schoubben 2025b: 14). The example of *gañja-* ‘treasury’ ← OP *ganza- shows that this substitution was possible also after a nasal (see also §3.5.1 s.v. *gaṃñā*).

These examples demonstrate that foreign *z* could be rendered by *j* in Gāndhārī and in other Indo-Aryan languages. Therefore, the use of 𐬵 to represent a foreign *z* does not by itself entail that 𐬵 represents a phoneme /z/ rather than /j^h/. 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” (see also Harmatta 1964b: 419).⁴⁵ Consequently, Brough’s first argument in favour of transliterating 𐬵 as *za* is not decisive.

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

Brough’s second argument for taking 𐬵 to be *za* is that the Gāndhārī equivalent of -(j)jh- in other MIA languages is regularly spelt with 𐬶 *ja* or 𐬷 *ja*, not with 𐬵. This observation is, however, no longer fully accurate: at least one example of 𐬵 corresponding to MIA *jh-* has since come to light. The Gāndhārī cognate of Pkt. *jhāna*- ‘meditation’ < Skt. *dhyāna*- is typically spelt with 𐬶 *ja* or 𐬷 *ja*, and in Senior fragment 12 (CKM 244) also with 𐬶 *ca* (cf. Silverlock 2015: 166; Ryder 2024: 100). Yet, in the Senavarma inscription (CKI 249 5a), the same word

43 One such example is the PN *Mahajhada* (*Mahazada*) (CKI 102 1; 327 1; 332 1), in my view a rendering of Bactr. *μανοζαδο /māhəzādə/ < *māha-zāta- ‘born through (the will of) the Moon (god)’. Another instance is the PN *Arajha(m)da* (CKI 108 1; 564 2-5), which I consider a rendering of Bactr. *αυροζαδο /ahrəzādə/ ‘born through (the will of) Ahura’ < *ahura-zāta- (differently Harmatta 1989: 301; Falk 2015: 10).

44 Below, I exemplify this substitution with borrowings from Iranian, but the same rendering is found with Greek loanwords, e.g. Skt. *jūka*- ‘the constellation Libra’ ← Gr. ζυγόν / ζυγός ‘idem’ (EWAia III: 211).

45 Speakers of Indian languages copying Avestan manuscripts also frequently confused -*j*- and -*z*- (Redard 2021: 66).

appears once with 𑀓, i.e. *jhaṇa* (*zaṇa*).⁴⁶ How should this variant form be interpreted?

Preferring the reading *zaṇa*, Glass (2000: 110) has argued that a sound change from *dhy-* > *jh-* > *z-* operated in this word. As supporting evidence, he cited examples of intervocalic *-dhy-* becoming *-z-* in modern Dardic languages.⁴⁷ Baums (2009: 171f.), however, cogently refuted this by noting that all palatal sounds have become *-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 𑀓 *ja* or 𑀓̃ *ja*, Baums searched for other evidence that could tell us the value of 𑀓 *ja* and 𑀓̃ *ja*. He mentions in this respect the Gāndhārī outcome of Skt. *dahya-* ‘to be burning’ (cf. Pāli *dayha-*; *ḍayha-*). This verb is currently attested in three different spellings:

- (i) *daj*^o: pres.3sg. *dajadi* (ABHIDH^{L3}, line 60, 2×); gerv. *dajidave* (BC 3 recto 17; Strauch 2014: 69); ptcp. *dajamaṇa* (NIRD^{L2} recto 79);
- (ii) *daj*^o: ptcp. *ḍajamaṇo* (dir.sg.; DHP^K 75d); ptcp. *ḍajamaṇeṇa* (ins.sg.; DHP^K 159b);
- (iii) *daś*^o / *ḍaś*^o: ptcp. *daśamaṇa* (dir.sg.; NIRD^{L2} recto 76); *ḍaśamaṇeṇa* (ins.sg.; DHP^{SP} 37a; 37b).

The third spelling illustrates the regular development of OIA *-hy-* to Gāndh. /*žž*/, written here with 𑀓̃ *śa*, but elsewhere also with 𑀓 *ja*. On this basis, Baums concluded that the 𑀓 *ja* and 𑀓̃ *ja* in *dajamaṇa* / *ḍajamaṇa* also represent /*žž*/.

The same conclusion was earlier reached by Brough (1962: 62). He, 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, apart from this one example noted by Baums, 𑀓 *ja* and 𑀓̃ *ja* do not normally interchange with 𑀓̃ *śa* or 𑀓 *ja*. For instance, the Niya verb *parib(h)uj-* ‘to understand’ < *paribudhy-* is attested more than 70 times, but it never appears with 𑀓̃ *śa* or 𑀓 *ja*. This suggests that the 𑀓 *ja* in *parib(h)uj-* stands for a geminate /*jj*/, deaspirated from earlier /*jjʰ*/ (cf. infra). Since initial stops are generally resistant to lenition in Gāndhārī (as in MIA more broadly), it also stands to reason that in

46 In its other occurrence in CKI 249, the word is spelt *jāṇa*. A further sequence *jhaṇa* (*zana*) occurs in CKI 841 1, but the context makes it unlikely that the word for ‘meditation’ is intended there (Scherrer-Schaub, Salomon & Baums 2012: 165 with fn. 25).

47 Cf. e.g. Pashai *waraz-* ‘to protect, keep, feed’ < OIA **upa-rādhyā-* ‘to favour’ (CDIAL I: 104 no. 2217).

initial position ʔ *ja* and Ȳ *ja* from OIA *-dhy-* represent /j/ and not a fricative /ʒ/.

The value /j/ is further confirmed by the fact that Gāndh. *jaṇa* / *jāṇa* < *dhyāna-* was borrowed into Khotanese as *jāna-* ‘meditation’ and probably into Chinese as *chán* 禪 ‘idem’,⁴⁸ Late Han Chinese *džan*^c (Schuessler 2007: 180). The initial *j-* of Khot. *jāna-* and the initial *dž-* of LHChin. *džan*^c both represent voiced affricates (approximately IPA [dʒ]), thus corroborating that Gāndh. *jaṇa* / *jāṇa* did not begin with a fricative.

The Gāndhārī development of OIA *-dhy-* to /j/ implies an intermediary stage with preserved aspiration, i.e. */jʰ/ (see von Hinüber 1982: 248 = 2009–19: 308).⁴⁹ Consequently, *jaṇa* can be understood as a historical spelling preserving the original aspiration. Another possibility is that *jaṇa* is a loanword. Given the high frequency of Buddhist formulae in the Senavarma inscription (cf. von Hinüber 2003), *jaṇa* might have been borrowed from an eastern MIA form (cf. Pkt. *jhāna-*). In that case, too, ʔ would stand for /jʰ/, thus warranting the transliteration of this *akṣara* as *jha*.

A second word where ʔ 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 the Gāndhārī cognate of Skt. *guhya-* in its derived meaning ‘pudenda, anus’. This etymology has been accepted by Baums (2009: 171), who takes it as evidence that ʔ can also represent /ʒʒ/, the default outcome of OIA *-hy-* in Gāndhārī (cf. supra). In my view, this is unnecessary. 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 Pkt. *gujjha-* < *guhya-* (CDIAL I: 226 no. 4222).⁵⁰ In that case, *gujha* is the preferred transliteration, and no recourse to complex phonological arguments is needed: *gujha* could simply write /gujjʰa/.⁵¹

48 In later periods, *chán* 禪 also comes to denote the Chán/Zen school of Buddhism. I write “probably into Chinese” because (i) the phonology of *chán* 禪, LHChin. *džan*^c, does not exclude the possibility that it was borrowed from a different MIA variety, and (ii) the assumption that all the early Indo-Aryan loanwords in Chinese derive from Gāndhārī has recently been questioned (F. Barchi, p.c.).

49 It is probably due to this deaspiration that ʔ is absent from the Aśokan Gāndhārī inscriptions. The fact that ʔ *jha* was scarcely used in inherited vocabulary may also help explain why this *akṣara* later became the standard device for rendering a foreign *z* in loanwords from Greek and Iranian.

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

51 It might be worth considering whether the instances of Gāndh. *dajʰ* / *dajʰ* ‘to be burning’ ~ Skt. *dahya-* mentioned above could similarly be loanwords from Pkt. *dajjha-* < *dahya-*, with the aspiration lost during the borrowing process.

In sum, there is now at least some evidence that the Kharoṣṭhī *akṣara* 𑖦 can correspond to (j)jh in other MIA languages. As a result, Brough's second argument in support of the transliteration *za* can no longer be maintained.

2.1.7.3 *Akṣaras* alternating with 𑖦

This brings us to Brough's third argument, namely the potential confusion arising from transliterating 𑖦 as *jha* when this grapheme is also used for the outcome of OIA intervocalic *-dh-* and, more generally, interchanges with 𑖧 *sa* and 𑖨 *śa* /z/. While I acknowledge that such alternations might appear less confusing if 𑖦 were transliterated as *za*, two observations weaken the force of this argument significantly.

First, 𑖦 can also alternate with the palatal obstruents 𑖩 *ca*, 𑖪 *cha*, and 𑖫 *ja*. Thus, if one transliterates 𑖦 as *za*, this type of interchange is no less confusing than the one with 𑖧 *sa* and 𑖨 *śa* when adopting the transliteration *jha*.

The alternation between 𑖦 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' < Skt. *√cur*; *jhuṭhi* as a variant of *cuṭhi(ye)* / *juṭhi*, a type of corn; and *ajhuyadae* 'from today onwards' as a variant of *ajuyadae* < *adya* 'today' + *upādāya* 'starting from'.⁵² The current transcriptions *zorita*, *zuṭhi*, and *azuyadae* fail to visualise this type of interchange. For the same reason, I prefer transcribing the South Asian Gāndhārī PN gen.sg. *Budhaziasa* < Skt. *Buddhajīva-* as *Budhajhiasa* (CKI 557 2).

Further evidence comes 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 begin with *jharita* (*zarita*) '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, the interchange between 𑖦 and 𑖧 *sa* and 𑖨 *śa* /z/ appears to be characteristic of Central Asian as opposed to South Asian Gāndhārī, suggesting that it may be a late or dialectal development. I found only one instance of this interchange in a South Asian source: in the Kushan inscription CKI 149, the

⁵² *jhorita* is attested in CKD 177 r1; 678 uo4; 694 o4; *jhuṭhi* in CKD 677 uo3; *cuṭhi(ye)* in CKD 422 o5; 782 uo4; *juṭhi* in CKD 291 o4; 571 uo5; 703 r1, r2; and *ajhuyadae* in CKD 586 uo3.

outcome of Skt. loc.sg. *māse* ‘month’ is spelt as *majhe* (*maze*), rather than as *mase* or *maṣe* as in other inscriptions.⁵³

The alternation among ṛ *sa*, ṛ *ṣa*, and ʿ indicates that /z/ was a possible phonological value of ʿ. But it does not follow that ʿ always represented /z/ or that /z/ was its only value. The evidence assembled above supports the existence of an alternative phonological value /(j)h/.

The key question is which value was originally intended. In my view, the restriction of the alternation between ṛ *sa*, ṛ *ṣa*, and ʿ to late sources counts as an argument that /(j)h/ was original. Further support for this view is to be found in palaeography. If ʿ had always been a sign for /z/, one wonders why a new grapheme ṛ *ṣa* was developed to write /z/ as the outcome of a lenited intervocalic -s-, -th-, and -dh- (so also Burrow 1935a: 780; LKD: §22).⁵⁴ What is more, the shape of the *akṣara* ʿ potentially reveals that its originally intended value was *jha* and not *za*, as it may not be a coincidence that ʿ not only looks like a vertically mirrored image of Kharoṣṭhī 𑀓 *ṇa*, another palatal sound (cf. Baums 2009: 171), but also as a mirror of the Early Brāhmī sign 𑀓 *jha* (S. Baums, p.c.).⁵⁵ These observations favour transcribing ʿ as *jha*.

The subsequent use of ʿ to write /z/ may be conceived of as the result of internal phonological developments in Gāndhārī. Lenition of OIA -th-, -dh-, and -s- introduced /z/ into the Gāndhārī phoneme inventory – at least intervocalically – and the sign ṛ *ṣa* was developed to write this new phoneme in inherited words (cf. *supra*). Meanwhile, ʿ *jha* remained the default representation for foreign z; but since intervocalic /z/ was now part of the phoneme inventory, foreign z could at once be rendered more faithfully as /z/ rather than /(j)h/. This new way of rendering a foreign z could, in turn, have caused a change in the phonological value of ʿ *jha*, i.e. from /(j)h/ to /z/, therewith enabling ʿ *jha* to start interchanging with ṛ *sa* and ṛ *ṣa* in inherited words (and ṛ *sa* and ṛ *ṣa* to be used as a substitution for a foreign /z/, see §4.3.19).

Most likely, this change in the phonological value of ʿ *jha* was originally restricted to intervocalic position. Yet, in some Niya Prakrit names, ʿ *jha* alternates with ṛ *sa* (not ṛ *ṣa*) also initially and before /m/. Note, for instance, *Jhagamoya* (CKD 630 r1) and *Jhagimoya* (CKD 632 o2), otherwise spelt as *Sagamoya*, and names ending in °*rajhma* / °*rasma* ← Ir. **razman*- ‘battle’.

53 For the spelling *mase*, see e.g. CKI 61 1. For *maṣe*, see CKI 152 1; 328 2; 509 1a, and the Niya documents.

54 On the historical development of ṛ *ṣa*, see recently Schlosser (2022: 85f.).

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

These alternations evidence that the value of 𑀧 *jha* had changed to /z/ also in these positions. However, the continued interchange of 𑀧 *jha* with 𑀧 *ja* and other palatal obstruents (cf. *jhuthi*; *jhorita* discussed above) leads one to believe that this process was not fully complete. Therefore, I cautiously assume that 𑀧 *jha* retained two phonological values in Niya Prakrit: /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 *kā*; *kṣa*; *kṣa*; *jha*; *ṭha*; *ṭha*; *ḍa*; *na*; *lā*; *ya*; *vha*; *ṣā*; *ṣā*, see §§2.1.6–2.1.7. I do not mention /ggh/, /pph/, and /bb/ as possible values of respectively *gha*, *pha*, and *ba* because I did not find a relevant example in Niya Prakrit. These values do, however, occur in other types of Gāndhārī.⁵⁶ As in Old Indo-Aryan (Nikolaev 2021), geminate /rr/ was probably absent from the language.

LETTER	VALUE	EXAMPLE(S)
𑀧 <i>a</i>	/a/ /ā/	<i>aja</i> / <i>ajja</i> / ‘now, today’ < <i>adya</i> <i>gamana</i> (<i>gamaṇ</i>) / <i>gamana</i> / ‘going’ < <i>gamana</i> - <i>agach</i> - / <i>āḡacch</i> / ‘to come’ < <i>āḡaccha</i> - <i>kala</i> (<i>kāla</i>) / <i>kāla</i> / ‘time’ < <i>kāla</i> -
𑀧 <i>i</i>	/i/ /ī/	<i>ich</i> - / <i>icch</i> / ‘to wish’ < <i>iccha</i> - <i>lihidaḡa</i> / <i>lihiḡaḡa</i> / ‘written’ < OIA * <i>likhita</i> -ka- <i>nidaḡa</i> / <i>nīḡaḡa</i> / ‘taken’ < OIA * <i>nīta</i> -ka-
𑀧 <i>u</i>	/u/ /ū/	<i>udaga</i> / <i>uḡaḡa</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> -
𑀧 <i>r</i>	/ri/ /ru/	<i>kṛta</i> (<i>kṛita</i>) / <i>kṛiḡa</i> / ‘made’ < <i>kṛta</i> - <i>pr̥ch</i> - (<i>pruch</i> -) / <i>prucc</i> ^h / ‘to ask’ < <i>pr̥ccha</i> - (LKD: §5)
𑀧 <i>e</i>	/ě/ /ē/	<i>eka</i> / <i>ěkka</i> / ‘one’ < <i>eka</i> - (cf. Pkt. <i>ekka</i> -) <i>pitupetri</i> / <i>piḡupētri</i> / ‘ancestral’ < <i>pit̥pait̥rka</i> - (cf. Pāli <i>pitupettika</i> -) <i>eṣa</i> / <i>ēṣa</i> / ‘this’ < <i>eṣa</i> -

56 Cf. *ughuṭhago* ‘proclaimed’ < OIA **ud-ghuṣṭa*-ka- (Pāli *ugghuṭṭha*-) in Av^{L4} verso 306, *pupha* ‘flower’ < Skt. *puṣpa*- (Pāli *puppha*-) in DHP^K 81b, and *babaka* ‘made from grass’ < Skt. *bālbaja*- (Pāli *babbaja*-) in DHP^K 169b.

		<i>lekha</i> /lĕk ^h a/ 'writing' < <i>lekha</i> -
२ o	/ō/ /ō/	<i>yoga</i> /yōgga/ 'proper' < <i>yogya</i> - (cf. Pāli <i>yogga</i> -) <i>omaga</i> /ōmaya/ 'short' < OIA * <i>avama</i> -ka- (cf. Pāli <i>omaka</i> -) <i>kośala</i> /kōśala/ 'well-being' < <i>kauśala</i> -
३ m	/ŋ/ /ñ/ /ṇ/ /n/ /m/	<i>upaśamk</i> - (<i>upaśamg</i> (h)-) /upažanṅ/ 'to worry' < <i>upa</i> + √ <i>śaṅk</i> <i>pañca</i> /pañja/ 'five' < <i>pañca</i> (cf. DHP ^K <i>paja</i>) <i>piṇḍa</i> /piṇḍa/ 'total' < <i>piṇḍa</i> - <i>mahamta</i> (<i>mahamda</i>) /mahanda/ 'big' < <i>mahat</i> - <i>gamam</i> /gaman/ 'going' < <i>gamana</i> - (LKD: §13) <i>samṇujita</i> /sambūḍiḍa/ 'honoured' < <i>samṇujita</i> -
ॣ ka	/k/ /kk/	<i>kama</i> /kāma/ 'desire' < <i>kāma</i> - <i>ukas</i> - /ukkaz/ 'to go away' < <i>ut</i> + √ <i>kas</i> (cf. Pāli <i>ukkas</i> -) <i>eka</i> /ĕkka/ 'one' < <i>eka</i> - (cf. Pkt. <i>ekka</i> -)
। ka	/sk/ /ṣk/	<i>namaḱaro</i> /namaskārō/ 'homage' < <i>namaskāra</i> - <i>maḱa</i> /māṣka/ 'bean' ← Bactr. *μαρκο /māškə/ (§3.2.2 s.v.)
॥ kṣa Ṛ kṣa	/kṣ/ /kṣa/	<i>kṣetra</i> (<i>kṣetra</i>) /kṣētra/ 'field' < <i>kṣetra</i> - <i>sakṣi</i> (<i>sakṣi</i>) /sākṣi/ 'witness' < <i>sākṣin</i> -
᳚ kha	/k ^h / /kk ^h /	<i>khara</i> /k ^h ara/ 'ass' < <i>khara</i> - <i>nikhal</i> - /nikk ^h āl/ 'to remove, provide' < <i>niṣkālaya</i> - <i>dukha</i> /dukk ^h a/ 'sorrow' < <i>duhkha</i> - (cf. Pāli <i>dukkha</i> -)
॥ ga	/g/ /gg/	<i>goṭha</i> /gōṭṣ ^(h) a/ 'farm, household' < <i>goṣṭha</i> - <i>yoga</i> /yōgga/ 'proper' < <i>yogya</i> - (cf. Pāli <i>yogga</i> -)
Ṛ ḡa	/gn/	<i>viḡa</i> /vigna/ 'obstacle' < <i>vighna</i> -
᳚ ga	/γ/	<i>anega</i> /anēya/ 'many' < <i>aneka</i> - <i>aroga</i> /arōya/ 'health' < <i>aroga</i> -
᳚ ḡa	/γn/	<i>Suḡuta</i> /sūṇyūḍā/, foreign PN ~ <i>Sugnuta</i>
᳚ gha	/g ^h /	<i>ghrida</i> /g ^h riḍa/ 'ghee' < <i>ghṛta</i> - <i>śighra</i> /śiḡ ^h ra/ 'quickly' < <i>śiḡhram</i>
॥ ca	/c/ /cc/	<i>cora</i> /cōra/ 'thief' < <i>caura</i> - <i>kica</i> /kicca/ 'task' < <i>kṛtya</i> - (cf. Pāli <i>kicca</i> -)
᳚ cā	/śc/	<i>pačā</i> /paścā/ 'afterwards' < <i>paścāt</i>

ṣ cha	/c ^h / /cc ^h /	chagalaga /c ^h aɣalaya/ ‘she-goat’ < OIA *chagala-ka- pruch- /prucc ^h / ‘to ask’ < <i>prccha-</i> (cf. Pāli <i>pucch-</i>)
Y ja	/j/ /jj/	jēṭha /jēṣṭ ^(h) a/ ‘eldest’ < <i>jyeṣṭha-</i> raja /rājja/ ‘kingdom’ < <i>rājya-</i> (cf. Pāli <i>rajja-</i>)
Ṭ ja	/ž/ /žž/	pradeja (<i>pradeśa</i>) /praḍēža/ ‘district’ < <i>pradeśa-</i> yajitaga /yāžiḍaya/ ‘requested’ < OIA *yācita-ka- guja /gužža/ ‘hidden’ < <i>guhya-</i> (cf. Pāli <i>guyha-</i> , Pkt. <i>gujjha-</i>)
Ṣ jha	/j ^(h) / /z/	jhorita (<i>c(h)or-</i>) /j ^(h) ōriḍa/ ‘stolen’ < <i>corita-</i> divajha (<i>divasa; divaṣa</i>) /divaza/ ‘day’ < <i>divasa-</i>
ṣ ṇa	/ñ/ /ññ/	ṇana /ṇāna/ ‘knowledge’ < <i>jñāna-</i> (cf. Pāli <i>ñāṇa-</i>) aṇṇa /aṇṇa/ ‘other’ < <i>anya-</i> (cf. Pāli <i>aṇṇa-</i>)
Ṭ ṭa	/tṭ/	paṭa /paṭṭa/ ‘silk roll’ < <i>paṭṭa-</i>
ṣ tha	/ṣṭ ^(h) /	naṭha /naṣṭ ^(h) a/ ‘destroyed’ < <i>naṣṭa-</i>
ṣ ṭha	/tṭ ^h /	vaṭhayaga (<i>vaṭayaga</i>) /vaṭṭ ^h āyaya/ ‘attendant’ (cf. BSk. <i>upasthāyaka-</i>) aṭhovaga /aṭṭ ^h ōvāya/ ‘fit for a purpose, suitable’ < OIA *arthopāka-
ṣ ḍa	/ḍ/	daṃḍa /daṇḍa/ ‘stick, punishment’ < <i>daṇḍa-</i>
ṣ ḍa	/ṛ/	kukuḍa /kukkuṛa/ ‘cock’ < <i>kukkuṭa-</i> vaḍavi /vaṛavi/ ‘mare’ < <i>vaḍavī-</i> giḍa /giṛa/ ‘taken’ < <i>grhīta-</i>
Ṭ ḍha	/ḍ ^(h) / /ṛ ^h / /ḍḍ ^h /	muṣḍhaṣi /muṣḍ ^(h) azī/, exchanged woman ← Bactr. *μoζδοβi /muždəšī/ < *mižda-strī- ‘reward woman’ or *miždušī- ‘gnädige (Frau)’ (§3.2.3 s.v.) oṣaḍha /ozaṛ ^h a/ ‘medicinal herb’ < <i>auṣadha-</i> aḍha /aḍḍ ^h a/ ‘half’ < <i>ardha-</i> (cf. Pāli <i>aḍḍha-</i>)
ṣ ta	/t/ /tt/ /ḍ/	taha /tahā/ ‘thus’ < <i>tathā</i> utara (<i>utvara</i>) /uttara/ ‘higher’ < <i>uttara-</i> lihitaga /lihiḍaya/ ‘written’ < OIA *likhita-ka-
ṣ tha	/t ^h / /tṭ ^h /	thavitaga /t ^h āviḍaya/ ‘deposit’ < OIA *sthāpita-ka- iṃthu /itt ^h u/ ‘thus’ < <i>ittham</i> (Schlosser 2022: 186; 295)
ṣ da	/d/ /dd/	doṣa /dōṣa/ ‘fault’ < <i>doṣa-</i> udiṣa /uddiṣṣa/ ‘concerning’ < <i>uddiṣya</i> (cf. Pāli

	/ḍ/	<i>uddissa</i>) <i>lihidaga</i> / <i>lihiḍaya</i> / 'written' < OIA * <i>likhita-ka-</i>
𑀓 <i>dha</i>	/d ^h / /dd ^h /	<i>dhanu</i> 'bow' / <i>d^hanu</i> / < <i>dhanu(s)-</i> <i>nadha</i> / <i>nadd^ha</i> / 'bundle' < <i>naddha-</i>
𑀘 <i>na</i>	/n/ /nn/	<i>nama</i> / <i>nāma</i> / 'name' < <i>nāman-</i> <i>manuśa</i> / <i>manuśśa</i> / 'man' < <i>manuṣya-</i> (cf. Pāli <i>manussa-</i>) <i>aṇṇa</i> / <i>anna</i> / 'food, cereal' < <i>anna-</i>
𑀡 <i>pa</i>	/p/ /pp/	<i>pita</i> / <i>piḍā</i> / 'father' < nom.sg. <i>pitā</i> ← <i>pitṛ-</i> <i>pipali</i> / <i>pippalī</i> / 'pepper' < <i>pippalī-</i>
𑀡 <i>pha</i>	/p ^h /	<i>phalophala</i> / <i>p^halōp^hala</i> / 'all kinds of fruit' (cf. BSkt. <i>phalāphala-</i>)
𑀧 <i>ba</i>	/b/	<i>budha</i> / <i>budd^ha</i> / 'Buddha' < <i>buddha-</i>
𑀧 <i>bha</i>	/b ^h / /bb ^h /	<i>bhata</i> / <i>b^hatta</i> / 'food' < <i>bhakta-</i> <i>abhomata</i> / <i>abb^hōmaḍa</i> / 'disrespected' < <i>abhyavamata-</i> (cf. Pāli <i>abbhomata-</i>)
𑀭 <i>ma</i>	/m/ /mm/	<i>muli</i> / <i>mūlī</i> / 'price' < <i>mūlya-</i> <i>ram-</i> / <i>ram</i> / 'to enjoy' < √ <i>ram</i> <i>samuha</i> / <i>sammuha</i> / 'face to face' < <i>sammukham</i>
𑀡 <i>ya</i>	/y/ /yy/	<i>yadi</i> / <i>yaḍi</i> / 'if' < <i>yadi</i> <i>priya</i> / <i>priya</i> / 'dear' < <i>priya-</i> <i>payati</i> / <i>payyātti</i> / 'capacity' < <i>paryāpti-</i>
𑀘 <i>ra</i>	/r/	<i>raya</i> / <i>rāyā</i> / 'king' < nom.sg. <i>rājā</i> ← <i>rājan-</i> <i>karana</i> / <i>kāraṇa</i> / 'reason' < <i>kāraṇa-</i> <i>parikraya</i> / <i>parikraya</i> / 'rent' < <i>parikraya-</i>
𑀓 <i>la</i>	/l/ /ll/	<i>lih</i> / <i>lih</i> / 'to write' < √ <i>likh</i> <i>kila</i> / <i>kīla</i> / 'wedge' < <i>kīla-</i> <i>vulasi</i> / <i>vullāzi</i> / 'admiration' < <i>ullāsa-</i>
𑀡 <i>lyā</i>	/l̥/	<i>lyihida</i> / <i>lihiḍa</i> / 'written' < <i>likhita-</i> <i>Lýipe</i> / <i>l̥ip(p)ě</i> /, foreign PN
𑀧 <i>va</i>	/v/ /vv/	<i>vivada</i> / <i>vivāḍa</i> / 'dispute' < <i>vivāda-</i> <i>avi</i> / <i>avi</i> / 'also, too' < <i>api</i> <i>sava</i> / <i>savva</i> / 'all' < <i>sarva-</i> (cf. Pāli <i>savva-</i>)
𑀧 <i>ya</i>	/w/	<i>yaṃti</i> (<i>vaṃti</i>) / <i>wāṇdi</i> / 'in, at, to' < <i>upānte</i> <i>hetuṇa</i> / <i>hēḍuwēna</i> / 'by reason' < <i>hetu-</i>

ʾvha	/f/	<i>Tiravhara</i> /tīrafara/, PN ← Bactr. *τ(ε)ιροφαρρο /tīrəfarrə/ < *tīra-farnah- 'glory of the god Tir'
𐰽 𐰺a	/ś/	<i>śata</i> /śaḍa/ 'hundred' < <i>śatam</i>
	/śś/	<i>avaśa</i> /avaśśa/ 'certainly' < <i>avaśyam</i> (cf. Pāli <i>avassam</i>)
	/ž/	<i>daśa</i> (<i>daja</i>) /daža/ 'ten' < <i>daśa</i>
𐰽 𐰺a	/ś/	<i>śamanera</i> /śāmanēra/ 'novice' < <i>śrāmaṇera</i> -
	/śś/	<i>vaśa</i> /vaśśa/ 'year' < <i>varṣa</i> - (cf. Pāli <i>vassa</i> -)
	/z/	<i>śeśa</i> /śēža/ 'remainder' < <i>śeśa</i> -
𐰽 𐰺a	/śn/	<i>kriśaga</i> /kriśnaya/ 'blackish' < <i>kṛṣṇaka</i> -
𐰽 𐰺a	/śf/	<i>śpālāya</i> /śfālāya/, foreign PN ~ <i>śvalāya</i>
𐰽 𐰺a	/s/	<i>saṃvatsara</i> /saṃvatsara/ 'year' < <i>saṃvatsara</i> -
	/ss/	<i>osuka</i> /ōssukka/ 'eagerness' < <i>autsukya</i> -
	/z/	<i>dasa</i> (<i>daśa</i> ; <i>dajha</i>) /dāza/ 'slave' < <i>dāsa</i> -
𐰽 𐰺a	/z/	<i>śaca</i> /zacā/ 'with' < <i>sacā</i>
		<i>viśaj</i> - /vizajj/ 'to send' < <i>visarjaya</i> -
𐰽 𐰺a	/sn/	<i>śatra</i> /snātra/ 'bath' < <i>snātra</i> -
		ins.sg. <i>pritiśehena</i> /prīdiśnehena/ 'with love and affection' < <i>prīti</i> - + <i>sneha</i> -
𐰽 𐰺a	/sf/	<i>śparna</i> /sfarna/ 'gold' < <i>suvarṇa</i> -
		<i>parospara</i> /parōsfara/ 'one another' < <i>paraspara</i> -
𐰽 𐰺a	/h/	<i>hasta</i> /hasta/ 'hand' < <i>hasta</i> -
		<i>suha</i> /suha/ 'happiness' < <i>sukha</i> -
𐰽 𐰺a	/hn/	opt.3sg. <i>gr̥hēyāti</i> /grihnēyādi/ '(s)he may take' < <i>√grah</i>

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) and some inscriptions in the (Issyk-)Kushan script (Sims-Williams 2025b), Bactrian is written in a local derivative of the Greek alphabet known as the Graeco-Bactrian script. 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 60,⁵⁷ and one grapheme has been added to the script inventory to write a phoneme unknown to Greek phonology, i.e. $\text{p} / \text{š} /$ (on which see Falk 2022: 155–167; Härtel 2023: 120–122). 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 Kushan 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. 60). 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 $\langle \beta \rangle$, $\langle \gamma \rangle$, and $\langle \delta \rangle$ stand for plosives and when for fricatives (§2.2.3); and (iii) which phonemes do $\langle \zeta \rangle$, $\langle \sigma \rangle$, and $\langle \rho \rangle$ 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.⁵⁸ Some of the linguistic features of the latter are typical of Late Bactrian and thus indicative of a late composition of this text.⁵⁹ 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

57 $\psi / \text{ps} /$ does not seem to be attested, also not in its expected numerical value 700.

58 Since this is not the place to give a comprehensive overview of Bactrian historical phonology, I will only discuss points that are directly relevant to my argumentation. SFBG (31ff.) outlines the main changes but differs in some crucial details from the views adopted here. Francesca Michetti is preparing a comprehensive historical phonology of the language based on her Rome PhD thesis. 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.

59 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.

being of a late nature and hence of little to no value to our understanding of Kushan Bactrian phonology. In this study, I adhere to a pragmatic policy: linguistic features observable in the Manichaean fragment are posited for Kushan 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/;⁶⁰ 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 OIr. **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’ <**rauĉah-*. In Kushan 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. infra), spell /ū/, e.g. in (υ)αρουγο / (h)arūgə/ ‘all’ <**harwa-ka-*.⁶¹ 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-Kushan times, sometimes even to write an apparently short vowel, as in σπουριγο /spurīgə/ <**us-pṛna-* + -ιγο <**-iya-ka-* (jb12).⁶²

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

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

61 These spelling habits probably find their origin in the Hellenistic Greek pronunciation of <ει> and <ου> (cf. Sims-Williams 2025b: 193 fn. 23; on the Greek evidence, see VG³: 69f.; 77f.; Kantor 2023: 516–544; 704–717). For the etymologies of λαδειγο and (υ)αρουγο, see Sims-Williams & Cribb (1996: 90; 92).

62 Or did the simplification of **-pp-* <**-rn-* to *-p-* in σπουριγο cause lengthening of the preceding vowel to /ū/?

sometimes spelt 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 αχρνο ‘calendar/regnal year’ < earlier χρνο 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 Kushan 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.⁶³

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 πιδηγο ‘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 whether <o> is only used as a graphic device or if it indicates a schwa (phonemic or not).⁶⁴

As already briefly indicated above, GBactr. <o> is further used to write /u/ (and /ū/), e.g. in ορλαγγο /urlaɣnə/ ‘name of a divinity’ < **wṛθra-gna*- or κοδο /kudə/ ‘little, insignificant’ < **kuta*-. In addition, <o> can represent the semivowel /w/, as shown by instances like οαπο /wāpə/ ‘there’ < **awaθra* or φρογαοο /frəɣāwə/ ‘profit’ < **fra-gāwa*-.⁶⁵

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

63 Thomas Jügel plausibly suggested 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* > *ʔ*)” (Jügel 2015: 168 fn. 429; see further Kreidl 2024: 208f.; Michetti 2025: 200–203). This suggestion has now been confirmed by the Bactrian material in (Issyk-)Kushan script, where nouns in the dir.sg. typically end in the vowel -*u* (Sims-Williams 2025b: 209).

64 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 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.

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

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(ο)- ‘to be(come)’ < **bawa*- could also be an example of /o/, but it is equally possible that βο(ο)- stands for /vuw/ rather than /vow/.⁶⁶ I therefore believe that we can 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 υρζ- ‘to release’ < **h₁za*- (MBactr. *hyrz*-) and λαυ- ‘to give’ < **daθa*- (MBactr. *lh*-).⁶⁷ Most likely, this spelling habit stems from the default aspiration of initial *v*- in Ancient Greek, i.e. ð- /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; KSPlate 3) and its derivative υνδοοαο ‘in Indian’ (Rab. 10).⁶⁸

Starting from the variant spellings μυπο / μυπο / μοπο ‘Mihir’ < **miθra*- in Kushan-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 μυπο in Rab. 10 and Kushan-period coins.⁶⁹ Starting with coins datable to Kanishka’s reign, the Bactrian outcome of **miθra*- can alternatively be written as μυπο, the standard spelling in later times. Assuming that μυπο 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 μυπο came to be regarded as equivalent to μοπο

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

67 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). The presence of such historical spellings suggests, however, that the change of **θ* to /h/ is a comparatively recent one.

68 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 CE (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 that speakers of Coptic approximated Gr. /ü/ as /i/ (Gignac 1976: 266f.). Another instance of the same substitution may be Bactr. οιπονηγο (and variant) ‘made from linen or cotton’, an adjective made from **οιπο* ‘linen, cotton’ ← Gr. βύσσος ‘idem’ (Sims-Williams 2002: 228; BD II: 248). A parallel substitution of Gr. -υ- /ü/ with Bactr. -ει- /i/ seems exemplified by the divine name δεινείσο ← Gr. δiónυσος (attested on a coin from the collection of the British Museum; Cribb & Bracey 2025: 310; 373; 516).

69 Cf. also the PN μυποζαδα /mihirəzādā/ < **miθra-zāta*- in Ayrtam 6 (Sims-Williams 2025d: 332).

(also found on coins of Kanishka). The latter is transcribed by Sims-Williams as /mihərə/, on the assumption that <ο> marks a *svarabhakti* vowel /ə/ and /h/ is left unwritten.

Although Sims-Williams' hypothesis seems plausible overall, one may still wonder whether the <ορ> in μορο really writes /hər/ and not simply /hr/. In the case of μορο, the variant μυρο /mihirə/ provides clear evidence that the cluster /hr/ < *θr was (eventually) broken up by an anaptyctic vowel, but <ορ> is also used to write the outcome of *θr- in words such as βαρο 'kingdom, city' < *xšaθra- and πορο 'son' < *puθra- (cf. Lazard, Grenet & de Lamberterie 1984: 222f.).⁷⁰ 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 spelt as βαυρο /šahrə/ and πουρο /puhrə/, never as **βαυορο /šahərə/ or **πουορο /puhərə/.⁷¹ I therefore have a slight preference to interpret the digraph <ορ> as an archaic spelling of /hr/ (similarly Härtel 2023: 112; 115), even though it is admittedly hard to understand why <ορ> would have been adopted to write /hr/.⁷² This potentially contentious point does 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.

70 A further example is obl.sg. πιορο 'father' < gen.sg. *piθrah (KSPlate 1, Sims-Williams 2015: 256; 259).

71 Contrast the pronominal gen.pl. ending, which in Kushan-period texts is written with -οαυο: εμοαυο 'of these' in DilT5, line 9 and Rab. 8, 12, 22; οισπ(ο)αυο 'of all' in DilT5, line 14, Rab. 2, SK4M 9, SK4A 12f., and SK4B 13; ουδοαυο 'of the same' in Rab. 10f. Judging only from the Kushan-period spelling, this ending could be interpreted either as /hǎnə/ or /əhǎnə/; but later spellings with -ο-υαυο /əhǎnə/ (e.g. οισπουαυο in S22), rather than **-υαυο /hǎnə/, leave no doubt about the presence of a schwa in this ending. For this pronominal ending, see further Michetti (2024: 177–179).

72 J. Kreidl (p.c.) made the interesting (but speculative) suggestion that <ορ> could result from a graphic simplification of earlier *<θρ>, given that <θ> and <ο> are palaeographically similar, and *θr is the most common source of Bactr. /hr/. A word where <ορ> could be used to write a cluster /hr/ that is not derived from *θr is the divine name αορομοζδο < *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 αυρηζο /ahrēznə/ < *ahura-yazniya- 'month of the worship of the ahura(s)' (BD II: 198). Bactr. ωρομοζδο / ωρομοζδο (BD II: 282; BD IV: 130) is, in my opinion, a loanword from MP Ōhrmuzd, the variant ωρομοζδο showing an inner-Bactrian simplification of -υρ- /hr/ to -ρ- /r/ (like in βαρο 'kingdom, city' < βαυρο; differently Härtel 2023: 327–330).

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/, /ɣ/, and /ð/ at some undetermined point in time after the classical period, i.e. after the 4th century BCE, 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? And, 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> intervocalically, e.g. λαδο ‘law’ < *dāta-, πιδο ‘father’ < nom.sg. *pitā, and καδο ‘house’ < *kata-ka-.⁷³ 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).⁷⁴

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

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

74 In other positions, *d developed to Bactr. λ /l/. If the adjective αγγαδδγγο ‘fortunate’ (Rab. 18) goes back to a virtual *ham-gata-dayana-ka- ‘whose daēnā is fortunate’ (thus Sims-Williams 2008c: 65; cf. now αγγαδο ‘happy, fortunate, rich’ < *ham-gata-, BD IV: 104), it would show that *-tVd- resulted in a geminate -δδ- /dd/. From the 7th century CE 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.

By lack of evidence to the contrary,⁷⁵ 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. 60). 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 αγο ‘ineffective’ <*a-kārya- (SFBG: 35);⁷⁶ and it could be assimilated to an adjacent voiced consonant, as in οισπαγο ‘everything’ <*wisparkā- or αγγιτο ‘received’ <*ham-kašta- (SFBG: 46).

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 spelt with <g>, as exemplified by, amongst others, *sp̄r̄myyg* ‘flower’ <*sp̄rgma-ka-, *βrg* ‘fruit’ <*bara-ka-, and *βyžg* ‘sin’ ~ βιζαγο <*bazdya-kā-. 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, intervocalically, or as part of a consonant cluster (SFBG: 36; 44). Words belonging to this category are, for instance, γαμβο ‘damage’ <*gamba-, λρωγο

75 As Sims-Williams (BD II: 39) points out, it is possible 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 [d]”. 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 Kushan 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. *oapδano < OIr. *wartana-. However, the fact that *wrδn* is written with <rδ> does not necessitate that Bactr. *oapδano 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 = 2025a: 10; Yoshida 2009: 286).

76 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’ <*ni-kanta- or ζαδακο /zādak(k)ə/ ‘child’ <*zāta-k(k)a-.

'falsehood' < **drauga-*, οἰγνο '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).⁷⁷ 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).⁷⁸

Relative chronology suggests that the fricativisation of **g* occurred before the start of Bactrian literacy in the 1st century CE. 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 Kushan times as well. It is therefore justified to transcribe GBactr. <γ> from **g* as /γ/ in every attested stage of the language.⁷⁹

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;⁸⁰ 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).

77 There are two examples of this correspondence in initial position, i.e. γ'w ~ γαο(ι) 'cow' < **gāw-* and γlyh ~ *γαλιω (earlier γαλιγο) 'theft' < **gadya-kā-*, and seven instances in non-initial position, i.e. γd ~ αγαδο 'came' < **ā-gata-*; γywt ~ ωγοτο 'secrecy (?)' < **awa-gušta-*; sprymygg 'flower' < **spřgma-ka-*; cywwng 'as' ~ *σαγωγγο or *σαγογγο (later σογγο) < **čiyāt-gauna-ka-*; fry'w ~ φρογαοο 'profit, wealth' < **fra-gāwa-*; mygdyg ~ *μυγδιγο 'fruit' < **migda-ka-*; and rwwyn ~ *ρωγνο or ρογνο 'butter' < **raugna-*. I leave out r'γγg 'evil' (cf. GBactr. ραγο 'idem'), since its etymology is unknown (BD II: 259; Sims-Williams 2009a: 264).

78 Every instance of MBactr. <ng> in words whose etymology is known continues **nV*k-: the suffix -'ng < **āna-ka-*; cywwng 'as' < **čiyāt-gauna-ka-*; frwyng 'foreseeing' < **fra-waina-ka-*; hβyśznng 'of many kinds' < hβyś 'much' + **zana-ka-*; and the suffix -yng < **aina-ka-*.

79 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 Kushan times. One can approximately date Bactrian lambdacism to the 4th or 3rd century BCE (de Blois 2013; Kreidl 2021; fthc. a: § 2.6.1.1.1.2; 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).

80 The -γd- in mygdyg 'fruit' < **migda-ka-* comes from **-yl-* < **-gd-* and not from **-xt-* (Sims-Williams 2009a: 263; 2016b: 278).

In a southern dialect of Bactrian, initial γ - / γ / can also derive from OIr. $*w$ -, e.g. $\gamma\omicron\lambda\omicron$ / $\gamma\omicron\lambda\omicron$ / < $*wad\ddot{u}$ - (BD IV: 110). See §3.2.1 s.v. *gušura*.

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 $\beta\iota\zeta\alpha\gamma\omicron$ 'sin' < $*bazdya-k\check{a}$ -, $\alpha\beta\iota\rho$ - 'to obtain' < $*abi-\check{a}r(a)ya$ -, and $\lambda\alpha\delta\omicron\beta\alpha\rho\omicron$ 'judge' < $*d\ddot{a}ta-b\check{a}ra$ -. In Manichaean orthography, these words are spelt as $\beta y\acute{z}g$, βyr -, and $l'd\beta r$, 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 Kushan-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 etymological origin, $-\mu\beta$ - stood for / mb / rather than $**/mv/$ (so also Sims-Williams 1989b: 233; 2011a: 170 *contra* SFBG: 45).⁸¹

Two further environments in which < β > may be assumed to stand for / v / are the clusters $-\beta\delta$ - from $*-ft$ - and $-\lambda\beta$ - from $*-dw$ -.⁸² Examples of the former are $\tau\alpha\beta\delta\omicron$ 'sealed' < $*tafta$ - and $\pi\iota\delta\omicron\rho\omicron\beta\delta\omicron$ 'received' < $*pati-grfta$ -. The fact that < β > continues a fricative is sufficient reason to assume that $-\beta\delta$ - from $*-ft$ - was realised as / vd / rather than as $**/bd/$ (cf. SFBG: 47 and $*-xt$ - > $-\gamma\delta$ - / γd /). The change of $*-dw$ - to Bactr. $-\lambda\beta$ - can be exemplified by $\alpha\lambda\beta\alpha\rho\omicron$ (also $\alpha\lambda\beta\alpha\rho\gamma\omicron$ in Uv2f.) 'court' < $*dwara(-ka)$ - and the PN $\beta\alpha\rho\alpha\lambda\beta\alpha\gamma\omicron$, possibly from $*bara-dw\ddot{a}ga$ - 'standard bearer' (BPN: no. 73). In this case, the assumption that $-\lambda\beta$ - stands for / lv / is supported by the parallel development of $*-\theta w$ - to Bactr. $-\lambda\phi$ - / lf / (Sims-Williams 2004a: 542f.; SFBG: 53).

Besides, GBactr. < β > can stem from OIr. $*p$. This can be the case when $*p$ stood (originally) in intervocalic position, as in $\alpha\beta\alpha\beta\gamma\omicron$ 'waterless' < $*ap\bar{a}pa-ka$ - (BD II: 181); $-\delta\eta\beta\gamma\omicron$ 'sealer' (attested in $\mu\omicron\lambda\rho\omicron\delta\eta\beta\gamma\omicron$) < $*t\bar{a}pa-ka$ - × $*\tau\eta\beta$ -

81 The only instance of < mb > in the Manichaean folio occurs in a loanword, i.e. in $\acute{z}mbwd'ng$ 'wordly, earthly' < $\acute{z}mbwd*$ ← Skt. *jambudvīpa*- (with adaptation) + suffix *-ng* < $*āna-ka$ -.
82 There is no Manichaean evidence for these clusters. A third environment could be $-\zeta\beta$ - from $*-zw$ - in case the sequence $\epsilon\zeta\beta\alpha\gamma\omicron$ in h4, line 4 means 'tongue' from $*hizw\ddot{a}-k\bar{a}$ - (Sims-Williams 2006: 115).

(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. βαμδδιγο ‘loan’ < **apāmita-ka*-.⁸³

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*-; *nβyxtyg* ~ 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 period” (Sims-Williams 1989b: 233 fn. 25).⁸⁴ 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 Kushan Bactrian.⁸⁵

A more tricky question is whether initial GBactr. <β> from **p*, as in βαμδδιγο < **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*/, βαμδδιγο would write /*bāmddigə*/. If the lenition happened first, the phonological realisation would be /*vāmddigə*/. 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 when procope happened before the lenition of **b* < **p* to /*v*/.⁸⁶ Therefore, I have hesitantly chosen to transcribe GBactr. <β> as /*b*/ when it continues **p* in initial position after procope.

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

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

85 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.

86 In Khotanese, too, procope preceded the lenition of **b* < **p* to /*v*/, as can be seen from the preverbs *ba*- < **upa*- and *bā*- < **upāka*- (SGS: 239; Fattori & Michetti 2024: 220). In Bactrian, initial /*b*/ also occurs in loanwords, e.g. MBactr. *b’gyg* ‘having a share’, most likely a Parthian loanword, and *bwt* ‘Buddha’ ~ βοτο (also

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

2.2.4 The phonological value of ζ, σ, and β

With <ζ>, <σ>, and <β>, 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) whether, 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. <β>.

2.2.4.1 -β- /š/

GBactr. <β> corresponds to the Manichaean grapheme <š>, as exemplified by words such as *rštyg* (cf. Rab. 1 ραβτογο) ‘righteous, just’ < **rašta-ka-* or *pydkšt* ~ πιδοκίπτο ‘restrained, prevented’ < **pati-kṛsta-* (Sims-Williams 2011a: 171). For this reason, <β> is commonly transliterated as /š/ (cf. e.g. Sims-Williams 1989b: 233; SFBG: 17).⁸⁷

When ignoring loanwords and ad hoc assimilations,⁸⁸ the etymological sources of Bactr. <β> /š/ can be divided into four categories. First, <β> is used for the outcome of OIr. *š in intervocalic position and in certain consonant clusters;⁸⁹ compare, for instance, νοβαλμο /nəšalmə/ (also archaic νιβαλμο) ‘seat’ < **ni-šadma(n)-* or αβιπταδο /avištādə/ ‘master’ < **abi-štāta-*.

Second, <β> can result from a simplified cluster involving *š, i.e. *-xš- and *-rš- (*-ʃš-). Examples of this category are βαυρο /šahrə/ ‘city’ < **xšaθra-*; φροχοαβ- /frəxwaš/ ‘to withdraw’ < **fra-xwarša-*; and κίβαγο /kišāgə/ ‘plough-ox’ < **kṛš-āka-*.

βοδδο / βουδο) ← Skt. *buddha-* or Gāndh. *budha* (Sims-Williams 2009a: 258; 262); but this naturally does not prove its phonemic status.

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

88 For ad hoc assimilations, cf. ζίπτο /zištə/ ‘requested’ < **jasta-*, i.e. *s > *š due to assimilation to the preceding *j (BD II: 212), and νααπτο /nəhāštə/ ‘settled’ < **ni-šāsta-* < **ni-šāsta-*, i.e. *s > *š due to assimilation to the preceding *š (BD II: 239; Michetti 2024: 175–177).

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

A third possibility is that <ɸ> comes from an OIr. *s (<PIr. *č) that was retracted by a neighbouring *r (*r̥) in clusters such as *-sr-, *-str-, or *-r̥st-.⁹⁰ This category can be exemplified by words like *ῥουο*, a late form of **ῥογο* /šūgə/ 'fingernail' < **srū-kā*-; *χοοῖο* /xwūšə/ 'mother-in-law' < **hwasrū*-; *οἶο* /wāšə/ 'hay' < **wāstra*- (MBactr. wš); and *πιδοκῖπτο* /pidkištə/ 'restrained, prevented' < **pati-kṛsta*- (MBactr. pydkšt).

Finally, <ɸ> can stem from *čy, be it initially, e.g. *ῥαδο* /šādə/ 'pleased' < *čyāta-, or intervocalically, e.g. *αῖαῖο* /avāšə/ 'back, in return' < *apāčyā.

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 (<PIr. *č) in words such as *σαδο* '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/.⁹¹

GBactr. <σ> can also be the result of OIr. *č. Two such examples are *σανο* 'pleasure' < *čānah- and *ρωσο* 'day' < **raučah*-. In the Manichaean fragment, the outcome of *č is written as <c> in the following nine examples:⁹²

- (i) *'cyd* ('cyyd; *cyd*) ~ (α)σιδο 'which' < *čim + *uti
- (ii) *c''k'myg* 'whosoever' (cf. MP *čegām-iz* 'whatever', *čegāmag* 'a bit')
- (iii) *c'sq* ~ (α)σασκο 'over, upon, against' < *hačā + *uskād
- (iv) *cγwwng* ~ *σαγωγω / *σαγογω (later σογω) 'as' < *čiyāt-gauna-ka-
- (v) *hrc* ~ *υαρσο* 'absolutely, at all, just' < *harwa- + *čim / *čit
- (vi) *qyc* ~ *κισο* 'anyone' < *ka- + *čim / *čit
- (vii) *pyc* ~ *πισο* 'before, in the presence of' < *patīča
- (viii) *rw'nyg* ~ *ρωσανιγο (ρωσσανιγο in *kv*15, BD IV: 123) 'pertaining to days' ← *rw*c* ~ *ρωσο* 'day' < **raučah*-
- (ix) *-yc* ~ *-(ι)σο* 'also, too' < *čim / *čit

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

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

91 See below for a possible palatalisation of *s to /ś/ when next to *i̯.

92 Partially preserved and etymologically unclear words are not included.

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.⁹³ In the 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 is provided by two Bactrian loanwords into Sogdian: (i) BSogd. *sxrh* 'wheel', which is most likely a loanword from Bactr. *σαχρο < *čaxra- (Sims-Williams 1979: 133 fn. 7; 1996a: 50);⁹⁴ and (ii) Sogd. *swδ* (CSogd. *swd*) 'to run, hurry', which can be derived from Bactr. *σωλ- < *čauda- (BD IV: 125, cf. Bactr. σωλογο 'runner, (swift) messenger' < *čauda-ka-).⁹⁵ The orthography of MBactr. *c''k'myg*, *c'sq*, and *γwung* suggests that word-initially, /ts/ from *č was not simplified to **/s/. The initial *s-* in *sxrh* and *swδ* 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. *-tVś- can also be written with <σ>. A few instances of such spellings are πισηβ- 'to slander, to accuse' < **pati-sāpaya-*, υαλοπισαγο '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 υαλοπισαγο) 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 (BD IV). 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 spelt, 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' (BD

93 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).

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

95 There is also a MSogd. noun *swδ* 'hurry, haste' (BBB 490); unless this noun is an inner-Sogdian formation, it can be derived from Bactr. *σωλο 'idem' < *čauda-.

IV: 5).⁹⁶ 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 spelt with <ś>. This grapheme occurs in the following six words:

- (i) *hβyśznng* ‘of many kinds, manifold’ ← *hβyś* ~ *υαβισο* ‘many, much’⁹⁷ + *znng** ~ *ζαγγο* ‘manner, way’ < **zana-ka-*
- (ii) *nyšt* ~ *νιστο* ‘is not’ < **nai(d) asti*
- (iii) *rymś* ‘blame’ (cf. Sogd. *rymys*)
- (iv) *śwwh-*, a verb used with the Indian loanword *nrh* ‘hell’ as its direct object and approximately meaning ‘to escape, to avoid’⁹⁸
- (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. 98), 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).⁹⁹

96 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 ναμασο / ναμωσο) ‘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.

97 The etymology of this word is debated. Building on earlier work by Gershevitch, Sims-Williams (BD II: 271) suggested the following three possibilities (admitting none of them to be obviously correct): (i) from **ha-bai-sah-*, comparable to Khot. *hambisa-* ‘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* / *hβyś* 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)arūga / ‘all’ < **harwa-ka-*), and the assumed simplification of -σπ- to -σ- as in *οισο* < *οισπο* ‘all’ < **wispa-* is not attested before 671 CE (SCBD: 64), whereas *υαβισο* already occurs in doc. **ba** from about 350 CE (SCBD: 82) and as *αβισοι* ← **αβισο* + enclitic -οι < **cit* already in Rab. 21 (3×, cf. Sims-Williams 1998: 87f.).

98 The etymology of MBactr. *śwwh-* is considered unclear by Sims-Williams (2009a: 258; 2011a: 171). In Schoubben (2025d: 298–305), I argue that *śwwh-* is a loan from Gāndh. **śoh(e)-* < Skt. *śodhaya-* ‘purify; remove (something noxious); clear off; exculpate’, but for now this word can be left aside.

99 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].

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 Kushan 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 aside the observed palatalisation of *s as a late (or dialectal) feature irrelevant to 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 <ž> 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’ ← *γουσоро /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 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 §4.3.16.¹⁰⁰

Was *s also palatalised to /ś/ when *ī 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-Kushan Bactrian use of a geminate <δδ> in front of palatal vowels finds its origin in a sound change of **dī* over **dyī* to

100 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*; πισασο ← *piśāca*-, a type of demon; and βοδδοαστρο ← *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 Indic ś was substituted with the closest sound available, i.e. Bactr. /s/. Potentially more relevant is Kreidl’s (fthc. b) argument that Munji *nəwuś*-, pret. *nəwuxt*- ‘to write’ is a loan from Bactr. ναβιω-, pret. ναβιχτο ‘idem’ < **ni-pinsa*-, **ni-pixšta*-, since the -ś- in *nəwuś*- would support that the -σ- in ναβιω- stands for a palatal /ś/ (induced by the preceding -ι- /i/). But even if Kreidl’s etymology holds true, it would still be difficult to know whether Munji adopted the word from an early form of Bactrian or from a later one that was (more or less) contemporaneous with the Manichaean fragment.

<δδι> /ddĩ/ (and **dē* over **dyē* to <δδη> /ddē/).¹⁰¹ But Manichaean evidence is unfortunately lacking, given that no relevant word happens to be attested in M 1224.¹⁰²

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.¹⁰³ The only potentially relevant form in Manichaean Bactrian is *tyśygyg* ‘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>.¹⁰⁴ Thus, it remains uncertain whether <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* ~ ιαηδανζιγο ‘eternal, for ever’ < **yāwaitāna-čiya-ka-* (Sims-Williams 2009a: 265; BD IV: 112), 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).¹⁰⁵ On this admittedly slender basis, I tentatively assume GBactr. <σ> to stand for /tś/ in words such as (α)σιδο ‘which’ < **čim*

101 See also below for possible evidence in support of a parallel change of **zi* to /źĩ/. In the loanword corpus of Chapter 3, there is no example to show whether **s* would also be palatalised by a following **ĩ* (or **ě*).

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

103 See also under <ζ> for examples such as MBactr. *βyζg* ~ βιζαγο /vizagə/ ‘sin’ < **bazdya-kā-*.

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

105 Indo-Aryan *c* can also be rendered as Bactr. <σ>; cf. e.g. ασαριαρσο ← OIA **ācāryārya-* ‘reverend doctor’; πισασο ← *piśāca-*, a type of demon; and σανδαροβανο ← *Candrabhānu-*, name of a Buddha. These loanwords do not count as conclusive proof that <σ> had a phonological value /tś/, given that Indic *c* could also have been approximated with Bactr. /ts/. In Rab. 5f., the city name Śrī-Campā is written in Bactrian as ζιριτ[ι]αμβο (or: ζιριτ[α]μβο), so here Indic *-c-* would correspond to Bactr. -τ(ι)- /t(y)/ (cf. Sims-Williams 2008c: 61).

+ **uti*, αλιχτογο ‘inclined, desirous’ < **hada-čixšta-ka-*, and πησινδ- ‘to approve’ < **pati-sandaya-*.¹⁰⁶

Still, none of the etymologies proposed below crucially depends on the assumption of a phonological value /tś/. Etymologies that require Bactr. <σι> from **čī* to be rendered as Niya *ci* also work if one posits an allophonic pronunciation [tsĩ] or if one accepts that Bactr. /tsĩ/ 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-* ~ υηρζ- /hirz/ ‘to let go’ < **hrza-*, or *zwwz-* ‘to rise’ ~ **(α)ζοαζ-* / (ə)zwaz/ < **uz-waza-*.

A phonological value /ž/, i.e. the voiced counterpart of /š/,¹⁰⁷ can be assumed in the following cases. First, <ζ> probably represents /ž/ when it

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

107 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>.

stems from Olr. *ž, as in $\mu\omicron\zeta\delta\omicron\omicron\alpha\nu\omicron$ / $\mu\omicron\zeta d\omega n\omicron$ / ‘a divinity’ < * $\mu\omicron\zeta d\omega n$ - ‘benevolent’ (Sims-Williams 1997b) or $\chi\omicron(u)\zeta\omicron$ / $\chi\ddot{u}\zeta\omicron$ / ‘good’ < * $\chi w\zeta\ddot{u}$ -. Another input for Bactr. /ž/ is provided by clusters whose voiceless counterpart yields /š/. The latter can, for instance, come from *-sr- in $\rho\omicron\upsilon\omicron$ < * $\rho\omicron\upsilon\omicron$ /šūgə/ ‘fingernail’ < * $sr\ddot{u}-k\bar{a}$ - and $\chi\omicron\omicron\omicron\omicron$ / $\chi w\ddot{u}\zeta\omicron$ / ‘mother-in-law’ < * $hwasr\ddot{u}$ - (§2.2.4.1). Consequently, *zr- most likely became Bactr. /ž/ in $\zeta\omicron\upsilon\omicron$ /žūnə/ ‘Time (as a divinity)’ < * $zruwa(n)$ -.¹⁰⁸ Another source for Bactr. /š/ is *čy-, e.g. $\beta\alpha\delta\omicron$ /šādə/ ‘pleased’ < *čyāta-. It therefore seems plausible that also a <č> derived from *jy- writes /ž/. One such example would be $\zeta\alpha\omicron(o)$ / $\zeta\alpha\omicron i$ /žāwə/ ‘life’ < *jyāwa-. In addition, there is $\alpha\zeta\alpha\nu\omicron$ /āžānə/ ‘worthy’ < *arjyāna-, whose /ž/ is confirmed by its being borrowed with retroflex sibilants; compare Khot. āšana-, TA āšām, TB ašām, and the Niya PN Ašamna (Weber 1985; Dragoni 2023b: 41).¹⁰⁹

In at least two types of words, one expects <č> to stand for /dz/. First, there is reason to believe that <č> 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 $\pi\iota\zeta\alpha\gamma\gamma\omicron$ /pidzāŋgə/ ‘knowledge (?)’ < * pati-zāna-ka- and $\sigma\pi\alpha\zeta\alpha\gamma\gamma\omicron$ /spādzāŋgə/ ‘on bended knee, kneeling’ < * spāta-zānu-ka- (cf. the variant $\sigma\pi\alpha\delta\omicron\zeta\alpha\gamma\gamma\omicron$). A second, slightly more common, source of <č> /dz/ is the voicing of <σ> /ts/ < *č after a nasal (Sims-Williams 1989b: 234; SFBG: 46).¹¹⁰ This type of voicing occurred in lexemes such as $\pi\alpha\nu\zeta\alpha\sigma\omicron$ /pandzāsə/ ‘fifty’ < * pančāsāt- .

Voicing after a nasal also affects the <σ> of the appurtenance suffix -σ(ε)γϝ < *-čiya-ka-, after v /n/ written as -č(ε)γϝ (BD II: 263; cf. also §5.2.2). One example of this kind is $\iota\alpha\omicron\eta\delta\alpha\nu\zeta\iota\gamma\omicron$ ‘eternal, for ever’ < * $\text{yāwaitāna-čiya-ka-}$ (BD IV: 112), a word attested in Manichaean orthography as *y’wyd’nzyg* (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

108 $\zeta\omicron\upsilon\omicron$ is attested in an unpublished inscription (cf. BPN: no. 484). In $\zeta\omicron\omicron\omicron(\rho)\iota\gamma\omicron$ ‘time’ < * zrunaka- , an early metathesis to * zurnaka- must have occurred to account for the Kushan Bactrian geminate -pp- /rr/. Therefore, the <č> in this word probably stands for /z/ (Skjærvø 2005: 314; BD II: 213; BPN: no. 160).

109 Another example of this substitution would be TB *koško* (later *koškiye*) ‘pit’ if ← * $\kappa\omega\zeta\gamma\alpha$ / $\kappa\ddot{o}\zeta g\ddot{a}$ / (later * $\kappa\omega\zeta\gamma\omicron$ / $\kappa\ddot{o}\zeta g\ddot{a}$ /) < * kaužda-kā- ‘opening, hole’ (Bernard & Chen 2022). Bernard and Chen reconstruct the Bactrian word as * $\kappa\omega\beta\kappa\alpha$ / $\kappa\ddot{o}\beta k\ddot{a}$ / (later * $\kappa\omega\beta\kappa\omicron$ / $\kappa\ddot{o}\beta k\ddot{a}$ /), 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, as is now accepted in Bernard (2025: 139 fn. 125).

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

phenomenon,¹¹¹ I cautiously posit /dž/ as a further value of GBactr. <ž>. This assumption has no repercussions for the loanwords treated in subsequent chapters.

The Manichaean evidence supports GBactr. <ž> 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.¹¹² The two letters tend to interchange and may have indicated the same phonological value (cf. Sims-Williams 2011a: 172–174).¹¹³

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 *šyǵ* (alternatively *šyžg*) ~ βιζγο 'good' if < *xšija-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 ζiv- /žin/, pret. ζiδo /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-.¹¹⁴ In the case of ζιπτο, also the observed change of

111 Sims-Williams (2011a: 173) adduces the spelling variation between ασιλγανσειγι (SK4M 22) and υασιλγανζειγο (SK4B 25f.) 'native of Hastilgan' as evidence for a non-palatal affricate in Kushan 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.

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

113 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 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. αζu- 'to be born' < *ā-zāya- (BD II: 189).

114 Gholami (SFBG: 65) writes that *a can also develop to *i in front of *n, giving oavivδo /wanində/ 'victorious' < *wananta- as an example. In the case of ζiv- < *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 (2017b: 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 -þt- /št/ can be attributed to assimilation to the initial palatal (cf. BD II: 212).

Two words whose <ž> / <j> does not derive from *j 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 /ĩ/ (cf. supra on *s to /ś/ after /ĩ/). 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 unlauded *a palatalise *z to /ž/?

None of the words attested in Manichaean script tells us whether *z was also palatalised when followed by *ĩ. This assumption would not be too far-fetched, however, given the parallel afforded by the palatalisation of *dz to /dž/ before *ĩ in *y’wyd’nžyg* ‘eternal, for ever’ < **yāwaitāna-čiya-ka*-. A change from *zĩ to /žĩ/ may moreover be witnessed by a few Bactrian loanwords into Niya Prakrit (see §4.3.20; §4.3.26).¹¹⁵

When /ž/ < *j occurs after a nasal, it would be phonetically plausible that a strengthening to /dž/ happened, e.g. in αλφανζ- ‘to acquire’ < **θwanja*- (BD II: 190). As, however, this is not certain, I will write the /d/ in phonological transcriptions of such words in between brackets, e.g. /əlfan(d)ž/.

I conclude that GBactr. <ž> could represent five phonological values. When <ž> serves to write the outcome of OIr. *z (< PIr. *j) 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. *j, 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 *ĩ (and possibly from *j after a nasal).

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

115 If TA/TB *senik* ‘care, pledge’ is a direct loan from Bactr. *žinyo (attested žinyo) < **zainiya-kā*- (cf. §3.2.1 s.v. *jheniga*), this suggests that *žinyo 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. *žinyo, it may not matter much whether the <ž> in *žinyo stands for /z/ or /ž/.

word. The values assumed for the letters β, γ, δ, ζ, σ, and ϐ are justified in §§2.2.3–2.2.4. Letters only used as numbers, i.e. ϑ 6, ξ 60, and ϑ 90, have been omitted.

LETTER	VALUE	EXAMPLE(S)
α	/a/ /ā/ /ə/	ανδαρζο /andarzə/ 'instruction' < *han-darza- αζαδο /āzādə/ 'noble' < *āzāta- αχπονο /əxšunə/ 'calendar/regnal year', earlier χπονο ναβιχτο (νιβιχτο; νοβιχτο) /nəvixtə/ 'written' < *ni- pixšta-
β	/v/ /b/	βαγο /vayə/ 'lord, god' < *baga- αβαρ- /āvar/ 'to bring' < *ā-bara- αβ(β)ο /āvə/ 'water' < *āp- (MBactr. β) αβαβγο /avāvɣə/ 'waterless' < *apāpa-ka- βαμδδιγο /bāmddigə/ 'loan' < *apāmita-ka- σταμβο /stambə/ 'injury, ill-treatment' < *stambV-
γ	/g/ /ɣ/	μαρηγο /marēgə/ 'slave, servant' < *marya-ka- γαμβο /ɣambə/ 'damage' < *gamba- λρωγο /lrōɣə/ '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- εβαρ- (αβαρ-) /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. βyžg) ζοно /žūnə/ 'Time (a divinity)' < *zruwa(n)- αζανο /āžānə/ 'worthy' < *arjyāna- πιζαγγο /pidžāŋgə/ 'knowledge (?)' < *pati-zāna-ka- πανζασο /pandzāsə/ 'fifty' < *pančāsāt- ιασηδανζιγο /yāwēdāndžigə/ 'eternal, for ever' < yāwaitāna-čīya-ka- (MBactr. y'wyd'nžyg)
η	/ē/	ηβ- /ēv/ 'to dispute' < *āpaya- οηλ- /wēl/ 'to lead' < *wādaya-

θ	/θ/	ιθαο /iθǎ/ 'thus' < *iθā (probably historical spelling)
ι	/i/ /ī/ /y/	ιθαο /iθǎ/ 'thus' < *iθā κίρδο /kirdə/ 'done' < *kṛta- λίδο /lidə/ 'seen' < *dīta- ιωλο /yōlə/ 'warrior' < *yauḍa- νυαγο /niyāgə/ 'grandfather' < *niyāka-
κ	/k/	καδο /kadə/ 'house' < *kata-ka- ζαδακκο /zādak(k)ə/ 'child' < *zāta-k(k)a-
λ	/l/	λαδο /lādə/ 'given' < *dāta- μορλο /murlə/ 'death' < *mṛθra-
μ	/m/	μαρο /mǎrə/ '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' < *wṛθra-gna- κοδο /kudə/ 'little, insignificant' < *kuta- μολο /mulə/ 'wine' < *madu- σοδο /sūdə/ 'plenty' < *sūtV- νοβιχτο /nəvixtə/ 'written' < *ni-pixšta- οαρο /wǎrə/ 'there' < *awaθra φρογαοο /frəyāwə/ 'profit' < *fra-gāwa-
ου	/ū/	(υ)αρουγο /h)arūgə/ 'all' < *harwa-ka-
π	/p/	παλαβνο /pālāšnə/ 'exchange gift' < *pāti-dāšinV- βαγοπουρο /vaγəpuhrə/ 'god's son' < *baga-puθra-
ρ	/r/	ροζγο /ruzgə/ 'vineyard' < *razu-ka- παρασαρλο /parāsarlə/ 'last year' < *parā-sardV-
σ	/s/ /ś/ /ts/	σαδο /sādə/ '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 /pitsə/ 'before, in the presence of' < *patīča (MBactr. pyc) ρωσο /rōtsə/ 'day' < *raučah-

	/tʰs/	υαλοπι σ αγο /haləpitsāgə/ ‘mutual agreement’ < *hada-pati-sākā- σ ιδο /tʰsidə/ ‘which’ < *čim + *uti (MBactr. <i>cyd</i>) αλ σ ιχτογο /altʰsɪxtəgə/ ‘inclined, desirous’ < *hada- čixšta-ka- πι σ ινδ- /pētʰsind/ ‘to approve’ < *pati-sandaya-
τ	/t/	τ αβο /tāvnə/ ‘seal’ < *tāpa- α μ α τ ο /āmatə/ ‘broken’ < *āmašta-
υ	/h/	υ ιρζ- /hirz/ ‘to release’ < *hṛza- (MBactr. <i>hyrz-</i>) λ αυ - /lah/ ‘to give’ < *daθa- (MBactr. <i>lh-</i>)
φ	/f/	φ ριυο /friyə/ ‘dear’ < *friya- σο φ ορσο /tsufursə/ ‘forty’ < *čaθwṛsat-
χ	/x/	χ ανο /xānə/ ‘house’ < *xānā- τα χ μο /taxmə/ ‘stream’ < *taxman-
ω	/ō/	ω ζο /ōzə/ ‘power’ < *aujah- ρ ω σο /rōtsə/ ‘day’ < *raučah-
þ	/š/	þ αυρο /šahrə/ ‘city’ < *xšaθra- ο αþ ο /wāšə/ ‘hay’ < *wāstra- (MBactr. <i>wš</i>)

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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 that can be ascribed 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*)”.¹ 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 language); (ii)

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

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).² 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 Kushan 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.³ 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.⁴ 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

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

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

4 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).⁵

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. Owing 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

Research on Iranian loanwords in Niya Prakrit may be divided into three main stages. The first began with the publication of the Niya documents by Boyer *et al.* (1920–29 = KD) and is closely associated with the work of Thomas Burrow and Harold W. Bailey. Burrow's 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 further demonstrated that the lion's share of the Iranian loanwords in Niya Prakrit could not have been borrowed from neighbouring Khotanese, on phonological and other grounds (1949a: 121–128 *contra* Konow 1936: 232; cf. §4.2.5).⁶

In a second phase, contributions to the subject were made on an occasional basis (e.g. Harmatta 1960; 1964ab; Schwartz 1974). A new synthesis was not attempted until Weber (1997), who made significant advances by systematically addressing the directionality of borrowing.

The significant expansion of the Bactrian text corpus since the 1990s ushered in a third stage of research. New texts enabled a more detailed

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- 5 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.
 - 6 Many of Bailey's individual etymologies have not gained wide acceptance in subsequent scholarship because of phonological and/or semantic problems; see the relevant lemmata.

understanding of the Bactrian language, which led to the subsequent realisation that some Iranian loans in Niya Prakrit came from this language specifically (cf. §1.1).⁷ 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.⁸

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 Old Indo-Aryan 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). 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.⁹

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

8 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.

9 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

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.¹⁰ When studying these, I could determine that 55 of them (~56.7%) were most likely borrowed from Bactrian. For another 25 words (~25.8%), Bactrian turned out to be a possible donor language.

Because of these statistics, I divide the loanwords into three main categories: “loans from Bactrian” (§3.2), “loans from Bactrian or another Iranian language” (§3.3), and “loans 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 loans 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.¹¹ A list of attestations added at the beginning of each lemma gives an overview of other orthographic variants; in the case of nouns, adjectives, and verbs, I 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

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.

- 10 Obviously, not all these etymologies are equally reliable; cf. §3.1.7. Compared to Schoubben (2024), two lemmata have been added (*ambamjaya* ‘wrapper (?)’ in §3.2.3; *kavaji* ‘shoe(s), boot(s) (?)’ in §3.3.3), while those on *apcira* and *reda* have been deleted (Schoubben 2024: 157–160; 166). The reason to delete the latter two is that I am no longer convinced by the etymologies proposed there. I argued that *apcira*, which probably means ‘vine row’ (LKD: 74 s.v. *apacira*; Trombert 2020: 397 with fn. 514), would come from a Bactrian syntagm *αβo σι(υ)po < *āp- ‘water’ + *čiθra- ‘seed’. Yet, this idea is semantically unsatisfactory, as one plants and does not sow vines (this was kindly pointed out to me by A. Huard).
- 11 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.

words, I record all published attestations known to me, also those in other forms of Gāndhārī.¹² For the alphabetical order, see Table 1 (p. 36).

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 loanwords¹³ 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.¹⁴

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

12 Convincing restorations and emendations have likewise been included.

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

14 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 have been lost or replaced by a different lexeme.

otherwise unattested Iranian donor language.¹⁵ 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).¹⁶ But 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 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 such 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

15 See e.g. Bernard (2025), 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”.

16 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.

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.¹⁷ 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. *πριγγοοαβο* ‘weaver of damask’).¹⁸ 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.¹⁹ 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 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.

17 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.

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

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

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 co-occurrence 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 Loans 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 cr1, cr2; 639 uo2, uo4; 665 r1; 676 uo4; 788 cr6f.; 836 3; 837 A2; *avidama*: CKD 187 o6; 462 r1; *aviṃdhama*: CKD 144 co1, co3; 345 uo7; *avidhama*: CKD 419 cr5; *aviṃtama*: CKD 209 o3, r1, r2; 571 cr4; *avitama*: CKD 880 uo7

Derivatives

PRET.3SG. *aviṃdamavita* ‘he imposed a fine’: CKD 204 o1

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).²⁰ 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’. *αβιν- itself is possibly denominative to a noun *upa-ayanā-, literally meaning ‘going to’ (BD II: 203).²¹

The etymology of αβινδαμο 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).²² Sogd. *βnd’m* (and variants) does not show a trace of an initial vowel.

20 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 Ogiyara & 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).

21 For the semantics, cf. MP *abāyēd* ‘it is necessary’ < Plr. *upa + *√Hai ‘to go to’ (EDIV: 155).

22 Otherwise, the sound substitutions do not require much commenting. The Bactrian cluster -vδ- /nd/ dovetails with Niya -md- /nd/. The latter cluster is also spelt 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

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 *βινδαμ /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 + 336 uo6; 324 + 328 uo8f.;²³ 345 uo11; 420 o8; 436 cr1; 652 uo5; 678 uo4; 788 uo11; 839 uo4; 898 o6; *kṣuṇna*: CKD 577 uo4; 588 uo5; *kṣana*:²⁴ CKD 889 cr2

INS.SG. *kṣuṇṇa*: CKI 172 1

LOC.SG. *kṣunaṇmi*: CKD 121 o1; 147 o1; 169 r1; 180 o1, oB1; 195 + 726 uo2;²⁵ 203 r1; 204 o1; 209 o1; 222 + 336 uo1; 298 r1; 318 uo2; 321 o2; 322 uo2; 324 + 328 uo2; 327 o2; 331 uo2; 343 o1f.; 345 uo1; 350 o1; 378 o1; 418 o2; 419 uo1; 420 o2; 425 uo2; 436 uo2; 437 uo1; 461 o1; 488 o1, o2; 489 r1f. (my restoration); 495 o3; 496 uo2; 500 o1; 505 o1; 506 o1; 568 uo2; 569 uo2; 570 uo1f.; 571 uo1; 572 uo1; 574 uo1f.; 575 uo2; 578 uo1; 579 uo2; 580 uo1; 581 uo2; 582 uo1, cr3; 583 uo2; 584 uo2; 586 uo1; 587 uo1; 589 uo1; 590 uo1; 591 uo2; 592 uo2; 593 uo2; 604 o1; 648 o2; 652 uo2; 654 uo2; 655 uo3; 656 uo2; 677 uo1; 709 uo2; 732 uo2; 760 o1; 765 uo1; 770 uo2; 782 uo2f.; 788 uo2; 820 uo2; 839 uo1; 841 uo2; 842 o1; 880 uo2; 881 uo2; 882 uo1f.; 884 uo1; 885 uo1; 889 uo2; 898 o2; *kṣuṇṇaṇmi*: CKD 401 uo1; 415 uo2; 478 o1; 573 uo2; 576 uo2; 577 uo2; 588 uo2; 600 o2; 715 o1; 879 uo2; *kṣunami*: CKI 161 1; 225 1; CKD 661 o1; *kṣunaṇmi*: CKI 152 1; 153 1; 155 1; CKD 369 o1f.; 422 o2; 808 uo3; *kṣuṇṇaṇmi*: CKD 801 uo1; *kṣuṇami*: CKI 148 1; 158 3; 160 1; 230 4; 245 1; 368 B2f.; 564 1-3; *kṣuṇaṇmi*: CKI 154 2; 367 1; 466 1; 830 1f.; *kṣonaṇmi*:²⁶ CKD 837 A1; 838 o1; 891 A1; *kṣaṇe*: CKI 242 1

Compounds

ADJ. *navakṣuniya* 'of the 9th year': CKD 830 2; *navakṣoniya*: CKD 829 2

ADJ. *daśakṣoniya* 'of the 10th year': CKD 831 2

kṣuna 'date, reign, regnal year' has cognates in most contemporary Tarim Basin languages. In Tocharian B, the same lexeme occurs as *kṣuṇ* 'regnal year,

nasals (cf. §2.1.5). The spelling variants *avitama*, *avidama*, and *avidhama* exemplify the frequent omission of anusvāra in Kharoṣṭhī.

23 For the joins CKD 222 + 336 and 324 + 328, see Schoubben in prep.

24 This variant spelling is probably a writer's mistake or due to a confusion with Skt./Gāndh. *kṣaṇa*- 'moment' (Baums 2018b: 64). The same is probably true of the loc.sg. *kṣaṇe* in CKI 242 1.

25 That CKD 195 and 726 can be joined is argued in Schoubben in prep.

26 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).

reign' (DoT: 261); in Khotanese as *kṣuṇa*- 'period of time, ruling year' (DKS: 69); and in Tumshuqese as *χṣana*- 'idem' (Konow 1935: 819).²⁷ The word also occurs in Sanskrit inscriptions of the Kushan period (Skinner 2017: 276 fn. 243). 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. Niya Prakrit most likely borrowed the word from Bactrian directly, since there is also a South Asian Gāndhārī cognate of *kṣuṇa* attested in inscriptions of the Kushan period (cf. Baums 2018a: 63).²⁸

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).²⁹ Recently, this etymology has been rejected by Scarborough (2021) because of the difference in Anlaut between Gr. *χρόνος* and Bactr. *χḡovo* /xṣunə/ and because of their slightly diverging semantics.³⁰ However, his counter-arguments are not decisive, as I shall try to show below.

Scarborough's main objection against Thierfelder's etymology is the required substitution of Gr. *χρ*-, i.e. /kʰr/ or /xr/, with Bactr. *χḡ*- /xṣ/. 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*- /xṣ/. 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*- 'to buy' < **xirr*- < **xirn*- < **xrīnā*-³¹ and the nouns *χḡ*ηγο 'purchase' < **xrayaka*- and *χḡ*πσο 'purchase' < **xrīti-čī*- (BD II: 277f.). Yet, given

27 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./Gāndh. *kṣaṇa*- 'moment'.

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

29 Earlier etymological proposals can be found in e.g. Bailey (1948: 328f.; DKS: 69). Yet, these all suffer from phonological problems; see Scarborough (2021: 600–602 with fn. 10).

30 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.

31 On the historical development of Bactr. *χḡ*-, in particular the assumed metathesis and the shortened vowel, see Kümmel (fthc.). The pret. *χḡ*δο can be analogical after the present stem.

that *χρηγο* and *χρσο* can have been secondarily influenced by the verb *χρ-*, 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 *αχριανο* ‘purchasable’ (adj. of unclear derivation) and *αχρиво* ‘purchase’, if from **xrayanā-* (so BD II: 199) and not **ā-xrayanā-* (so EDIV: 446).³²

Now, phonetic descriptions of ancient grammarians suggest that the *-p-* /*r*/ in *χρόνος* may have been pronounced as a voiceless [ɾ], which is relevant for the etymology of *χρνο*, as the change of a voiceless liquid to a sibilant is typologically widespread (cf. Kümmel 2007: 162f.). According to the grammarians, Gr. *-p-* /*r*/ was pronounced “aspirated”, that is “voiceless”, when preceded by a voiceless aspirate (VG³: 41–43; Probert 2010: 91f.; Jatteau 2013: 228).³³ 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

Οἱ δὲ ἀρχαῖοι γραμματικοὶ τὸ μὲν μετὰ ψιλοῦ εὐρισκόμενον ῥ ἐψίλουν, τὸ δὲ μετὰ δασέος ἐδάσυνον· οἷον τὸ Ἀτρεύς 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 Ἀτρεύς [name Atreus] and κάπρος [boar] unaspirated, but χρόνος [time (period)], ἀφρός [foam], and θρόνος [throne] aspirated.” (tr. mine).³⁴

Based on the testimony of these grammarians, one can hypothesise that speakers of Bactrian felt /*xš*/ to be phonetically closer to the Greek cluster [kʰɾ] (or: [xɾ]) than ***/xr*/.³⁵

Additional support for the derivation of *χρνο* from *χρόνος* comes from palaeography, as the letter rho has been used to write sibilants in Greek sources from the Indo-Iranian borderlands. On a coin of the Indo-Scythian ruler Śpalirises (ca. 70–60 BCE), his name is, for instance, written in Greek

32 There are also words like *αβαχρηγο* ‘fee, compensation, wages’ < **apa-xraya-ka-*, *οιχρηγανο* ‘hire, rent’ < **wi-xraya-* + suffix *-γανο*, and *οιχρиво* ‘idem’ < **wi-xrayanā-* (BD II: 182; 248), where the root is preceded by a preverb.

33 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).

34 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).

35 N. Sims-Williams (p.c.) points out that if one interprets Bactr. *αθβο* ‘(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. *-θβ-* /*θš*/.

script as gen.sg. ΠΠΑΛΙΡΙΣΟΥ. In other words, the cluster /śp/ is spelt 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,³⁶ thereby providing indirect evidence that the -p- in Gr. χρόνος could have developed into the -ɸ- seen in Bactr. ɸpovo.

A separate issue is the semantic difference between χρόνος and ɸpovo: 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 (cf. Scarborough 2021: 600f. fn. 7; 606). Nevertheless, this discrepancy should not concern us too much, since the Gāndhārī evidence bridges the semantic gap between χρόνος and ɸpovo: Gāndh. *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’.³⁷

In two administrative formulae, the meaning of Gāndh. *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 o1

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

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

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 o1, *īśa kalaṃmi* ‘at this time’ is employed in the same function as *īśa kṣunaṃmi*.³⁸

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

37 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, *On the crown* 225.

38 *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 o1. 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 Gāndh. *īśa kṣunaṃmi*; cf. e.g. THT 4001 a1 *ñu kṣunne trice menne śak-śuk[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).

The second formula is *aja kṣuna uvadae* (and variants).³⁹ 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 line 14 of the Greek translation of Aśoka’s 13th 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 uo1

saṃvatsare 20 1 maṣe 4 2 divaṣe 10 3 Mahanuavamaharaya jīṭugha Amgoka devaputraṣa kṣunaṃmi ...

“In the 21st year, 6th month, 13th day in the reign of the great king of great Nuava, the *jīṭugha* Amgoka, 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, Gāndh. *kṣuna* ‘date, reign, regnal year’ is a direct loan from Bactr. χρόνο / xṣunə / ‘(calendar/regnal) year’. The Bactrian word can, despite Scarborough’s objections, be accounted for as a loanword from Gr. χρόνος ‘time (period)’.

3. *guśura* ‘prince’

Attestations of the base form

DIR.SG. *guśura*: CKD 187 o2; 216 r6; 295 o3; 320 o5; 401 uo5f; 415 uo5; 478 o1, o2; 584 co3, uo2; 654 uo7; 696 o1, o6; 702 o1; 703 o2; 899 uo9; *guśuro*: CKD 884 uo11; *gośora*: CKD 837 A6 (2×); 837 A7

GEN.SG. *guśuraṣa*: CKD 696 o5, o7

INS.PL. *guśurakehi*: CKI 249 9b

GEN.PL. *guśurana*: CKD 324 + 328 co3; 884 co4, uo1f; *guśurane*: CKD 842 o1; *guśuraṇa*: CKI 564 2-5

abbr. *go*: CKD 831 3 (2×; Strauch *apud* Ching 2013a: 66)

39 Attestations: CKD 222 + 336 uo5f. (*uju kṣu(*na) uvadae*); 324 + 328 uo8f. (*aja kṣuna uvatae*); 345 uo11 (*aja kṣuna uvadae*); 420 o8 (*aja kṣuna uvatae*); 436 cr1 (*aja kṣuna upadae*); 577 uo4f. (*aja kṣumna uvatae*); 588 uo5 (*aja kṣumna uvatae*); 652 uo5 (*aja kṣuna uvada[e]*); 678 uo4 (*aja kṣuna uvadae*); 788 uo11 (*aja kṣuna uvataya*); 839 uo4 (*aja kṣuna upatāya*; see p. 479 for the reading); 889 cr2 (*aju kṣana uvatae*); 898 o6 (*aja kṣuna uatae*).

The official title *gušura* (variant *gušuraka**) is attested in Niya Prakrit, South Asian Gāndhārī, and (Epigraphical) Sanskrit.⁴⁰ As far as can be seen from the attestations in these languages, the duties of a *gušura* were of a judicial and military character.⁴¹ *gušura* 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.⁴² They all start from the same premise, i.e. that *gušura* 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 by some Iranian names attested in Gāndhārī (Schoubben 2023: 289–291) and by some dialect forms in Bactrian: e.g., γολο ‘wife’ < *wadū- (BD IV: 110), γοανιγαρο ‘beneficent’ next to οανηγαρο ‘idem’ < *wāhyah- + *-kāra- ‘doing what is better’ (BD IV: 4; 8; 92; 110; 120), and the PN γοραμβαδο < *wṛθragna-pāta- (BPN: no. 119).

Burrow (1935a: 781f.; LKD: 87f. s.v.) at first suggested *gušura* to be related to Av. *vīcira*- ‘decider (?)’, MP *wizīr* ‘argument, decision’, and NP *wazīr* ‘counsellor, vizier’. However, the semantics of Av. *vīcira*- are uncertain,⁴³ 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.

A decade later, Burrow conceived of a different etymology for *gušura*, again assuming a change from *wi- to *gu- in the Iranian donor language.⁴⁴ This time, Burrow compared *gušura* to Av. *visō.puθra*-, MP/Parth. *wispuhr*-, Shina *gušpūr*, Burushaski *gušpuhr*, and other witnesses of the Iranian title **wisah puθra*- ‘son of the house > prince’.⁴⁵ The source of *gušura* would,

40 The attested forms in Sanskrit are *gušūra*-, *gošūra*-, *gaušūra*-, *gašūra*-, now also *gišūra*-. See Falk (2004: 149f. = 2013a: 362f.); Schoubben (2023: 286); Sims-Williams (2022–23: 136; BD IV: 4).

41 See in particular CKI 249 and CKD 478. That *gušura* had military associations is also suggested by the (Epigraphical) Sanskrit compound *gušuraspāla* (Thor-North 235:41), whose second element is to be identified with Bactr. σπαλο* ‘army’ < *spāda- (von Hinüber 2017: 137 = 2009–19: 1630).

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

43 Peschl (2022: 291) glosses *vīcira*- as ‘discriminating’.

44 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 hand-written note added to p. 87 of Burrow’s annotated copy of LKD.

45 On this title, see e.g. Colditz (2000: 328ff.). **wisah puθra*- was additionally calqued into Aramaic as *br byt*’. On the more recently discovered Bactrian cognates, see below.

according to Bailey (1947: 150), be a “Scythian” dialect, for which he posited the following phonological changes: **wisah puθra-* > **wisē puθra-* > **gušivura-* > **gusiura-* > *gušura-*.

In Schoubben (2023: 289), I questioned Burrow’s comparison between *gušura* and **wisah puθra-* on semantic and phonological grounds.⁴⁶ 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 *vazrka-*, MP/Parth. *wuzurg* (*wazarg*; *wuzarg*), Pāzand *guzurg* (*guzarg*), NP *buzurg*, and Bactr. *οαζαρκο* (*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 letter **kc** contains a newly attested form *γοσοβοργο* ‘prince’ < **wisah puθra-ka-* (BD IV: 110)⁴⁷ 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; BD IV: 4). 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 *γury* ‘wolf’ < OIr. **wṛka-*). It therefore seems most plausible that the <*γ*> in *γοσοβοργο* also stands for /*γ*/ (and not for /*g*/). In other words, Bactr. initial /*γ*/ needs to have been substituted with Gāndh. *g-* /*g*/ . Why this substitution happened is easy to understand from Gāndhārī phonology: Gāndh. /*γ*/ only occurs in intervocalic position (§2.1.2).⁴⁸

The palatal *ś* in *gušura* / *gušuraka** asks for slightly more discussion. Sims-Williams phonologically transcribes *γοσοβοργο* as “[*yusvurg*]” (2022–23: 136; BD IV: 4). Yet, if this were correct, it would be hard to account for the *ś* in *gušura* / *gušuraka**, given that Gāndhārī keeps its dental and palatal sibilants

46 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*.

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

48 See also §3.3.2 s.v. *gavaša* and §4.3.10.

distinct. I would rather transcribe γοσοβοργο as /yuśvũrgə/.⁴⁹ When we compare MBactr. *wyś(p)* (~ οισ(π)ο) ‘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.⁵⁰ If so, the ś in *guśura* / *guśuraka** is explained more easily: it would directly correspond to the Bactr. /ś/,⁵¹ 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 (see also Schoubben 2025b: 14).

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,⁵² given that *guśuraka** can be directly explained from Bactr. γοσοβοργο /yuśvũrgə/.⁵³ 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.

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 ***-śuraka-* 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**.

49 I transcribe the first <ο> in -βοργο as /ũ/ because (i) the loss of **h* < **θ* may have caused compensatory lengthening, and (ii) the vowel in question is typically written as <ũ> in Sanskrit.

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

51 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. οισβοργο (and the corresponding οισλογδο ‘princess’ < **wisah duxtā*) and in EpSkt. *giśūra-* (next to *guśūra-*, *gośūra-*, etc.).

52 It may be relevant in this regard that the ins.pl. *guśurakehi* in CKI 249 9b is the oldest attestation of the title under discussion.

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

A second possibility is that the co-existence of *gušuraka** and *gušura* reflects the situation in the donor language. In Bactrian, a form without the *ka*-suffix, i.e. οισβορο ‘prince’ < **wisah puθra-*, is also attested (BD IV: 120; cf. also the PN οισβοροζιυο ‘in the prince’s charge’, BPN: no. 350). Thus, instead of being back-formed from *gušuraka** ← γοσοβοργο /γυśvũrgə/, it is also possible that *gušura* is to be traced back to *γοσοβορο /γυśvũrə/, a dialect form of οισβορο.

In short, the discovery of Bactr. γοσοβοργο in recently published birchbark letters has settled the question of the etymology of the official title *gušura* (variant *gušuraka**). When taking into account the palatalisation of OIr. *s after *ĩ suggested by the Manichaean evidence, *gušuraka** can be derived in a straightforward manner from γοσοβοργο /γυśvũrgə/ < **wisah puθra-ka*-. The more frequent *gušura* could either have been back-formed from *gušuraka** or borrowed from a Bactrian by-form *γοσοβορο /γυśvũrə/ < **wisah puθra-*.

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

Attestations of the base form

DIR.SG. *jheniga*: CKD 161 cr1; 177 r1; 184 r3; 244 r3; 258 o3; 288 cr1; 362 o5; 370 cr2, cr5; 372 o4; 373 r4; 585 uo4; 644 r4 (*jhenig[ā]si* ‘was under your care’), r5; 722 uo5; 735 r1; 819 cr4; 840 cr4; *jheniya*: CKD 278 r1, r5

DIR.PL. *jheniga*: CKD 152 uo6; 164 o5; 271 + 338 uo3, uo4;⁵⁴ 307 o4, o5; 475 r5; 509 uo2; 721 o5, o6

jheniga ‘in charge of, under the care of’ has been known to be an Iranian loanword since at least Konow (1932: 80; 1936: 239).⁵⁵ He convincingly compared the Niya word with Khot. *ysīniya-* (also *ysīnita*; *ysīniyā*; *ysīnī*) ‘in charge of’ < **zainiya-kā-* and BSogd. *zyn’y* (also *zyny(h)*; *zynyy*) ‘deposit, care’ < **zainiyV-* (cf. YAv. *zaēni-* ‘zealous, vigilant’ 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’.⁵⁶ 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).

54 For the idea that CKD 271 and 338 originally formed one document, cf. Schoubben in prep.

55 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).

56 Pinault (2002: 272f.); DoT (764f.); DTTA (530f.); Dragoni (2023b: 197–199).

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 CE. The development of **-ē-* < **-ai-* to Khot. *-ī-* is moreover already found in Pre-Khotanese loanwords into Tocharian, approximately datable to 500 BCE–400 CE (Dragoni 2023b: 256). A (Pre-)Khotanese origin of Niya *jheniga* is thus improbable for chronological reasons.⁵⁷

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’ (Ur1, line 2; Ur2; cf. BPN: nos 239; 264).⁵⁸ 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/ ‘armourer’ < **zaina-pati-* (→ Niya *jenavida*, §3.2.2 s.v.) and the PN ζηνιβο /zēnīvə/ ‘who protects what is entrusted (to them)’ < **zaini(ya)-pā-* (BPN: no. 151).

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 o1 (2×), o2 (2×), o3, r1 (2×); 65 A2, C1, C2; 66 A1, A2, A3; 80 rA1; 93 o1; 105 oA5, oE3, rA3; 115 oD6, o2, o3, oK6; 118 oD2; 129 o1, o3, r1; 146 oA2, oA3, oB1; 148 r5; 170 r2, r3; 173 oA2, oA7, oB2; 174 r1; 181 o2; 199 oB2; 204 rD2; 210 r1; 221 o2; 266 o1, o2, rB2; 299 rB1; 337 o1; 404 r1; 407 oE1; 409 r1; 411 r1; 419 uo7; 448 o3; 449 o11; 456 r1; 457 o1; 458 oLM; 459 r1; 460 r1; 462 oLM; 463 rLM; 464 rLM; 465 r1; 467 rC4; 485 oLM; 533 o1; 535 r1; 543 r1; 597 o1; 601

57 If BSkt. *ysenikām* belongs here too, the spelling with <ys> need not 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; Maggi 2022b: 156f.) and not necessarily a marker of Khotanese origin.

58 See additionally BD II (201) on βανοζινυο < **βανοζινιγο* ‘royal infant’ < **bānu-zainiya-ka-* ‘in the queen’s charge’, BPN (nos 350; 472) on the PNs οισβοροζινυο and τοβαζινι (family name τοβαζηνανο), and BD IV (117) on the PN μροζινυο.

oB6, oD6, oG4, rB5, rD4, rF5; 605 r5; 607 o1; 609 oD3; 615 r1; 618 r1; 620 rB1; 627 r4; 631 o1; 642 oC4; 727 oB4; 731 oB4; 758 oC2; 762 oE1, oE3, oF1; 763 rB1; 774 uoB1, uoB2, uoB3, uoB4, uoB5, uoC1; 795 co3; 810 o3; 833 1; *daśavita*: CKD 104 o1, o2; 108 r4; 146 oB3a, oB4a, rAB1, rAB2; 191 oA2a; 204 o3; 205 o1; 237 o1; 608 o4; 613 o3; 628 oB2; 688 oA1; 776 o5; 790 A1; *taśavita*: CKD 610 rC1; *daśapati*: CKD 838 o5, r3

DIR.PL. *daśavite*: CKD 477 r1, r2, r3

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).⁵⁹ 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 Median **dasa-pati*- → Elam. *da-šā-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.⁶⁰

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). Yet, a Bactrian source for this plural is possible, too, since the dir.pl. of $-\beta\iota\delta\omicron$ would likewise end in *-ε /e/* in Kushan times (cf. also §4.4.3).

59 On Bactr. $-\beta\iota\delta\omicron$ /vidə/, see also §3.2.1 s.v. *śadavida* and §3.2.2 s.v. *jenavida*.

60 Conceivably, $\lambda\alpha\sigma\omicron$ 'ten' as the name of the administrative unit a $\lambda\alpha\sigma\omicron\beta\iota\delta\omicron^*$ 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 form is likely to be a secondary creation, given that it only occurs in CKD 838, one of the documents in Kuča Prakrit.

6. *nokṣari* ‘month of the new year’

Attestations of the base form

DIR.SG. *nokṣari*: CKD 195 + 726 uo2

Since *nokṣari* occurs after the loc.sg. *maše* ‘in the month’ in the dating formula of CKD 195 + 726, it must be a month name.⁶¹ Konow (1924: 121) identified it as “the ,new-year’s’ month, corresponding to *Nausaryī* in the Khorasmian and *Nausard* in the Sogdian calendar”.⁶² In Old Iranian terms, this month name is a compound of **nawa(-ka)-* ‘new’ and **sardV-* ‘year’.

Burrow (1934: 512) proposed that *nokṣari* is a loanword from Khotanese. Yet, this hypothesis requires the ad hoc assumption that word-final **-rd-* would become *-r-* in Khotanese rather than *-l-* as elsewhere, including in *salii-* ‘year’. I therefore concur with Bailey (1949a: 127) that this proposal is unlikely. A Sogdian origin for *nokṣari* is also implausible, since **-rd-* is continued in this language as *-rδ-*, including in *srδ* ‘year’.

More plausibly, *nokṣari* is a Bactrian loan because the *-r-* in *nokṣari* can then be explained as a simplification of the foreign cluster *-ρλ- /rl/* < OIr. **-rd-*.⁶³ The relevant month name is moreover indirectly attested in the compound βδδιγονωγοσαρλο ‘second new year’ and in the Late Bactrian form νωγοσαρδο ‘new year’, which has *-ρδ-* from earlier *-ρλ-* (BD II: 203; 240; SCBD: 89).⁶⁴

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). This suggests that the *-i* in *nokṣari* was taken over from the source form. Considering 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 = 2025a: 130–132; SVK III: 153), Bactr. νωγοσαρλο* may reflect an earlier **nawa-ka-sardī-*. I would therefore like to suggest that *nokṣari* is a loan from a Kushan Bactrian form **νωγοσαρλι /nōgsarlī/*, in which the final **-ī* was still preserved.

61 Cf. e.g. the month name *Arthamisiya* ← Gr. ἀρτεμίσιος, which is likewise placed after the loc.sg. *maše* (*maša*) in CKI 152; 159; 509. I owe this comparison to Stefan Baums.

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

63 Cf. Harmatta (1960: 206); §4.3.25.

64 Note also ασαρολο ‘this year’ < **ā-sardV-* (BD II: 194) and παρασαρλο ‘last year’ < **parā-sardV-* (BD II: 251).

7. *prigha* ‘(monochrome) damask’

Derivatives

DIR.SG. *prighamaga* ‘made from damask’: CKD 316 o3

Compounds

DIR.SG. *špetapriḡha* ‘white damask’: CKD 318 uo6

In both of 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 *pr̥ṅga-* (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 juǎn* 綵絹 ‘idem’.⁶⁵

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* / *pr̥ynk* in Sogdian (SD: 281; 296; DMSB²: 175).⁶⁶ In recent decades, the evidence has been enlarged further by the Bactrian compound πριγγοοαβγο ‘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 opinion, it could have been an originally Sogdian word. In this vein, he cautiously derived Sogd. *pr̥yng* from **upa-riṅga-* ‘marked, lined’ (cf. also SD: 281); if correct, this 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 **riṅga-* ‘mark, line’ rests on a doubtful comparison with YAv. *haptō.iriṅga-*, whose assumed

65 In view of the nasal in BSkt. *pr̥ṅga-*, one could expect the Niya form to have been spelt as ***pr̥imḡha*. The writing of anusvāra is, however, not always consistent in Kharoṣṭhī, and an *aḡsara* 𑀧 *pr̥im* 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 (S. Baums, p.c.). In a handwritten note added to his personal copy of LKD, Burrow wonders whether *piṅga* (CKD 416 o3) and *piṅgha* (CKD 264 o4) 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. *piṅgā-* (*Harṣacarita*) to the dossier.

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

meaning ‘having seven distinguishing marks’ is not entirely sure (Goldman 2015: 185f.). Therefore, other options need to 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, namely $\pi\rho\iota\gamma\gamma\omicron^*$ ‘damask’ < **pir-aina-ka-* ‘made from the silkworm’. The proto-form **pir-aina-ka-* 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).⁶⁷ **pir-aina-ka-* would moreover regularly yield Bactr. $\pi\rho\iota\gamma\gamma\omicron^*$ / $\pi\rho\iota\gamma\gamma\omicron$ because of (i) the intervocalic lenition of **-k-* to *-g-* (SFBG: 35); (ii) syncope of the unaccented short vowels **-i-* and **-a-* (SFBG: 60f.); and (iii) the 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. $\pi\rho\iota\gamma\gamma\omicron^*$. 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. *laṣī* ‘gift’

Attestations of the base form

DIR.SG. *laṣī*: CKD 122 o1; 243 o2, o4; 380 o1; 415 uo4; 677 uo3, uo7; 678 uo6; 839 uo5; 860 co2, co4, cr1; *laṣīya*: CKD 573 cr2; *laṣa*: CKD 222 + 336 uo4, uo5; 690 r5

In every instance except CKD 690 r5, Niya *laṣī* /*lašnī*/ is a complement of the verb *de(na)-* ‘to give’ and in certain formulae this word can be replaced by *prahuḍa* ‘gift’ < Skt. *prābhṛta-* (cf. Burrow 1935a: 786; LKD: 115 s.v.); the meaning ‘gift’ is hence secure.

Etymologically, *laṣī* is certainly a borrowing from Bactr. $\lambda\alpha\rho\upsilon$ /*lašnə*/ ‘gift’, a cognate of ZMP *dāšn*, MMP/MParth. *dāšin* ‘idem’ (CPD: 25; DMMP:

67 Another relevant word could be Bactr. $\pi\rho\sigma\iota\gamma\gamma\omicron$ (**kf** b2), if this means ‘made of silk’ and derives from **pira-čiya-* + the material suffix **-aina-ka-* (BD IV: 89; 123). Even though these East Iranian words closely resemble Skt. *pīlu-*, Tamil *puru*, and other Dravidian words for ‘worm’, the ultimate etymology remains unclear (Sims-Williams 2008a).

136).⁶⁸ 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. **dāšīnā*-. In view of the final *-i* of Niya *laši*, one could also consider to reconstruct **dāšīnī*-, a feminine in **-ī* derived from the thematic masculine stem in **-a*. This alternative reconstruction would have the advantage that it allows us to posit an early Kushan form **λαβνι* /*lāšnī*/, corresponding sound for sound with Niya *laši* /*lāšnī*/. A different option could be that *laši* is a loan from an archaic nom.sg. **λαβνι* with **-ι* /*i*/ < **-ah* as in Sogdian and Khotanese. Yet, this option appears less likely because it is hard to see why *laši* 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 r2

Niya *lastana* ‘dispute, lawsuit’ and Khot. *lāstana*- ‘quarrel’ are borrowings from Bactr. *λαστανω* /*lāstānə*/ ‘litigation, dispute’ (Schwartz 1974; BD II: 226 *pace* Bailey in KT VI: 315–317; DKS: 371).⁶⁹ We can be confident that this term originated in Bactrian, since *λαστανω* regularly derives from **dāta-stāna*-, literally ‘the place of law/judgement’ (cf. MP/Parth. *dādestān*), with lambda-dasm and simplification of **-tst-* to *-στ-* /*st-*/ after syncope.⁷⁰

In its sole instance (CKD 298 r2), *lastana* is used as part of a light verb construction with pret.3pl. *kritamti* ‘they made’. This construction may have

68 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 Skt. *lakṣya*- ‘aim’ or *lakṣmī*- ‘richness’, and Bailey (KT VI: 315–317), from Plr. **√HraH* ‘to give’, will not be addressed here.

69 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 words for ‘dispute, lawsuit’ are *vivada* < Skt. *vivāda*- and the Iranian loanword *hastama* (§3.3.3 s.v.).

70 Cf. further TA *lāstānk* / TB *lastānk* ‘executioner’s block (?)’, which are probably loans from a related Bactrian word **λασταγγο* /*lāstāngə*/. The latter could be derived from **dāta-stāna-ka*- (Schwartz 1974: 403), or it could be a substantivised adj. derived from *λαστανω* with the suffix *-αγγο* /*āngə*/ < **-āna-ka*- and haplological shortening as in *καδγοσταγγο* ‘belonging to Kadagstan’ < **kata-ka-stāna-ka*- < **kata-ka-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, BD IV: 104). See also §3.2.4 s.v. *ṣvaṭhaṃgha* / *soṭhaṃga*.

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).⁷¹

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

Attestations of the base form

DIR.SG. *vaga*: CKD 574 cr1; 815 B1f.; *vaka*: CKD 496 cr4; 498 o5; 559 r1⁷²

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* /*vāyə*/ ‘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 *ιαοιοαρδαοι* ‘grain, corn’ (eg3–5), comparable to how Niya *vaga* co-occurs with *aṃna*, the functional equivalent of *ιαοιοαρδαοι*. The farming contract known as doc. **U** moreover stipulates that the tenant can keep a *υρδδιγο 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* /*vāyə*/ than its alternative spelling *vaka* does. The variant with *-k-* may 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).⁷³

71 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).

72 I refrain from including the ambiguous sequences *bhumanavakaamṇa* (CKD 165 o7) and ins.sg. *bhumanavakaamṇena* (CKD 165 o6). 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 r2) are otherwise attested.

73 Cf. also the EpSkt. PN *Vakamihira* ← Bactr. **βαγομυρο* /*vagəmiḥ(i)rə*/ < **baga-miθra-* ‘lord Mithra’ in a Brāhmī inscription from Mathurā (Lüders 1961: 94f.), and

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).⁷⁴ In all probability, *vaga* thus finds its origin in Bactrian.

11. *valaga* 'animal keeper'

Attestations of the base word

DIR.SG. *valaga*: CKD 14 uo3 (2×), cr1; 40 uo3; 176 o1; 367 o4; 557 r1; 671 o1; *valagam*:

CKD 367 o2, o3; *valaka*: CKD 777 uo4, uo5, uo6, uo7

INS.SG. *valagena*: CKD 82 o2, o2f.; 253 r2

GEN.SG. *valagaša*: CKD 14 cr2; 25 o3; 777 uo3f.

Attestations as a PN

GEN.SG. *Valakasa*: CKI 1059 1

Compounds

DIR.PL. *śeṣavalage* 'remaining animal keeper': CKD 788 ur1

GEN.PL. *uṭavalagana* 'camel keeper': CKD 637 o11

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 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 cl5. 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'. Etymo-

the use of 𐭪 *ka* to indicate the spirant /γ/ in the *Khotan Dharmapada* (LKD: §16; Brough 1962: 86).

74 In Sogdian Tale B (M 135), line 56, 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 (N. Sims-Williams, p.c.).

logically, οαλαγο can be compared to Parth. *wāḍāg* ‘leader, pilot’ (DMMP: 335) and BSogd. *w’δ’kk* ‘leader’ (SD: 396) < **wād-āka-*.⁷⁵

Høisæter observes a complementary distribution in the functions of a *valaga* and an *arivaga* (also *ariyaga*). 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 whether *arivaga* could be a Bactrian title ending in -οαλαγο /wālga/ ‘leader’ < **wāda-ka-*, as in the title αῤτοοαλγο (BD II: 200; BD IV: 108; Härtel 2023: 396–398; Schoubben 2025b: 12f.).⁷⁶

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

Attestations of the base form

DIR.SG. *śadavida*: CKD 86 o4; 216 r3f.; 569 uo7, uo8; 586 uo7; 587 uo7; 590 uo8; 637 o8; 648 o7; 654 uo8; 656 uo5; 795 uo1; 797 uo4 (2×); 808 uo10; 879 cr2; 886 A1; *śadavita*: CKD 159 r1f.; 247 o3; 436 uo2; 586 uo6 (2×); 715 o4; *śatavita*: CKD 683 o1; *śatavida*: CKD 422 o9

DIR.PL. *śadavida*: CKD 482 uo2, uo4; *śadavide*: CKD 580 uo5 (2×)

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 latter attested via Elam. *sa-ad-da-bat-ti-iš* / *sa-da-bat-ti-iš* (Iranica: §4.4.7.107).⁷⁷ 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 s.v. *daśavida* (see especially p. 85, fn. 60). The actual Bactrian form *σαδοβιδο may be indirectly preserved as *sadāvida*, a title

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

76 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*.

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

attested in a colophon of a Gilgit *Saddharmapuṇḍarika* manuscript (von Hinüber 2017: 137 = 2009–19: 1630).

Niya Prakrit *śadavida* ‘chief of a hundred households’ may, in its turn, have been borrowed into Old Turkic and Sogdian as *šadapit* and *š’δpyt*, respectively.⁷⁸ Old Turkic *šadapit* 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, N. Sims-Williams (p.c.) proposes that Niya *śadavida* was (via some intermediary) first borrowed into Old Turkic as *šadapit* and thence into Sogdian as *š’δpyt*.⁷⁹ It should be admitted, though, that it is hard to explain why the -v- in Niya *śadavida* was borrowed as Turkic -p- and not simply as *-v-.⁸⁰

In any case, the etymology of Old Turkic *šadapit* and Sogd. *š’δpyt* 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 o3; 305 o3; 307 o3; 317 o2; 390 o4; 399 o2, rA1; 475 r4; 713 o6;
śado: BC 11 recto 12, verso 16; *śade*: BC 11 recto 36, recto 37 (2×), recto 37f., recto 39 (2×), verso 17

INS.SG. *śātena*: CKD 702 o6

GEN.SG. *śadasa*: BC 4 verso 12

Derivatives

INS.SG. *śadimena* ‘pleased, happy’: BC 11 recto 11, recto 12

PRES.1SG. *śademi* ‘I am happy’: CKD 139 o3; 259 o3; 302 o1; 305 o2; 307 o2; 390 o4; 819 uo2; 840 uo5; *śatosmi*: CKD 385 o2; 399 rA1; 475 r3f.; 541 o4 = 541 r4; 702 o3;
śadosmi: CKD 247 o2; 714 o1; PRES.1PL. *śadama* ‘we are happy’: CKD 399 o2; 721 o2; *śadema*: CKD 690 r4; *śatama*: CKD 797 uo2; *śatosma*: CKD 164 o3

78 This is a new proposal, but note that Humbach (1960: 41; cf. also Mayrhofer 1962: 342) already made a comparison between Old Turkic *šadapit* and OIr. **sata-pati*-, the ultimate source of Niya Pkt. *śadavida*.

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

80 One option would be to posit a Tocharian intermediary as Indo-Aryan -v- is more often borrowed as -p- in Tocharian (e.g. TB *sintāp* ‘rock-salt’ ← Skt. *saindhava*-); but two arguments seem to speak against this scenario: (i) the absence of the relevant word in Tocharian, and (ii) the fact that Indic -v- frequently gets borrowed as -w- in Tocharian when it is not at the end of a word, e.g. TA/TB *pintwāt* ‘alms’ ← Gāndh. *piṇḍavada* < Skt. *piṇḍapāta*-.

Most likely, Niya *šada* ‘pleased, happy’ is a loanword from Bactr. *𐬱𐬁𐬀𐬎* /šādə/ ‘idem’ < *čyāta-.⁸¹ This etymology is strongly supported by the exact match between Niya 1sg. *šademi* ‘I am happy’ and Bactr. 1sg. *𐬱𐬁𐬎𐬎𐬀* /šādēmə/ ‘idem’, both forms being used in nearly identical contexts in (3.4) and (3.5).

(3.4) CKD 139 o3f.

tena šademi tahi paride aroga šrudemi

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

(3.5) **ba2f.**

[oto]μo ναγατο σιδo λρογηιο ταδο βαδημo

“[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. *šād* ‘happy, joyful, serene’ (DMMP: 313) and Sogd. *š’t* ‘happy, rich’ (SD: 370) would in theory also work as a source of Niya *šada*.⁸²

14. *Suliga* ‘Sogdian’

Attestations of the base form

DIR.SG. *Suliga*: CKD 661 o4

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. *swyōyk* ‘idem’ and other forms cited below.⁸³

81 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 *šada* to be an inherited word related to BSkt. *śāta-* (Pāli *sāta-*) ‘pleasant, agreeable’ (BHSD: 525). Yet, she does not explain how she would then account for the initial retroflex in the Gāndhārī form. The derivative *šadima** (ins.sg. *šadimeṇa*) can be explained as an inner-Gāndhārī formation with a suffix *-ima* as in Gāndh. *pāpima** ‘evil’ (cf. Pāli *pāpima(t)-*).

82 Note that the attestation of a South Asian Gāndhārī cognate of Niya *šada* 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 *šada* because of the different initial and because the Khotanese word only means ‘rich’ (DKS: 146).

83 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;

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* / *βnty* 'servant' < **banda-ka-* (for which cf. e.g. Lurje 2010: no. 295).⁸⁴ There is moreover at least one other Sogdian name mentioned in CKD 661, i.e. *Nani Vadhaga* ← Sogd. *nnyβntk* (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.⁸⁵ The ethnonym for 'Sogdian' has not yet turned up in Tocharian texts proper, but the personal name *Suklyi[ka]* in the Buddhist Sanskrit manuscript SHT 2030 (*Mahāmāyūrividya-rājñī*) 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.).

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 *sūlig* (*Greater Bundahišn* B 205,11). Cf. also *sūlig mānišn* as a gloss of YAv. *suγdō.šayana-* 'where the Sogdians live' (AIW: 1582).
- (ii) MMP *suγlī* in the tune name *ēn pad suγlī zgar* 'this (one) to the Sogdian melody' (BBB 462; cf. DMMP: 310; 381; Sims-Williams, Sheldon & Gulácsi 2022: 59 fn. 87).

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 Late Han Chinese as *śā lək* (Schuessler 2007: 346; 471). 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 o2 (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.

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

85 Tumsh. *sudāna-* (= *sudana-*) 'Sogdian' (Konow 1947: 189) is a ghost word. The relevant instances are better read as *sudāta-*, a PN (Maue 2009; Ogihara 2021: 154 fn. 21).

(iii) Skt. *sūlika-* (variant *sūlika-*) ‘Sogdian’ (MW: 1087; 1244).⁸⁶

On the Chinese evidence, see Kumamoto (1982: 193–196).

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. *swγdyk* ‘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. *Khotamīna*), I would therefore argue that Khotan Pkt. *Suliga* and its comparanda are borrowings from Bactrian (so also Sims-Williams 2024: 435f.).

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

- (i) the personal name *σoγδοκανο*, a patronymic in *-ανο* from *σoγδοκο** /*suydək(k)ə*/ ‘Sogdian’.
- (ii) the toponym *βονοσoγoλιγo*, 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-* /*yd*/. The earlier Bactrian designation for ‘Sogdian’ would be *σoγλιγo** /*suyliḡə*/ < **sugdiya-ka-*, as can be safely posited on the basis of the attested compound *βονοσoγoλιγo* ‘Sogdian estate’ (with an additional *-o-* /*ə*/ between *-γ-* /*γ*/ and *-λ-* /*l*/).

Interpreting *Suliga* as a loan from Bactr. *σoγλιγo** /*suyliḡə*/ merely requires the assumption that the foreign cluster *-γλ-* /*γl*/ was simplified during the borrowing process.⁸⁷ The same simplification would be needed in the case of Khot. *sūliya-* (*sūlya-*), ZMP *sūliḡ*, and Skt. *sūlika-* (variant *sūlika-*), whereas MMP *suyli* and TB *Suklyike* (also BSkt. *Suklyi[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

⁸⁶ The initial *ś-* is hypercorrect.

⁸⁷ For Bactrian suffixal *-γ-* /*g*/ → Pkt. *-g-* /*γ*/, see §4.3.11. In case Niya *sokhaliga* were also connected, Bactr. *-γλ-* /*γl*/ would be substituted with Niya *-khal-* and Bactr. *-o-* /*u*/ as Niya *-o-*.

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. *σογλιγο** /suγlīgə/ ‘idem’ < **sugdiya-ka-* (cf. the attested βονοσογλιγο ‘Sogdian estate’) with simplification of the foreign cluster -γλ- /γl/ to Pkt. -l-. Bactr. *σογλιγο** probably also lies at the origin of, amongst others, Khot. *sūliya* ‘Sogdian, merchant’; the TB name *Suklyike* and the BSkt. gloss *Suklyi[ka]*; and Skt. *śūlika-* (variant *sūlika-*) ‘Sogdian’.

15. *stora* ‘large animal, horse, camel’

Attestations of the base form

DIR.SG. *stora*: CKD 25 o6; 123 o2; 125 r1; 188 r2; 272 o7; 333 o3, o4, o6; 367 o3; 435 uo3; 634 o5; 743 o3 (2×); 842 o9f.

INS.SG. *storena*: CKD 135 uo5; 139 o6; 164 o4; 381 o2

GEN.SG. *storaṣa*: CKD 283 o3; 292 o3; 305 o4; 361 o4; 841 uo4; *storasya*: CKD 159 oB3

DIR.PL. *storaṃca*: CKD 13 uo2

Derivatives

DIR.SG. *storaga* ‘large animal, horse, camel’ < **staura-ka-*: CKD 306 r1; *storaē*: CKD 84 cr5

Compounds

DIR.SG. *storabala* ‘animal flock’: CKD 164 o7; 376 o1; 721 o5

DIR.SG. *storavara* ‘horse driver’: CKD 84 cr3; 119 uo6

DIR.SG. *storvana* ‘groom’: CKD 399 rA2; INS.SG. *storvanena*: CKD 399 rA2; GEN.SG. *storvanaṣa*: CKD 399 rA2f.

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. BSkt. *sthora-* ‘pack animal’, is attested thrice in the *Divyāvadāna* (BHSD: 611; Schoubben 2022b: 343–346).⁸⁸

Burrow (1934: 514; LKD: 132 s.v.) convincingly related *stora* (and BSkt. *sthora-*) to YAv. *staora-* ‘large animal’ and its cognates < **staura-* (cf. also Bailey 1949a: 122; Agrawala 1956–57: 112). The question remains from

88 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 9a) 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.).

which Iranian language Niya Prakrit adopted this word. Bactr. $\sigma\tau\omega\rho\omicron$ /stōrə/ (later $\alpha\sigma\tau\omega\rho\omicron$, 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), MParth. *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 BSkt. *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. $\ast\lambda\iota\rho\tau\omicron$ < OIr. $\ast d\check{r}\acute{s}ta-$ (Schoubben 2022b). Given this Bactrian etymology of *lardayati*, one expects BSkt. *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’.⁸⁹ Their assumed meaning ‘horse power, cavalry horses’ fits only the occurrence in CKD 376 o1, 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 o7

storabala laṃcaga parivalidavya

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

(3.7) CKD 721 o5

eṣa Danutreya atra viśajidama 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 $\sigma\tau\omega\rho\omicron\beta\alpha\lambda\omicron$ /stōrəbalə/ (or: /stōrəvalə/) ‘animal’. Bactr. $\sigma\tau\omega\rho\omicron\beta\alpha\lambda\omicron$ is a compound of $\sigma\tau\omega\rho\omicron$ ‘animal’ and $\beta\alpha\lambda\omicron$ ‘family’ < **pada-* (cf. also Bactr. $\sigma\tau\omega\rho\omicron\beta\alpha\lambda\gamma\omicron$ ‘animal’ and its Sogdian cognate **t’wṛpδ’k* ‘idem’; BD II: 266; BD IV: 125). The original meaning of $\sigma\tau\omega\rho\omicron\beta\alpha\lambda\omicron$ is accordingly ‘the

89 *-bala-* would function here like in the Skt. compound *caturāṅgabala-* ‘the force of the fourfold limbs > the entire army’.

stock of beasts/animals', which is precisely how Burrow translates Niya *storabala*.⁹⁰

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. $\sigma\tau\omega\rho\alpha$ /*stōrā*/ 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. $\ast\sigma\tau\omega\rho\alpha\beta\alpha\rho\alpha$ /*stōrēvārā*/ < **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* rA2), whereas for <rva>, this stroke is shorter and the curl indicating the preconsonantal *r* is added higher up (e.g. *ṣarva* rA2). Given this distinction between the two *akṣaras*, Boyer *et al.*'s (KD: 143) transliterations *stovaṃna*, *stovaṃnena*, and *stovaṃnaṣa* (rA2–3) 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.

(3.8) CKD 399 rA2f.

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).

90 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.

I would therefore argue that Niya *storvana* is etymologically connected to OIr. **staura-pāna*- ‘groom’, a compound attested through MP *stōrbān* (CPD: 77).⁹¹ 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. **ʃsu-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 BSk. *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 cr1, cr3; 57 o3; 59 r1; 272 o6; 275 o3; 333 o6; 374 o3; 387 o4, o7; 796 cr3, cr4, cr5; 797 uo4, cr3; *śpura*:⁹² CKD 158 r1; 165 o4, o7; 211 r6; 329 o4; 414 r7; 517 o3; 714 o4, o5; 725 r2

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 r1f.

[*pal̥yī*] *lihidaḡa sarva śpara cavala yatma Motḡe aḡeta Angi Tsomḡoṣa ca hastami iśa (*vi)ṣajidavo*.

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

(3.10) CKD 714 o4

yaṃ ca aṃṇa pal̥yī śarva śpura aḡeta L̥yipeya Tsuḡetaṣa ca hastam̥mi cavala iśa viṣajidavo.

“The rest of the tax is quickly to be sent here all complete (*śarva śpura*) in the hand of the *aḡeta* L̥yipeya and Tsuḡeta.” (after TKD: 143).

91 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.

92 I follow Burrow (LKD: 133 s.v. *śpora*) in reading *śpura* also where Boyer *et al.* (KD) read *śpora*, i.e. in CKD 165 o4; 165 o7; 211 r6; 329 o4.

Burrow (1935a: 787f.; LKD: 132 s.v.) convincingly explained *śpara* / *śpura* as an Iranian loanword by comparing it to OIr. **us-pr̥na-* ‘full, complete’. Some of the latter’s reflexes are MMP/MParth. *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; BD IV: 107).⁹³

An additional argument in support of Burrow’s etymology comes from phraseology. As can be seen from the quotations above, *śpara* / *śpura* 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 J16 ~ J23’ (BD I²: 48ff.), while Khot. *biśśu* (*bāśśu*) *uspurro* ‘all complete’ is used to translate BSkt. *sakalasamāptam* in the *Saṅghāṭasūtra* (Canevascini 1993: 257). The combination of *śpara* / *śpura* with *sarva* ‘all’ in Niya Prakrit may hence be calqued on this Iranian idiom.

In the donor language of Niya *śpara* / *śpura*, 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* / *śpura*, while the second excludes Sogd. *‘spwrn-* (and variants). Bactr. σπορο /*spurə*/, on the other hand, meets both requirements, making it plausible that Niya *śpara* / *śpura* is a Bactrian loanword.

Still, the immediate source of Niya *śpara* / *śpura* 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 Kushan period as φαρρο /*farrə*/ and in later times as φαρo /*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-Kushan times. Since there are both historical and linguistic reasons to think that the Bactrian loanwords in Niya Prakrit were adopted in the Kushan period (§4.2.1), a Kushan 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. 36).

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

93 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).

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 *parospara* ‘one another’ < *paraspara*-.⁹⁴

A more tricky question is how to account for the different vowels *-a-* and *-u-* in *spāra* / *spūra*. 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 *siparī* ‘complete, exhausted’ and Arm. *spar* ‘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 *spāra* and *spūra* 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 *spāra* and *spūra* to a phonological process in Niya Prakrit. The closest parallel available seems to be the word *kamamta* / *kamumta*, 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, i.e. that the variation between *spāra* and *spūra* 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. **-ǵ-* in a labial environment (SFBG: 60), it is conceivable that it was phonetically realised 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 §4.3.7.⁹⁵

Despite this uncertainty about the best way to explain the difference in vocalism between *spāra* and *spūra* ‘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-pr̥na-*.

3.2.2 Plausible etymologies

17. *amtagi* ‘belonging to the district’

Attestations of the base form

ADJ. *amtagi*: CKD 64 o2; 135 uo3, uo4; 213 r1; 223 uo2;⁹⁶ 743 o3 (2×)

⁹⁴ For another Iranian loanword starting with *sp-*, see §3.3.1 s.v. *spāsa*.

⁹⁵ Unfortunately, there is no other instance among the Bactrian loanwords in Niya Prakrit containing a vowel *o* /*u*/ derived from OIr. **-ǵ-* to check whether this double treatment was standard or not. My proposal also raises questions to what extent *spāra* / *spūra* was integrated into the language.

⁹⁶ It seems to have gone unnoticed that the contents of CKD 213 and 223 complement each other.

How exactly to translate the Niya adjective *aṃtagi* cannot be deduced from the available contexts. The attestations have, however, 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 Olr. **han-tāka-* ‘swift, express’, from PIr. **ham + *√tač* ‘to run’ (EDIV: 372ff.).⁹⁷ 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.⁹⁸

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 uo1–5

ahuno cuṭalayina Vhurmaṣevaṣa Khotamṇaṇmi dutiyae gaṃdavo huda ... eḍaṣa Apitaṣa dudi ? gaṃdavo cuṭalayina Vhurmaṣevena śadha Khotamṇaṇmi gaṃtavo huda yo cuṭalayina Vhurmaṣevaṣa aṃtagi uṭa 2 dadavo yo eṭaṣa Apita[ṣa] aṃtagi uṭa 1 dadavo avi arivaga maṇnuśa aḥhovaga 1 dadavo ... eṭaṣa arivagaṣa tanu storena gaṃtavo.

“Now the *cuṭalayina* Vhurmaṣeva had to go on a mission to Khotan. ... this Apita must go on the mission, and the *cuṭalayina* Vhurmaṣeva must go with him to Khotan. The two *aṃtagi* camels (destined for) the *cuṭalayina* Vhurmaṣeva must be given (to him), (likewise) the one *aṃtagi* 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 *aṃtagi* camels, it seems tempting to infer a contrast between *aṃtagi* and *tanu* ‘own’. In other words, the local government may have provided the *aṃtagi* camels for Vhurmaṣeva and Apita, since they do not have to use their own.

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

98 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).

This interpretation finds further support when the attestations of *aṃtagi* 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,⁹⁹ are responsible for these *aṃtagi* animals (see CKD 64; 213; 223; 743). In CKD 223, it is moreover explicitly stated that an *aṃtagi* horse is provided by the state (abl.sg. *rajade*).

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

If the comparison is correct, Niyā Prakrit *aṃtagi* can be interpreted as an adjective meaning ‘belonging to the district’. This proposal would also solve the problem of the final *-i* in *aṃtagi*, as the assumed basis *aṃtaga** ‘district’ ← *ανδαγο* would, as required, be a noun in this scenario. One can further draw a parallel between *aṃtagi stora* ‘animal belonging to the district’ (CKD 743 o3 (2×)) and gen.sg. *avaṃci storaša* ‘of the animal belonging to the village’ (CKD 841 uo4). *avaṃci* is a derivation with the *ci*-suffix from *ayana* ‘village’ (§3.3.2 s.v.), 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 Niyā 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. *ανδαγο* lacks cognates in the other Middle Iranian languages.¹⁰⁰ On this ground, I consider donor languages other than Bactrian less likely.

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

100 The etymology of *ανδαγο* 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 Olr. **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 has the advantage to compare *ανδαγο* with the semantically close *ωδαγο* ‘district’, for which a derivation from

18. *are* ‘a half’

Attestations of the base form

DIR.SG. *are*: CKD 2 rA1, rA2, rA3, rB1, rB3, rC1, rC2, rC3, rD1; *ara*: CKD 176 oB4

The Niya Prakrit word *are* occurs in lists modifying the unit of measurement *khi* (Appendix 1 s.v., pp. 461ff.). Based on this, Burrow (LKD: 77 s.v.) plausibly suggested that *are* comes from an outcome of OIr. **arda-ka-* ‘half’, although **arda-* ‘idem’ (as in e.g. YAv. *arəda-*) could work as well (see just below).¹⁰¹

Most relevant Middle Iranian languages can be excluded as the source of Niya *are* on phonological grounds. The *-l-* in *hala-* ‘half’ < **arda-* (DKS: 470) rules out Khotanese, while Sogdian is excluded because the cluster **-rd-* is preserved as *-rδ-* in that language.

Because of the parallel offered by *nokṣari* ‘month of the new year’ ← Bactr. **νωγοσαρλι* /*nōgsarli*/ < **νωγοσαρλο** < **nawa-ka-sardī-* (§3.2.1 s.v.), 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).¹⁰² If one follows Burrow in opting for OIr. **arda-ka-*, the Bactrian source of *are* can be posited as **αρλαγο* /*arləgə*/ ‘half’. In this case, the final *-e* in *are* could result from a lenition process: **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-*, as discussed further in §4.4.3. For the phonological development, compare the attested Bactrian word *αρλο* ‘side, bank (of a ditch)’ < **arda-*.

**awa-tāka-* can hardly be doubted (cf. BD II: 281). As my proposal on Niya *amtagi* is independent of the ultimate etymology of *ανδαγο*, I prefer to leave the issue undecided for now.

101 Meanwhile, Falk (2001: 312f. = 2013a: 51f.) also identified a Kharoṣṭhī numerical symbol for ½ (the discussion of this symbol in Fan 2020 should be corrected in light 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 oA3), whereas *are* is placed before *khi*. This discrepancy reflects a general tendency in Niya Prakrit to write numerical symbols after the nouns they modify. This “typical accounting usage” is also attested in Iranian languages (Sims-Williams 2023: 90) and may, in my view, have originated in Aramaic, where numeral signs are similarly written after the noun; cf. e.g. the “lists of supplies and labels” in ADAB (174ff.).

102 Alternatively, one would have to assume that *are* is a Parthian loan, as **-ard-* yields Parth. *-ār-* (Korn 2013b: 106, e.g. MParth. *ārag* ‘side’ < **arda-ka-*).

19. *āspista* ‘lucerne’

Attestations of the base form

DIR.SG. *āspista*: CKD 214 o3, o4; 272 o8

Niya *āspista* is mentioned as part of a horse's provisions (CKD 214 *āspaša ... 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 *āspista* 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).¹⁰³ For Old Iranian, this word for ‘lucerne’ can be reconstructed as **aspa-sti-*, a compound of **aspa-* ‘horse’ < Plr. **Hačwa-* and **sti-* ‘food’ < Plr. **Hsti-* < PIE **h₁d-ti-* (Mayrhofer 1985).¹⁰⁴

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.¹⁰⁵ 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-*

103 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). As kindly pointed out to me by Athanaric Huard, an additional cognate of Niya *āspista* appears as Skt. **svista* in section 44b2 of the *Fànyǔ zá míng* 梵語雜名, a Chinese-Sanskrit lexicon. Skt. **svista*, which is emended from *scista*, translates Chinese *mùxu* 苜蓿 ‘lucerne’; see Bagchi (1929–37 I: 88; 291; II: 353f.).

104 Since Plr. **Hačwa-* ‘horse’ is continued as OP *asa-* and not as ***aspa-*, MP *aspast* < OP **aspa-sti-* must 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 Plr. **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 (Mayrhofer 1985: 169 fn. 20). Alternatively, the compound may have been folk etymologically adapted to **aspa-* (A. Lubotsky, p.c.).

105 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).

umlaut (SFBG: 65) leads one to expect Bactr. *ασπιστο ‘lucerne’ < **aspa-sti*-,¹⁰⁶ a form which fits well with the vocalism of Niya *aspista*.

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 Kushan Bactrian, *ασπιστο would be phonologically /aspištə/. Consequently, the Bactrian cluster -στ- /št/ in *ασπιστο would have to correspond to a non-palatal -st- in Niya *aspista*. This correspondence is entirely understandable, since **-št- is a phonotactically prohibited cluster in Niya Prakrit (cf. §3.2.2 s.v. *saste*). The cluster -śp- in *aspista* 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. *aspa*.¹⁰⁷

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

20. Khotam̐na ‘Khotan’

Attestations of the base form

ABL.SG. *Khotam̐nade*: CKD 248 o2; 272 o2, o4, o9; 283 o2; 289 o2; 291 o2; 329 o2; 333 o2; 341 o2; 349 o3; 351 o3; 357 o2; 358 o2; 362 o3, o6; 368 o2; 379 o2; 400 o2; 403 uo2; 578 ur3; 584 cr2; 637 o7

LOC.SG. *Khotam̐nam̐mi*: CKD 14 cr1, cr2; 22 o2; 135 uo2, uo3; 214 o2; 223 uo2; 248 o6; 251 o2; 253 r2; 362 o3, o4f.; 367 o3; 400 o2; 403 uo2; 584 cr1; 637 o1, o6; *Khotam̐nami*: CKD 14 uo2, cr1; *Khotanam̐mi*: CKD 388 o2

Derivatives

ADJ.DIR.SG. *Khotam̐ni* ‘Khotanese’: CKD 36 uo2; 180 oA4, oA5; 216 r1, r4; 296 uo3; 322 co1, uo3; 335 co1; 438 uo2; 517 oA1, oA3; 583 uo5; 622 o5; 823 o3; *Khotani*: CKD 30 o2 (2×); 592 uo4; *Khotam̐niya*: CKD 330 o1; *Khotaniya*: CKD 549 o3; ADJ.DIR.PL. *Khotam̐niye*: CKD 86 r6; 333 o5; 625 o4; 881 uo4; *Khotaniye*: CKD 376 o1; 415 uo2, uo3, uo5; *Khodani*: CKD 686 oA3; ADJ.GEN.PL. *Khotam̐niyana*: CKD 471 r2; 494 uo3, cr2; 735 r2; *Khotaniyana*: CKD 516 o2; *Khotam̐niyāna*: CKD 399 rA3

106 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.

107 Note nevertheless that the σπ- /sp/ in Bactr. σπαλο* ‘army’ < **spāda-* is also rendered as śp- in Gāndhārī, without there being any reason to suspect a folk etymology: e.g. CKI 230 2 gen.sg. *śpalasakarita*(*sa) ‘worshipped by an army’.

Compounds

DIR.SG. *Khotanamaharaya* ‘great king of Khotan’: CKD 661 o1; GEN.SG. *Khotamnamaharayaṣa*: CKD 214 o2

LOC.SG. *Khothanaramjiyami* ‘kingdom of Khotan’: CKD 895 A3

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 Kushan times evidenced by the Sino-Kharoṣṭhī coins, Dragoni plausibly argues that Niya *Khotamna* was instead borrowed via Bactrian.¹⁰⁸

One can debate how to reconstruct the Bactrian donor form of Niya *Khotamna*, 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 there are not many 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).

21. *jenavida* ‘armourer’

Attestations of the base form

DIR.SG. *jenavida*: CKD 506 o2

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 Kuvīṇeya*), 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. ζηνοβίδο /zēnavidə/ ‘armourer’, 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; Härtel 2023: 403).¹⁰⁹

108 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.).

109 Two more Bactrian titles ending in -βίδο were borrowed into Niya Prakrit; see §3.2.1 s.vv. *daśavida* and *śadavida*. ζηνο ‘weapons’ is now also attested on its own in Bactrian, see BD IV (111).

The sound correspondences between *jenavida* and ζηνοβίδο /zēnəvidə/ do not need much commenting, 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 o2

GERV. *nihaṃñitavo*: CKD 283 o4; *nihaṃñitavya*: CKD 291 o4f.

INF. *nihaṃñanae*: CKD 331 uo3

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.¹¹⁰ See (3.12).

(3.12) CKD 291 o4f.

yahi eda anadilekha atra eṣati praṭha sā 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 (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 §3.3.2 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 Skt. *ni* + $\sqrt{khan}$. The latter means, however, ‘to dig’, so that 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

110 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.

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. *νιωνζ- /*nihan(d)ž*/ < **ni-θanja-* 'to hold back > to deposit, to put down' (cf. EDIV: 391f.).¹¹¹ The reconstruction of this Bactrian verb can be supported by the existence of (i) a corresponding noun ναναγγο < **ni-θanga-* '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 MParth. *nihenj-* 'idem' (DMMP: 242). The reason to consider *nihaṃñ-* a loanword from Bactrian is that the vocalism of *nihaṃñ-* fits better with *νιωνζ- /*nihan(d)ž*/ than with the cognates in the other languages.¹¹²

My etymology requires that the Bactrian verb was originally borrowed into Gāndhārī as **nihaṃj-* or the like and underwent a subsequent loss of the voiced consonant as in Gāndh. *kuñaru* 'elephant' < Skt. *kuñjara-* (DhP^K 123d; 132d, 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.

23. *picara* '(mark of) honour'

Attestations of the base form

DIR.SG. *picara*: CKD 107 o1; 206 uo1; 247 o1;¹¹³ 288 cr3; 377 r2; 395 o1; 756 o2; BC 4 verso 1

The lexeme *picara* has a positive connotation. *picara*, for instance, occurs in the compound *picaradiyavarṣaśatayupramamṇa* '(with) a life span of a 100 divine and *picara* years',¹¹⁴ 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.

111 For the phonology, cf. Bactr. αλφανζ- /*əlfan(d)ž*/ < *λφανζ- (cf. pret. λφαχτο in DN1, line 6f.) 'to acquire' < **θwanja-* (BD II: 190). The preverb **ni-* often develops to *va-* or *vo-* /*nə*/ in Bactrian, but in texts before 380 CE a more archaic form *vi-* /*ni*/ < **ni-* can still be found (SCBD: 63, see also §3.2.3 s.v. *nihala*).

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

113 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).

114 The compound occurs (with insignificant spelling variants) in CKD 107 o1f.; 206 uo1f.; 247 o1; 395 o1.

(3.13) CKD 288 cr2–4

*pačadara Dharmapriyaša hastammi lekha prahuḍa prešisama yo tehi picara syati*¹¹⁵ *Yiliyaša 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. *pratyarham* ‘worthily’ (attested via *yathāpratyarham* ‘according to merit’; MW: 842). As noted in LKD (104f. s.v.), this etymology is phonologically problematic, since Skt. *prati-* cannot yield Niya ***pic-*.¹¹⁶

I 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.).¹¹⁷ 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) xm4–8

μισιδο αλσιχτογιμο αζο μαρηγο μαρδο σαγονδο το χοηο ταρα λορηγιο
οτο ασιδουανο βαγανο αβηζαρηιο αλο αργαο αλο πιδοφαρο σαγονδο

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

116 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’ < Skt. *yarhi* ‘when’; Schlosser 2022: 225f.; 258; 311).

117 Note also the adj./adv. *αλοπιδοφαρο* ‘honoured, with respect’ (BD IV: 105).

το χοηο αζανο ταδομο το χοηο πιδο χοβο ριζαο 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 *picaradivavarṣaśatayupramāṇa* ‘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.¹¹⁸

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

(3.16) al17–19

στομο λ[αδο] φαρο οριβτομφο ι χοη[οι] νγαμωσogανο οδο πιδοφ[αρο] διγαρο β’

“And I [gave], (as) an offering and (mark of) ho[nour] (πιδοφαρο) for Wirishtmish 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”.¹¹⁹

Now that the semantic overlap between *picara* and πιδοφαρο has been illustrated, it remains to clarify the phonological details of the proposed equation, as it would 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 MParth. *padišfar* ‘honour’ (DMMP: 273f.), and thus to be derived from OIr. **pati-fšarV*.¹²⁰ I therefore propose that *picara* was borrowed from a dialect form **πιδοφαρο* /pidšarə/, in which the

118 For a comparable example, cf. **ch**7f.: τακαλδανο ασο το χοηο λογοασταγο 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 *šadosmi* ‘I am pleased’ (§3.2.1 s.v. *šada*) in the opening of CKD 247.

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

120 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).

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 *ḡḡpo /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. -δoþ- /dš/ and Gāndh. -c- (see §3.2.3 s.vv. *aco*; *picav*- and §4.3.18).¹²¹

In brief, the semantic match between Gāndh. *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.

24. *maḱa* ‘bean’

Attestations of the base form

DIR.SG. *maḱa*: CKD 401 uo4;¹²² 505 o2; 713 o8, o9; 714 o3

The semantics and etymology of *maḱa* have been treated in Schoubben (2021: 50–52), so that 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 -*k*-, the latter representing the combination of a sibilant and -*k*- (§2.1.6). Taking account of the default value of Niya ṛ *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.

121 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*.

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

In the article, I proposed that *makā* is a loanword from an unattested Bactrian word *μαρκο /māškə/ < *māša-kā- ‘bean’, a cognate of, amongst others, NP *māš* ‘bean’ < *māša- (see Kümmel 2017: 284). The required syncope of the internal *-a- in *māša-kā- 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-kā- (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.¹²³ Therefore, I include it among the plausible etymologies.

25. *milima*, a unit of measure

Attestations of the base form

DIR.SG. *milima*:¹²⁴ CKD 131 oA6, oA7, oA9; 142 r1; 151 ob1, ob2; 154 oA2, oA4, oB1, oB2, oB3; 168 o1, o3; 175 o1; 207 r6; 225 o1, o2, o4 (2×), o8; 282 oA1; 329 o4 (2×); 345 ur3 (2×), ur4 (2×), ur6, ur7 (2×), ur8, ur10; 387 o6; 456 r1; 460 o2, r1; 465 r1; 476B o1; 495 o5; 536 oA1, oA2, oA3, oA4, oB1, oB3; 547 o0, rC2; 549 o2; 574 uo3, uo6, cr2; 579 uo4; 580 uo4; 581 uo5; 608 o4; 637 o2, o3 (3×), o6, o9, o10; 648 o5; 655 uo4; 662 o3; 718 r1; 762 oE2, oE4; 763 rB1; 774 uoA1, uoA2; 801 uo4f.; 828 3; 868 2

DIR.PL. *milima*: CKD 60 rB2; 67 o1, o2, o3, o4, r1, r2; 89 o7, o8; 93 o1, rC4; 94 r24, r29, r35, r43, r48; 98 o2; 104 o3; 108 r4; 121 o2, o3; 122 o2; 131 oA1, oA2, oA3, oA4, oA5, oA8, oC1, oC2; 140 cr1; 146 oB2, oB4b, oC2, rDF2; 154 o2, oA1, r3; 181 o2; 200 o4, o5, o5f.; 207 r1, r2, r3, r4, r6; 225 o3, o6, o7, r7; 282 oA2; 291 o3, o4; 292 o3; 309 o2; 345 uo3, ur1f, ur9; 349 o4; 463 rLM; 467 rC4; 468 uo2f., uo4; 477 r1, r2, r3; 478 o2, o3; 505 o2 (2×); 527 o2, r1, r2, r2f.; 530 uo2; 536 oB2; 539 o1, o2; 547 rA1, rA2, rA3, rB1, rB2, rB3, rB4, rC1; 549 o3; 567 uo3; 575 uo4, cr1; 585 cr3; 603 r4; 634 o4; 637 o3, o6, o7, o11, o12; 659 o2; 668 o1; 703 r1, r2, r3, r4; 740 o3; 762 oD1, oE1; 765 uo2; 776 o5; 795 uo6; 796 uo6f.; 797 uo4, cr3; 839 uo2; 868 1 (2×), 2; 869 7, 8; 882 uo3; 897 o3 (2×), o5; *milimaṃ*: CKD 25 o2, o3, o4; *milimi*: CKD 571 uo5; 882 co2 (?)

GEN.PL. *milimana*: CKD 595 r2

123 N. Sims-Williams (p.c.) wonders whether the unexplained word μαρτρο in df5, denoting some commodity (BD II: 232), could be a misreading of *μαρκο. Yet, doc. df is unfortunately badly readable at this crucial point.

124 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.).

Derivatives

ADJ.DIR.SG. *milimi* ‘with a capacity of X *milima*’: CKD 422 o5; 496 uo4f; 580 uo2 (2×); 652 uo3f; 654 uo3; 677 uo3; 678 uo3; 715 o3; 782 uo4; 805 cr7 (?); *milimī*: CKD 422 o5; *milimiye*: CKD 808 uo5

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., pp. 461ff.).

It is generally accepted that *milima* goes back to the Ancient Greek measure μέδιμνος, as first pointed out by F. W. 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,¹²⁵ even though other Greek loanwords in Bactrian were admittedly no longer affected by lambdacism (*d > λ /l/).¹²⁶ Potentially, μέδιμνος was borrowed slightly earlier, at a time when lambdacism had not yet stopped operating entirely.¹²⁷

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 also be rendered as -i- in Gāndhārī names of Greek origin for which no Bactrian intermediary should be posited, e.g. *Alikasudara* (SHĀH XIII 9; MĀN XIII 10) ← 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 *μυλιμνο /milimnə/ rather than *μελιμνο /melimnə/ (cf. also §4.3.3).

125 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 μέδιμνος, need not have passed through a Bactrian intermediary, as its form is difficult to reconcile with that of Niya *milima*.

126 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.

127 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.

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; Sims-Williams 2025d: 331) 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 co1, cr1): an exceptional form secondarily syncopated from the better-attested *ṣamanera* < Skt. *śrāmaṇera*-.

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.

26. *yatma* ‘measurer of rations’

Attestations of the base form

DIR.SG. *yatma*: CKD 23 o3; 37 uo2; 59 r2; 146 oB3b, oC2; 272 o6; 275 o3; 291 o4; 305 o7; 307 o6, o7; 326 r1; 374 o2, o3, r1; 428 o6; 430 uo2 (2×), uo3; 439 uo2; 444 r2, r4; 546 o5; 571 cr3f.; 581 uo7, cr6; 582 uo7; 586 uo7; 587 uo8; 589 cr1, cr5; 590 uo2; 599 r2; 640 r3; 715 o8; 765 uo5; 797 uo2, uo4; 817 uo2, uo3, uo4, cr1; 880 uo6; 881 co3, uo2, uo6

DIR.PL. *yatma*: CKD 590 uo7

GEN.PL. *yatmana*: CKD 714 o5¹²⁸

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 oB3b–B4b

yatma Pogeyaṣa aṃṇa pruchidavya ... sarva piṃḍa milima 20 4 ma[v]idavya

128 It remains unclear whether the word *yatmi* in CKD 349 o8 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)?

“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 *ageta*, 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 o5-7

yo ca adehi palyi saṃgalitaga hotu yaṃ ca aṃṇa masuṇena krinidavya siyaṃti taha krinidavya yatma agetaṣa 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 *ageta* that nothing must be short.” (after TKD: 55).

As regards etymology, Harmatta (1960: 213) suggested that *yatma* is a *man*-derivative from the Skt. root $\sqrt{yat}$ ‘to arrange’. Such a form is, however, 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 Young Avestan (*Āfrīnagān* 3.11; *Vīdēvdād* 19.29), in both cases translated into Middle Persian as *bahr* ‘portion, share’ (Hintze 2007: 126f.). Middle Iranian cognates of **yāta-* are MP *yād* (CPD: 46) and Bactr. $\alpha\delta o$ /*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 ** $\alpha\delta\mu\alpha$ /*yādmā*/, with final *-a* still preserved as in e.g. $\lambda o\gamma\delta\alpha$ ‘daughter’ < nom.sg. **duxtā* or $\beta o\delta\beta\alpha$ ‘PN or title’ < **čyuta-pā-* ‘person responsible for the expenditures’ (BPN: no. 557; Sims-Williams 2025d: 326), or it could have been borrowed from a later form ** $\alpha\delta\mu o$ /*yādmə*/.¹²⁹**

129 The rendering of Bactr. $-\delta\mu-$ /*dm*/ as Niya *-tm-* and not as ***dm-* is probably orthographic in nature; cf. §4.3.13. The root ** $\sqrt{maH}$* ‘to measure’ is continued in Bactrian in the verb $\phi\rho o\mu u-$, pret. $\phi\rho o\mu\alpha\delta o$ ‘to order’ < **fra-māya-*, pret. **fra-māta-* and its derivatives (EDIV: 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 oB2 (*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 makes Maggi’s (2017: 157; 2022b: 152) comparison with the newly discovered Khotanese phrase 6 *baše* ‘six garments’ (90-YKC-40) sufficiently attractive.

As argued by Maggi, the most likely source of Niya *vaše* and Khot. *baše* is Bactr. *οαφε /waše/, dir.pl. of *οαφο /wašə/ ‘garment’ < *wastra- (cf. YAv. *vastra-*).¹³⁰ 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 3; 328 5; 368 B2; *sasteyammi*.¹³¹ CKD 329 o5; 403 uo3; *sasteyammi*: CKD 153 r2

INS.PL. *saste*hi: CKI 152 1; 155 1; 159 1a; 225 1; 245 1; 509 1a; CKD 422 o1; 656 uo1; 808 uo1.

130 For the phonology, cf. οαφο (MBactr. wš) ‘hay’ < *wāstra-. For the rendering of Bactr. o- /w/ as Niya v-, see §4.3.22.

131 It is on the basis of the loc.sg. *sasteyammi* (*sasteyammi*) that the dir.sg. is generally set up as *saste**.

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).¹³²

(3.19) CKD 422 o1f.

*saṃvatsaraye 3 maṣ(*e) 4 3 sast(*e)hi 4 4 maharajaṣa rajatirajaṣa mah.
... ṣa Mahanuavaraja Tajaka devaputraṣa asti kṣunaṃmi ...*

“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 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’, while the default word for ‘day’ in Khotanese is *haḍāa-* (DKS: 418f.; 447).¹³³ 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 Kushans: *saste* occurs almost exclusively in inscriptions from the Kushan kings Kanishka and Huvishka (Salomon 2003: 76f.; Baums 2018a: 63), and it is widespread in Kharoṣṭhī inscriptions from Afghanistan, i.e. in texts from the heartland of the Kushan empire (Falk 2003: 73 = 2013a: 66).

Because of the connection between *saste* and the Kushan empire, it seems worthwhile to investigate the possibility of a Bactrian origin of *saste*. A plausible donor form would be Bactr. *σαχτο* ‘day, elapsed’. Etymologically, *σαχτο* derives from **saxta-*, the verbal adj. of the Plr. root **√cač* ‘to pass’ (cf.

132 It seems to have escaped notice that the ins.pl. *sastehi* (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).

133 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. **rauċah-*. This parallel is, however, not quite exact, given that the outcomes of Plr. **√cand*, including Khot. *sad-*, do not mean ‘to shine’ (EDIV: 332).

EDIV: 324f.; BD II: 263; SCBD: 21).¹³⁴ As shown by passage (3.20), Bactr. σαχτο is used in the same type of dating formula as Gāndh. *saste*.¹³⁵

(3.20) KSPlate 5f.

καλδι κανηρκι βαο αμο οηβο 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).

Note, for instance, that σαχτο occurs side by side with χρονο ‘calendar/regnal year’,¹³⁶ in the same way that *saste* tends to co-occur with *kṣuna* ← χρονο (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 Gāndh. -st-. An exact parallel for this sound correspondence is lacking. Yet, one of the previously identified Iranian loanwords, i.e. Niya *načira* /naścira/ ‘hunting’ ← **naxčir* (§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* /naścira/, /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).¹³⁷

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.,¹³⁸ 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

134 σαχτο instead of expected **σαγδο could be due to influence from the present stem σαχσ- < **saxsa-* or σαχτο could be a dialect form. Given that the word already occurs in Kushan times (see (3.20)), Gholami’s suggestion (SFBG: 47) that σαχτο is a loanword from MP/Parth. *saxt* appears unlikely to me.

135 Outcomes of the Iranian root *√*čac* ‘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 Gāndh. *saste* and the derivatives of *√*čac*. Yet, he did not infer an etymological relationship between the two from his observation.

136 The same can be said about the attestations of σαχτο in A1 and R1 (where χρονο occurs in the later spelling αχρονο).

137 For a possible explanation of the final -e in this word, see §4.4.3.

138 Note also the combination of *sastehi* with the ins. *dašahi* ‘ten’ in CKI 155 1.

only ‘day’ but also ‘elapsed’ (BD IV: 124), 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) Abamukhwini having elapsed (σαχτο)” (A1).¹³⁹

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 Kushan sources; there is an exact semantic match 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. *ambamjaya* ‘wrapper (?)’

Attestations of the base form

LOC.SG. *ambamjayammi*: CKD 252 r4

The word *ambamjaya* occurs merely once in the Niya Prakrit corpus: in the final sentence of CKD 252, its anonymous author writes that he has sent (*prahita*) a bow-string (*jiya*) in an *ambamjaya* (loc.sg. *ambamjayammi*). Therefore, it is difficult to establish the semantics of *ambamjaya*.¹⁴⁰ Yet, as observed by Sims-Williams (BD IV: 90; 105), a possible etymon may be provided by Bactr. αμβανζο as attested in doc. **kg**, line 11 (BD IV: 23; cf. also 62). Like *ambamjaya*, αμβανζο is a gift sent (φορταδο) together with a letter; and, when we derive αμβανζο from **ham-banda-čiya-* ‘that which bounds

139 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 PIr. **√čac*, there may be some historical connection, but the details remain unclear. M. Peyrot and F. 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).

140 Burrow (TKD: 47) called the word “completely obscure”.

together',¹⁴¹ it might mean something like 'wrapper', thus fitting the context in which *aṃbaṃjaya* occurs.¹⁴²

If αἰβανζο is indeed the source of Niya *aṃbaṃjaya*, the sequence *-aya* seems a trifle odd. Assuming the outcome of **-č-* to have been palatal before **-i-* (§2.2.4), αἰβανζο could stand for /ambandžə/.¹⁴³ From this, I would, however, expect ***aṃbaṃja* instead of *aṃbaṃjaya*. To solve this problem, one could consider reconstructing a more archaic form **αἰβανζι* /ambandžī/, which could have yielded Niya ***aṃbaṃji*. Yet, in that case, one would still need to emend the attested loc.sg. *aṃbaṃjayammi* to ***aṃbaṃj(i)yaṃmi* – something that seems hard to justify for a hapax of uncertain semantics.

Thus, to summarise, *aṃbaṃjaya* might be a loan from Bactr. αἰβανζο 'wrapper (?)' < **ham-banda-čiya-*; but this etymology can be argued about (i) because of the uncertain semantics, and (ii) because it does not account so well for the sequence *-aya* in *aṃbaṃjaya*.

30. *ambukaya*, a title

Attestations of the base form

DIR.SG. *ambukaya*: CKD 251 o2, r1

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. αἰβουκαο /ambūkā(y)ə/ (?), a title held by the famous Kushan official Nukunzuk in KSPlate 1 (Sims-Williams 2015: 259; Härtel 2023: 395f.).¹⁴⁴ This proposal should be treated with caution, though, since neither the exact meaning nor the etymology of αἰβουκαο has as of yet been determined.¹⁴⁵

141 Cf. βανζο (also βινζο) 'slave-girl, maid-servant' < **banda-čī-* (BD II: 201; BD IV: 109). If Sims-Williams' etymology is correct, *aṃbaṃjaya* can only be a loan from Bactrian because of the required syncope in between **-nd-* and **-č-*.

142 There is no contextual clue to identify the meaning of αἰβανζο. We can only rely on its etymology.

143 In case αἰβανζο stood instead for /ambandžə/, this would still be fine for the etymology, as /ndž/ would probably be rendered with a palatal cluster *-mj-* anyhow (cf. Skt. *gañja-* 'treasury' ← OP *ganza-* 'idem'; §3.5.1 s.v. *gañña*).

144 The assumed correspondence between Bactr. *-μ-* /m/ and *anusvāra* would be due to the absence of a cluster ***mb-* in Niya Prakrit (the same applies to *aṃbaṃjaya* 'wrapper (?)' ← αἰβανζο discussed §3.2.3 s.v.). The *-y-* in Niya *ambukaya* remains puzzling.

145 By the time of the Surkh Kotal inscription, Nukunzuk had been promoted to the rank of *καρὰλαργγο* 'lord of the marches, margrave', so it is conceivable that

31. *aco* ‘frontier, border post’

Attestations of the base form

ABL.SG. *acode*: CKD 152 cr1

LOC.SG. *acovaṃmi*: CKD 125 o2¹⁴⁶

Attestations as a PN

GEN.SG. *Acoaša*: CKD 374 o2, r1; *Acoša*: CKD 374 o2

Derivatives

DIR.SG. *acoviṃna* ‘border official’: CKD 125 o3; 133 o3, o5; 323 r1; 563 r4; *acovina*: CKD 139 o5f, o6; 152 cr1

Compounds

LOC.SG. *Acomenaṃmi*, toponym: CKD 637 o3 (2×; cf. p. 124, fn. 149)

The semantic analysis of *aco* depends to some extent on that of the better-attested derivative *acoviṃna*. 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.¹⁴⁷

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* /adšawə/ < **ati-čyāwa-* ‘the place where one

αμβουκαο was a military title too. In view of the intervocalic *-κ-* /k/, one may want to posit a morpheme boundary between αμβου- and -καο (the latter perhaps from **kawi-* ‘prince, giant, hero’?).

146 Loukota (2024: 77) cautiously suggests resegmenting the sequence *Acokisgiya devataša* ‘of the deity Acokisgiya’ in CKD 361 o2 to *aco Kisgiya devataša*, in which case we would also have an attestation of the dir.sg. *aco*.

147 CKD 125 o2: *ari Apeṃnaša uṭa acovaṃmi ukasidavya* ‘The ari Apeṃna has to ride out on a camel to the *aco*’ (TKD: 22). CKD 152 cr1: *itu uyutaya acovina acoade tura nikhalidavo* ‘From now on (this) *acovina* ... is to be removed from the *aco*’ (TKD: 27).

crosses/enters' (cf. *ḡao-* 'to go' < **čyawa-*, BD II: 283).¹⁴⁸ 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-ḡāma-*, 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 2013a: 195). The reconstruction of a Bactrian noun **αδοḡαοο* would thus not be too far-fetched.

Two substitutions are necessary to derive Niya Prakrit *aco* from **αδοḡαοο* /*adšāwə*/, both of which can be paralleled. First, Bactr. *-ḡop-* /*dš̌*/, phonetically conceivably [ṭṣ̌], would correspond here to the Niya voiceless palatal *-c-*, as in *picav-* 'to hand over' ← **πιδοḡαο-* < **pati-čyāwa-* (§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).

acoviṃna '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 o3f.

*taṃ kalaṃmi Aco(*me)naṃmi*¹⁴⁹ *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. **μηναοο* /*mēhanə*/ < OIr. **maiθana-* 'dwelling', a common element in Iranian

148 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 /*š̌*/.

149 So tentatively emended by me, in view of the spelling *Acomenaṃmi* later. It seems clear that the same place is meant twice.

toponyms.¹⁵⁰ 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 toponym 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 toponym ρη(ο)γανο /rē(w)ganə/, as the latter likely also contains *raiwa- ‘rich’ as its first part (BD II: 260; BPN: no. 394).

Coming back to *aco*, it can, with due caution, be concluded that it is a loanword from Bactr. *αδοραο /adšāwə/ < *ati-čyāwa- ‘the place where one crosses/enters’.

32. *aḏini* ‘(broomcorn) millet’

Attestations of the base form

DIR.SG. *aḏini*: CKD 222 + 336 uo3, uo4; 579 uo3f.; *aḏimni*: CKD 83 cr4; *aḏina*: CKD 722 uo5 (2×); *aḏim*: CKD 140 cr4

Compounds

DIR.SG. *aḏinibhija* ‘with a capacity for millet’: CKD 839 uo2

It has been known since at least Burrow (LKD: 73 s.v.) that *aḏini*, whose *-ḏ-* represents /ɾ/ (§§2.1.2; 2.1.6), refers to a crop. Further progress was made by Bailey (1948: 332), who could assign the meaning ‘(broomcorn) millet’ to *aḏini* by comparing it to local NIA forms of the same meaning such as Pashai *aṛīn* and Dameli *āṛīn* (cf. CDIAL I: 11 no. 195 for more forms).¹⁵¹

Morgenstierne (1942: 156) and Turner (CDIAL) derive Niya *aḏini* and its NIA cognates from OIA **aṇuni-*, a hypothetical derivative of Skt. *aṇu-* ‘millet’.¹⁵² This etymology requires an ad hoc dissimilation of *-ṇ- to *-ḏ- supposedly triggered by the *-n- later in the word, and it does not readily explain the vowel *-i-* in the second syllable of Niya *aḏini*.

150 Cf. e.g. Bab. *ú-ra-zu-me-ta-nu* ← OIr. **warāza-maiθana-* ‘dwelling of the boars’ (Iranica: §4.3.242) and Nisa Parth. *brzmytn* /barzmēthan/ (Diakonoff & Livshits 1977–2001: 189). For *Acomena*, Thomas (1935: 60) considers a different connection with Chin. *mén* 門 ‘gate’, in Late Han Chinese *mən* (Schuessler 2007: 379). If *aco* is a Bactrian word (cf. supra), it seems best to assume the same for *-mena*.

151 For the Niya evidence, see recently also Høisæter (2020: 155f.).

152 There is also one attestation of a Niya Pkt. derivative of *aṇu-*, namely in the compound *anubhiša* ‘millet seed’ (CKD 703 r2; cf. also Trombert 2020: 394).

Given these difficulties, it seems better to build further on Morgenstierne's later suggestion (1973: 258) of an Iranian loanword. Indeed, Niya *aḡini* and its NIA cognates resemble a word for '(broomcorn) millet' found in various Iranian languages: MP *arzan* (LW), LKhot. *ā'ysam*, Psht. *ḡdān*, Yidgha *yurzun*, Sanglechi *wuḡdān*, and Wakhi *yirzn* (CPD: 11; DKS: 20; EDP: 29; Morgenstierne 1938: 273; 421; 554).¹⁵³

The main challenge with the hypothesis of an Iranian loanword is to find a historically plausible donor language that can account for the sequence *-ḡi-/ṛi/* in Niya *aḡini*. I argue below for a Bactrian donor, though some steps in the argument remain hypothetical.

The first point concerns the pre-form of the Iranian word. This word is traditionally reconstructed as an *a*-stem **arzana-*.¹⁵⁴ The newly discovered Tumshuqese acc.sg. *arzanu* 'millet' indeed reflects **arzana-* (Ogihara & Ching 2024: 313–315), but most of the attested forms could also go back to an *i*-stem **arzani-*.¹⁵⁵ For Niya *aḡini*, it would help if we could posit such an *i*-stem at least for a pre-stage of Bactrian: *i*-umlaut (SFBG: 65) would then yield Bactr. **arṣivo*, matching Niya *aḡini* in having */i/* in its middle syllable.¹⁵⁶

As cereal terms frequently influence each other analogically,¹⁵⁷ a preform **arzani-* may have arisen by analogy with another *i*-stem of similar meaning, e.g. **dāsi-*, a term for 'oats' that might have existed in (Pre-)Bactrian given its wide attestation in the neighbouring Pamir languages (e.g. Munji *lisok*; cf. Kümmel 2017: 282).

If Niya *aḡini* indeed continues Bactr. **arṣivo* < **arzani-*, its *-ḡ-/ṛ/* may be explained as the result of a sound substitution. In **arṣivo*, the cluster *-ṛṣ-* < **-rz-* stands in front of *-i-/i/*, meaning that it may have been palatalised to */rṣ/* (cf. §2.2.4.3). Such a cluster, consisting of a rhotic and a palatalised voiced sibilant, is foreign to Gāndhārī phonology. One may therefore hypothesise that *-ḡ-/ṛ/*, phonetically most likely a retroflex flap [ɽ] (§2.1.6), was the

153 For Nuristani cognates, see Halfmann (2025b: 110f.).

154 Compare, e.g., Kümmel (2017: 283f.; 2020: 258), who uses the notation **(h)arjana-*, and Halfmann (2025b: 110f.).

155 Parth. **arzan*, for example, a plausible source of MP *arzan*, could be derived from either **arzana-* or **arzani-* (cf. *žan* 'woman' < **jani-*).

156 Cf. *ṣivo* /*žinə*/ 'woman' < **jani-* (BD II: 212), where one can, however, not be sure whether the raising of **-a-* to *-i-/i/* was caused by *i*-umlaut or by the preceding palatal. Out of **arzana-*, one would anticipate Bactr. **arṣavo* (cf. *žayyo* /*zangə*/ 'manner, way' < **zana-ka-*).

157 Two examples: (i) Dutch *giert* '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.).

closest sound available to render such a foreign cluster in loanwords. As argued in §3.2.3 s.v. *oḡ-* and §4.3.26, another loan etymology may show the same correspondence Bactr. -ρζ- /rǰ-/ → Niya -ḡ- /r/.

Finally, the word-final *-i* in *aḡini* warrants comment. If the hypothesis of a preform **arzani-* is correct, *aḡini* may reflect Early Bactrian **αρζινι* /arǰini/ with final **-i* preserved, while the variant spellings *aḡina* and *aḡim* could be the result of the weakening of final vowels in Niya Prakrit (cf. LKD: §13). A second, perhaps preferable, possibility is that word-final **-i* causing umlaut of a preceding vowel had already been weakened to *-ə* (or: *-Ø*) at the time of borrowing, as suggested by Bactr. -βιδο < **-pati-*, which is never rendered in Niya Prakrit with a final ***i* (see §3.2.1 s.vv. *daśavida*; *śadavida*; §3.2.2 s.v. *jenavida*). In that case, *aḡina* and *aḡim* would faithfully represent Bactr. **αρζινο* /arǰinə/, and *aḡini* would be a secondary form analogous to the semantically related dir.sg. *yavi* ‘barley’ < Skt. *yava-* and dir.sg. *gohomi* ‘wheat’ < Skt. *godhūma-* (both CKD 83 cr4).

33. *atga* ‘additional, complementary’

Attestations of the base form

DIR.SG. *atga*: CKD 327 o4; 571 uo4; 580 uo4; 591 uo4; 592 uo4

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.¹⁵⁸ 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 YAv. *apanō.tāma-* ‘farthest’ < **apana-* ← OIr. **apa* ‘away’ and YAv. *paitina-* ‘different, single, each’ ← OIr. **pati* ‘towards, against, etc.’ (AIW: 75; 833). The postulated **ati-ka-* finds its closest parallel, formally and semantically, in Skt. *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 αδογαγο ‘income’ < **ati-gāma-* (Sims-Williams 2013a: 194f.).

158 For the presumed rendering of Bactr. -δγ- /dg/ as Niya -tḡ-, see §4.3.13.

In short, the derivation of Niya *atga* ‘additional’ from Bactr. *αδγο /adgə/ < **ati-ka-* works fine. As, however, the reconstruction of this Bactrian word cannot be backed up by an exact parallel from another Iranian language, caution is still called for.

34. *avalika* ‘swaddle’

Attestations of the base form

DIR.SG. *avalika*: CKD 575 uo5, cr1

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. *bleǵd-* ‘to wrap, swaddle’ < OIr. **upa-darzaya-* (EDP: 14; EDIV: 63), I have argued (Schoubben 2021: 53f.) that *avalika* means ‘swaddle’ and is borrowed from an unattested Bactrian word *αβαλιϰο /əvališkə/ < **upa-dr̥šta-ka-*.¹⁵⁹ For the development of **upa-*, one can compare, amongst other examples, αβαστανο /əvastānə/ ‘support’ < **upa-stāna-* (BD II: 181). The development of **-dr̥šta-ka-* to **-λιϰο* would be regular because of (i) lambdacism (SFBG: 35f.); (ii) the vocalisation of **-r̥-* 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 ναϰο ‘pupil’ < **hāwišta-ka-* (BD II: 272; SFBG: 50).

Alternatively, *avalika* could be a loan from *αβαλιϰο /avəliškə/ ‘swaddle’, a hypothetical Bactrian cognate of Sogd. βδ̥yšṭk ‘swaddled’ < **abi-dr̥šta-ka-* (MacKenzie 1970: 39; SD: 100). For this option, see Schoubben (2022b: 352 fn. 23).

35. *ašgara* ‘herald (?)’

Attestations of the base form

DIR.SG. *ašgara*: CKD 80 oB2; 104 o1; 118 oC4; 483 oA2; 525 o1; 604 o2¹⁶⁰

Attestations as a PN

ADJ. *Ašgarani* ‘the son of Ašgara’: CKD 110 oB2; 536 r1

¹⁵⁹ For the correspondence between Bactr. -ϰ- /šk/ and Niya -ḱ-, cf. §2.1.6; §4.3.18.

¹⁶⁰ I wonder whether the hapax legomenon *ašga* in CKD 584 uo4 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).

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 -κο < *-k(k)a- from an underlying *αζγαπο.

The etymology of *αζγαπο is debated. According to Sims-Williams (BPN: no. 13), *αζγαπο could be compared with the Young Avestan name *Ziyrī-* and the Sogdian name *zyr* (cf. also Lurje 2010: no. 265) or with Sogd. *jy'r* 'cry'. He also records a proposal by Rüdiger Schmitt, according to whom *αζγαπο would be the Bactrian outcome of Olr. **azdā-kara-* 'herald' (Aram. *'zdkr*'; Bab. *az-da-kar-ri*; MP/Parth. *azdēgar*; cf. Bactr. αζδο κῑρ- 'to give notice'). If one accepts *αζγαπο to be the source of *ašgara*, it must have been a title in origin. I therefore prefer Schmitt's etymology.

To arrive at *αζγαπο from **azdā-kara-*, one should probably posit an intermediary pre-form **azda-kara-*, since a long **ā* would typically not be syncopated.¹⁶¹ Contrast, for instance, ζῑγβαρῑο '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 υαρκο /hāškə/ 'pupil' < **hāwišta-ka-* (SFBG: 50).

By implication, *αζγαπο 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. *αζγαπο, as indirectly attested in the PN αζγαρακο. If *αζγαπο results from **azda-kara-* < **azdā-kara-*, the meaning of *ašgara* would be 'herald'.

36. *oḍ-* 'to let go'

Attestations of the base form

PRES.2SG. *oḍesi*: CKD 317 o4

PRES.3SG. *oḍeti*: CKD 18 uo2

PRES.3PL. *oḍemti*: CKD 482 uo2

PRET.1SG. *oḍidemi*: CKD 153 r1; 417 o2; 450 o5; 546 o3

161 As A. 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.

PRET.3SG. *oḍita*: CKD 52 uo3; 292 o3; 324 + 328 uo6; 345 uo11; 425 uo4; 527 r1; 577 uo4; 667 r5; 788 uo4, uo9, uo10;¹⁶² 889 uo8; *oḍida*: CKD 236 uo3; 437 uo7; 574 uo5; 889 cr7 (2×)

PRET.3PL. *oḍitamti*: CKD 1 co2; 9 uo3; 212 uo2; 386 o2

PST.PTCP. *oḍitaga*: CKD 198 o2; 206 cr4; 320 r5; *oḍidaqa*: CKD 198 o2; 236 uo3

FUT.3SG. *oḍiṣyati*: CKD 358 o6

FUT.2PL. *oḍiṣatu*: CKD 546 o6; *oḍiṣamtu*: CKD 159 r7; 633 r3; *oḍiṣyatu*: CKD 125 o3; 157 o6; 320 r4

GERV. *oḍidavo*: CKD 77 r1; 109 r3; 152 uo5; 197 r2; 198 o2; 212 cr2; 358 o7, o8; 506 o5; 743 o2; *oḍidavya*: CKD 272 o5; 320 r2f.; 362 o5; 381 o2; 430 uo2, uo3; 639 uo4 (2×); 665 o4

Derivatives

GERV. *praodidave*: BC 4 recto 17, recto 19 (2×)

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.¹⁶³ 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-* /*r/*, this type of lenition generally being restricted to single intervocalic retroflexes.

162 One should read *oḍita* (3×) instead of Wu’s (2020: 151) *oḍita*. Her translation (2020: 153) of the relevant passage of CKD 788 (uo9f.) can also be refined. Wu translates *Cāmpira uthita ima Paṃcapriyae dura oḍita yo tatra jaṃṇatriyammi nikastaga taha sarva dura oḍita* as “Campira 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 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; emphasis mine).

163 To justify his translation ‘to throw away, reject’, Burrow referred to *diṭṭhim 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).

Proceeding from a newly attested gerundive *praodidave* ‘it should be let gone, rejected’ in South Asian Gāndhārī (BC 4 = CKM 267), Schlosser (2022: 171; 307) has recently proposed an alternative etymology. According to her, *praod-* would derive from an otherwise unattested combination of the preverb *pra-* and the Buddhist Sanskrit 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 *od-* would have arisen.

Since *od-* 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 *uṣṣṣ-* < OIr. **hrza-* to Plr. **√harj* (BD II: 272f.; EDIV: 132f.). My suggestion is that *odeti* was borrowed from a synonymous verb **ωuṣṣṣ-* < OIr. **awa-hrza-* as in the Young Avestan pres.1sg. *auuaghərəzāmi* ‘I let go’ (*Yasna* 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 odidavo* in CKD 152 uo5 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 *od-* is that OIr. **āzātam* is known to form a collocation with the root **√harj* ‘to let go’: compare Aram. *ʾzt šbq*, a calque of OP **āzātam hrj-*, MP *āzād hil-*, and Bactr. *αζαδο uṣṣ-*, all of them meaning ‘to let free’. The derivation of *od-* from **ωuṣṣṣ-* < OIr. **awa-hrza-* would thus allow for the attractive conclusion that *ajhatu od-* is another witness of the Iranian collocation of **āzāta-* ‘free’ + **√harj* ‘to let go’, though one must acknowledge that the preverb **awa-* is missing in the parallels.¹⁶⁴

On the formal side, my etymology would need two sound substitutions, viz. (i) loss of intervocalic *-h-*, and (ii) rendering of Bactr. *-pṣ-* as Niya *-d-* / *ṛ-*. Because of them, one cannot be entirely confident that the derivation of *od-* from **ωuṣṣṣ-* < OIr. **awa-hrza-* is indeed correct. Yet, I intend to show below that both substitutions are understandable.

First, my etymology requires that the intervocalic *-u-* / *h-* in **ωuṣṣṣ-* was lost during (or after) the borrowing process with subsequent contraction of the vowels. Inherited words such as *goma* ‘wheat’ < *gohoma* (CKD 795 uo6) <

164 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 *uṣṣ-* and **ωuṣṣṣ-* (F. Dragoni, p.c.).

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.¹⁶⁵

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 *ωυιρζ-, its 3sg. can be more or less confidently reconstructed as *ωυιρζιδο based on the attested 3sg. υιρζιδο (xl10f.). 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/.¹⁶⁶ 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. *ωυιρζ- /ōhirz/ ‘idem’ < *awa-hrza-; more specifically, its source may have been a 3sg. *ωυιρζιδο in which *rz could have been palatalised so as to result in Niya -ḡ- /r/.

37. *caṃkura* ‘imposer of penalties’

Attestations of the base form

DIR.SG. *caṃkura*: CKD 16 uo2; 64 o2; 236 cr1; 297 uo2; 318 uo3; 324 + 328 cr2;¹⁶⁷ 345 cr5; 437 uo2, uo6 (2×), cr4; 506 o2; 532 co1, uo1; 582 co4, cr4; 584 co3, uo2; 732 uo3; 788 ur1; 796 uo2; 842 o2; 884 uo2

GEN.SG. *caṃkura*sa: CKD 437 cr8; 815 A1

The officials known as *caṃkura* were entrusted with various administrative duties and frequently acted as judges.¹⁶⁸ They were, in other words, an

165 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 *nihamñ*- ‘to deposit, to put down’ ← *νιυανζ- /nihan(d)ʒ/ (§3.2.2 s.v.) and *nihala* ‘settlement, agreement’ ← *νιυαλο /nihālə/ (§3.2.3 s.v.), the -h- seems to be preserved.

166 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* ~ *υιρζηιο, which shows no trace of palatalisation in the script.

167 For this attestation (based on my reading *ca[m]kura* {sa} instead of *cakuraya*), see Schoubben (in prep.).

168 Cf. CKD 318; 506; 582; 584; 732; 815; 842; 884.

integral part of the civil administration of the Shanshan kingdom (cf. also LKD: 88 s.v.; Padwa 2007: 281).

The same title is attested in Tibetan and Sogdian. In 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 adopted an existing local title when they conquered parts of the Tarim Basin in the 7th century CE (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)* approximately correspond to those of a *nagararakṣaka-* or *nāgaraka-* in the Indian tradition, “a city official who also acted as chief of the police”. He further noted that in a Tibetan-Chinese bilingual text Tib. *cang khyu(r)* is rendered by Chin. *shǒu hù* 守護 ‘protector’ and refers to the person responsible for a stūpa. This translation does not, however, necessarily imply that the etymological meaning of *caṃkura* was ‘protector’. A Sogdian document from Lóulán (L.M.II.ii.09 recto 8–9) also has the title as *cnkwr*, presumably borrowed from Niya Prakrit (Sims-Williams 1996a: 49; 2020: 24; 2023: 75). Unfortunately, this Sogdian occurrence sheds little light 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 identified it with Chin. *jiàng jūn* 將軍 ‘general, high-ranking military officer’, in Late Han Chinese approximately *tsiāṇ kun* (Schuessler 2007: 306; 328).¹⁶⁹

Although LHChin. *tsiāṇ kun* resembles *caṃkura*, uncertainty remains as to whether this etymology satisfactorily explains the *-r-* in *caṃkura*. Aware of this difficulty, Brough invoked the well-attested substitution of a foreign final *-r* with *-n* in Chinese. Yet, this correspondence is due to the lack of word-final *-r* in (Early) Middle Chinese, and is not directly comparable to what Brough needs to assume for Niya Prakrit.¹⁷⁰ Potentially more relevant is Starostin’s proposal (1989: 399–401; cf. already Pulleyblank 1962: 228–230) that final **-r* persisted in Old Chinese, so that the word for ‘army’, i.e. *jūn* 軍, can be reconstructed as OChin. **[k]wər* (Baxter & Sagart 2014: 348). By the time of (Early) Middle Chinese, however, this **-r* had gone in the majority of dialects to *-n* (Baxter & Sagart 2014: 252–255; Hill 2019: 187). Thus, this phonological issue remains a weak point in Brough’s etymology, even though one could theoretically argue that *caṃkura* was borrowed from a more

169 Cf. also Høisæter (2020: 593), who wrongly attributes the etymology to Yoshida (1996: 70 fn. 3).

170 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 Old Turkic as *saṇun* (HWA: 584), where the expected *-n* is found.

archaic form of Chinese in which *-r was still preserved in the first centuries CE.

A more serious problem is the lack of evidence that *caṃkuras* played a significant military role in the Shanshan kingdom: none is mentioned among the military officers listed in CKD 478. Consequently, Brough (1970b: 85 = 1996: 362) was forced to speculate that a *caṃkura* was not “a general of the highest rank, but presumably a local military commandant”. Moreover, if *caṃkura* comes from *jiàng jūn* 將軍, it is somewhat unexpected that Tib. *cang khyu(r)* is instead translated with Chin. *shǒu hù* 守護 ‘protector’. For these reasons, I would caution against Brough’s etymology.

Since *caṃkuras* appear to have exercised judicial rather than military functions (cf. supra), it seems more likely that *caṃkura* should be compared with the Bactrian legal formula ζἰα νο κῑρ- ‘to impose a penalty’ < OIr. **ziyāni*- ‘penalty, punishment’ (e.g. YAv. *ziiāni*-; MP *zyān*) + **√kar* ‘to do’ (BD II: 212). On this basis, one can reconstruct a corresponding nominal compound **ziyāni-kara*-, which would regularly yield Bactr. *ζἰα γγαρο ‘imposer of penalties’ due to syncope of the **i* in between **n* and **k*. I propose that this hypothetical Bactrian title *ζἰα γγαρο is the direct source of Niya Pkt. *caṃkura*:¹⁷¹ semantically, the interpretation ‘imposer of penalties’ accords well with the role of *caṃkuras* as judicial officials, and it is also compatible with Thomas’ comparison between the *caṃkura* and the *nagararakṣaka*- / *nāgaraka*- ‘chief of the police’.

How, then, does *caṃkura* relate phonologically to *ζἰα γγαρο? If one accepts the premise that **z* was palatalised to Bactr. /*ž*/ before **i* (§2.2.4.3), ζἰα νο would represent /*ž(i)yānə*/ and *ζἰα γγαρο for /*ž(i)yāngarə*/. Since voiceless consonants became voiced after nasals in Niya Prakrit (§2.1.5), the sequence <ṃk> in *caṃkura* is one way to write /*ṃg*/ in Kharoṣṭhī, and thus matches the /*ṃg*/ cluster of *ζἰα γγαρο /*ž(i)yāngarə*/.

Two further substitutions require more discussion: the apparent devoicing of Bactr. *ž*- /*ž*/ to Niya *c*- and the representation of Bactr. -αρ- /ar/ by Niya -ur-. Neither is exactly paralleled among other (potential) Bactrian loanwords in Niya Prakrit.¹⁷² Yet, I hope to demonstrate below that neither 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*, it should be noted that Niya Prakrit lacks a direct counterpart to the initial /*ž*/ in *ζἰα γγαρο /*ž(i)yāngarə*/.

171 The syncope excludes donor languages other than Bactrian.

172 For this reason, I did not include *caṃkura* among the plausible Bactrian loanwords collected in §3.2.2.

Although Niya Prakrit has a phoneme /ǰ/, it appears only intervocalically as the result of lenition of OIA -c-, -j-, and -ś- (§2.1.2). Consequently, Bactr. ǰ- /ǰ/ had to be approximated in one way or another. Since Indic initial *j-* is rendered as MBactr. ǰ- in *ǰmbwd'ng* 'worldly, earthly' < *ǰmbwd** ← *jambudvīpa-* (with adaptation) + adjective suffix -'ng < **āna-ka-*, one might expect **ζιγγαρο* /ǰ(i)yāṅgarə/ to have been approximated as ***ǰamkura*. If so, the attested *camkura* could reflect the occasional initial devoicing seen also in inherited words in Niya Prakrit, e.g. *ciyanae* 'to live' < √*jīv* (CKD 703 r5). Although it remains somewhat unusual that only *camkura* is attested, the substitution of Bactr. ǰ- /ǰ/ with Niya *c-* is thus explicable from within Niya Prakrit (see also §4.3.28).

Finally, a few comments are to be made about the apparent rendering of Bactr. -ap- /ar/ as Niya -ur-, which contrasts with the default substitution of Bactr. -a- /a/ with Niya -a-, including when before -r- (see §4.3.1). Although no definitive explanation can be offered, the situation recalls the alternation between Bactr. παρο- and πορο- < **pari-*, as in παρογατο alongside πορογατο 'observed' < **pari-kašta-*, and similar cases (on which cf. also Lazard, Grenet & de Lamberterie 1984: 221). In my view, this interchange of <α> and <ο> suggests that Bactr. -p- /r/ may have induced subphonemic rounding of a preceding **a*, a hypothesis that may also explain why, in contrast to πιδο- < **pati-*, **pari-* did not undergo *i*-umlaut to result in **πιπο-.¹⁷³ If accepted, this hypothesis may also account for the substitution of Bactr. -ap- /ar/ by Niya -ur- presupposed by the proposed etymology of *camkura*. It must be admitted, however, that no comparable alternation between <α> and <ο> is attested in the Bactrian reflex of *(-)kara-.

To summarise, Brough's attempt to derive Niya *camkura* from Chin. *jiàng jūn* 將軍 'general, high-ranking military officer', LHChin. *tsiāṅ kun*, encounters a minor phonological and a more serious semantic difficulty. While these issues do not conclusively refute his proposal, it appears more plausible that *camkura* was borrowed from Bactr. **ζιγγαρο* /ǰ(i)yāṅgarə/ < **ziyāni-kara-* 'imposer of penalties' (cf. the attested phrase ζιανο κip-). This proposal requires two unparalleled, yet reasonable, substitutions, i.e. Bactr. ǰ- /ǰ/ → Niya *c-* and Bactr. -ap- /ar/ → Niya -ur-.

173 The absence of *i*-umlaut in γαρο /garə/ 'mountain' < **gari-* (and αριαο 'in Bactrian' if from **arya-* with a short vowel + suffix -ao) are perhaps to 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*" (emphasis mine).

38. *tim-* ‘to be concerned about, to be angry’

Attestations of the base form

GERV. *timidavo*: CKD 109 r7; 152 uo7; 184 r2; 499 r2f.; 840 cr5; *timidavya*: CKD 91 r1; *timitavya*: CKD 335 co5; *dimidavo*: CKD 159 r8; 288 cr2; 424 o5f.

Superseding an earlier interpretation by Thomas (1934a: 64; 66 fn. 6), Burrow (LKD: 94f. s.v. *timitavya*) could show that Niya *tim-* is a synonym of the phrasal verb *manyu kar-* ‘to be concerned about, to be angry’.¹⁷⁴

Finding a plausible etymology for this Niya verb has proved 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.¹⁷⁵ As another option, Burrow conceived of a connection with MP/NP *tīmār* ‘care for somebody > worry, sorrow’ (cf. also MSogd. *tym’r* ‘sorrow, grief, care’; DMSB²: 231). Since, however, this Persian word lacks a convincing etymology itself (Hasandust 2015: 935), using it as an explanation for Niya *tim-* would be a case of *obscurum per obscurius*.

I propose to derive *tim-* from a so far unattested Bactrian cognate of PIr. **√tamH* ‘to faint, to be tired’, a verbal root continued in most Middle Iranian languages.¹⁷⁶ 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. **τμ-* /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-tāmya-* as the etymon of *pātem-*).¹⁷⁷

Semantically, my etymology hinges on the additional assumption that Bactr. **τμ-* 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 **τμ-*, so for now, this new etymology of Niya *tim-* has to be treated with caution.

174 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.).

175 Burrow’s suggestion that “we may have a special treatment of an original **tīmyeti*” does not carry conviction.

176 Cf. e.g. Parth. *tām-* ‘to choke’, Sogd. *ṭ’s’ō* ‘tired’, Khot. *ttāma-* ‘fatigue’, and the other forms cited in EDIV (376f.).

177 Since κμ- ‘to want’ is already attested in doc. **xp**, a text datable before 380 CE (SCBD: 82), the raising of **-ā-* to *-i-* /*i-* in front of **-m-* will have been sufficiently early, though it should be noted that the older form κμ- is now also attested in the 4th-century birchbark letters (BD IV: 114). This sound change is typical for Bactrian, meaning that if the etymology of Niya *tim-* proposed here is correct, one can exclude other donor languages.

39. *tomga*, a title

Attestations of the base form

DIR.SG. *tomga*: CKD 3 co1, uo1; 11 co1, uo1; 23 o1; 28 o1; 37 co1, uo1; 42 co1, uo1; 44 o1;¹⁷⁸ 45 co1, uo1; 46 uo2; 49 co1, uo1; 72 rC4, rD5; 124 uo1; 138 o1; 180 oB6; 189 o1; 208 o1; 224 o1; 226 o1; 236 co1, uo1; 272 o3; 375 o1; 427 o1; 451 o1, r1; 468 co1, uo1; 470 o1; 481 co1, uo1; 516 o1; 524 co1, uo1; 540 co1, uo1; 561 co1, uo1; 568 cr1; 720 o1; 729 o1; 746 o1; *tomgha*: CKD 78 oB2; 82 o2; 85 oE2; 103 rC1; 115 oA4; 123 o3; 131 oA5; 132 rA3; 137 rB1; 151 oA5; 216 o5; 431 cr2 = 432 uo7, cr5 = co2; 454 r2; 571 cr3, cr7; 572 uo3; 587 uo7; 589 cr3; 590 uo7; 656 uo5; 820 uo7; 839 cr1; *togha*: CKD 436 cr2; 579 uo9; 589 uo6; 654 uo8; 880 uo5

GEN.SG. *tomgaša*: CKD 105 oB4

DIR.PL. *tomga*: CKD 357 o4; 387 o7; 796 uo3; *tomgha*: CKD 96 oA1, oA2, oA3, oA4, oB1, oB2, r1, r2, r3; 622 o3

INS.PL. *tomgehi*: CKD 165 o4¹⁷⁹

GEN.PL. *tomgana*: CKD 165 o5; *tomghana*: CKD 387 o11

Attestations as a PN

GEN.SG. *Tomgaša*: CKD 494 cr4

Compounds

DIR.SG. *sruvatomga*:¹⁸⁰ CKD 509 uo2; DIR.PL. *survatomga*: CKD 524 uo3; *survatomge*: CKD 524 uo6

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. *Tomgaša*).

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 phonetic resemblance is only superficial, and their duties differ (cf. again LKD: 95f. s.v.).

178 Cf. Appendix 3, p. 475 for the reading.

179 Based on a suggestion by Meng Xiaoqiang (Leiden), I propose that the unclear hapax *tommihi* (LKD: 96 s.v.) in CKD 165 o4 is a misreading for ins.pl. *tomgehi*. A glance at the available images makes clear that the reading 𐰜 *ge* is preferable over 𐰜 *mi* because of the leftward orientation of the tail of the relevant *akṣara* (cf. also the gen.pl. *tomgana* in CKD 165 o8). The resulting translation "Also in Peta-ayana the arrears of last year's tax and the tax of this year is to be sent here all complete with the *tomgas* (*tomgehi*)."¹⁸⁰ (after TKD: 32) is one other indication that *tomgas* were responsible for transportation (for which cf. *infra*).

180 On the compound *sruvatomga* (variant *surva*-), the first element of which is obscure, see TKD (99f.).

Burrow (LKD: 96) more convincingly suggested that *tomga* is related to OIr. **tuwāna-ka-* ‘strong’ ← Plr. **√tauH* ‘to be able, strong’ (cf. e.g. MP *tuwān* ‘mighty, powerful’ < OIr. **tuwāna-*; CPD: 84; DMMP: 330; EDIV: 386f.).¹⁸¹ If this etymology is correct, the Niya cluster *-m̐g(h)-* /*ŋg/* 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,¹⁸² *tomga* would most likely be a loanword from an unattested Kushan title **τ(o)οαγγο /t(u)wāŋgə/* < **tuwāna-ka-*.¹⁸³

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 *Toñkā* (Ot.12 a9; see Ching & Ogihara 2012: 81; 83 and DoT: 327).¹⁸⁴ Another potential witness is Old Turkic *toŋa* ‘hero, outstanding warrior’, a word also used as a personal name and a title. *toŋa*, which already occurs in the Kül Tegin and Bilge Khagan inscriptions (dated to respectively 732 and 735 CE),¹⁸⁵ 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’.¹⁸⁶

Given the contacts with Kuča reported in the Niya documents (Høisæter 2020: 367–369), TB *Toñkā* potentially represents a direct borrowing from Niya *tomga*. As *Toñkā* 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.

181 Bailey’s (1982: 98 n. 7) alternative suggestion to derive Niya *tomga* from the Plr. root **√tauʃ* ‘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.

182 Contrast e.g. *-ŋγgo /ēŋgə/* (later *-γγgo /īŋgə/*), the Bactrian outcome of the material suffix **-aina-ka-*, with its cognates Sogd. *-yny* /ēñē/, Khot. *-inaa-*, and MP/Parth. *-ēnag* (Degener 1989: 133; BD II: 213).

183 This reconstructed form would regularly result in Niya *tomga* with the default substitution of *-wā-* with *-o-* (§4.3.1).

184 It remains in doubt whether the Tocharian A female name *Toñkitsā* is also connected; cf. DTTA (219).

185 Cf. *toŋa* : *teg(i)n* ‘prince Toŋa’ 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.).

186 *Pace* Bailey (KT IV: 34; DKS: 219), there is no Khotanese evidence to consider; see Zhang (2016: 122).

Subsequently, Old Turkic may have borrowed the word under review as *toŋa*. At the time of the first Turkic qaghanate (552–603 CE), 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 CE) and Khüis Tolgoi (604–620 CE). 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, Old Turkic *toŋa* must have been in use in the western part of Inner Asia, since in the Bactrian doc. Y, datable to 771/772 CE (SCBD: 84), Old Turkic *toŋa* is rendered as τογγαυο (cf. BD II: 222; 275; BPN: no. 211).¹⁸⁷

To sum up, if the etymological and historical scenario suggested above is correct, this means that a Kushan Bactrian title *τ(ο)οαγγο /t(u)wāŋgə/ was borrowed at the beginning of the first millennium into Niya Prakrit as *toṃga*. 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 *Toṃkā*. In the form *toŋa*, the title could subsequently spread further to the Turkic groups on the steppes before eventually being reborrowed into Bactrian as τογγαυο.

40. *nihala* 'settlement, agreement'

Attestations of the base form

DIR.SG. *nihala*: CKD 788 uo7f.

The lexeme *nihala* is a hapax from CKD 788, a document registering the divorce between a man Čampira and his wife Paṃcapriya. The relevant context is cited below in (3.22):

(3.22) CKD 788 uo7–9¹⁸⁸

*edaša stri Paṃcapriyae Čaṃpiraša vaṃti nihala krita tena vidhanena
ede Čampira Paṃcapriyae ca priti[šehe]na sarajitaṃti*

187 An additional witness to this spread is the PN *tnwk' rsl'n* /toŋa arslan/ in a Turco-Sogdian administrative document from the 9th–10th century (Pelliot chinois 3134, lines 11, 24; cf. Lurje 2010: no. 1260; Sims-Williams & Hamilton 2015: 28f.; 109).

188 I adopt Lin's (1990: 284) reading *edaša*, gen.sg. of the demonstrative pronoun, instead of Wu's (2020: 151; 154) new reading *eda šā*. The form of the *aḱsara* does not necessitate the assumption of a length stroke and Wu's reading results in a syntactically awkward sentence. In cr5, Lin's reading *siyaṃti* is also preferable over Wu's *siyati*.

“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’. However, this interpretation results in an illogical sequence of events, and it is 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 I: 422 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”.¹⁸⁹

This translation can now be strengthened with a Bactrian etymology for *nihala*. In Rab. 19f, the opt.pres.3sg. $\nu\alpha\lambda\eta\iota\sigma$ points to a present stem $\nu\alpha\lambda-$, whose preterite is attested as $\nu\alpha\alpha\beta\tau\sigma$ /*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’ < PIr. **ni* + $\sqrt{had}$ ‘to sit down’ (EDIV: 125f.).¹⁹⁰ 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 ** $\nu\alpha\alpha\lambda-$* /*nəhāl*/. In Bactrian documents from before 380 CE, 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. *nihaṃñ-*).¹⁹¹ Consequently, ** $\nu\alpha\alpha\lambda-$* /*nəhāl*/ may in turn come from ** $\nu\alpha\alpha\lambda-$* /*nihāl*/, pret. ** $\nu\alpha\alpha\beta\tau\sigma$* /*nihāštə*/.

Against this background, my suggestion is that Niya *nihala* is borrowed from a Bactrian noun ** $\nu\alpha\alpha\lambda\sigma$* /*nihālə*/ ‘settlement, agreement’ derived from the verb under discussion. A seemingly later variant of ** $\nu\alpha\alpha\lambda\sigma$* , i.e. $\nu\alpha\alpha\lambda\sigma$ /*nəhālə*/, is attested in Bactrian (Tt12; 14; 19), perhaps denoting a type of text (BD II: 239);¹⁹² and Sims-Williams (2008c: 66) has cautiously suggested

189 If this interpretation is correct, *nihala* would be a synonym of *samaga* < Skt. *śamaya-* ‘settlement, agreement’ in CKD 588 uo3f.: *ahuno Pitga divira Suḡaṃtaṣa ca samti samaga kritaṃti sarajitaṃti* “Now Pitga and the scribe Suḡaṃta have made a settlement (*samaga kritaṃti*); they have agreed.” (TKD: 125).

190 On the -u- in $\nu\alpha\alpha\beta\tau\sigma$, see now Michetti (2024: 175–177).

191 Examples include $\nu\beta\alpha\gamma\sigma$ /*nivāgə*/ next to $\nu\alpha\beta\alpha\gamma\sigma$ /*nəvāgə*/ ‘pawn, pledge’ < **ni-pāka-* and the aforementioned $\nu\beta\alpha\lambda\mu\sigma$ /*nišalmə*/ besides $\nu\alpha\beta\alpha\lambda\mu\sigma$; $\nu\sigma\beta\alpha\lambda\mu\sigma$ /*nəšalmə*/ ‘seat, throne’ < **ni-šadma(n)-*.

192 The sequence *nihalu* in AG1, line 3, a Bactrian inscription in (Issyk-)Kushan script, might also be the same word (Sims-Williams 2025b: 204 with fn. 38).

that Bactr. *νῠαλο / ναυαλο may also be the source of NP *nihāl* ‘young plant, shoot, sucker, transplanted cutting; cushion, mattress’ (CPED: 1437) and of Sogd. *nx* ‘δδ ‘cushion’ (translating Parth. *barz*).¹⁹³

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’ ← *νῠαυζ- / nihan(d)ž/ < **ni-θanʿa-* (§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.

41. *paḱe* ‘allotment, share’

Attestations of the base form

DIR.SG. *paḱe*:¹⁹⁴ CKD 66 oB1, oB2, oB4; 75 o4, o5, o6, o7, o8, o9, o10, o11, o12, o13, o14, o15, o16, o17, rA4, rA5, rA6, rA7, rA9, rA10, rA11, rA12, rA13, rA14, rA16, rA17, rA18, rA19, rA20, rA21, rA22, rA23, rA24, rA25, rB4, rB5, rB6, rB7, rB8, rB9, rB10, rB11, rB12, rB13, rB14, rB15, rB17, rB19, rB20, rB21, rB22, rB23; rB24, r1; 79 oA2, oA3, oA4, oB1, oB2, oB3, oB4, oC1, oC2, oC3, oC4, oC5, oC6, oC7, r2, r3, r4, r5, r6; 87 o1, oA1, oA2, oA3, oA4, oA5, oA6, oA7, oA8, oA9, oB1, oB2, oB3, oB4, oB5, oB6, oB7, oB8, oB9, oC1, oC2, oC3, oC4, oC5, oC6, oC7, oC8, oD1, oD2, oD3, oD4, oD5, oD6, oD7, oD8; 95 oA1, oA2, oA3, oA4, oB1, oB2, oB3, oB4; 116 o2, o3, o4, r1, r2; 191 oA1, oA2a; 204 oA1, oA2, oA3, oA4, oA5, oB2, oB3, oB4, r1, r3, r4, r5; 242 oA2, oA3, oB1, oB2, oB3, oC1, rA2, rA3, rB1, rB2, rB3, rC1, 313 oA2, oA3, oB2, oB3; 398 o2, o3; 446 oA1, oA2, oA3, oB1, oB2, oB3, oC1, oC2, oC3; 449 r1, r2, r3f; 453 o1; 462 r1; 619 o1, o2, o3, rA2, rA3, rB1, rB2, rB3; *phaḱe*: CKD 204 oB1, oB5, r6, r7, r8, r9, r10, r11, r12

ABL.SG. *paḱayade*: CKD 608 o1

DIR.PL. *paḱe*: CKD 66 oB3; 147 o2; 313 oB1; 614 oA2, oB1; *paḱke*: CKD 68 cr2; *paḱeyu*: CKD 75 o18, r2; 87 o2; 116 o1, o5; 619 rA1

The Niya word *paḱe* ‘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 2025: 36–38). This etymology fails, however, to

193 For a further cognate, cf. MParth. *nš'l* ‘draff, dregs, lees (in wine)’, on which see Durkin-Meisterernst (2013: 98f.).

194 Whenever it is ambiguous whether *paḱe* is dir.sg. or dir.pl., I list the attestation under dir.sg.

account for the consistent spelling of *paḱe* with <ka>, which otherwise represents the combination of a sibilant and *k* (cf. §2.1.6).

The spelling with <ka> would, as argued in more detail in Schoubben (2021: 52f.), be explained more easily when deriving *paḱe* from an unattested Bactrian noun *παρκο /pəškə/ < *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, *παρκο could have developed a meaning ‘share’ out of ‘that which is cut’.¹⁹⁵

Phonologically, *pišta-ka- would regularly result in *παρκο /pəškə/ 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 -ρκ- /šk/ as in ναρκο ‘pupil’ < *hāwišta-ka- (BD II: 272; SFBG: 50). This combination of sound changes moreover excludes the possibility that *paḱe* would have been borrowed from another Iranian language.

Given that Niya *a* was most likely pronounced as a schwa (cf. §2.1.1), Bactr. *παρκο /pəškə/ corresponds sound for sound with Niya *paḱe*. The final *-e* in *paḱe* may be accounted for by assuming that *paḱe* was borrowed from a dir.pl. *παρκε ‘shares’, as argued in §4.4.3.

The form *paḱeyu* is a separate issue. This is a plural or possibly a collective which always occurs at the beginning or end of lists of allotments.¹⁹⁶ According to Burrow, the ending *-u* in *paḱeyu* would be comparable to the Tocharian A plural in *-u* found in words such as *cmolu* ‘births’ ← *cmol* or *kālymeyu* ‘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 *paḱe(yu)* is probably not a Tocharian word in the first place (cf. also §6.4.5).

195 The reconstruction of *παρκο enables us to explain at the same time NP *pišk* ‘lot, share’ and Kurdish *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 *παρκο. As pointed out to me by R. 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.

196 *paḱeyu* can co-occur with numerals higher than one (CKD 87 o2; 116 o5); the dir.pl. *ede* ‘these’ (CKD 87 o2; 116 o5); and plural verb forms (CKD 116 o1; 619 rA1).

That said, I am myself unable to explain the morphology of *paḱeyu*, and this point, combined with the semantic shift of Plr. *√*paiš* from ‘to crush, to grind’ to ‘to cut’ required by my Bactrian etymology, prevents me from including *paḱe* amongst the plausible etymologies of §3.2.2.

42. *picav-* ‘to hand over’

Attestations of the base form

PRES.2SG. *picavesi*: CKD 553 o3

PRES.2PL. *picavetu*: CKD 439 uo2f.

PRET.1SG. *picavidemi*: CKD 152 cr1; 272 o10; 519 o5

PRET.2SG. *picavideṣi*: CKD 552 r4

PRET.3SG. *picavita*: CKD 889 uo6; *picavida*: CKD 16 uo2; 42 uo2; 506 o4, o7

PRET.2PL. *picavidetha*: CKD 375 o4

PRET.3PL. *picavitaṃti*: CKD 322 uo5

FUT.3SG. *picaviṣyati*: CKD 735 r4

PST.PTCP. *picavitaga*: CKD 248 o7

GERV. *picavitavo*: CKD 296 uo4; 403 cr1; *picavitavya*: CKD 788 uo7; *picavidavo*: CKD 46 cr3; 143 uo3; 159 r2f; 198 o3; 235 cr1; 366 o4; 439 uo4; 440 r2; 532 cr3; 546 o5; 562 cr1; 706 uo4; 719 o4; 734 r1; 735 r4; *picavidavya*: CKD 46 cr1; 310 uo2; 439 uo4; 545 cr1; 703 r3

INF. *picavamṇae*: CKD 152 cr3; 375 o3; 506 o10

picavi///: CKD 292 o5

The contexts in which *picav-* occurs make it clear that the general meaning of this verb is ‘to hand over’ (LKD: 105 s.v.). Note, for instance, passage (3.23), where the gen.sg. *Caṣgeyaṣa* (PN) fulfils the syntactic role of the recipient.

(3.23) CKD 532 cr2–4

*yatra eda manuṣa Vusmeka karmavidae siyati śadha parikrayena
Caṣgeyaṣa picavidavo śadha śramanehi*

“Wherever this man Vusmeka has been employed, he is to be handed over (*picavidavo*) to *Caṣgeya* 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-* with the causative of Skt. *prati* + √*r*, i.e. *pratyarpayati* ‘to give back, to restore’. Yet, this proposal must be rejected for phonological reasons (cf. LKD: 105 s.v. *pace* Schlosser 2022: 187f.): from OIA *praty-*, one cannot derive Niya *pic-* (see also

§3.2.2 s.v. *picara*), and there is no parallel for a change from OIA *-rp-* to Niya *-v*.¹⁹⁷

Burrow (LKD: 105 s.v.) briefly considered deriving *picav-* from a reconstructed OIA verb **pi-cyāvaya-* ‘to cause to go to > to hand over’. This solution is weakened by the lack of clear evidence for a preverb **pi-*.¹⁹⁸

In my view, *picav-* is more plausibly a Bactrian loanword, possibly from **πιδοῖο- /pidšāw/ < OIr. *pati-čyawa-* ‘to go towards’ or **pati-čyāwa-* ‘to cause to go towards’.¹⁹⁹ Although **πιδοῖο-* itself is not attested in Bactrian, the base verb *ῖο- /šaw/* ‘to go’ < **čyawa-* occurs frequently (BD II: 283), and Khot. *patāts-* ‘to let go, to abandon’ offers a parallel for the combination of the root **√čyaw* with the preverb **pati-* (SGS: 67; EDIV: 41).

The meaning of **πιδοῖο-* would be different from that of Khot. *patāts-*. Yet, a semantic development from ‘to go to’ to ‘to hand over’ would be understandable because handing something over necessarily involves movement towards the recipient. The semantics become even more straightforward if one starts from a causative ‘to cause to go towards’. This is possible if we start from a preform **pati-čyāwa-* with long vowel, comparable to the preform **fra-jāma-* ‘to cause to go towards’ that underlies Sogd. *fš’m /fšām/* ‘to send’ (Sims-Williams 1983: 50 = 2025a: 245f.). Additional semantic parallels include Khot. *hajsem-* ‘to send’ < **fra-jāmaya-* and YAv. *frašāuuaiia-* ‘idem’ < **fra-čyāwaya-*.²⁰⁰

To sum up, the reconstruction of a Bactrian verb **πιδοῖο- /pidšāw/ < *pati-čyāwa-* provides a semantically and formally plausible source for Niya *picav-* ‘to hand over’. Nevertheless, since only the base verb *ῖο-* ‘to go’ is attested in Bactrian, and a semantic shift from to (cause to) go towards’ to ‘to hand over’ must be assumed, some caution remains warranted.

197 Semantically, the comparison with *pratyarpayati* would be acceptable, since this verb can also mean ‘to deliver’ (cf. Thomas 1936a: 793 *contra* LKD: 105 s.v.).

198 Burrow (LKD: §20; 106 s.v.) proposed deriving *pivamṇamṇae* in CKD 586 uo4 from **pi-bandhanāya*, thus with this same preverb. However, this form is more likely a dittography for *pivamṇae* ‘to drink’ (TKD: 150).

199 The *i*-umlaut affecting the preverb **pati-* is only found in Bactrian, which excludes the possibility that *picav-* was borrowed from another Iranian language. For the sound substitutions Bactr. *-doṭ-* /dš/ → Niya *-c-* and Bactr. *-o-* /w/ → Niya *-v-*, see respectively §4.3.18 and §4.3.22. The integration of *picav-* into the Niya Prakrit conjugation class in *-eti* is discussed in §4.4.4.

200 Sogd. *fš’m /fšām/* cannot derive from an *aya*-formation **fra-jāmaya*, since **-y-* would have triggered umlaut of the long **-ā-*. Similarly, **pati-čyāwaya-* would be expected to yield Bactr. **πιδοῖο- /pidšēw/*, which would make the comparison with Niya *picav-* less neat phonologically.

43. *piro* ‘military post, fort’

Attestations of the base form

DIR.SG. *piro*: CKD 639 uo3 (2×); *pirova*: CKD 120 o2; 376 o4; *piroya*: CKD 188 r1; 246 r4; 310 uo2; 333 o5

INS.SG. *pirovena*: CKD 665 o8

GEN.SG. *pirovaša*: CKD 639 uo2

LOC.SG. *pirovami*: CKD 157 o3, o4

Derivatives

ADJ. *pirovi* ‘of the fort’: CKD 639 uo4

Compounds

LOC.SG. *Parconapirovaṃmi* ‘Parcona fort’: CKD 122 o4

DIR.SG. *pirovala* ‘fort keeper’: CKD 154 oB2; *piroyala*: CKD 765 uo2; DIR.PL. *piropa(*la)ye*: CKD 188 r2

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.).²⁰¹

piro is not the only attested dir.sg. form of this word; there are also the longer variants *piroya* (4×) and *pirova* (2×, cf. further ins.sg. *pirovena*; gen.sg. *pirovaša*; loc.sg. *pirova(m)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* < Skt. *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: 28; 46).²⁰² 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

201 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’.

202 There have been other etymological proposals for Niya *piro*, i.e. from a thematicised cognate **prθwa-ka-* of Av. *pərətu-* ‘bridge’ (YAv. *pəšu-* ‘crossing, bridge’) and MP *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.

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 via a no longer identifiable intermediary language). **pati-raupa-* is expected to yield Bactr. **πιδορωβο* /*pidrōvə*/ with the characteristically Bactrian change of **pati-* to *πιδ(o)-*, whence a simplified form **πρωβο* /*pirōvə*/ would need to be assumed.²⁰³

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. *πριρτο* and *πιδοριρτο* ‘ancestral estate’, but the more recent discovery of Bactr. obl.pl. *πιοριρτειγανο* /*pihriřtigānə*/ ‘belonging to the father’ has made it clear that instead of being a more archaic form than *πριρτο*, *πιδοριρτο* 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 **πιδορωβο* /*pidrōvə*/ to **πρωβο* /*pirōvə*/ that I classify this etymology one category below the plausible etymologies.

44. *badho* ‘pledge, mortgage’

Attestations of the base form

DIR.SG. *badho*: CKD 587 uo5; 590 uo6; 591 uo6; 592 uo6; *baṃdhava*: CKD 473 uo2, uo3, cr1; 492 uo2; *baṃdhova*: CKD 678 uo6; *baṃthova*: CKD 569 uo9; *ba(*dha)vo*: CKD 331 uo5 (emendation by A. Glass)

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 Skt. *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 Skt. *bandha-* ‘bond’ or *baddha-* ‘bound’ (cf. also Lüders 1940b: 46 who opts for neut.sg. *baddham*). Although semantically a better match, this

203 There seems to be no good reason why ***pitro* or ***pidro* would have been simplified to the attested *piro* within Prakrit.

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; BD IV: 106), derived from a past stem *βαμδο /bāmdə/ ‘loaned’ < *apāmita-, which is indirectly attested by Bactr. βαμδδιγο /bāmddigə/ ‘loan’ < *apāmita-ka- (BD II: 201).²⁰⁴ 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 wmwrrt’w ‘destruction’ ← wmwrrt ~ *ομopτο (or the like) /wimurtə/ < *wi-mṛṣta- ‘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 *-αοο* /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 *-mth-* (in *baṃthova*) and *-(m)dh-* (in *badho*; *baṃdhava*; *baṃdhova*) would be sufficiently close approximations.²⁰⁵

The main point of concern with my etymology is that it requires procope to have happened before the change of **b* from OIr. **p* to Bactr. /v/ (cf. §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.

45. *muṣḍhaṣi*, exchanged woman

Attestations of the base form

DIR.SG. *muṣḍhaṣi*: CKD 573 uo4

The hapax *muṣḍhaṣi* 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

204 βαμδδιγο exemplifies the gemination of δ /d/ in front of a palatal vowel typical of later Bactrian texts (BD II: 38).

205 Cf. also the rendering of Bactr. -μβ- /mb/ as Niya *-mb-*, discussed in §3.2.3 s.vv. *aṃbaṃjaya* and *aṃbukaya*. The aspiration seen in *-mth-* /-(m)dh- could be unetymological (cf. §2.1.3), in this particular case perhaps caused by a folk etymology with derivatives of √*bandh* ‘to bind’.

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 *μoζδοϑi /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 *mukaṣi*; 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).²⁰⁶

According to N. Sims-Williams (p.c.), one may rather want to derive *muṣḍhaṣi* from Bactr. *μoζδοϑi < *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. *miždušis (Iranica: §4.1.4), and Khot. *mājsai-* ‘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, *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’.

46. *leṣ-* ‘to dispatch, to conduct’

Attestations of the base form

PRET.3SG. *liṣita*: CKD 52 uo2

PRET.1PL. *leṣitama*: CKD 392 o4

FUT.3SG. *leṣiṣyati*: CKD 624 o2

FUT.3PL. *leṣiṣaṃti*: CKD 367 o2

The etymological analysis of the Niya verb *leṣ-* ‘to dispatch, to conduct’, phonologically probably /lēṣ/ (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 Skt. root √*śliṣ* ‘to embrace, to cling to’. To

206 Bactr. μoζδο* ‘reward’ may also be attested as an independent word in the meaning ‘spoils’ in KSPlate 4, but this is not certain (see Sims-Williams 2015: 261). If my etymology of Niya *muṣḍhaṣi* were correct, the elements pointing to Bactrian as the donor language would be 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-.

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 Gāndh. *śil-* and not *l-*; compare, for instance, the ins.sg. *śilogano* ‘verse’ from Skt. *śloka-* in Av^{L6} recto 25 (Lenz 2003: 265) and the parallel development in Pāli *siloka-* and Pkt. *siloya-* (CDIAL I: 739 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(d)-* ‘to set out, to move, to send’ < OIr. **darzaya-* to the Plr. root **√darǵ* ‘to attach, to fasten, to load, to sew’ (EDP: 42f.; EDIV: 62f.; Kreidl fthc. a: §3.3.1.1.1.4).²⁰⁷

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. **liṣ-* /liṣ/ may have developed eventually (cf. infra). **liṣ-* /liṣ/ 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 uo2 next to the forms with *-e-*). It should be noted, though, that this interchange is rare in Niya Prakrit (cf. LKD: §§1; 3), and that in the case of other loanwords, Bactr. *-i-* /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 **liṣ-* /lēṣ/ as the source of Niya *leṣ-*. **liṣ-* /lēṣ/ would probably not be the regular outcome of **darzaya-*. Still, one could assume that **liṣ-* /liṣ/ < **darzaya-* was remade into **liṣ-* /lēṣ/ due to analogy with the similarly sounding and semantically comparable *liṣ-* ‘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. **liṣ-* /lēṣ/ with umlaut of **ā* to *-i-* /ē/ (SFBG: 65). Analogical influence from *liṣ-* < **dāraya-* would indeed be plausible, given that (i) *liṣ-* has a suppletive preterite stem *liṣydo* < **dṛxta-* to the root **√dra(n)j* ‘to fix, to fasten, to hold’, and (ii) the latter has been thought to be etymologically related to **√darǵ* ‘to attach, to fasten, to load, to sew’ (cf. EWAia I: 706f.; EDIV: 62f.; 76).

Irrespective of whether one opts for **liṣ-* /liṣ/ or for **liṣ-* /lēṣ/, my etymology rests on the assumption of a Bactrian sound change from **-rzy-*

207 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(d)-* are Av. *darəz-* ‘to attach’ (YAv. pres.3sg. *darəzaiieiti*), Khot. *dalś-* ‘to make firm, to fasten, to load’, and Khwar. *ḍzy-* ‘to (up)load’.

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.²⁰⁸ But 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-. Yet, 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).²⁰⁹

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 uo2

ahono iśa Līpeya viṃñāyēti yatha eṣa iśa klasenadharmena mahi maharayaṣa uṭa liṣita taṣa nadha coritaga hoati

“Līpeya 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 view of the assumed derivation of Bactr. *λιζ- /liž/ or *ληζ- /lēž/ from the root *√darj ‘to attach, to fasten, to load, to sew’, one may wish to translate *uṭa liṣita* instead as ‘he loaded a camel for me’. This translation would 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/ < *dṛšta-, argued in Schoubben (2022b) to be the source of OIA *lārda- ‘load, cargo’, whence BSkt. *lardayati* ‘to load’. In other words, Niya Prakrit may indirectly preserve the present stem of the Bactrian outcome of *√darj ‘to load’, and Sanskrit the past stem.

47. vaṣḍhiga, festival on the mountain

Attestations of the base form

DIR.SG. *vaṣḍhiga*: CKD 622 o3; 634 o5; 637 o2

LOC.SG. *vaṣḍhikaṃmi*: CKD 637 o5

208 For this reason, I did not include *leš-* among the plausible etymologies in §3.2.2.

209 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 νοζδιγο /nəzdigə/ < *nazdiya-ka- ‘close, intimate, friend’ with βιζαγο (MBactr. βυζγ) /vižagə/ ‘sin’ < *bazdya-kā-.

Derivatives

ADJ. *vaṣḍhigaiṃ* ‘relating to the *vaṣḍhiga*’: CKD 140 uo5; 140 cr2

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 o2f.

yam ca atra masu ayamici tatra cavala samghalidavo 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).²¹⁰

(3.26) CKD 634 o4f.

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).

(3.27) CKD 637 o2–5

taṃ kalaṃ kāla Kirtēya iśa agata Caḍotaṃmi parvataṃmi vaṣḍhiga kṛta cojhbo Somjaka kalaṃmi taṃ kalaṃmi vyaga nikasta masu potgoṇēna parvataṃmi milima 1 khi 4 aṃṇa dirpira aṃna milima 2 khi 10 aṭa milima 1 khi 4 1 ... aṃṇa parvatade kala Kirtēya nivartita taṃ kalaṃmi Caḍotaṃmi vaṣḍhikaṃmi masu khi 4 3 nikhastā

“... 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’.²¹¹

Because of its co-occurring with *masu* ‘wine’, and *parvata* ‘mountain’, Burrow (LKD: 120 s.v.) advanced the hypothesis that *vaṣḍhiga* refers to “some

210 Later in the document, it is said that tax (*palīi*) should also be brought.

211 For the suffix *-iṃ* (shortened from *-ina*), see §6.4.1. In its second occurrence, *aṃna vaṣḍhigaiṃ* is contrasted with *aṃna kṛṣide* ‘corn from the field’; but unfortunately this does not tell us much about the semantics of *vaṣḍhiga*.

kind of regular festival held on the mountain, at which wine was consumed". As observed by Sims-Williams (2025b: 190f.), this hypothesis has gained in plausibility now that the Kushan Bactrian inscription DN1, located on the ridge of Mount Qarabayu (4320 m), has been interpreted as recording precisely such a festival.²¹² Since *vašdḥiga* 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.²¹³

The etymology of *vašdḥiga* has so far remained obscure. I would 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).²¹⁴ *βαγδιγο could have meant something like 'tribute', which would fit well with the idea that offerings to the gods were made during a *vašdḥiga*. Its morphological formation would be comparable to that of the Zoroastrian Middle Persian legal term *baxtīgih* 'distribution of the inheritance' (Macuch 1993: 694), an abstract in -īh < **-iya-θwa*- derived from **baxtig* ← *baxt* 'distributed' < **baxta*- + suffix -īg < **-iya-ka*-.²¹⁵

Phonologically, my etymology requires that the foreign cluster -γδ- /γd/ was borrowed as Niya -šdh-.²¹⁶ 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

212 See Halfmann *et al.* (2024: 33–45) and Baums (2024: 284f.). Note especially ι μολο χοαρδο 'he drank wine' in line 13.

213 Interestingly, CKD 622 and 634 mention that the *vašdḥiga* 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.).

214 Because gemination of -δ- /d/ to -δδ- /dd/ before -η- /ē/ and -ι- /ī/ only occurs in post-Kushan Bactrian (cf. SCBD: 60), I reconstruct the proposed source of Niya *vašdḥiga* as Bactr. *βαγδιγο and not as *βαγδδιγο. If it existed, the latter form would have been a homonym of Late Bactr. *βαγδδιγο 'Bactrian', which has been plausibly reconstructed by Sims-Williams (2016b: 279) as a later development of *βαχλιγο 'Bactrian' ← βαχλο 'Bactria'.

215 Cf. also MMP *baxtagih* 'opposition, division, conflict' and MParth. *baxtagift* 'oppositeness, split, conflict' < **baxta-k-iya-θwa*- (DMMP: 119).

216 The assumed rendering of Bactr. -ιγο /īgə/ as Niya -iga /īya/ is regular (cf. §4.3.11), and the variant *vašdhika** (attested through loc.sg. *vašdhikaṃmi*) can be accounted for as a hypercorrect spelling inspired by the OIA suffix -ika-.

by Gāndhārī phonotactics, was rendered with the best option at hand, i.e. the retroflex cluster *-ṣḍh- /zḍ^(h)/*.²¹⁷

If Niya *vaṣḍhiga* can indeed be traced back to Ir. **baxt-iya-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 **βtyk* (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 *-yt-* was first voiced before the whole cluster was rendered as *-ṣḍh- /zḍ^(h)/* in the same way as argued above for Bactrian. Overall, the hypothesis of a Bactrian loanword therefore seems the least costly option.

48. *ṽapga* ‘weaver’

Attestations of the base form

DIR.SG. *ṽapga*: CKD 174 oB2

Attestations as a PN

DIR.SG. *ṽapga*: CKD 797 uo5;²¹⁸ *ṽapga*: CKD 821 o2; GEN.SG. *ṽapgaasa*: CKD 797 uo3, uo5, cr2

The word *ṽapga* is used in parallel with *takṣana* ‘carpenter’ in CKD 174, suggesting that *ṽapga* also denotes a profession. It therefore seems conceivable that we are dealing with a loanword from Bactr. *αβγο** ‘weaver’ < **wāba-ka-*, the latter attested as the second member of the compound *πριγγοαβγο* ‘weaver of damask’ (BD II: 258).²¹⁹ The syncope which made **wāba-ka-* into *αβγο** is typically Bactrian, meaning that, if my etymology holds true, other Middle Iranian languages do not qualify as the source of *ṽapga*.²²⁰

217 For a more detailed treatment of this argument, see §4.3.27.

218 Read in uo5 *ṽapga na lamcaga kareṣi* ‘you, ṽapga, do not do rightly’ with Hasuiké (1996: 307) against Lin’s (1999: 230) *t(*e)na ṽapgana lamcaga kareṣi*. For *na* ‘not’ + *lamcaga* ‘right’ + *kare-* ‘to do’, cf. CKD 272 o10; 399 o2f; 538 cr3; 562 uo3.

219 Bactr. *πριγγο** ‘damask’ was also borrowed into Niya Prakrit; see §3.2.1 s.v. *prigha*.

220 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. *w’f* (DMSB²: 233).

In view of its etymology, Bactr. $\alpha\beta\gamma\omicron^*$ 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 §4.3.8.²²¹

49. *sujinakirta* ‘needlework, embroidery’

Attestations of the base form

DIR.SG. *sujinakirta*: CKD 318 uo5, cr1

The word *sujinakirta* occurs twice in a list of stolen textile products, which makes it semantically attractive to derive it from a cognate of NP *sōzankard* ‘needlework, embroidery’ < OIr. **saučanya-kṛta-*.²²²

According to Lüders (1936a: 31f.; also Bailey 1936: 578), Niya Prakrit borrowed *sujinakirta* from a pre-stage of Khotanese. This suggestion could work for the second element of the compound. However, it depends on the assumption that **-kṛta-* had developed only as far as **-kārda-* (or: **-gārda-*) and not yet into the historically attested *-gāḍa-* / *-yāḍa-* by the time Pre-Khotanese came into contact with Niya Prakrit (SGS: 110–112; Maggi 2022b: 154).²²³ A more serious problem lies in interpreting Niya *sujina-* as a loan from Khot. *sumjsañu-* / *saujsañā-* ‘needle’ (DKS: 427; 429): the Khotanese forms show no trace of an *i*-vowel, and their palatal *-ñ-* does not correspond well to the non-palatal *-n-* of the Niya form.²²⁴

In my view, *sujinakirta* is more plausibly a Bactrian loanword. The element *-kirta* can be explained straightforwardly from the attested Bactr. $\kappa\iota\rho\delta\omicron$ /kirdə/ ‘made’ < OIr. **kṛta-* (BD II: 223).²²⁵ In addition, Bactrian appears

221 See also §4.3.22 for the substitution of Bactr. $\omicron-$ /w/ with Niya $\upsilon-$ /w/.

222 Thus first Lüders (1936a: 31f.). Cf. also Bailey (1936: 578; 1966: 34f.; 1982: 16) and Burrow (LKD: 131 s.v.).

223 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). I do not know of good evidence to tell when **-rd-* < Plr. **-rt-* developed to Khot. *-ḍ-*.

224 Although not inconceivable, substituting Khot. *-js-* /dz/ as Niya *-j-* /ž/ would likewise be unparalleled.

225 As the second member of a compound and after preverbs, the κ /k/ of $\kappa\iota\rho\delta\omicron$ is voiced to $-\gamma-$ /g/ in the case of $\lambda\iota\sigma\tau\eta\gamma\iota\rho\delta\omicron$ ‘estate; ward, dependant’ < **dastay(ā)-kṛta-* and $\varphi\rho\omicron\gamma\iota\rho\delta\omicron$ ‘constructed’ < **fra-kṛta-*. Yet, this voicing process was probably not consistently applied in light of MBactr. $\beta\gamma\acute{z}g-qyrdg'nyg$ ~ GBactr. $\beta\iota\zeta\alpha\gamma\omicron\kappa\iota\rho\delta\omicron\gamma\alpha\nu\iota\gamma\omicron$ ‘wrong-doing, (guilty) of evil deeds’ < **bazzda-kā-* + **kṛta-kāna-ka-* (Sims-Williams 2009a: 262). There is thus no problem with assuming Niya *sujinakirta* to have been borrowed from a Bactrian compound ending in $\kappa\iota\rho\delta\omicron$ /kirdə/ rather than $-\gamma\iota\rho\delta\omicron$ /girdə/.

to be the only relevant Middle Iranian language that offers a straightforward explanation for the vowel *-i-* in Niya *suġinakirta*.²²⁶ As shown by ἀμιν- /āmin/ ‘to consider’ < *ā-manyā- (BD IV: 106), κινω /kinə/ ‘ditch’ < *kanyā-, and λρουμινω /lruhminə/ ‘enemy’ < *duš-manyu- (BD II: 223; 228f.), OIr. **-any-* regularly developed to Bactr. *-iv-* /in/. The expected outcome of OIr. **saučanya-* may therefore be reconstructed as Bactr. *σωσινω, which readily accounts for the *-i-* of Niya *suġinakirta*.

In line with my argument that GBactr. <σ> from OIr. *č stands for /tś/ in front of *-i-* /i/ (§2.2.4.2), I take *σωσινω to stand for /sōtśinə/. It would then follow that Bactr. *-σ-* /tś/ corresponds to Niya *-j-* /ž/ in *suġinakirta*. This substitution is understandable if *-σ-* /tś/ was first borrowed as Niya *-c-* (cf. §4.3.17), which could subsequently have lenited to the attested *-j-* /ž/ (cf. §2.1.2).

One difficulty remains: the *-ω-* /ō/ in *σωσινω does not match the *-u-* in *suġinakirta*, since *-ω-* /ō/ is normally borrowed as *-o-* (cf. §4.3.6).²²⁷ Several explanations could be considered, though none is entirely satisfactory. One possibility is that *o* and *u* were confused, as alternations between these two vowels are occasionally found in Kharoṣṭhī sources, though they are rare in Niya Prakrit (LKD: §2; §4). Another possibility is a folk-etymological contamination with Niya **suġi* ‘needle’, the expected outcome of Skt. *sūcī-*. However, *suġi* is not attested in Niya Prakrit, which weakens this explanation.

Thus far, the argumentation has been based on the assumption that the Bactrian word for ‘needle’ derived from OIr. **saučanya-*. Yet, two dialect forms in Pashto, i.e. Bangash *stana* ‘needle’ and Waṇeci *sanġān* ‘idem’, offer tentative evidence for an OIr. variant form **sūčanya-*, with the same vocalism as YAv. *sūkā-* ‘needle’.²²⁸ In the hypothetical case that the Bactrian word for ‘needle’ continued **sūčanya-* rather than **saučanya-*, it may be reconstructed as

226 Alanic probably also had an *-i-* in the word for ‘needle’ (cf. Oss. I. *sūġin*), but this is a geographically and historically unlikely donor language.

227 That the first *akṣara* of *suġinakirta* is *ṣ* *su* and not *ṣ* *so* is beyond doubt. Occasionally, Bactr. *-ω-* /ō/ < **-au-* is raised to *-o-* /ū/, as e.g. in σαγωνδο < σαγωνδο ‘as, like, etc.’ < *čiyāt-gauna- + -do < **-uti* or ανουγο /anūhgə/ < ανουγο /anōhgə/ ‘immortal’ < **anauša-ka-* (BD IV: 106). Since these raisings are an isolated feature in the historical grammar of Bactrian, it appears doubtful, however, whether one could assume *σωσινω to have been raised to *σσοσινω. Note nevertheless that raising of **-au-* to *-ū-* has also occurred in some modern Iranian languages, including the Iron dialect of Ossetic, where the word for ‘needle’ occurs as *sūġin* (cf. Abaev 1958–89 III: 164f.; Lubotsky 2001: 306; Cheung 2002: 17).

228 See Morgenstierne (EDP: 76), who reconstructs **sūčānī-*, and Cheung (2011: 175), who has **sučānyā-*.

*σοσινο /sūtšinə/. In that case, the -u- in Niya *sujinakirta* would be a faithful rendering of the corresponding vowel in Bactrian.

In summary, the comparison, first suggested by Lüders, between Niya *sujinakirta* and NP *sōzankard* ‘needlework, embroidery’ < *saučanya-kṛta is persuasive. However, the hypothesis that *sujinakirta* is a Khotanese loanword is difficult to maintain. Given the presence of -i- in *sujinakirta*, a Bactrian source is more plausible, and the relevant form can, with due caution, be reconstructed as *σωσινοκίρδο /sōtsinəkirdə/. The vowel -u- of *sujinakirta* remains problematic – unless the Bactrian source instead continued OIr. *sūčanya-kṛta- and can be reconstructed as *σοσινοκίρδο /sūtšinəkirdə/.

3.2.4 Tentative etymologies

50. *kilme* ‘family estate’

Attestations of the base form

DIR.SG. *kilme*: CKD 422 o4; 598 r3 (?); 795 uo2

ABL.SG. *kilmeyade*: CKD 358 o7; 817 uo4; 884 uo4; *kilmiyade*: CKD 358 o6

LOC.SG. *kilmeyammi*: CKD 256 uo2; 482 uo2; 859 co2; *kilmeyami*: CKD 817 uo3, uo5

Derivatives

ADJ. *kilmi* ‘concerning the family estate’: CKD 46 cr3

ADJ.DIR.SG. *kilmeci* ‘belonging to the family estate’: CKD 209 o2; 278 r6f.; 279 o2 (2×); 297 uo2; 331 uo2; 358 o7; 437 uo2, cr5; 474 uo2 (2×); 495 o3; 519 r2; 581 uo4; 585 uo4, uo5; 621 o2 (2×); 806 A1, A2, A3; 884 uo5 (2×); *kilmeciya*: CKD 381 o2; 393 o2; 532 uo2; 806 A2; ADJ.DIR.PL. *kilmeci*: CKD 632 o3; *kilmemci*: CKD 639 uo2; *kilmeciye*: CKD 152 uo6; 271 + 338 uo3 (2×), cr2; 279 o3; 307 o4; 468 cr1, cr2; 817 cr1; *kilmemciye*: CKD 713 o7; ADJ.GEN.PL. *kilmeciya*: CKD 16 uo2; 254 o3; 271 + 338 cr4; 374 o2; 468 uo2, uo3, cr1, cr2; 734 r2; 819 uo6; 848 3; *kilmiciyana*: CKD 261 r1; 358 o5; ADJ. *kilme[c]*: CKD 257 o4

Compounds

ADJ. *vegakilme* ‘outside (?) the family estate’: CKD 211 r7; 481 cr1; *yegakilme*: CKD 714 o5; *vegakilmi*: CKD 165 o7

DIR.SG. *kilmerakšana* ‘guard of the family estate’: CKD 808 uo3

LOC.SG. *Petaayanakilmeyammi* ‘family estate (located) in Peta village’: CKD 32 uo2f.

GEN.PL. *Yayekilmeciya* ‘belonging to the Yaye family estate’: CKD 431 uo2f. = 432 uo2

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*’²²⁹ would need to be interpreted within a feudal framework. In other words, *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 more to do with kinship groups. There are, for instance, indications for exogamous marriage practices between different *kilmes* / *ayanas* (§3.2.3 s.v. *muṣḍhaṣi*; §3.7.2 s.v. *mukāṣi*). 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.²³⁰ Otherwise, it would be difficult to account for a passus as (3.28), where it is said that land has been taken in Śakā’s *kilme*.

(3.28) CKD 482 uo2

Śakā garahati yatha edaṣa kilmeyaṃmi Molýina bhuma ladhaye

“Śakā complains that Molýina has received land in his estate (*kilmeyaṃmi*).” (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. *Petaayanakilmeyaṃmi* ‘in a family estate (located) in *Peta* village’ in CKD 32 uo2f.). One could thus interpret *ayana* as a small village consisting of different estates, possibly still linked to one another by tribal connections.

229 *kilmeci* is derived from *kilme* with the appurtenance suffix *-ci* (on which cf. §5.2.2). *kilmi* in CKD 46 cr3 is formed by adding the adj. suffix *-i* (§6.4.3) to *kilme*.

230 As I learn from the summary in Jiang (2020: 145f.), Duan & Tshelotar (2016: 43) have voiced similar objections against Padwa’s analysis.

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.²³¹ Yet, the two words are still not entirely synonymous, as becomes clear from (3.29).

(3.29) CKD 358 o7

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*.²³² *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

231 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 palyi* ‘village tax’ in CKD 713 o8. Ching (2013a: 73) already suspected *goṭha* to be an administrative unit and compared some technical usages of Khot. *bisā*- ‘house’. One can additionally draw a parallel with Bactr. *kaḍyo* ‘household, estate’, which is also used as an administrative unit from which taxes are paid (see doc. J).

232 Cf. e.g. TA *himavant šulyim kälymeyac* “towards the mountainous region of the Himavant” (A 77 b3).

to something like *κίλμο /kilmə/ because of the absence of an initial cluster κλ- in Bactrian.²³³ 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 *kālyme* and TB *kālymiye*, to large-scale territories, something which is difficult to reconcile with the semantics of Niya *kilme* (Banti 2000: 6).²³⁴

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. *γῑρλομηνο /γῑrlmēhə/, the expected outcome of a hypothetical Old Iranian compound **gr̥da-maiθa-* ‘dwelling of a household’.²³⁵ 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. *bimexa-* ‘lodger’ or ‘servant’ < **wi-maiθa-* (Dragoni 2020: 219f.; Ogiwara 2025: 268f.).²³⁶

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’. Firstly, 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 καθγοσστανο, 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 *gr̥havaṣa*; *grihavaṣa*) in the Niya

233 κλ- would have to come from a phonotactically impossible Old Iranian cluster **kd-*. The cluster -λμ- /lm/ is allowed in Bactrian, as proved by νῑβαλμο ‘seat’ < **ni-šadma(n)-*.

234 Cf. e.g. τὰ πρὸς μεσημβρίαν κλίματα τῆς Μηδίας ‘the southern regions of Media’ in Polybius 5.44.6, with Montanari (2015: 1139).

235 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. γῑρλ- /γῑrl/ ‘to call, to name’ < **gr̥da-* (BD II: 207); the change of intervocalic *-θ- to Bactr. -v- /h/ is evidenced by, amongst others, παυαγγο /pahangə/ ‘plate’ < **paθana-ka-* ‘broad’ (Sims-Williams 2013a: 194). On the evidence for OIr. **gr̥da-* ‘house(hold)’, see now Bernard (2025: 115f.).

236 Cf. also Khot. *parmihā-* ‘village’ < **pari-miθā-*, with zero grade of the root.

documents too, where it consistently pairs with *goṭha* ‘farm, household’ (cf. CKD 47; 62; 292; 326 (7×)), similar to how *kilme* and *goṭha* are semantically connected (cf. supra).

The other issue with my etymology is that it presupposes two phonetic substitutions which, though conceivable, are not paralleled elsewhere.²³⁷ First, one needs to assume that the foreign cluster /rlm/ in *γῑρλομῑου /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.²³⁸

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).²³⁹ As there is, however, insufficient evidence to determine which type

237 Otherwise, the phonological correspondences work fine. Given that intervocalic *h* is liable to be lost in Niya Prakrit (§4.3.23), a derivation from *γῑρλομῑου /γῑrlmēhə/ would nicely account for the final -e in Niya *kilme*.

238 Thomas’ (1935: 63; 1944: 61) proposal to see in *vega* an inherited word out of Skt. *vega-* ‘stream, flood’ is semantically implausible.

239 Variation between *v* /v/ and *y* /w/ occurs in inherited words too (cf. §4.3.22), and the substitution of Bactrian intervocalic -y- /g/ with Niya -g- /y/ 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- /y/ after the word was borrowed, Sogd. *βyk* could also be the source of Niya *vega-*.

of legal context could lie behind an expression ‘outside the family estate’,²⁴⁰ 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 co5

Since the ins.sg. *taravarena* in CKD 585 is used parallel to the ins.sg. *śastrena* ‘with a knife’, the underlying noun *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 appears with the meaning ‘one-edged sword’ as *taravāri-* (e.g. *Harṣacarita*), fem. *taravālikā-* (in lexical sources), and *talavāraṇa-* (*Kirātārjunīya* 14.29) (cf. MW: 438; 440).

Mayrhofer (KEWA: 482; EWAia III: 237) argued that this is a *Kulturwort* without a recoverable etymology. One of his reasons for thinking so is that two Nuristani cognates and one NIA form cannot easily be reconciled with the Sanskrit prototype: Kati *tərwōč* (aberrant č), Prasun *trāž* (aberrant ž),²⁴¹ and Odia *tarāri* (aberrant r). Since, however, the vast majority of NIA cognates can still be regularly derived from **taravārV-* (see CDIAL I: 324 no. 5706), it would be desirable for a specialist in these languages to reassess whether the Kati, Prasun, and Odia forms might not be secondary developments. Until such work is carried out, the alternative proposal suggested below must remain tentative.

Yet, if it is true that *kilme* is a Bactrian loanword, it would seem better to derive the element *vega-* from the same source.

240 In light of the exogamous marriage practices evidenced in the Niya documents (cf. §3.2.3 s.v. *muṣḍhaṣi*; §3.7.2 s.v. *mukaṣi*), one may conjecture that women who married into another family and were therefore living outside their original family estate, but who remained legally tied to their natal family because the legal requirements for marriage had not been fully met, were still required to contribute to the taxes owed by their natal family.

241 *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 *təraž*.

Given that several Indo-Aryan terms for military equipment are Iranian loanwords (Burrow 1973³: 389; Ollett 2024: 96),²⁴² and that words for ‘sword’ often derive from verbs meaning ‘to cut’ (Buck 1949: 1392f.),²⁴³ I cautiously propose that Niya *taravara* and its cognates may be 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 commonly found in such compounds (cf. BD II: 202 for Bactr. -βαρο in this function).

If this etymology is on the right track, the change from *-*rd*- to -*rl*- would strongly suggest Bactrian as the donor language. Other loanwords confirm the required correspondence between Bactrian intervocalic -ρλ- /rl/ and Niya -*r*- (see §4.3.25), and the foreignness of the cluster -ρλ- /rl/ may have motivated the observed alternation between -*l*- and -*r*- in the Sanskrit reflexes (*taravāri*-; *taravālikā*-; *talavāraṇa*-) and NIA forms such as Hindi *tarwār* / *talwār*.²⁴⁴

The spread of a Bactrian term for ‘sword’ into Indo-Aryan languages outside Gāndhārī could plausibly be connected with the Kushan military expansion across northern India (see e.g. Rab. 4–7 and cf. §7.2).²⁴⁵

52. Remena, toponym

Attestations of the base form

DIR.SG. *Remena*: CKD 518 ur1

LOC.SG. *Remenaṃmi*: CKD 214 o4; 251 o3; 376 o1

§3.2.3 s.v. *aco* advances the hypothesis that the place name *Remena* is a loan from a Bactrian compound *ρη(ο)μηνανο /rē(w)mēhanə/ < **raiwa-maiθana*-, literally ‘rich dwelling’. Support for this idea comes from the parallel formation of the attested Bactrian toponym ρη(ο)γανο and the use of **-maiθana*- as the second element of toponyms in other Iranian languages. As etymologies of toponyms are tricky to prove, the proposal must still be regarded as tentative.

242 More generally, words denoting “sharp cutting implements” are cross-linguistically borrowed quite often (see e.g. Carling 2020: 129–131; 135).

243 Cf. e.g. YAv. *karəta*- ‘knife, dagger’ from Plr. *√*kart* ‘to cut’ (EDIV: 243f.).

244 Liquid dissimilation could have been a contributing factor.

245 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. *laṭhana* ‘plain, open land (?)’

Attestations of the base form

LOC.SG. *laṭhanami*: CKD 392 o4

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*).²⁴⁶ 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-*.²⁴⁷

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 *λαχρτα* ‘desert’ in Ayrtaṃ 4 (Sims-Williams 2025d: 329).²⁴⁸ In addition, a later form *λαχρτο* /*laxštə*/ may be attested in h8, line 11, but unfortunately in a badly understandable context (Sims-Williams 2004b: 331).

Bactr. *λαχρτα* (later *λαχρτο*) can, however, not be the direct source of Niya *laṭhana*, as this would leave the sequence *-ana* unaccounted for.²⁴⁹ One way out of this conundrum would be to interpret *laṭhana* as a loan from Bactr. **λαχρτανο* /*laxštānə*/ < **daxštānə-*, a form safely reconstructable based on the attested *λαχρτανιγο* ‘cremation place’ (BD II: 226 *contra* Humbach 2002: 417). Being a derivative from PIr. **√daj* ‘to burn’, **λαχρτανο* is, however, expected to mean ‘burning’, a translation which does not really suit the attestation of Niya *laṭhana*. Therefore, it may be preferable to assume that *laṭhana* is borrowed from Bactr. **λαχρτανο* /*laxštānə*/, possibly an adjectival

246 It remains unclear to what extent *laṭhaya*, an adjective used in CKD 298 o1 to define *kriṣivatra* ‘cultivation’, is connected.

247 It is unknown whether 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.

248 Sims-Williams (2025d: 328f.) reads and translates Ayrtaṃ 4 as follows: []α[]δῖ λαχρτα σταδο αβαβσα τιδι βοδβαα δι ι••νο κανδο α[“... was (?) a desert, without water, then the *shudva* dug the ...”. The apparent preservation of **-xšt-* in Bactrian is unusual, as this cluster is by default simplified to *-xt-* /*xt-*, e.g. *σπαχτο* /*spaxta*/ ‘service’ < **spaxšti-*.

249 Bactr. *λαχρτα* (later *λαχρτο*) could still be the source form of Khovar *lašt* ‘flat; flat land, plateau’ (cf. Kreidl fthc. b).

derivative in -avo < *-āna- from λαχβτα (later λαχβτο) ‘desert, plain’ < *daxštā-. In case *λαχβταvo was substantivised – as adjectives in -avo < *-āna- often are (BD II: 193) – laṭhana could still mean something like ‘open land’ or ‘plain’.²⁵⁰

Phonologically, Bactr. *λαχβταvo /laxštānə/ would be a straightforward source of Niya laṭhana. The only assumption needed is that the Bactrian cluster -χβτ- /xšt/ was simplified to Niya -ṭh- /ṣṭ^(h)/ during the borrowing process.

To sum up, Niya laṭhana could be a loan from Bactr. *λαχβταvo /laxštānə/, a derivative in -avo from λαχβτα (later λαχβτο) ‘plain, open land’ < *daxštā-. As, however, the semantics attributed to laṭhana are conjectural and the reconstruction and morphological analysis of *λαχβταvo uncertain, this etymology can only be tentative at the present stage of research.

54. lastuga, textile product

Attestations of the base form

DIR.SG. *lastuga*: CKD 161 cr6; 184 r2; 288 cr4; 566 o2; 585 cr5; 728 rB1; *lastuka*: CKD 416 o3

The word *lastuga* refers to a textile product, as is clear from CKD 566 o2, 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 rB1: *hasta* 4 3); that it was not of great value (CKD 184 r2: *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

250 As a third option, one could speculate that *laṭhana* was borrowed from an obl.pl. in -avo < *-ānām of λαχβτα (later λαχβτο) ‘desert, plain’. Yet, if so, *laṭhana* would be the only Bactrian loanword in Niya Prakrit where the obl.pl. was borrowed.

him to assume that *lastuga* is, like NP *dastār*, derived from OIr. **dasta-* ‘hand’, but “with a different suffix”.²⁵¹

Although it is certainly conceivable that a textile term is based on a word meaning ‘hand’,²⁵² 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’, and χολιστο ‘with one’s own hands > acting personally’ (BD II: 227; 281). In other words, the **a* in OIr. **dasta-* developed to Bactr. *-i-* /*i-*/.²⁵³

Burrow’s etymology consequently requires that the *-i-* /*i-*/ in Bactr. λιστο /*listə*/ was substituted with Niya *-a-*.²⁵⁴ Such a substitution is not impossible if one posits a scenario whereby Bactr. *-i-* /*i-*/ was phonetically realised as a central vowel (e.g. [i] 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

251 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 *lystk*, transliterated by him as “*rastak, ristak*” and wrongly interpreted as a textile, has been cogently refuted by MacKenzie (1969: 400) and Schwartz (1974: 400).

252 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’.

253 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 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 ζιπτο /žištə/ ‘requested’ < **jasta-*, **-a-* was raised to *-i-* /*i-*/ because of the preceding palatal (BD II: 212). Since OIr. **dasta-* goes back to Plr. **fasta-*, one could also consider that the raising is due to the preceding affricate **f*. This is chronologically difficult, however, as it places the vowel raising – a sound change peculiar to Bactrian – before the Common Iranian dissimilation of the affricate **f-* to **d-* in the word for ‘hand’ (Klingenschmitt 2000: 200f. fn. 30; the same dissimilation also happened in Nuristani, see Halfmann 2025b: 80f.). N. Sims-Williams (p.c.) cautiously suggests that the *-i-* of λιστο was generalised from the loc.sg. **dastayā*, which will have been in common use and may survive as the first element of λιστηγυρδο ‘estate; ward, dependant’ < **dastay(ā)-krta-* (cf. further the double palatalisation in the Khotanese loc.sg. *dīšta*).

254 I transcribe λιστο as /*listə*/ 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.

Bactr. *λιρτο /lirtə/ ‘load, cargo’ < *dṛšta- was borrowed into OIA as *lārda- ‘idem’, whence BSkT. *lardayati* ‘to load’ (Schoubben 2022b, see especially pp. 350f.).²⁵⁵ However, Bactr. -i- is otherwise always rendered with Niya -i- (see §4.2.2),²⁵⁶ 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 evidence supporting an Iranian suffix *-ukā-.²⁵⁷ A morphologically more attractive reconstruction would be OIr. *dasta-ka- as in MP *dastag* ‘bunch, bundle, group’ (CPD: 25) and the loanwords Arm. *dastak* ‘palm of the hand’ (Olsen 1999: 876) and Syriac *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 /lištəgə/ < *dasta-ka- accordingly requires one to posit a rendering of Bactr. -ο- /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 /lištəgə/ < *dasta-ka- is merely tentative.

255 Cf. further TB (→ TA) *pärmanik* /pərmánɨk/ ‘hope’ ← Bactr. φρομυγγο < **framanyu-ka-*, where Bactr. -i- /i/ is substituted with an accented schwa in Tocharian.

256 In case Niya *avališka* means ‘swaddle’ and is a loan from Bactr. *αβαλισκο /əvališkə/ < **upa-dṛšta-ka-* or *αβολισκο /avəliškə/ < **abi-dṛšta-ka-* (§3.2.3 s.v.), this would also be true of the sequence -λι- /li/.

257 Cf. Maggi (2016: 65); the hypocoristic suffix -uka- potentially seen in Old Iranian anthroponyms (Iranica: 573) is probably irrelevant to the morphological analysis of *lastuga*.

55. *ṣvaṭhaṃgha* / *ṣoṭhaṃga* ‘finance officer’

Attestations of the base form²⁵⁸

DIR.SG. *ṣvaṭhaṃgha*: CKD 11 ur1; 33 uo2; 713 o1; *ṣoṭhaṃga*: CKD 7 uo2, ur1; 12 uo2, ur1; 14 co1, uo1; 19 uo1; 35 o1; 37 uo2, ur1; 38 o1; 54 r1; 64 o2; 70 co1, uo1; 71 co1, uo1; 91 o1; 123 o3; 134 o1; 142 o1, r2; 155 o1; 156 ur1; 158 o1; 165 o5; 182 o1, r1; 192 o1; 206 uo3; 208 o1f; 230 o1; 265 co1, uo1; 310 urB4; 341 o3; 344 o1; 358 o8f; 400 o1; 403 co1, uo1; 413 o1; 422 o7; 427 r1; 433 co1, uo1; 439 co1, uo1; 461 o2; 469 o1; 474 co1, uo1; 484 co1, uo1; 494 co1, uo2; 497 o1; 502 o1; 503 o1; 504 o1; 509 co1, uo1; 520 uo2; 521 o1; 524 uo2 (2×); 548 o1; 555 o1; 567 uo2 (2×), uo4, ur1; 582 co2; 592 cr1; 598 r1; 636 co1, uo1; 638 o1; 641 o1; 657 o1; 686 oB6; 716 o1; 721 o1; 723 o1; 734 o1; 744 o1; 745 o1; 795 co5; 796 uo1; 808 uo9; 821 o1; 859 co1; 887 1; 888 co1, uo1; 899 uo2; *ṣoṭhaṃgha*: CKD 19 co1; 21 uo1; 22 o1; 34 o1; 83 co1, uo1; 85 oF2; 86 o2, r1; 90 o3; 97 o2; 107 o2; 110 oB3; 135 co1, uo1; 140 co1, uo2; 143 uo1, r1; 152 co1, uo1; 157 o1; 159 oA1; 162 co1, uo1; 165 o1; 203 o3; 206 co1, uo2; 220 o1; 243 o1; 327 o7; 330 r1; 340 o1; 453 o2; 454 r2; 498 o2; 507 o3; 541 o3 = 541 r2; 547 oC2; 552 r1; 569 cr1; 572 uo3f; 575 uo4f; 576 cr1, cr2; 577 uo7; 580 co2, uo1f., uo3, uo5, uo7; 582 uo2, uo3; 586 uo5; 587 uo4, uo7, cr3; 589 uo7; 593 cr1; 604 o3; 648 o6; 767 uo2; 769 uo1; 771 uo3; 787 ur1; 816 A1, A2; 817 cr1f., cr3; 839 uo3; 897 o1; *ṣoṭhaga*: CKD 422 o10

GEN.SG. *ṣoṭhaṃghaṣa*: CKD 656 uo5

DIR.PL. *ṣoṭhaṃga*: CKD 272 o5

GEN.PL. *ṣoṭhaṃgana*: CKD 198 o3; 567 cr1

Compounds

ABL.SG. *ṣoṭhaṃgadharma* ‘the office of a finance officer’: CKD 567 uo4

The official called *ṣvaṭhaṃgha* / *ṣoṭhaṃga*²⁵⁹ 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*).

²⁵⁸ Some comments on the list of attestations. For some documents (CKD 35 o1; 265 co1; 400 o1; 887 1; 897 o1), the available editions have *ṣoṭhaṃ(h)a*. Yet, in all cases where I could check the reading, the expected *ṣoṭhaṃ(h)a* is visible on the images, so I assume for convenience that everywhere 7 *ṭha* and not † *tha* must be read. In addition, I assume that Boyer *et al.*’s (KD: 48) reading *ṣoṭhaṃgha* in CKD 123 o3 is a typo for *ṣoṭhaṃgha* with an initial retroflex. Finally, in CKD 821 o1, read perhaps *ṣoṭhaṃga* instead of *ṣoṭhaga*.

²⁵⁹ -*ṭh-* stands for /ṣṭ/, cf. §2.1.6.

Niya *ṣvaṭhaṃgha* / *ṣoṭhaṃga* has a cognate in TA *ṣoṣṭānk**.²⁶⁰ This Tocharian word is attested through its nom.pl. *ṣoṣṭānkāñ* in the syntagm *lāñc āmāsāñ ṣoṣṭānkāñ* “kings, ministers, and finance officers” (A 222 a2). It does not occur in administrative documents.

More recently, it has been argued that also the Bactrian title $\sigma\omega\tau\alpha\gamma\gamma\omicron$ is connected to the words under discussion (BD II: 266; Hitch 2009: 18). I doubt the correctness of this argument. The dis legomenon $\sigma\omega\tau\alpha\gamma\gamma\omicron$ only occurs in contexts that do not allow us 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 $\sigma\omega\tau\alpha\gamma\gamma\omicron$ 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 *-*št-*, e.g. in $\alpha\tau\alpha\omicron$ /atā/ ‘eight’ < **aštā* / **aštau*, but this sound change had already been completed by the time of the earliest Bactrian inscriptions.²⁶¹ If one wants to connect *ṣvaṭhaṃgha* / *ṣoṭhaṃga* to $\sigma\omega\tau\alpha\gamma\gamma\omicron$, one thus either has to assume a very early borrowing or a dialect variant with - $\beta\tau$ - /ṣṭ/ preserved. As neither option is particularly plausible, I prefer to leave Bactr. $\sigma\omega\tau\alpha\gamma\gamma\omicron$ 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 a financial rather than a military character (cf. supra). In addition, the phonological correspondence is weak.²⁶²

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* + * $\sqrt{waxš}$ 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

260 See LKD (ix; 128), Bailey (1937a: 905 with fn. 3; 1947: 149; 1949a: 124), and DTTA (497f.).

261 Cf. e.g. Sims-Williams (1985) on the evidence from the Surkh Kotal inscription.

262 The dental sibilant in Tibetan does not correspond to the retroflex in Niya, and there is no reason why Tib. -*ṭh-* would be substituted with Niya -*ṭh-* /ṣṭ/.

hoc sound changes that cannot be ascribed to any known Middle Iranian language: **fra-waxš-tana-ka-* > **frōxštanaka-* > **šōštanaka-* > **šōštanka-*.²⁶³

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-* / *-ṣṭh-*.

Pinault (*apud* Carling 2005: 57) traced *ṣvaṭhaṃgha* / *ṣoṭhaṃga* back to a Chinese combination *shōu cáng* 收藏 ‘receive, accept, gather, harvest’ + ‘conceal, store’. Semantically, this etymology is attractive, but Pinault’s idea nevertheless suffers from some drawbacks. First, *shōu cáng* 收藏 is normally used as a verb instead of as an official title (*Hànyǔ dà cídiǎn* s.v. 收藏). Secondly, there seems to be no attestation of *shōu cáng* 收藏 in the contemporary Chinese documents from the Tarim Basin.²⁶⁴ Finally, Pinault’s proposal is phonologically not self-evident. In Late Han Chinese, *shōu cáng* 收藏 would have been pronounced as *śu dzāṅ* (Schuessler 2007: 176; 469), which is not easily reconciled with either *ṣvaṭhaṃgha* or *ṣoṭhaṃga*, as it would be quite unexpected had Chin. *-dz-* been rendered as /*ṣṭh-*/ in Niya Prakrit and Tocharian.²⁶⁵ Therefore, also this etymology is not fully convincing.

Most recently, Pinault (in DTTA: 497f.) has proposed to interpret Niya *ṣvaṭhaṃgha* / *ṣoṭhaṃga* and TA *ṣoṣṭaṅk** as a hybrid compound with a 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’, LHChin. *śā* (Schuessler 2007: 471), or Chin. *xiě* 寫 ‘depict, write’, LHChin. *siā^B* (Schuessler 2007: 537).²⁶⁶ 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 the *Kauṭīliya Arthaśāstra* (DTTA:

263 The relative chronology assumed here is *exempli gratia*.

264 Chavannes (1913); Conrady (1920); Maspero (1953); Hou & Yang (1999); Trombert (2000). I thank Meng Xiaoqiang (Leiden) and Athanaric Huard (Munich) for their help with and advice on the Chinese evidence.

265 Observe also the different treatment of LHChin. *u* shown by Niya *jīṭuṃgha* ‘palace attendant’ ← Chin. *shì zhōng* 侍中, LHChin. *dža^c tuṅ* (p. 16, fn. 30). In this word, LHChin. *u* is rendered as Niya *u* and not as *va* or *o*, as is assumed in Pinault’s etymology of *ṣvaṭhaṃgha* / *ṣoṭhaṃga*.

266 Phonologically, the first of these options seems preferable, though it would still be peculiar that the palatal **ś-* in Late Han Chinese would be borrowed with a retroflex *ṣ-* in Niya Prakrit (and Tocharian).

497, referencing MW: 1263; Kangle 1965: 195–198).²⁶⁷ 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 have been written with 𑖦 *ṣṭha* and not with 𑖦 *ṭha* /ṣṭ/ (cf. Niya *vaṭṭhayaḡa* ‘attendant’ ~ BSkt. *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 -iḡa > -iya > -i (LKD: §75).²⁶⁸

Previous etymologies commonly neglect the alternative form *ṣvaṭṭhamḡa*. Yet, even though it is attested much less frequently than *ṣoṭṭhamḡa*, *ṣvaṭṭhamḡa* still deserves due attention as a development of *ṣvaṭṭhamḡa* > *ṣoṭṭhamḡa* is more easily motivated than the other way around and paralleled by *Aṃḡvaga* (and variants) > *Aṃḡoka* (*Aṃḡoka*) ‘name of a king’ (LKD: §7). Therefore, I take *ṣvaṭṭhamḡa* to be the more original form.

In what follows, I hope to make it plausible that *ṣvaṭṭhamḡa* represents a borrowing from an as yet unattested Bactrian title *αζβαρσταγγο /əzvarstāḡə/ < *uz-bara-stāna-ka- < *uz-bara-stān-āna-ka-, literally ‘the person in charge of the place (office) tax products are stored’.²⁶⁹ 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 phonological substitutions that have to be assumed to derive *ṣvaṭṭhamḡa* / *ṣoṭṭhamḡa* out of *αζβαρσταγγο /əzvarstāḡə/.

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 PIr. *uz + *√bar (EDIV: 6–10), a combination of preverb and root continued in Bactrian as αζβαρ- /əzvar- ‘to bring forth, produce, disburse’ (BD II: 188; BD IV: 104).²⁷⁰ 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).²⁷¹ αζγαμο is derived from

267 For this official’s involvement with taxes, cf. *gopasthānikasthāneṣu pradeṣṭārāḡa kāryakaraṇaṃ balipagrahaṃ ca kuryuḡ* ‘In the offices of the Revenue Officers and County Supervisors, Magistrates should carry out their duties and the collection of tributes.’ (*Kauṭīliya Arthaśāstra* 2.35.7; Olivelle 2013: 174).

268 This point is also made in Halfmann (2024: 200 fn. 18).

269 In view of the syncope of *-āna-ka- to -αγγο /āḡə/, the etymology suggested here is only possible with Bactrian as the donor language.

270 Variant spellings αζαβαρ-; αζοβαρ-; later εζβαρ-.

271 See also doc. **am**, which is a list of such disbursements.

OIr. **uz-gāma-*, which literally means ‘coming out’ (cf. MParth. *izyām* ‘exit, passing away’, Sogd. *zy’m* ‘end’), but which 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.²⁷²

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).²⁷³ 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).

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* /kadəstāṅgə/ (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 **kata-ka-stāna-ka-* < **kata-ka-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 p. 89, fn. 70).

272 Parth. **wzbry* was, in the meaning ‘vineyard’, eventually borrowed into Georgian as *zvari* (Bielmeier 2008).

273 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 *βαυροστανο* /šahr(ə)stānə/ ‘capital city’ < **xšaθra-stāna-* (h5, line 5; Sims-Williams 2006: 112).

If I am right that *ṣvaṭhaṃgha* / *ṣoṭhaṃga* is a loanword from *αῤβαρσταγγο /əzvarstāṅgə/, two phonological substitutions need to have taken place. First, one has to assume that Niya ṣv- (possibly /zv/) corresponds to Bactr. αῤβ- /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,²⁷⁴ and clusters of pre-consonantal *r* and dentals often result in a retroflex in Gāndhārī, as in MIA in general (cf. von Hinüber 2001²: §256).²⁷⁵ 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. **haprsā-* 'juniper' (cf. YAv. *hapərəsī-*).²⁷⁶ He assumes (2022a: 6f.) that *-rs- is rendered as Gāndh. -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 *ṣoṣṭānk** would not be accounted for.

In sum, a so far unattested Bactrian title *αῤβαρσταγγο /əzvarstāṅgə/ < **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 *ṣoṣṭānk** by speakers of Tocharian A. Semantically, this proposal would seem superior

274 A sequence <rst> is twice attested in Central Asian Gāndhārī, but once in a foreign PN, i.e. *Tsagirsta* (CKD 419 cr2), 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.

275 A Niya example is *parivaṭ-* /parivaṭṭ/ 'to exchange' < *parivart-*.

276 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 Gāndh. **havuṣa* → Skt. *hapuṣā-* (*habuṣā-*; *havuṣā-*) can be identified more precisely as (Early) Kushan Bactr. **vaβopσα* /havursā/ < **haprsā-* (cf. λογδα /luydā/ < nom.sg. **duxtā*).

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 <šv>.

3.3 Loans 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 whilst 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.

3.3.1 Secure etymologies

56. *ajhate* ‘free, noble’

Attestations of the base form

DIR.PL. *ajhate*: CKD 272 o10; 588 uo6; 889 cr3; *ajhade*: CKD 120 o2, r2; 507 r1; 593 uo8;²⁷⁷ *ajhati*: CKD 576 cr1; *asade*: CKD 436 cr2

GEN.PL. *ajhateyana*: CKD 242 oA1

Derivatives

ADV. *ajhatu*: CKD 152 uo5

Burrow (1934: 509; LKD: 73 s.v.) convincingly argued *ajhate* to be a loanword from a Middle Iranian derivative of OIr. **āzāta*- ‘noble, free’.²⁷⁸ 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 **z’t’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 (3.30).

277 The form *ajhade* is also attested in the unpublished loan contract in Bajaur fragment 15 (CKM 278).

278 For the semantics of this Iranian word, see de Blois (1985) and Colditz (2000: 53–107). For cognate forms in the Nuristani languages, see Halfmann (2025b: 111f.); it is not clear whether the Nuristani forms are inherited or later loanwords from Iranian.

(3.30) CKD 152 uo4f.

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)

Assuming 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 co2; 9 uo3; 386 o2). It would therefore seem counter-intuitive not to translate *ajhatu oḍ-* as ‘to let free’, a translation which fits the context of (3.30) 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 phraseology. Aram. *ʾzt šbq*, a calque of OP **āzātām hṛd-*, MP *āzād hil-*, and Bactr. αζαδο υρζ- allow for the reconstruction of an Old Iranian collocation **āzātām + *√harj* ‘to let free’.²⁷⁹ If my argument that the verb *oḍ-* is derived from Bactr. *ωυρζ- < **awa-hṛza-* is correct (for which see §3.2.3 s.v.), Niya Prakrit would preserve an indirect witness to the same Iranian collocation.²⁸⁰

57. *spāṣa* ‘watching, guarding’

Attestations of the base form

DIR.SG. *spāṣa*: CKD 123 o2; 133 o3; 272 o2;²⁸¹ 283 o2; 291 o2; 329 o2; 340 o2; 341 o2; 349 o2; 351 o2, o5; 357 o2; 358 o2; 362 o2; 368 o2; 379 o2; 387 o2; 541 o6 = 541 r6; 578 ur3

Compounds

DIR.SG. *spāṣavamṇa* ‘guard, watchman’: CKD 178 o2; 518 uo2, uo3; *spāṣavamṇaga* (< **spāsa-pāna-ka-*): CKD 507 o2; 515 uo4; 541 o6 = 541 r5; *spāṣavamṇi*: CKD 84 cr5; *spāṣavamṇe*: CKD 126 o3; DIR.PL. *spāṣavamṇe*: CKD 88 r2; *spāṣavamṇe*: CKD 119 uo6; *spāṣavamṇeya*: CKD 522 r1; *svaṣavamṇiye*: CKD 471 r2; GEN.PL. *spāṣa-*

279 For Aram. *ʾzt šbq*, see Benveniste (1954: 299) and Gershevitch (1954: 126 = 1985: 164), and on MP *āzād hil-*, compare Colditz (2000: 82–86). The Bactrian syntagm is attested in documents F8~F7', F16~F14'f, and P17'.

280 The required change of **-am* to **-u* would also fit with a Bactrian source, as we now have direct evidence for this sound change in the Bactrian texts in (Issyk-)Kushan script (Sims-Williams 2025b: 210).

281 Read *spāṣa* in this document and not *spāsa* as per Boyer *et al.* (1920–29: 102).

vaṇṇaṃṇa: CKD 71 uo4, cr1 (2×); *spāṣavaṇṇana*: CKD 297 cr2; *spāṣavaniyana*: CKD 471 r3; Adj. *spāṣavaṇṇi* ‘of the watchman’: CKD 520 uo2, uo3, ur1

The meaning and etymology of *spāṣa* and the compound *spāṣavaṇṇa* have been elucidated by Thomas (1934a: 44f. fn. 7) and Burrow (1934: 512f.; LKD: 132 s.v.; *pace* Lévi *apud* Bloch 1937: 52). While *spāṣavaṇṇa* ‘guard, watchman’ refers to the persons responsible for watching after the outer borders of the kingdom, the base form *spāṣa* refers to the act of ‘watching, guarding’ itself. Etymologically, *spāṣa* is probably a loan from a descendant of OIr. **spāsa-*, a noun made from the PIr. verbal root **√spać* ‘to see, to watch > to attend to, to serve’ (EDIV: 353f.). The compound *spāṣavaṇṇa* can be traced back to OIr. **spāsa-pāna-* ‘the one in charge of watching’.

The initial cluster *sp-*, 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 *sp* in inherited words such as *paros̥pāra* ‘one another’ < *paraspara-*.²⁸² The word-internal voiced sibilant -s- /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. *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 shift 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 *spāṣa*, as it is 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, for, as Burrow (1934a: 513) already remarked, a meaning such as ‘duty’ or ‘service’ would suit well in the formulaic phrase *avi spāṣa jividaparicagena anada rakṣidavya* ‘also your duty is to be kept even at the expense of your life’.²⁸³

282 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.

283 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).

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 *spāšavaṃna* would be reconstructable as **σπασοβανο* /spāsəvānə/.²⁸⁴

58. *harga* ‘dues, tax’

Attestations of the base form

DIR.SG. *harga*: CKD 141 o1; 206 uo7; 285 o4; 295 o2; 677 uo4; 696 o6

Although *harga* is only rarely attested, it is not in serious doubt that this word refers to a kind of tax. Its relationship to *palýi*, 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.).²⁸⁵ 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 *𐬔𐬀𐬭𐬀* /hargə/ (BD II: 272; BD IV: 127).²⁸⁶ This scenario would probably work best if, contrary to what has been claimed by Schwartz (2008: 144), *𐬔𐬀𐬭𐬀* is not “borrowed from Sasanian MPers. economic terminology”, but a word already used in Kushan times (despite there being no attestation from this period). Otherwise, it might be chronologically difficult for *𐬔𐬀𐬭𐬀* to still have been borrowed into Niya Prakrit (cf. §4.2.1).

Schwartz’s main argument to regard *𐬔𐬀𐬭𐬀* 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

284 Currently, two other Bactrian compounds in *-βανο* < **-pāna-* are known, i.e. *𐬔𐬀𐬭𐬀* ‘shepherd’ < **fšu-pāna-* (BD II: 279) and *𐬀𐬔𐬀𐬭𐬀* ‘robber’ < **rāθa-pāna-* → *𐬀𐬔𐬀𐬭𐬀* ‘robbery’ (BD II: 259). See furthermore §3.2.1 s.v. *stora*, where I argue that Niya *stovana* is a loan from Bactr. **στωροβανο* ‘groom’ < **staura-pāna-*.

285 For more forms, see Schwartz (2007: 26; 2008: 143f.).

286 Note in passing the resemblance between the Bactrian syntagm *𐬔𐬀𐬭𐬀 𐬔𐬀𐬭𐬀* ‘dues of the lord’ (doc. **Nn**) and Niya *rayaka harga* ‘dues from the king’ (CKD 696 o5f.; cf. perhaps also *raja harga* in CKD 285 o4).

disappear in Bactrian (SFBG: 39), there are also native words where it generally stays, e.g. in $\nu\text{p}\zeta\text{-}$ /hirz/ ‘to let go’ < **hrza-*.

Therefore, I am more inclined to agree with Sims-Williams (2002: 227), according to whom $\nu\text{ap}\gamma\text{o}$ 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*.

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.²⁸⁷ 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

59. *ṭa* ‘flour’

Attestations of the base form

DIR.SG. *ṭa*: CKD 358 o6; 637 o3; 797 cr1;²⁸⁸ 854 4 (?)

Niya *ṭa* /*ṭṭa*/²⁸⁹ ‘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 I: 60 no. 1338). While so much is clear, the etymology has been a continuous topic of debate. The most widely held opinion states that Niya *ṭa* and the other Indic forms are inherited words cognate with, amongst others, MP *ārd* ‘flour’ (CPD: 11); Bactr. $\alpha\rho\delta\text{o}$ /*ārdə*/

287 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).

288 Basing myself on the hand copy of CKD 797 in Hasuikē (1996: 307), I consider Hasuikē’s reading *ṭa naṃdha* preferable over Lin’s (1999: 231) incomprehensible *ayanaṃ ca. ṭa naṃdha* can be translated as ‘a load of flour’ and compared with *amṇa nadha* ‘a load of corn’ in CKD 68 uo2; 200 o5; 468 uo2 and loc.sg. *kuyana nadhaṃmi* ‘a load of *kuyana* (corn)’ in CKD 435 uo2.

289 Cf. §2.1.2 for the fact that intervocalic *-ṭ-* stands for a geminate /*ṭṭ*/ in Niya Prakrit.

(BD II: 193f.; BD IV: 106); Tumsh. *ārda*-* (acc.sg. *ārdu*; Ogihara & Ching 2024: 315); and Khot. *āḍa*- (DKS: 17) < **ārta*- ← PIIr. **Harta*- < PIIr. **HrHtá*- < PIE **h₂lhl₁tó*- ‘ground’ (root **√h₂elhl₁* ‘to grind’ as in Gr. ἀλέω ‘idem’).²⁹⁰

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.²⁹¹ In light of Vedic *īṣyant*- ‘jealous’ ~ YAv. *arāšiiant*- ‘idem’ < PIIr. **H^hHšiant*-, I would moreover anticipate the verbal adj. **HrHtá*- to yield OIA **irta*-, 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 CE, which makes that Niya *aṭa* (3rd–4th century CE) 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.²⁹² 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.

A geographically more attractive option is to see in Niya *aṭa* a loan from Bactr. αρδο /*ārdə*/. Then, one can hypothesise that this word for ‘flour’ was borrowed into South Asian Gāndhārī as **āṭṭa*- and transmitted in this form to

290 See e.g. Scheller (1965) and Burrow (1972: 539; 1973³: 47). The geminate -*ṭṭ*- of Skt. *aṭṭa*- would point to Prakrit origin.

291 Burrow (1979–83: 81–83) has argued that Vedic *arāṇī*- ‘piece of wood used to kindle fire by attrition’ should be analysed as an agent noun of the type *caḥśāni*- ‘looking’ from **√HarH* ‘to grind’. In my opinion, *arāṇī*- more likely comes from the widely attested Skt. 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. MSogd. *l’n*, perhaps ‘flint’, is probably unconnected to the Vedic word (Benkato 2017: 68f.).

292 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”.

the Prakrit vernaculars of northern India via the trade routes that were under the control of the Kushan dynasty (Neelis 2011: 132–144; 186–204).²⁹³ The example of Niya *sujinakirta* ‘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 Gāndh. $*\check{a}rta-$. $-rt-$ can furthermore develop to $-ṭ-$ / $ṭṭ-$ in Niya Prakrit and Gāndhārī at large, e.g. *kaṭavo* ‘to be done’ next to *kartavo* < *kartavya-*; so, $*\check{a}rta-$ ← $\alpha\rho\delta o$ could have yielded Gāndh. $*\check{a}ṭṭa-$, whence Niya *aṭa*.²⁹⁴

Still, the absence of any decisive phonological arguments makes it difficult to be sure that Bactr. $\alpha\rho\delta o$ / $\check{a}rd\check{a}$ / is the source of Niya *aṭa* and its cognates. Gāndh. $*\check{a}ṭṭa-$ < $*\check{a}rta-$ could also have been borrowed from another Iranian language used in the region in which the word for ‘flour’ had the form $*\check{a}rd(\check{a})$, e.g. Parthian. It is even possible that $*\check{a}rta-$ (> $*\check{a}ṭṭa-$) was borrowed from an older form $*\check{a}rt(\check{a})$ < $*\check{a}rta-$, comparable to Sogd. *rtk* (‘rt’k) ‘flour’ < $*\check{a}rta-ka-$ (Livshits 2015: 173; Begmatov 2020: 241).

60. *ayana* ‘village, territory of a clan’

Attestations of the base form

ABL.SG. *ayanade*: CKD 334 r1; 696 o5

LOC.SG. *ayanammi*: CKD 46 uo3; 334 o2, r2 (2×), r3; 549 o1; 629 r3; 823 o2; *avanammi*: CKD 295 o2f.

Derivatives

ADJ. DIR.SG. *ayanemci* ‘belonging to the village’: CKD 713 o8, o8f.

Compounds

LOC.SG. *Amtuayanammi* (alternatively *Vamtu-*) ‘*Amtu* (*Vamtu*) village’:²⁹⁵ CKD 296 uo2, uo3, ur1; 859 co2; 884 uo4f.; ADJ. DIR.SG. *Amtuayanemci* ‘belonging to *Amtu* (*Vamtu*) village’: CKD 496 uo5; ADJ. DIR.PL. *Amtuayanemci*: CKD 296 uo4

ABL.SG. *Ajiyamaayanade* ‘*Ajiyama* village’: CKD 573 uo4; 817 uo3, uo5; LOC.SG. *Ajiyamaayanammi*: CKD 105 oD1; 181 r1; 199 oB1; 275 o2, r1; 279 o2, o3; 389 o2; 422 o3f.; 714 o2, o3; 817 co1; *Ajhiyamaayanammi*: CKD 207 oa; *Ajimaayanammi*: CKD 713 o6; ADJ. GEN.PL. *Ajiyamaayanemciyana* ‘belonging to *Ajiyama* village’: CKD 817 uo4; LOC.SG. *Ajiyamaayanakilmeyami* ‘family estate (located) in *Ajiyama* village’: CKD 817 cr5

293 See also §3.2.4 s.v. *taravara* for this type of borrowing chain.

294 For this sound development, cf. also §4.3.24.

295 For the uncertainty whether to read *Amtu-* or *Vamtu-*, see Ching (2012: 28). In CKD 884 uo4f., I propose to restore *aṃ* ? *ayanammi* (the reading of Duan 2016b: 57) as *Aṃ(*tu)ayanammi* or *Vaṃ(*tu)*°.

- LOC.SG. *Catişadeviayanammi* 'Queen *Catişa* village': CKD 496 uo3; ADJ. DIR.SG. *Catişadeviyanemci* 'belonging to Queen *Catişa* village': CKD 474 uo2
- LOC.SG. *Traşaaqyanammi* '*Traşa* village': CKD 70 ur1; 326 r2; 393 o2, r1; ADJ. DIR.PL. *Traşaaqyanemciyana* 'belonging to *Traşa* village': CKD 326 o1, r5
- LOC.SG. *Navagaqyanammi* '*Navaga* village': CKD 366 o2; *Nayakaavanammi*: CKD 193 r1; ADJ. GEN.PL. *Navagaqyanemciyana* 'belonging to *Navaga* village': CKD 366 o4
- LOC.SG. *Paginaavanammi* '*Pagina* village': CKD 750 o2
- DIR.SG. *Petaavana* '*Peta* village': CKD 16 uo2, ur1; LOC.SG. *Petaayanammi*: CKD 42 uo2, cr1, ur1; 46 uo2, ur1; 121 o2; 136 uo2, ur1; 137 oA1; 165 o3; 494 cr4; 628 oB3; *Petaavanammi*: CKD 10 uo2; 105 oB1; 808 uo3; ADJ. DIR.SG. *Petaayanemci* 'belonging to *Peta* village': CKD 32 uo2; 46 cr2; 124 ur2; ADJ. DIR.PL. *Petaayanemci*: CKD 124 cr2; *Petaayanemciye*: CKD 164 o8; ADJ. GEN.PL. *Petaayanemciyana*: CKD 839 uo9; *Petaavanemciyana*: CKD 162 uo4; *Petaayaniciyana*: CKD 110 o1; LOC.SG. *Petaayana-kilmeyammi* 'family estate (located) in *Peta* village': CKD 32 uo2f.
- LOC.SG. *Yayeayanammi* '*Yaye* village': CKD 121 o3; 254 o2; 279 o2 (2×), o3, o4; 431 co1 = 432 co1; 439 uo2; 468 uo2; 481 cr2; 495 o3; 497 r1; 532 uo2, uo3, cr1; 621 o2, o5; 632 o3; 884 uo10, uo12; *Yayeayanammi*: CKD 254 o2; *Yayeayaqanmammi*: CKD 581 uo3f.; ADJ. DIR.SG. *Yayeayanemci* 'belonging to *Yaye* village': CKD 532 cr1; 740 o2; *Yaveavanemci*: CKD 474 uo2; ADJ. DIR.PL. *Yayeayanemciya*: CKD 37 cr1; *Yaveavanemciye*: CKD 401 uo2; ADJ. GEN.PL. *Yayeayanemciyanana* (?): CKD 37 ur1; *Yayeayani(ṃ)ciyana*: CKD 431 uo1 = 432 uo1; *Yayiyanimciyana*: CKD 745 o3
- DIR.SG. *Yirumḍhinaayana* '*Yirumḍhina* village': CKD 297 ur1; LOC.SG. *Yirumḍhina-ayanammi*: CKD 163 o3; 297 uo2

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. *Petaayanakilmeyammi* 'in a family estate (located) in *Peta* village' (CKD 32 uo2f.). In addition, Burrow (1935a: 779; 1935b: 674) noted that *Petanagamrammi* 'in *Peta* city' appears as a substitute for the more frequent *Petaayana* in CKD 25 o2. It seems, however, doubtful that one can use this as evidence that *ayana* and *nagara* 'city' are exact synonyms.²⁹⁶

296 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. *Yayekilmeciyanana* in CKD 431 uo2f. = 432 uo2, with the element *Yaye* that frequently occurs as the name of an *ayana*. Note also that Caḍota, called a *nagara* 'city' in CKD 879 uo3, 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).

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). It is more likely, as suggested by Burrow (1935a: 779), that *ayana* is a further witness of OIr. **ā-wahana*- ‘dwelling’ – an Iranian word preserved, amongst others, in OP *āvahana*- ‘village’ (Schmitt 2014: 145); MP *hāyān* ‘town, village’ (Henning 1952: 520–522 = 1977 II: 406–408); and, as a loanword, Arm. *awan* ‘village, small town’ (Olsen 1999: 869).²⁹⁷

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* / *dānagrana* (CKD 577 uo6; 588 co2, uo5f.) next to *danagrahana* ‘giving and taking’ < OIA **dāna-grahaṇa*- (cf. LKD: §28). Therefore, *ayana* could as well be borrowed from an unattested Parth. **āwahan* or Bactr. **ααυανο* /*āwahanə*/ < **ā-wahana*-, the reconstruction of which can be backed up by Parth. *padwahan* ‘supplication, prayer’ and Bactr. *πιδοοαυανο* ‘request, entreaty’ < **pati-wahana*-, respectively (DMMP: 271; BD II: 255).²⁹⁸

61. *gavaśa* ‘deer, stag’

Compounds

DIR.SG. *gavaśanačira* ‘deer hunting’: CKD 509 cr1

gavaśa, i.e. /*gāvāśna*/, 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 YAv. *gauuasna*- < OIr. **gawazna*- (TKD: 99; cf. also Konow 1943: 67).

297 The Middle Persian *āwahan* ‘fortified place, stronghold’ lemmatised by MacKenzie (CPD: 13) probably does not exist; see Fattori (2025: 148f. fn. 4). 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).

298 If my Bactrian etymology of *kilme* ← **γρδομησο* < **grda-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. **ααυανο* /*āwahanə*/. For more discussion on the treatment of intervocalic *h* in the Iranian loanwords in Niya Prakrit, see §4.3.23.

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. *γ’wzn-* (SD: 162), CSogd. *γwz-n-** (only acc.pl. *γwz-nt’*; 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).²⁹⁹

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.

62. *tavastaga* ‘carpet’

Attestations of the base form

DIR.SG. *tavastaga*: CKD 431 cr7 = 432 cr4; 527 o2, o4-r1, r3; 534 oC1; 578 uo5f; 579 uo4; 581 uo5; 583 uo5; 590 uo3 (2×); 633 r2; 728 oA4, rA2; *tāvastaga*: CKD 583 uo4; *tavastae*: CKD 59 r4

DIR.PL. *thavastaga*: CKD 416 o2; *thavastae*: CKD 714 o3; *tavastaga*: CKD 622 o4f; 728 oB1³⁰⁰

299 There are personal names in which Bactrian initial γ- /γ/ is substituted with Gāndh. *g-* /γ/, i.e. *ḡaṇavhryaka* ← **γoavoφpυαko* /γwanəfriyak(k)ə/ < **wana-friya-k(k)a-* (CKI 150 1) and *ḡema* ← **γoημo* /γwēmə/ < **waima-* (CKI 1073 2; 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.

300 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).

As first recognised by Thomas (*apud* KD: 348), *tavastaga* ‘carpet’ is one of the many textile products of Iranian origin in Niya Prakrit.³⁰¹ The closest match to the Niya form is Arm. *tapast(ak)* ‘carpet, mat’, a loan from Early Parth. **tāpast(ak)* < OIr. **tāpasta(-ka)-*.³⁰² As a nominal derivative 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 uo4) 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 recipient language or the donor language. 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* /tāvastagə/ would be a plausible source form.

63. *draṃga* ‘office’

Attestations of the base form

ABL.SG. *tra[m]ghade*:³⁰³ CKD 640 o1

LOC.SG. *draṃgaṃmi*: CKD 98 o2; 357 o5 (2×), o6; *draṃgami*: CKD 567 uo2, uo4; *tramghami*: CKD 173 oA1

DIR.PL. *draṃga*: CKD 439 uo3 (2×), uo4; 520 uo2, uo3; *draṃgha*: CKD 430 uo2; 775 uo2

Compounds

DIR.PL. *draṃgadhare* ‘office holder’: CKD 272 o5; *draṃghadare*: CKD 107 o6; *tramghadhare*: CKD 554 o1; *tramghadhāre*: CKD 86 o4; GEN.PL. *draṃgadharanaṃ*: CKD 3 uo4

ABL.SG. *nagaradraṃgade* ‘city office’: CKD 317 o6; LOC.SG. *nagaradraṃgaṃmi*: CKD 283 o7; LOC.PL. *nagaradraṃgeṣu*: CKD 272 o6

Niya Pkt. *draṃga*³⁰⁴ 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’

301 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).

302 The frequently cited NP *tabastah* ‘fringed carpet’ may be a ghost word (cf. CPED 280).

303 Boyer *et al.* (KD: 241) read *traghade*, but a trace of the expected anusvāra is visible on the picture in Stein (1921 IV: Plate XXIII).

304 The variant spellings of this word listed above do not require much commenting. If not resulting from the palaeographic similarity between 𑀮 *tra* and 𑀮 *dra*, spellings with initial *tr-* can be due to initial devoicing (§2.1.4).

(cf. CKD 430; 439; 520; 775); people responsible for such bureaucratic tasks are called *draṃg(h)adhara*, literally ‘office-holder’.³⁰⁵ On the other hand, *draṃga* can 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 CE) 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; emphasis 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 $\sqrt{\text{dra(n)}}$ ‘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 1955a: 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 /draṅgələrə/³⁰⁶ ‘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 of *καράλαρργο* ‘lord of the marches, margrave’ < **karāna-dranga-* ‘holding the border’ (Henning 1965: 77–79 = 1977 II: 633–635), **dranga-* would be expected to yield (Kushan) Bactr. **λραγγο*,³⁰⁷ and δδραγγοληρο is only attested in doc. Y, a text datable to 771–772 CE (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*.³⁰⁸

305 Cf. also the syntagm *draṃga* ‘office’ + *dhar-* ‘to hold’ in CKD 439 uo3 (2×), uo4; 520 uo2, uo3; 775 uo2.

306 On the late use of δδρ- to write /dr/, cf. BD II (39).

307 OIr. **dr-* also becomes λρ- /lr/ in initial position; cf. e.g. λρo(u)γο /lrūgə/ ‘healthy, in good health’ < **druwa-ka-* (BD II: 228).

308 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*.

Nevertheless, there is at least potential evidence that (δ)δραγγο* does not derive from earlier *λαγγο but existed already in this form in Kushan Bactrian. In line 4 of the Kushan 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-.³⁰⁹ Consequently, there is at least a tentative possibility that δραγγο* already existed in Kushan Bactrian, and that 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, however, it remains a fact that Bactr. δδραγγοληπο ‘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.³¹⁰

64. *namata* ‘felt’

Attestations of the base form

DIR.SG. *namata*: CKD 151 oB2; 184 r1; 382 o1; 385 o4, o5 (2×); 575 uo5, cr1; *naṃmata*: CKD 796 uo6;³¹¹ *namatha*:³¹² CKD 154 oA4

DIR.PL. *namata*: CKD 151 oB1; 382 o1; 387 o10; *namate*: CKD 476B o1; *namati*: CKD 345 uo4; *naṃmati*: CKD 728 oB1

Attestations as a PN

DIR.SG. *Namata*: CKD 742 o2; GEN.SG. *Namataša*: CKD 376 o1

309 For the Kushan Bactrian abl.-ins.sg. in -α, compare Sims-Williams (2015: 258), Kreidl (2024), 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.

310 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 relevant sound change, Sogdian is excluded as a donor, since *dr- became Sogd. ž- (via *δr-; Sims-Williams 1989a: 180 = 2025a: 11).

311 *naṃmata* is my reading; Hasuiké (1996: 301) and Lin (1999: 229) have *namata*.

312 This variant spelling with -th- is due to unetymological aspiration (§2.1.3).

Derivatives

DIR.SG. *namataga* ‘felt’ < **namata-ka-*: CKD 728 oA3; *naṃmataga*: CKD 728 oA1; *naṃmatae*: CKD 714 o3

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); BSkt. *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 lexica; MW: 528; 531).³¹³

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. *nāmata-* / *nimata-* (AIW: 1068);³¹⁴ 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 comparanda. Yet, the aforementioned Sogdian and Khotanese forms would, for instance, work phonologically.³¹⁵ 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*/.³¹⁶

313 Lelli (2020: 151f.) argues that this word for ‘felt’ occurs already in *Atharvaveda Paippalāda* 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.

314 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).

315 Because of the cognates of Niya *namata* in South Asian languages, Sogdian and Khotanese are, however, not so likely donor languages for geographical reasons.

316 The voiced -*ḍ-* /*d-* would not be a problem as the -*t-* in Niya *namata* stands for /*ḍ*/ (§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).

65. *paraša* ‘abduction, plundering’

Attestations of the base form

DIR.SG. *paraša*: CKD 165 o5; 195 + 726 uo5; 222 + 338 cr1; 324 + 328 uo3; 625 o4

INS.SG. *parašena*: CKD 436 uo6

Derivatives

PRET.3PL. *parasitamti* ‘they abducted’: CKD 324 + 328 uo2f; *parašitamti*: CKD 491 uo2; *parisitamti* (exact reading uncertain): CKD 881 uo4f.

PST.PTCP. *parašitaya* ‘abducted’: CKD 283 o5; *parašitae*: CKD 292 o4

paraša, i.e. /pǎřāza/, means ‘abduction, plundering’ (Thomas 1934a: 48 fn. 1). Therefore, Burrow (LKD: 103 s.v.) related it to Plr. **parā* + *√*Haj* ‘to take away, carry’ (EDIV: 171f.), a verb continued in Young Avestan (3pl. *parāzənti* ‘they take away’ in *Yasht* 13.68; opt.3sg. *para* ... *azōiṭ* in *Vīdēvdād* 18.12) and Wāneci (*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.³¹⁷

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. *παράζο /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. παρᾱσο /parātsə/ ‘away’ < **parāčā* (BD II: 251; with a variant spelling παρσο, cf. BD IV: 99; 121). This idea would have the significant advantage of not requiring the reconstruction of unattested forms, and Bactr. παρᾱσο can be used in the phrase παρᾱσο ζιν-, pret. παρᾱσο ζιδο ‘to take away’, which comes close to the semantics of Niya *paraša*.³¹⁸ But there is also a drawback: since Bactr. παρᾱσο is an adverb, while Niya *paraša* is an inflectable noun (cf. the ins.sg. *parašena* in CKD 436 uo6), one would have to posit a reanalysis from adverb to noun during the

317 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).

318 The semantic match is not exact, because the Niya word consistently refers to kidnapping and plundering, whereas Bactr. παρᾱσο ζιδο in doc. *je* refers to the confiscation of animals for tax purposes. In *Uv*14, the variant spelling παρσο co-occurs with opt.2pl. βαρηδο to mean ‘you may go away’.

borrowing process. Such a reanalysis is not inconceivable, but it is still not immediately obvious how and why this would have happened.³¹⁹

As concerns phonology, it may seem counter-intuitive that Bactr. -σ- /ts/ would be rendered as Niya -s- /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)śa), 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 *paraśa* out of Bactr. παρασσο /parātsə/.

In conclusion, it seems that, with the evidence at hand, Niya *paraśa* ‘abduction, plundering’ could either be a loan from a descendant of OIr. **parāza*- ‘taking away’ or from Bactr. παρασσο /parātsə/ ‘away’ < **parāčā*.

66. *parivanae* ‘burden, provisions’

Attestations of the base form

DIR.SG. *parivanae*: CKD 214 o3

According to Burrow (LKD: §20; §45; 104 s.v.), Niya *parivanae* ‘burden, provisions’ could be derived from Skt. *paribhāṇḍa*(-ka)- (thus also CDIAL I: 443 no. 7850), with the same phonological development of the cluster -ṇḍ- shown by Niya *rupyabhana* ‘silver object’ < Skt. *rūpyabhāṇḍa*- (CKD 149 o2). The semantic aspect of this etymology is nevertheless not self-evident, since Skt. *paribhāṇḍa*- has a different meaning than Niya *parivanae*, namely ‘utensils, furniture’.³²⁰

Burrow’s alternative derivation from OIA **paribandha*-ka- ‘bound around (the beast of burden)’ is semantically more attractive, but this formation seems otherwise unattested in Indo-Aryan. I therefore suggest that *parivanae*

319 As an alternative option, F. Dragoni (p.c.) suggested that an allegro pronunciation of Bactr. παρασσο ζιδε /parātsə židə/ was borrowed into Niya Prakrit as *paraśita** ‘kidnapped’ (cf. the verb forms listed under “derivatives”). In this case, the noun *paraśa* could be a back-formation, but it still remains unclear how and why such a back-formation would have happened. If directly from παρασσο ζιδε /parātsə židə/, I would perhaps also expect *paraśita** to contain a palatal sibilant /ž/ rather than a dental sibilant -s- /z/.

320 Note also that intervocalic -bh- by default develops to Niya -h- (LKD: §27) and not to -v-, as Burrow’s etymology requires. The development of -bh- to -v- is, however, not impossible, as e.g. shown by the PN *Śilaprava* (gen.sg. *Śilapravaśa* in CKD 592 cr3), which is clearly the same as the PN *Śilaprabha* in CKD 489 r4.

is an Iranian loanword related to CSogd. *prbnty* /parvandě/³²¹ ‘burden’ (~ Syriac *mwbl*) < **pari-banda-ka*- ‘bound around (the beast of burden)’ (DCS²: 135); NP *parwanda* ‘bundle, roll of tissues, etc.’ < **pari-banda-ka*- (CPED: 246); and TB *perpente* ‘burden’ < Proto-Tocharian **perpente* ← OIr. **pari-banda*- (Bernard 2025: 51).

A first possibility is that *parivanae* is borrowed from Sogdian, seeing that in Niya Prakrit voiced consonants could be assimilated to a preceding nasal.³²² The other option is that *parivanae*, which can be regularly traced back to earlier **parivanaga*, is a loan from Bactr. **παροβανδαγο* /parəvandəgə/ < **pari-banda-ka*-. This option likewise requires the loss of /d/ to have taken place in Gāndhārī.³²³

67. *pravaṃnaga* ‘(authoritative) document’

Attestations of the base form

DIR.SG. *pravaṃnaga*: CKD 72 r1; 81 oE1; 86 o4, r4 (2×); 100 o2; 275 o3; 348 uo1; 416 o1; 419 co1; 443 r1; 549 o1; 571 co1, cr5; 579 co1, cr3; 582 co1; 586 co1, uo8; 587 co1, cr1; 589 co1, cr2; 590 co1, uo9; 648 o7; 654 cr2; 655 uo3, cr4; 710 o1; 715 o9; 782 ur3; 795 uo1; 805 uo1; *pravaṃnae*: CKD 369 o1; *pravaṃnaka*: CKD 370 ur1; *pravaṃna*: CKD 573 co1

INS.SG. *pravaṃnagena*: CKD 275 o3

LOC.SG. *pravaṃnagaṃmi*: CKD 59 r2f; 633 r5

Compounds

DIR.SG. *gaṃnaṃnapravaṃnaga* ‘accounting document’: CKD 159 r5; *ganana-pravaṃnaga*: CKD 278 r3; *ganamaṃnapravaṃnaga*: CKD 289 o3

DIR.SG. *rayakaūṭipravaṃnaga* ‘account of the royal she-camels’: CKD 180 o1

DIR.SG. *lekhapravaṃnaga* ‘written document’: CKD 580 co1; 580 cr3; 582 cr1

The word *pravaṃnaga* 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

321 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 spelt as *prβ*(*ʹ*)*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. *vaβavdo* / voβavdo ‘idem’ < **ni-bandV* (BD II: 236).

322 See §4.3.29 for more examples of this change in Iranian loanwords.

323 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). If **parbanaa*- were 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*.

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), *pravaṃnaga* would be an inherited word and derived from Skt. *prapanna-* to *pra* + $\sqrt{pad}$ 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 *pravaṃnaga* from Skt. **prati-panna-ka-* to *prati* + $\sqrt{pad}$ 'to enter, to arrive at, etc.' (MW: 667). His proposal moreover runs into phonological problems as **prati-panna-ka-* should yield Niya ***paḍivaṃnaga* or the like.³²⁴

I propose to compare Niya *pravaṃnaga* with Sogd. *prwn'k** 'document' in *prwn'k' kr'k* 'document compiler' (Livshits 2015: 164) and Bactr. *παροοανayo* /*parwānāgə*/ 'authorisation, authority' < OIr. **parwānākā-* (BD II: 252).³²⁵ The Sogdian and Bactrian forms would both be a fitting source of Niya *pravaṃnaga* – the Bactrian especially so when Miyamoto (2022–23: 92) is right that *παροοανayo* meant 'type of document on which orders were written' instead of 'authorisation, authority', as Sims-Williams has it (BD II: 252).³²⁶

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.

324 Bailey (KT IV: 70) further proposed that Khot. *pravanaa-* is a loan from Niya *pravaṃnaga* (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. *pravanāja* and Skjærvø 2002: 8), so I leave this question open.

325 After completing my lemma on *pravaṃnaga*, 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 *pravaṃnaga* and Bactrian *παροοανayo* have some relationship" and he mainly focusses on the semantics and sociohistorical interpretation of the Bactrian word.

326 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.

pramāṇa-, as these two words regularly co-occur, and *pramana* was specifically used for the authority enjoyed by a legal document.³²⁷

68. *maravara* ‘accountant’

Attestations of the base form

DIR.SG. *maravara*: CKD 100 o3; 186 o4; 187 o9; 346 o1;³²⁸ 385 o5; 781 uo7; 782 ur2; 879 uo7f.

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* Kuviñeya (385) is also referred to as *gaṃñavara* “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 Plr. **√bar* ‘to bring, carry’ instead of with **√kar* ‘to do, make’.³²⁹

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.³³⁰ Yet, given 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). However, intervocalic **b* also develops to a voiced fricative in various Middle Iranian languages, most notably in

327 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 also worth noting that *pramana* was borrowed into Bactrian as *παρμανο* ‘authoritative’ (BD II: 251f.), whose initial sequence *παρ-* rather than ***πρα-* may itself result from contamination with *παροοαναγο* ‘authorisation, authority’ (in view of *πριγγοοαβο* ‘weaver of damask’, there was no inhibition against initial *πρ-* /*pr*/ in Bactrian).

328 In this document, one can read and restore *maravara Kuviñeya* /// (**ñeya* ...) instead of *ma ra vara kuḍi* /// (KD: 126). The *maravara* Kuviñeya is also mentioned in CKD 385 o5.

329 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) and Härtel (2023: 405–407).

330 This seems to have been Burrow’s opinion.

Parthian,³³¹ Sogdian, Khotanese, and Bactrian. Therefore, the lenition may rather have to be attributed to the donor language. If *maravara* was borrowed from Bactrian, its donor form could be reconstructed as **υμαροβαρο* /*hmārēvārə*/ < **hmāra-bāra*-.³³²

69. *vara* ‘load; time, occasion’

Attestations of the base form

DIR.SG. *vara* ‘load’: CKD 291 o3 (*eka vara*)

DIR.SG. *vara* ‘time, occasion’: CKD 45 uo3; 58 r1; 105 oE1; 120 o1; 262 uo2; 310 urB2 (2×), urB4; 371 r3; 420 o7; 425 cr3; 436 uo5 (2×); 437 cr5; 542 uo5; 550 o3; 571 cr4; 580 cr2; 684 oB4; 696 o7; 805 cr1; 860 co2, co4; 879 cr1

DIR.PL. *vara* ‘load’: CKD 291 o5 (*dui vara*)

DIR.PL. *vara* ‘time, occasion’: CKD 72 r1 (2×), rA5, rA6; 358 o8; 519 o3; 634 o2; 719 o2

In nearly all of its occurrences, Niya Pkt. *vara* means ‘time, occasion’ (French *fois*), much like its cognates Skt./Pāli *vāra*- ‘idem’.³³³ For this meaning, see below. Passage (3.31) contains two instances of Niya *vara*, for which the meaning ‘time, occasion’ does not seem suitable (Burrow 1935a: 787; LKD: 119 s.v. *varaya*). The context is about the collection and transport of corn.

(3.31) CKD 291 o3–5

*eka vara ya*³³⁴ *abhyadara kuhaniyaṃmi aniṣyaṃti ityartha 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 into the capital. ... (The remaining) two-thirds are to be deposited at Piṣali.” (TKD: 52).

Burrow rendered *eka vara* as “one-(third) part of it” and *dui vara* as “(the remaining) two-thirds”. Since ‘part’ is not a known meaning of Skt./Pāli *vāra*- (cf. MW: 943; CDIAL I: 673 + IV: 93 no. 11547), he further proposed that *vara*

331 Cf. Sundermann (1989: 123). It is irrelevant to my argument whether the lenition is phonemic or allophonic in Parthian (for which cf. GW: §§173–178).

332 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 *υμαρογγο* ‘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).

333 In Mahārāṣṭrī Prakrit, there is additional evidence for a (probably secondary) feminine *vārā*- ‘time, occasion’ (cf. Oberlies 1993: 147).

334 With Baums and Glass (2002a– *contra* Burrow 1935a: 787), I do not read *vara* and *ya* together as *varaya* < **varagā*, as this destroys the parallel with *dui vara*.

in (3.31) is an Iranian loanword related to MP/Parth. *bahr* (also *baxr*) ‘part, share’ (DMMP: 107; 119).³³⁵

The etymology of *bahr* argues, however, against this proposal. MP/Parth. *bahr* is most likely cognate with YAv. *baxədra-* ‘share, portion’ < **baxθra-* (Hübschmann 1895: 33; AIW: 923).³³⁶ For Burrow’s idea to work, Niya *vara* would thus have to come from a Middle Iranian language in which (i) initial **b-* regularly spirantises to **v-*, and (ii) **-xθr-* underwent the same type of simplification as in Persian and Parthian. While Bactrian and Sogdian meet the first criterion, neither satisfies the second. In Bactrian, **bāxθri-* ‘Bactria’ yields βαχλο /vāxlə/ (BD II: 202), leading one to expect **baxθra-* ‘portion, share’ to result in **βαχλο* /vaxlə/: a phonologically unlikely source of Niya *vara*.³³⁷ In Sogdian, **-θr-* becomes *-š-* (Sims-Williams 1989a: 180 = 2025a: 11), so a hypothetical Sogdian reflex of **baxθra-* likewise fails to account for the *-r-* of Niya *vara*. Burrow’s etymology can therefore be maintained only by positing an otherwise unknown Middle Iranian donor language.

In my view, it is preferable to connect Niya *vara* in (3.31) with Bactr. βαρο /vārə/ and Sogd. β’r < OIr. **bāra-* in the sense ‘load’ (BD II: 202; SD: 97; DMSB²: 57).³³⁸ The Bactrian term occurs in the phrase χαρο αλο βαρο ‘a donkey with its load’ (xk4), which closely matches the context of (3.31), where camels (*uṭa*) are said to transport *vara*. Moreover, *eka vara* ‘one load’ would be parallel to Sogd. *’yw β’r* ‘idem’ in *rt’yw β’r rtk pr’šyw* ‘and I sent one load of flour’ (Mugh document B11, line 9; Livshits 2015: 126–129; Begmatov 2020: 170–175). Consequently, I propose translating (3.31) as: “they will bring one load into the capital. ... (The remaining) two loads are to be deposited at Piṣali”.

335 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’.

336 YAv. *baxədra-* ‘share, portion’ is attested in *Yasht* 5.130 (nom.pl. *stūi-baxədra* ‘with big portions’) and *Frahang ī oīm* entry no. 569 (*baxədra* translated with MP *bahr* ‘share’; Klingenschmitt 1968: 15). 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).

337 Henning (*apud* Livshits 1969: 76) regarded the sequence βαυ- on a potsherd from Kara-Tepe as the remnant of a Bactrian word βαυ[po] ‘share’, but βαυ- is better restored as βαυ[apo] ‘monastery’ (BPN: no. 149; Fussman 2011: 106).

338 On the Sogdian word, see also Begmatov (2020: 157; 175; 242), who argues that it may have been used as a unit of measurement.

Also when *vara* means ‘time, occasion’, it is typically preceded by a numeral.³³⁹ Passage (3.32) provides a representative example, where *vara* follows the numerals *dvi* ‘two’ and *tre* ‘three’:

(3.32) CKD 634 o2

avi yo dvi tre vara imade lekha atra presemi tahi isa gamtavo asi.

“I have sent a letter two or three times (telling you) that you had to come here.” (TKD: 52).

A striking parallel to (3.32) is offered by a sentence from the Bactrian birchbark letters, cited as (3.33), which contains a homophonous Bactrian noun *βapo* /*vārə*/ ‘time, occasion’ preceded by the numeral [v]ρηιο ‘three’.

(3.33) **kv11**

[v]ρηιο βapo πωστογο νοβιχτηιο.

“[I] wrote a letter to you three times.” (BD IV: 44).

Since Bactr. *βapo* /*vārə*/ in (3.33) has the same meaning as Niya *vara* and occurs in precisely the same type of context, it is beyond reasonable doubt that these words are connected. The question is rather whether they represent (i) two words inherited from Proto-Indo-Iranian, (ii) an Indo-Aryan loanword in Iranian, or (iii) a loanword in the opposite direction. Building on a suggestion by N. Sims-Williams (p.c.), I argue below in favour of the third option.

Bactr. *βapo* ‘time, occasion’ has a cognate in MP/NP *bār* ‘idem’ (CPD: 17; CPED: 141).³⁴⁰ The New Persian form has been compared with Skt. *vāra-* since the 19th century (see e.g. Horn 1893: 36 no. 157). If both forms were inherited, their Proto-Indo-Iranian preform should have had initial **w-*, yielding Skt. *v-* and NP *b-*. In his etymological dictionary of New Persian, Hasandust (2015: 361) indeed argues that NP *bār* continues the Plr. root **√war* ‘to turn’ (EDIV: 419f.). This derivation is semantically attractive, given parallels such as Sogd. *prwrt(y)* ‘time, occasion’ < **pari-warta(-ka)-* ‘turn’ (DMSB²: 172f.), French *fois* < Latin *vicis* ‘turn, occasion’, and Dutch *keer* ‘time, occasion’ ← *keren* ‘to

339 The numeral can be either an ordinal or a cardinal. In one case (CKD 358 o8), *vara* ‘time, occasion’ is preceded by the quantifier *bahu* ‘many’.

340 It is theoretically possible that *βapo* is a loanword from MP *bār* (cf. BD IV: 109). As there is, however, no concrete argument in favour of this assumption, I prefer to treat the Bactrian and Persian words as inherited from a common source. Balochi *bār* ‘time, occasion’ was probably borrowed from New Persian (cf. Korn 2005: 253 fn. 353; 353).

turn'.³⁴¹ Phonologically, however, it is unlikely that NP *bār* continues a root with initial **w-*; in that case, one would expect MP ***wār* and Bactr. ***oαpo* instead of the attested *bār* and βαπο.³⁴² Consequently, Skt. *vāra-* and its Indo-Aryan cognates are probably not inherited from the same proto-lexeme as the Persian and Bactrian words.

It is likewise improbable that we are dealing with an Indo-Aryan loanword in Iranian. Since the initial β- in Bactr. βαπο likely represents /v/, and since this word occurs in a variety of Bactrian containing several Indic loanwords (cf. BD IV: 3; Schoubben 2025b), βαπο could conceivably be interpreted as a loanword from Skt. *vāra-* or its Gāndhārī cognate (cf. Niya *vara*). The Middle Persian form *bār*, however, is far more difficult to explain as an Indic loanword: one would have to posit a change from initial *v-* to **b-* in the donor form to account for the initial *b-* of MP *bār*;³⁴³ and it is not obvious in what sociolinguistic context Middle Persian would have borrowed a word meaning 'time, occasion' from an Indo-Aryan language. Moreover, Skt. *vāra-* and its cognates lack a convincing inner-Indic etymology. Mayrhofer (KEWA: 193f.; EWAia III: 466) entertains the possibility that *vāra-* is derived from $\sqrt{vr}$ 'to choose'. Yet, this is semantically not self-evident (cf. above fn. 341), and other nominal derivatives of $\sqrt{vr}$, e.g. *vara-* 'choicest, best', contain a short vowel. Mayrhofer is therefore compelled to posit an unattested **vāra-* 'choice' as the preform of *vāra-* 'time, occasion'.

This brings us to the third, and I believe most plausible, possibility: that Skt. *vāra-* and its cognates are Iranian loanwords. This account has several advantages. First, it is phonologically straightforward, since the donor form may have been Bactr. βαπο /vārə/ or a related East Iranian form likewise exhibiting initial *v-*. If the Indic forms are borrowings, this also helps explain why they appear only in comparatively late sources, such as the Niya documents (3rd to 4th century CE); Epic and Classical Sanskrit literature;³⁴⁴

341 Hasandust cites Khot. *bāda-* 'time' < **warta-* 'turn' as a parallel, but *bāda-* might instead derive from **upa-ratu-* (Sims-Williams 1983: 49 = 2025a: 244). He also mentions an alternative derivation from $\sqrt{war(H)}$ 'to choose' (EDIV: 420f.), but this is semantically not very convincing (via 'chosen time?').

342 Contrast, for instance, MP *war* 'oath, ordeal' = Bactr. oαpo 'idem' < OIr. **warah-*. To account for the initial **b-*, it has been suggested that ***wār* 'time, occasion' was contaminated with *bār* 'load, burden' (see e.g. Korn 2005: 253 fn. 353). Below, I will argue for a direct derivation of *bār* 'time, occasion' from *bār* 'load, burden'.

343 There are occasional instances of a change from initial *v-* to *b-* in Gāndhārī. See, e.g., the examples collected by Salomon (2008: 116).

344 The *Rāmāyaṇa* and *Mahābhārata* probably did not receive their fixed form before the 3rd or 4th century CE (cf. Brockington 1998: 26f.). In any case, Epic Sanskrit contains other Iranian loanwords, e.g. *pustaka-* 'book' (EWAia III: 331f.).

and post-canonical Pāli texts.³⁴⁵ Finally, since Bactr. βαπο and Niya *vara* occur in administrative contexts (official letters, etc.), it is plausible that this technical term entered Indo-Aryan languages during the Kushan administration of (northern) India.³⁴⁶

The hypothesis of an Iranian loanword in Indic would gain further support if a convincing etymology for the Iranian forms can be established. Such an etymology is, I would argue, available if MP/NP *bār* ‘time, occasion’ and Bactr. βαπο ‘idem’ are taken to be originally identical with MP/NP *bār* ‘load, burden’ and Bactr. βαπο ‘idem’ < OIr. **bāra-*. Although a semantic shift from ‘load’ to ‘time, occasion’ might seem counter-intuitive at first blush, Greek φορά offers a precise parallel: derived from the same PIE root **√b^her* ‘to carry, bring’ as OIr. **bāra-*, φορά originally meant ‘that which is carried’, i.e. ‘load’, yet in Byzantine and Modern Greek it has become the standard expression for ‘time, occasion’.³⁴⁷ As with the Indo-Iranian words under discussion, Gr. φορά is regularly preceded by a numeral, a usage that may have facilitated the semantic bleaching from ‘load’ to ‘time, occasion’ (cf. Shipp 1979: 213f.; 557), perhaps via an intermediary sense such as ‘movement’ (cf. e.g. Danish *gang* ‘time, occasion’ ← *at gå* ‘to go’).³⁴⁸

The discussion above may be summarised as follows. Niya Pkt. *vara* is attested in two somewhat distinct senses: in one document (CKD 291), it

345 The occurrences of Pāli *vāra-* ‘time, occasion’ cited in Rhys Davids & Stede (1921–25 s.v.) are nearly all from commentaries on the Pāli canon, the earliest of which are traditionally dated to the 5th century CE (cf. Norman 1983: 119).

346 If, as I argue below, the meaning ‘time, occasion’ was derived from ‘load’, one may also compare the borrowing of Bactr. **λῑρτο* /*lirtə*/ ‘load’ < **dṛšta-* into various Indo-Aryan languages (Schoubben 2022b; for the sociolinguistic context, see pp. 352–354).

347 See, e.g., Trapp (1994–2011: 1949), who glosses Byzantine Greek φορά as German ‘Mal’ and ‘Ladung’.

348 For an early example of the semantic bleaching of Gr. φορά after a numeral, compare Plato, *Politicus* 269e: κατὰ δύναμιν γε μὴν ὅτι μάλιστα ἐν τῷ αὐτῷ κατὰ ταῦτά μίαν φορὰν κινεῖται ‘as far as it is in its power, it [the body] moves in the same place, under the same modalities, in a single motion [μίαν φορὰν ‘in one load’, i.e. ‘once’]’ (tr. mine). For Ir. **bāra-*, a relevant passage is *Dēnkdār* 9.16.10: *ud zīndagīh andak andak sazihistan ud hanjaft zīndagīh zan ud xwāstag* (ud) *abāriḡ gētiyig ādān hamāḡ pad ēw bār hištan ud ō aniy kas madan* ‘and (the fact) that life passes little by little, and, when life has come to an end, (one’s) wife, property, (and) other wealth in this world are all in one moment [*pad ēw bār*] left behind and come to someone else’ (Vevaina 2023: 169). Since the point of this passage is that the property of person A is transferred to person B completely and immediately upon A’s death, *pad ēw bār* ‘in one moment’ might reflect an earlier sense such as ‘in one load/movement’.

probably means ‘load’, whereas it normally denotes ‘time, occasion’, like its cognates in other Indo-Aryan languages (e.g. Skt. *vāra*-). For both meanings, Niya *vara* has close comparanda in Iranian; note in particular MP/NP *bār* and Bactr. βαρο /*vārə*/, which exhibit the same polysemy between ‘load’ and ‘time, occasion’. Within Indo-Aryan, the word is attested only in relatively late sources and it lacks a convincing internal etymology. The Iranian words, by contrast, derive from OIr. *bāra*-, an inherited cognate of Skt. *bhāra*- ‘load’; and a semantic shift from ‘load’ to ‘time, occasion’ finds a clear parallel in Byzantine and Modern Greek φορά. I therefore conclude that Niya Pkt. *vara* ‘load; time, occasion’ and its Indic cognates are probably loanwords from Bactr. βαρο /*vārə*/ or from another East Iranian form in which **b-* had developed into **v-*.

3.3.3 Arguable etymologies

70. *agiṣḍha* ‘cover, rug’

Attestations of the basic form

DIR.SG. *agiṣḍha*: CKD 154 oA3; 431 cr1 = 432 uo7,³⁴⁹ cr4 = cr1; *akiṣḍha*: CKD 207 r5; 881 cr2

DIR.PL. *agiṣḍha*: CKD 431 uo7 = 432 uo6; 652 uo5; *akiṣḍha*: CKD 881 uo3, uo4

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 connected with Bactr. γιζδο /*giṣḍə*/ (or: /*γiṣḍə*/) ‘rug (?)’, Kabuli Persian *γiṣḍi* ‘goats-hair tent’, and Psht. *kəṣḍay* ‘idem’ (cf. EDP: 38; BD II: 207).

It is difficult to trace the exact trajectory of borrowings.³⁵⁰ Given that initial *α-* /*ǎ*/ can sometimes be lost in Bactrian, Niya *agiṣḍha* could be a loan from Bactr. **αγιζδο* /*ǎgiṣḍə*/ (or: /*ǎγiṣḍə*/), a more archaic form than the

349 Boyer *et al.*’s (KD: 157) reading *agiṣḍha* in CKD 432 uo7 should be corrected to *agiṣḍha*.

350 Harmatta’s (1964a: 16f.; 1967: 3ff.) suggestion to trace *agiṣḍha* 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 anticipate Niya *-ṭh-* /*ṣṭ-* and not the voiced cluster *-ṣḍh-* /*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) and a loan from OIr. **ā-kṛsta*- ‘something cut’ ← **ā* + **√kart* ‘to cut’.

attested $\gamma\iota\zeta\delta\omicron$.³⁵¹ 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 *agiṣḍha*. Yet, as long as we remain ignorant of the ultimate etymology, it would be premature to claim that Niya *agiṣḍha* is necessarily a Bactrian loanword.

71. *ageta* ‘tax collector’

Attestations of the base form

DIR.SG. *ageta*: CKD 105 oB3, oC1; 132 oC2; 169 rC3, oC3; 197 r1; 264 o2; 384 rB3; 411 oC2; 422 o8 (3×); 431 uo8 = 432 uo6; 444 r2; 571 uo8; 577 uo7; 580 cr5; 583 uo2; 586 uo6; 587 uo7, uo8; 590 uo7; 592 cr2, cr3; 640 o1, r3; 715 o6, o7; 782 ur2; 823 r3; 879 uo7; 886 A3; *agita*: CKD 42 cr1; 137 rA2

GEN.SG. *agetaša*: CKD 275 o3; 307 o6, o7; 322 uo7

DIR.PL. *ageta*: CKD 59 r2; 714 o4; *agita*: CKD 725 r1

GEN.PL. *agetana*: CKD 437 cr5; 496 cr5; 571 cr3; 714 o5

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 $\sqrt{\text{c}ait}/\theta$ ‘to consider’ (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. $\kappa\eta\delta\omicron$ /*kēdə*/, approximately ‘priest’ (BD II: 222; BD IV: 114). The original form of the verbal root is $\sqrt{\text{c}ait}$ (cf. Skt. $\sqrt{\text{cit}}$). PIIr. **t* developed to PIr. **θ* before any consonant, thus giving rise to a by-form $\sqrt{\text{c}ai\theta}$ (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 $\sqrt{\text{c}ait}/\theta$, one may refer to OAv. *acistā* (*Yasna* 51.11), which Insler (1975: 316) and some other

351 For the loss of initial $\alpha-$ / $\check{\alpha}$ / in Bactrian, cf. e.g. $\mu\alpha\chi\omicron$ /*māxə*/ ‘us, we’ < $\alpha\mu\alpha\chi\omicron$ /*amāxə*/ < **a(h)māxam* and $\mu\alpha\tau\omicron$ /*matə*/ ‘broken up, disposed’ < $\alpha\mu\alpha\tau\omicron$ /*āmātə*/ < **āmašta-* (BD II: 191). It should, however, be conceded that $\gamma\iota\zeta\delta\omicron$, attested in doc. **cj** of about 465 CE (SCBD: 83), would be the earliest example of the loss of initial $\alpha-$ / $\check{\alpha}$ /. If *agiṣḍha* is indeed borrowed from $\sqrt{\text{c}ai\zeta\delta}$, 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.

scholars interpret as standing for **ācistā*, i.e. a middle 3sg. injunctive aorist based on **ā + *√čait/θ*.³⁵²

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. *cimt-* / *cimd-*, a cognate of PIr. **√čait/θ*, is also used in the technical sense ‘to assess, to reckon (taxes)’ (LKD: 89 s.v.). An additional parallel is Latin *censor*. 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 *ageta* with any precision. In view of the vowel *-e-* in *ageta*, 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), *ageta* 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 *ageta*.³⁵³

72. *kavaji* ‘shoe(s), boot(s) (?)’

Attestations of the base form

DIR.SG. *kavaji*: CKD 581 uo5; *kavaši*: CKD 505 o2

DIR.PL. *kavaji*: CKD 431 cr5 = 432 cr2

The exact semantics of Niya Pkt. *kavaji* / *kavaši* remain somewhat conjectural, though it is most likely “an article of dress” (LKD: 82 s.v.). One argument supporting this interpretation is that a *kavaji* could be made of felt (cf. *kavaji namadaga 4* ‘four *kavaji* made of felt’ in CKD 431 cr5 = 432 cr2).

It has been proposed to connect *kavaji* / *kavaši* with BSk. *kavacikā-*, an entry in *Mahāvvyutpatti* 6078. Since it is translated into Tibetan as *ḥthab ber*

352 A corresponding verb *ā + √cit* is also attested in Vedic, but with a different meaning, i.e. ‘to attend to, comprehend, appear’.

353 As there are only three attestations of *agita* and *ageta* 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*).

‘corslet, battle-garment’ and into Chinese as *zhē páo* 遮袍 ‘protective upper garment’ (Lüders 1936a: 14; BHSD: 174), BSkt. *kavacikā-* is clearly a derivative of *kavaca-* ‘armour, cuirass’.³⁵⁴ Deriving *kavaji* / *kavaši* from *kavacikā-* is phonetically straightforward: Skt. *-c-* regularly yields Niya *-j-* / *-ś-* / *-ž-*, and *-ikā-* is lenited to *-i* (LKD: §17; §75; 82 s.v.). Nevertheless, there is no evidence that *kavaji* / *kavaši* carried any military associations; in the Niya documents, it is simply listed as a textile item amongst the provisions for a journey (CKD 505) or as part of the payment for a vineyard (CKD 581).

Alternatively, as suggested by A. Huard (p.c.), Niya *kavaji* / *kavaši* may be compared with Skt. *kavaši*, as attested in *Fànyǔ zá míng* 梵語雜名 50a6 (Bagchi 1929–37 I: 99). In this lexicon, Skt. *kavaši* is rendered by Chin. *xuē* 靴 ‘boot(s)’, which suggests that it is an Iranian loanword connected to MP/NP *kafš* ‘shoe’ (Pelliot *apud* Bagchi 1929–37 I: 308; 354; cf. also Bailey 1955a: 14). MP/NP *kafš* goes back to an *i*-stem **kafši-*, traces of which survive in Arm. *kōšik* ‘shoe’ (Olsen 1999: 888) and in the Bactrian plural *καφβινο* ‘shoes’ (A35; BD II: 222). Skt. *kavaši* can be interpreted as a loanword from early Kushan Bactrian **καφβι* /*kafši*/ or from a related form preserving the final *-i* at the time of borrowing. This implies that Ir. *-f-* was approximated with Skt. *-v-*, and that the foreign cluster *-fš-* was resolved with an anaptyctic vowel *-a-*, comparable to Skt. *stavāraka-* ‘silk’ ← East Iranian **stavrag* ~ MP *stabrag* ‘shot silk’ (Agrawala 1951: 14f.; EWAia III: 523).

Given that many textile terms in Niya Prakrit are Iranian loans (cf. §4.5.3), it is plausible that *kavaji* / *kavaši* is likewise of Iranian origin. The proposal that it derives from Bactr. **καφβι* /*kafši*/ (or a cognate thereof) gains support from three observations: (i) Bactr. *καφβινο* ‘shoes’ occurs in a list that also includes the words *κωσοβο* ‘blanket’, *παγαζο* ‘cloak’, and *ποσο* ‘sheep’, and *kavaji* / *kavaši* occurs in close proximity to the Niya Prakrit cognates of these Bactrian words, namely *kojava* ‘rug, blanket’, *raji* ‘cloak, woollen cloth (?)’, and *paśu* ‘sheep’;³⁵⁵ (ii) if *kavaji* / *kavaši* means ‘shoe(s)’ of ‘boot(s)’, this accords with the evidence that it can be made of felt (cf. *supra*), as felt boots continue to be used in the Tarim Basin and neighbouring regions;³⁵⁶ and (iii) it is likewise plausible that a Bactrian term was once used for such boots, since

354 Bailey (DKS: 66) cites Khot. *kauvaji* ‘coat’ as a further comparandum, but this form is a ghost word. The passage in question rather contains the sequence *kau va ji* ‘so if’ (Skjærvø 2002: 166).

355 *kavaji* co-occurs with *kojava* and *raji* in CKD 431 = 432 and with *paśu* in CKD 581. The plausible connection between *κωσοβο* and *kojava* and *παγαζο* and *raji* is discussed in §3.3.3 s.vv. *kojava*; *raji*.

356 Interestingly, Aurel Stein discovered in the ruins of Dandan Oilik a wooden panel depicting a man wearing boots with felt soles (Stein 1907: 278; 298).

Kushan emperors are frequently depicted wearing boots on coins and sculptures (Cribb & Bracey 2025: 395f. *et passim*).

Two potential objections to the derivation from *καφῃ /kafši/ should nonetheless be noted. First, -p- /š/ would be represented here with a palatal -ś- / -j- rather than a retroflex -ṣ-, as in other Bactrian loanwords in Niya Prakrit and in Skt. *kavaṣi*. This is not decisive, however: as -p- /š/ may have been fronted when preceded by a labial -φ- /f/ and followed by a front vowel -i /i/, fluctuation between palatal -ś- / -j- and retroflex -ṣ- is quite conceivable (cf. also §4.3.18).³⁵⁷ Second, *kavaji* / *kavaṣi* occurs twice with the numeral 'one' in lists of provisions and payments (CKD 505; 581), where a reference to a single shoe would seem odd. One can imagine, though, that *kavaji* / *kavaṣi* functioned as a collective noun denoting a pair of shoes or boots.

In conclusion, Niya Pkt. *kavaji* / *kavaṣi* may be a loanword from early Kushan Bactrian *καφῃ /kafši/ 'shoe' (cf. the attested pl. καφῃνο) or a cognate of it, much like Skt. *kavaṣi* 'boot(s)'. However, definitive proof that *kavaji* / *kavaṣi* means 'shoe(s), boot(s)' is lacking, and it cannot be excluded that it is instead related to BSkt. *kavacikā*- 'war-coat'.

73. *kojava* 'rug, blanket'

Attestations of the base form

DIR.SG. *kojava*: CKD 173 oA1; 222 + 336 uo5; 327 o5; 382 o2; 416 o4; 431 cr1 = 432 uo7, cr4 = cr1; 448 o1; 534 oB5; 549 o3; 583 uo5; 592 uo4; 633 r2; 668 oA4, oC2; 841 uo3, uo4; *koṣava*: CKD 345 ur2; 448 o3; 575 uo4, cr1; 714 o3; 728 rA1

DIR.PL. *kojava*: CKD 431 cr2 = 432 uo8; *koṣava*: CKD 207 r5

The contexts in which Niya *kojava* (also *koṣava*) occurs demonstrate 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 *Mahāvīyutpatti* 5861, the nom.sg. *kocavaḥ* is translated as Tib. *la ba* 'woollen rug' and Chin. *hè zī* 褐子 'coarse cloth made of wool'. *Mahāvīyutpatti* 8982 lemmatises

357 The rendering of Ir. *f* as Pkt. *v* and the insertion of an anaptyctic vowel -a- would be the same as in Sanskrit. In Niya Prakrit, Ir. *f* is normally represented by *vh* (cf. §3.4.2 s.v. *Vhurmajheva*); but this *akṣara* is restricted to personal names (cf. §2.1.6), making it reasonable to assume that in common nouns Ir. *f* was substituted with a slightly different sound, e.g. *v*.

a neuter form *kocavakam*, again translated into Tibetan as *la ba* ‘woollen rug’ and into Chinese as either *zhāng pí* 麀皮 ‘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).³⁵⁸

Regarding the etymology of these terms, Lüders (1936a: 11) already noted the absence of a straightforward inner-Indo-Aryan derivation, leading him to conclude that they are likely loanwords, “vermutlich aus dem Iranischen”. At the time, Lüders’ proposal of an Iranian origin could not be substantiated, as no forms resembling Niya *kojava* and its cognates were attested in Iranian languages. This is no longer the case since the surfacing of a Bactrian word *κωσοβο*, which, given its co-occurrence with *βαρζο* ‘pillow’, probably means ‘blanket’ and thus semantically matches well with Niya *kojava* and its cognates (BD II: 225).³⁵⁹

Can we conclude that Niya *kojava* is a loan from Bactr. *κωσοβο* ‘blanket’? In principle, one would wish to answer affirmatively: after all, Bactrian is the source of several other terms for textile products in Niya Prakrit (cf. §4.5.3), and *κωσοβο* is thus far the only trace of this word for ‘blanket’ in Iranian languages. Yet, the absence of a convincing etymology for *κωσοβο* complicates matters, as it prevents certainty regarding its phonological interpretation.³⁶⁰

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/, given that the default outcome of OIr. **č* is Bactr. /ts/ (cf. §2.2.4.2). If this is correct, it becomes less straightforward (though perhaps not impossible) to interpret

358 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, *De lingua Latina* fr. 14 Kent as the putative source of *gausape*; cf. de Melo 2019: 640f.; 1259f.); and Gr. γάυσσας* ‘woollen cloth’ (nom.pl. γάυσσαςοι 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 *gëzof* ‘animal skin, cloak’). Due to this uncertainty, I will not discuss them further.

359 Another word which may belong here is Syriac *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*.

360 Cf. the similar case of Niya *agiṣḍha* ‘cover, rug’ and Bactr. γῑḍο ‘idem’ (§3.3.3 s.v.).

kojava (also *kośava*) as a Bactrian loan: the alternation between *-j-* and *-ś-* in *kojava* / *kośava* points to the presence of a phoneme /*ž*/, which is difficult to reconcile with Bactr. /*ts*/.³⁶¹

However, since **kaučapa-* is only a mechanical reconstruction and it is therefore uncertain that *κωσοβο* actually stood for /*kōtsəvə*/, alternative options may be pursued as well. One might, for instance, consider whether the *-σ-* in *κωσοβο* could instead represent /*ś*/, perhaps as the result of an older cluster **-sy-*. Although this suggestion cannot at present be substantiated with a compelling etymology for *κωσοβο*, it would at least allow for a plausible chain of borrowings.

Taking into account that intervocalic *-ś-* became a voiced /*ž*/ in Gāndhārī (written as *-ś-* or *-j-*; cf. §2.1.2), *κωσοβο*, if pronounced /*kōśəvə*/, could be a phonologically straightforward source of Niya *kojava* (also *kośava*). In other words, Gāndhārī could have borrowed this word directly from Bactrian. Pāli *kojava*- ‘rug, cover’ would then be explainable as a borrowing from Gāndhārī, consistent with Burrow’s (1973³: 389) observation that this type of Iranian word first entered Gāndhārī before spreading to other Indo-Aryan languages.³⁶² The Sanskrit forms, in their turn, could be hypersanskritisms modelled on Gāndhārī: as Skt. *-c-* regularly corresponds to Gāndh. /*ž*/ (§2.1.2), it would be possible to back-form the Sanskrit forms with *-c-* from *kojava* (or: *kośava*).³⁶³

Although this scenario seems attractive, it cannot be proved as long as the etymology of Bactr. *κωσοβο* has not been clarified. Hence, cautious conclusions are warranted: it seems plausible that Niya *kojava* ‘rug, blanket’ and its cognates are Iranian loanwords, likely etymologically connected to Bactr. *κωσοβο* ‘blanket’, but whether the latter is also the donor for the Indic forms remains unresolved.

74. *namanaga* / *namaṃniya* ‘exchange’

Attestations of the basic form

DIR.SG. *namanaga*: CKD 222 + 336 uo6; 769 cr1, cr2; *namaṃnaga*: CKD 279 o4; *namaṃniya*: CKD 571 uo7; 580 uo8; 581 cr2; 586 uo4; 590 uo6; 655 cr2; *namani*:

361 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 *-ṣ-* /*z*/ (cf. §3.3.2 s.v. *paraṣa*; §4.3.15; §6.4.4).

362 Phonologically, this proposal assumes that the Gāndhārī voiced palatal sibilant was substituted with the voiced palatal affricate *-j-* in Pāli.

363 Consequently, I cannot entirely agree with Lüders (1936a: 5) that the Sanskrit forms are necessarily more archaic because of their intervocalic *-c-*.

CKD 591 uo6; 769 cr2; *namaṃni*: CKD 582 uo5; 820 uo5; *naṃmani*: CKD 587 uo5; *naṃmaṃni*: CKD 839 uo5; *naṃmaniya*: CKD 592 uo6

Compounds

INS.SG. *namanagamuliyena* ‘price (consisting of) an exchange’: CKD 677 uo2

The Niya word *namanaga* / *namaṃniya*³⁶⁴ typically co-occurs with the verb *de(na)*- ‘to give’, most frequently in legal formulae stipulating the rights one has regarding newly acquired property. (3.34) provides a representative example:

(3.34) CKD 592 uo5–7

taha ajuvadae atra striya Lyimisoae vaṃti Ramṣotsaṣa eṣvarya huda taḍanae baṃnanae vikranaṃnae naṃmaniya deyaṃnae badho deyaṃnae taha sarva boga kikama karaṃni siyati

“From now on Ramṣotsa has ownership of the woman Lyimisoae, 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).

In Bailey’s view (1955a: 19; 1982: 38f.), *namanaga* / *namaṃniya* could be translated as ‘pledge’. Yet, this translation seems unlikely, as the word *badho* already carries this meaning (see §3.2.3 s.v.), and the two words can occur side by side, as they do in (3.34).³⁶⁵ Consequently, I also reject Bailey’s etymological proposal tracing *namanaga* / *namaṃniya* back to Mlr. **ni-vāna* < OIr. **ni-pāna*-, itself in any case but a postulated variant of OIr. **ni-pāka*- ‘pledge’ (Bactr. *vaḥayo*, Sogd. *np’k*, etc.).³⁶⁶

Instead, I follow Burrow (LKD: 100 s.v. *namaṃniya*) in interpreting *namanaga* / *namaṃniya* as ‘exchange’. The strongest evidence for this translation comes from CKD 279, where *namaṃnaga* is 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. *mukaṣi*).³⁶⁷

364 The variation between *-aga* and *-i(ya)* will be discussed below.

365 See also CKD 590; 591.

366 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 happened.

367 Lüders’ (1940b: 46–49) proposal to interpret *namanaga* / *namaṃniya* as ‘loan’ appears to fit less well. His etymological comparison with YAv. *ṇamah-* ‘interest on a loan’ (*Vīdēvdād* 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.

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 traceable to OIr. **ni-māna-* (cf. NP *namūna* ‘similar, like; pattern, etc.’; Hübschmann 1897: 205).³⁶⁸ The meaning ‘exchange’ in Niya Prakrit would be based on the notion of giving something for something similar when exchanging goods.³⁶⁹

A potential problem with Burrow’s etymology concerns the variation between Niya forms in *-aga* and *-i(ya)*.³⁷⁰ If I understand him correctly, Burrow considered both forms independent derivatives from an underlying **namana*, itself a descendant of OIr. **ni-māna-*. Although not impossible, this seems implausible, as the forms in *-aga* and *-i(ya)* are interchangeable.

An alternative option is to treat the forms in *-aga* as more archaic and those in *-i(ya)* as the result of a phonological development. Although *-aga* normally develops only as far as *-ae* or *-e* (LKD: §53), a parallel for *-aga* becoming *-i(ya)* may be found in dir.sg. *spāṣavaṃni* (CKD 84 cr5), possibly a lenited form of dir.sg. *spāṣavaṃnaga* (CKD 507 r2; 515 uo4; 541 o6 = 541 r5). Under this scenario, the Iranian source of *namanaga* / *namaṃniya* could descend from OIr. **ni-māna-ka-* ‘equal > exchange’.

Since forms in *-i(ya)* outnumber those in *-aga* (13 vs. 5 tokens), yet another possibility is to treat 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 Koṭbac’i and Łazar P’arpec’i, suggesting that the Old Iranian pre-form may be reconstructed as **ni-māni-* rather than **ni-māna-*.³⁷¹ 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 a Middle Iranian language in which **ni-* yielded **nə-*; otherwise the rendering with Niya *na-* would be hard to account for. This sound change cannot be ascribed to any

368 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’.

369 On exchange practices in the Shanshan kingdom more generally, see Trombert (2020: 399–401).

370 For the interchange between *-i* and *-iya* in Niya Prakrit, see LKD (§9).

371 Iranian loanwords in Armenian are often assigned to a declension type that reflects the corresponding Old Iranian morphological class; see Olsen (2005); Korn (2013a); Fattori (2023).

particular language, as it occurs in all relevant Iranian languages.³⁷² Depending on how one accounts for the variation between *-aga* and *-iya*, a possible Bactrian source could be reconstructed as **ναμανο* /*nəmānə*/ < **ni-mānV-*, **ναμαναγο* /*nəmānəgə*/ < **ni-māna-ka-*, or **ναμανιγο* /*nəmānigə*/ < **ni-māni-ka-*.³⁷³

75. *pajhavaṃta* ‘breastband (?)’

Attestations of the base form

DIR.SG. *pajhavaṃta*:³⁷⁴ CKD 316 o2

DIR.PL. *pasavaṃta*:³⁷⁵ CKD 534 oA4

In CKD 316, *pajhavaṃta* combines with the adjective *prighamaga* ‘made from damask’, while in CKD 534, its spelling variant *pasavaṃta* is specified by the adjective *thavaṃnae* ‘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.³⁷⁶

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:

372 In Bactrian, the outcome of **ni-* can be written as *vi-*, *vā-*, 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 spelt with simple *n-*, e.g. MMP/MParth. *nm’y-* ‘to show’ < **ni-māya-*, I would not exclude that the **-i-* could also be weakened to a schwa-like sound.

373 But note 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 *vā-* /*nə*/ (§§3.2.2 and 3.2.3 s.vv.).

374 Boyer *et al.* (KD: 115) read this word as *paṃjhavaṃta*. In my view, the first *akṣara* is more likely *ḥ pa* than *ḥ paṃ*; cf. the similarly drawn *ḥ pa* in *aparimana* ‘without measure’ in the same line.

375 See TKD (106) for this reading. The etymology proposed below starts from the assumption that the anusvāra in <*saṃ*> is non-etymological.

376 For the alternation between *-jh-* and *-s-* in an Iranian loanword, cf. *asade* (CKD 436 cr2) next to *ajhate* ‘free’ (§3.3.1 s.v.).

875); and Bactr. λιστοβανδιγο ‘bound around the hand > bracelet’ (BD II: 227).³⁷⁷

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 *-mt-* /*nd-*.³⁷⁸ 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 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 *pajhavaṃta*,³⁷⁹ although a Parthian or Sogdian donor form would work phonologically too.³⁸⁰

76. *raji* ‘cloak, woollen cloth (?)’

Attestations of the base form

DIR.SG. *raji*: CKD 431 cr6 = 432 cr2; 655 uo7; 714 o3; 795 uo2, uo5³⁸¹

GEN.SG. *rajiyaša*: CKD 795 uo3, uo5³⁸²

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 precise meaning cannot be determined from the available contexts, which mostly consist of lists.

No etymology appears to have been proposed until now. However, several terms for textiles in neighbouring Iranian languages resemble *raji*: Dāri *rayza* and Yidgha *royz* ‘women’s cloak’ (Morgenstierne 1938: 243); Sogd. *ryzk* / *ryzy*

377 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 o2). 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 prefer the etymology presented above.

378 For the phonological interpretation of Niya <mt> as /nd/, see §2.1.5.

379 *παζο* ‘breast’ and *βανδο* ‘bundle, bond’ are both attested in Bactrian (BD II: 201; 250f.).

380 For the (possibly allophonic) lenition of OIr. postvocalic **-b-* to Parth. *-β-*, cf. Sundermann (1989: 123) and GW (§§173–178).

381 Instead of *uṭi* (Lin 1999: 230), one should read *raji* (cf. Hasuike 1996: 294). A picture of the under-tablet of CKD 795 is available in Baumer (2000: 105; 2002: 40).

382 In both cases, Lin’s (1999: 230) reading *uṭiyaša* is a mistake for *rajiyaša* (cf. *raji* in uo2, uo5 and Hasuike 1996: 294 who has *raḍi ya ṣa*).

‘cloth made of wool or hair’ (Sims-Williams 2023: 36; 72; 118; Sims-Williams & Hamilton 2015: 30; 108); and Bactr. *παγαζο* ‘cloak’ (BD II: 259).³⁸³

The spelling variation between Sogd. *ryzk* (Ancient Letter 2, line 24) and *ryzy* indicates that this word is an **-aka*-stem, which implies that the final *-y* of *ryzy* stands for */ē/*.³⁸⁴ Since *ryzy* is already attested in an Early Sogdian fragment from Loulan (L.A.IV.v.028; Sims-Williams 2023: 72), the change of final **-aka-* to *-y /ē/* probably happened sufficiently early. It is thus possible chronologically that *raji* is a loan from Sogd. *ryzy*.

If so, two phonological substitutions must be assumed: (i) Sogd. *-γz-* → Niya *-j- /ž(ž)/*, and (ii) Sogd. *-y /ē/* → Niya *-i*. The first substitution is fairly straightforward: *-γ-* could have been lost as the initial element of a foreign cluster (cf. Khotan Pkt. *Suliga* ‘Sogdian’ ← Bactr. *σουλιγο** /*suyligə*/; §3.2.1 s.v.), and the palatal *-j- /ž(ž)/* may be due to a slightly fronted pronunciation of Sogd. */z/* before *-y /ē/*. The second substitution may be attributable to an inner-Prakrit development from *-e* to *-i* (as in *niče* ‘decision’ > *niči*; cf. LKD: §1), or it may simply be that the phonetic quality of Sogdian final */ē/* was closer to Niya *-i* than to *-e*.³⁸⁵

Unlike Sogd. *ryzy*, Bactr. *παγαζο* is clearly not an **-aka*-stem, although its exact stem-class remains uncertain – as is indeed apparent from Sims-Williams’ reconstruction of its preform as **razgV-* with an undetermined final

383 In Bactrian orthography, an alpha is sometimes inserted within a consonant cluster, perhaps to indicate a *svarabhakti* schwa. Compare, e.g., the variation between *τογδο* /*tuydə*/ and *τογαδο* /*tuyədə*/ ‘paid’ < **tuxta-* (BD II: 270). Although *παγαζο* is attested only once, it occurs in proximity to other textile products, such as *κωσοβο* ‘blanket’ and *βαρζο* ‘pillow’ (A34). Interestingly, Niya *kajava* ‘rug, blanket’, conceivably a loan from Bactr. *κωσοβο* (§3.3.3 s.v.), is likewise attested near *raji* (CKD 714 o3).

384 Cf. Sims-Williams (1990: 286–291 = 2025a: 125–130). The derived adjective *ryzy-cykw* ‘of rayze type’ (Sims-Williams & Hamilton 2015: 108) provides further confirmation that the *-y* of *ryzy* is an integral part of the stem rather than the nom.sg. ending of a light stem. Before the form *ryzk* was recognised in Ancient Letter 2, line 24, Sogd. *ryzy* used to be transliterated as */rayzi/*.

385 If, as seems likely (Sims-Williams 1990: 286 = 2025a: 125 fn. 39), Sogdian final */ē/* became shortened to */ĕ/*, this may also help explain why it was borrowed as *-i* rather than **-e*.

vowel (BD II: 259).³⁸⁶ If a preform **razgi-* can be assumed,³⁸⁷ Bactr. *παφαζο* would go back to an early Kushan form **παγζι*. The latter would be an attractive etymon for Niya *raji*, especially if **παγζι* is phonologically interpretable as /rayzi/ with palatalisation of OIr. **z* (< Plr. **j*) to Bactr. /z/ in front of **i* (§2.2.4.3). The Bactrian cluster *-γζ-* /yzi/ would be rendered in Niya as *-j-* /z(z)/, involving the same loss of /y/ that must be assumed if *raji* is taken to be a Sogdian loanword.

In conclusion, it seems conceivable that Niya *raji* is borrowed from either Sogd. *ryzy* /rayzē/ ‘cloth made of wool or hair’ or Bactr. **παγζι* /rayzi/ ‘cloak’ (cf. attested *παφαζο*). The etymology remains arguable, however, both because the semantics attributed to *raji* rest in part on the etymological proposal, and because some uncertainty persists regarding the final *-i* of *raji*.

77. *rasamna* ‘rope (?)’

Attestations of the base form

DIR.PL. *rasamna*: CKD 345 uo4

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 justified 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*.³⁸⁸

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

386 The reconstruction with **-zg-* enables a connection with Vedic *rāju-* ‘rope’ and other derivatives of the PIE root **√(H)resg* ‘to braid, plait’ (EWAia II: 427; LIV²: 507). The sequences *-yz-* in Sogd. *ryzy* and *-γαζ-* < **-γζ-* in Bactr. *παφαζο* must then be the result of a subsequent metathesis.

387 I do not know of strong evidence for the reconstruction of an **i*-stem, but it may be relevant that the *-ji-* in Vedic *rāju-* < Plr. **√(H)razju-* must reflect a form in which the velar preceded a palatal vowel (Kümmel in LIV²: 507). In addition, compare perhaps the **ti*-stem attested in Latin *restis* ‘rope, cord’ and Old Lithuanian *rekstis* ‘basket’. **razgi-* could also be a secondary form that was analogically influenced by another textile term, e.g. **kaḡši-* ‘shoe’ (cf. §3.3.3 s.v. *kavaji*).

388 Niya *rasamna* cannot be inherited, as the palatal sibilant of Skt. *raśanā-* ‘rope, cord, girdle’ should have been preserved. Sindhi *rasan* ‘girdle’ (CDIAL I: 616 no. 10647) is probably an Iranian loanword too; the inherited form in Sindhi is *rāhāna* (also *rāna*) ‘cord, rein, line’, with intervocalic *-s-* lenited to *-h-* (Masica 1991: 194; 207). MP *rasan* ‘rope’ is a loanword from another Iranian language, as Plr. **Hraśanā-* (cf. Skt. *raśanā-*) should yield OP ***raθanā-*, whence MP ***rahan* (cf. Plr. **dača* ‘ten’ > OP *daθa* > MP *dah*).

plausible source of *rasaṃna* would be Parth. **rasan*, the most plausible donor of Arm. *aṛasan* ‘cord’ (Olsen 1999: 867). Yet, one can envisage other options too, e.g. that *rasaṃna* is borrowed from Bactr. **ρασανο* /*rasanə*/ < OIr. **rasanā-*.³⁸⁹

78. *šaṃna* ‘hemp, hempen (?)’

Compounds

DIR.SG. *šaṃnapaṭamae* ‘made of hempen (?) cloth’: CKD 318 uo7

The hapax legomenon *šaṃna* appears in the phrase *šaṃnapaṭamae kaṃculi* ‘a jacket made of *šaṃna* cloth’ and seemingly refers to a type of fabric. Given this, one could be inclined to regard *šaṃna* as a derivative of Skt. *śāṇa-* ‘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).

In light of the initial *ṣ-*, Burrow (1935a: 787; LKD: 126 s.v.) opted for an Iranian loanword, comparing Niya *šaṃna* to MP/NP *šan* ‘hemp’ < OIr. **šana-* (CPD: 79).³⁹⁰ 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).³⁹¹ How the word for ‘hemp’ sounded in Bactrian is currently unknown. In case the word used was **ṛaṇo* /*šanə*/ < **šana-*, this could be a possible source of Niya *šaṃna*, but this naturally cannot be proved for now.

389 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 *-iṽḍ-* and *-iṽḷ-* or where there was a palatal vowel or consonant before or after **-an-*” (Sims-Williams 2017b: 111). None of these contexts applies to **ρασανο* /*rasanə*/ < **rasanā-*.

390 See additionally Iranica (§4.3.206; §4.4.20.16) for indirect traces of OIr. **šana-ka-* ‘hemp seed’ or ‘hemp biscuit’ in Elamite.

391 On the Khotanese and Sogdian word and their relation to other Iranian words for ‘hemp’ and to TA *kanak* / TB *kenek* ‘cotton cloth, cotton fabric’, see Bernard (2024: 295; 2025: 203–206).

79. *hastama* ‘quarrel, dispute’

Attestations of the base form

DIR.SG. *hastama*: CKD 434 uo1; 561 uo2, cr1; 569 uo4; 583 uo2; 584 uo3; 593 uo5; 767 uo2; 842 o1; 884 uo1; *astama*:³⁹² CKD 506 o2; 582 cr4; 676 uo2; 732 uo2; 820 uo6

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.³⁹³ Yet, it is certainly worth considering in view of YAv. *stāṇbīia-*, entry no. 519 in the *Frahang ī oīm*, which is glossed by MP *stēz* ‘strife, quarrel’ and evidently derives from the root **√stamb(H)* (AIW: 1606; Klingenschmitt 1968: 14).³⁹⁴

The simplification of **-mb-* to *-m-* necessary for Burrow’s etymology does not need to have happened in the donor language.³⁹⁵ 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).³⁹⁶ If so, one cannot easily determine the immediate source of Niya *hastama*; it could, for instance, be Bactrian **(v)ασταμβο / (h)astambə/* or Parthian **hastamb*.³⁹⁷

392 The variant *astama* manifests the omission of *h-* found more often in Niya Prakrit (cf. LKD: §10).

393 The root **√stamb(H)* does combine with other preverbs. Cf. e.g. Parth. *wistambag* ‘rebellious’ < **wi-stamba-ka-*.

394 Other derivatives of **√stamb(H)* have, for instance, to do with “austerity” and “oppression”. Cf. e.g. Bactr. *σταμβο /stambə/* ‘injury, ill-treatment, oppression’; ZMP *stambag* ‘oppressive’, *stambagih* ‘oppression, obstinacy, tyranny’; MSogd. *stmb* (and variants) ‘stern, severe, coarse’; and Arm. *stambak* ‘austere’.

395 In Khotanese, **-mb-* becomes *-m-*; see just below.

396 For more examples of Iranian loanwords in Niya Prakrit still undergoing this sound change, cf. §4.3.29.

397 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.

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 that can be securely ascribed 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 o6; 373 r3

ujhmayuga is an adjective with an apparently positive connotation, used to describe *manuṣya* ‘man’ (CKD 283) and *jaṃna* ‘people’ (CKD 373). Its precise meaning is uncertain, but the cluster *-jhm-* /*zm-* suggests an Iranian origin.

Bailey (*apud* Burrow 1935a: 780; LKD: 79 s.v.) compared *ujhmayuga* with MP *uzmāy-* ‘to prove, to test, to try’ (also *uzmāyīšn* ‘skill, experience’; CPD: 85), which has a cognate in Sogd. *zm’y* ‘to tempt’ < PIr. **uz + *√maH* (SD: 461; DCS²: 236; EDIV: 254–256). Accepting Bailey’s comparison, Burrow suggested that *ujhmayuga* might mean either ‘tried > trustworthy’ or ‘skilled’.

If this etymology is correct, *ujhmayuga* would seem to derive from a donor form in which the initial **u-* of the OIr. preverb **uz-* remained intact. Sogd. *zm’y* does not meet this requirement, but other donor languages are conceivable. In Khotanese, for instance, **uz-* is regularly continued as *uys-* /*uz-* (SGS: 230). In Bactrian, the initial **u-* in **uz-* is usually weakened, including in loanwords into Niya Prakrit (cf. §3.2.1 s.v. *śpara* / *śpura*).³⁹⁸ Yet, archaic forms preserving the initial vowel do exist, e.g. *οζοαστο* /*uzwāstə*/ ‘brought out, released, issued’ < **uz-wāsta-*. A Bactrian origin of *ujhmayuga* is therefore not excluded *a priori*.

398 If, as argued by Chamot-Rooke (2022: 31–33), TA/TB *smāṃ* ‘test’ is borrowed from Bactr. **αζμανο* /*əzmānə*/ < **uz-māna-*, then such weakening would indeed also be seen in a nominal reflex of **uz + *√maH*.

One difficulty remains: what type of formation is *ujhmayuga*? Burrow does not address this question. Morphologically, the simplest assumption would be a pre-form such as **uz-māy-a-ka-*. However, this raises the problem of explaining the internal *-u-* in *ujhmayuga*. A form **uz-māy-a-ka-* might yield Bactr. *οζμαιογο, but this would likely correspond to /uzmāyəgə/ rather than ***/uzmāyugə/*, and it is not quite certain whether *-ογο* /əgə/ could be rendered as *-uga* rather than ***-aga* (cf. §3.2.4 s.v. *listuga*). A derivation from **uz-māy-u-ka-* is even less attractive, since no productive suffix **-ukā-* exists (cf. Maggi 2016: 65),³⁹⁹ and *u*-stems are comparatively rare. For these reasons, the question must remain open.

In sum, Bailey's proposal to interpret *ujhmayuga* an additional witness of Plr. **uz* + **√maH* remains tentative. It amounts essentially to a root etymology, and the meaning assigned to *ujhmayuga* cannot be independently confirmed.⁴⁰⁰

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 uo3, cr1 (2×)) as "Middle Iranian" **mazdīg(ə)* < **mazd-īya-ka-* ← **mazdā-* 'wisdom', on the assumption of a substitution of Ir. **-zd-* with Niya *-ṣḍh-* (on which cf. §4.3.19).⁴⁰¹ 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

399 The hypocoristic suffix in **-uka-* proposed on the basis of some Old Iranian names (Iranica: 573) is probably irrelevant for *ujhmayuga*.

400 Given its positive connotation, it may be worth considering whether *ujhmayuga* could alternatively come from an Iranian adjective starting in **hu-* 'good'.

401 See Iranica (244–246) for a list of Old Iranian names made from **mazdā-* 'wisdom', including **mazdā-ka-* and **mazd-uka-*.

examples, two from the Niya documents and one from an inscription discovered in Miran.

- (i) *Aṣaṃna* (CKD 327 o2) ← Bactr. αζανο /āžānə/ ‘worthy’ < *arjyāna- (Weber 1997: 31f.)
- (ii) *Marega* (e.g. CKD 431 cr1 = 432 uo6) ← Bactr. μαρηγο /marēgə/ ‘servant’ < *marya-ka- (Maricq 1958: 367; BPN: no. 237; cf. the patronymic μαρηγανο)
- (iii) *Tita* (gen.sg. *Titaṣa* in CKI 443 1, 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.⁴⁰² One of these has a hitherto unrecognised pendant in Niya Prakrit, i.e. *Liaka* (CKI 46, 2, Rev) ← Bactr. λιακο /l(i)yāk(k)ə/ < *dahyu-k(k)a- ‘(little) land’ (BPN: no. 117), which I propose to compare with Niya *Lýaka* (CKD 701 oE3; 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.

Owing to the methodological pitfalls involved in onomastic research,⁴⁰³ 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 *-tg-* (~ -δγ- /dg/) or *-lg-* (~ -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

402 A well-known example is Gāndh. *Yolamira* (CKI 165 1, 2×) ← Bactr. *ωλομι(υ)ρο /yōləmi(h)rə/ < *yāuda-miθra- (BPN: no. 195).

403 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.

cf. BPN: 5–12).⁴⁰⁴ 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.⁴⁰⁵

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.

3.4.2 A discussion of ten selected examples

81. *Apge*, PN

Attestations of the base form

DIR.SG. *Apge*: CKD 36 uo2; 262 uo1; 701 rH2, oB9; *Apgeya*: CKD 262 ur1; 304 oA2; 580 uo6; 842 o3, o7; *Apgaya*: CKD 654 cr1

INS.SG. *Apgeyena*: CKD 47 uo2, ur1

GEN.SG. *Apgeyaša*: CKD 313 oA1; 419 cr3; 428 o4; 443 o3; 444 r4; 589 uo7; 648 o8; 782 ur4

ABL.SG. *Apgeyade*:⁴⁰⁶ CKD 63 uo2

Niya *Apge* may represent *αβγο /āvgə/, the expected Bactrian outcome of **āpa-ka-*, an Old Iranian hypocoristic name made from **āp-* ‘water’ evidenced by Elam. *ab-ba-ka₄* / *ab-ba-ak-ka₄*, Gr. ἀπάκης (Avroman 1 A28; B30), and Arm. *Apak* (see Martirosyan 2021: no. 37). **āpa-ka-* was probably based on longer compound names such as **āp(a)-dāta-* ‘given by the waters’ (Parth. *’pdt*; Schmitt 2016: no. 26) or **āp(a)-pāta-* ‘protected by the waters’ (Parth. *’pp’t*; Schmitt 2016: no. 28).⁴⁰⁷ If *Apge* has been correctly etymologised, donor languages other than Bactrian (e.g. Sogdian) are excluded because of the apparent syncope of *-a- in between *-p- and the suffixal *-k-.⁴⁰⁸

404 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).

405 In searching for these, I have consulted Tavernier’s *Iranica* and various fascicles of the *Iranisches Personennamenbuch*.

406 In Schoubben (2025a: 94f.), I argue that *Apgeyade* is in fact a *saut du même au même* for *Apgeya*(**ša asiya*)*de ‘from the mouth of Apgeya’.

407 **āp-* ‘water(s)’ was used in these Iranian names because the “good Waters” acted as guardian deities of the 10th day of each Zoroastrian month which was also named after them: Av. *apqm vaṇ’hīnām*, Bactr. αβαμοχοινο, Sogd. *’pwxn*.

408 For the substitution of Bactr. -βγ- /vg/ with Niya -pg- required by my proposal, cf. §4.3.8.

82. *Katge*, PN

Attestations of the base form

DIR.SG. *Katgeya*: CKD 324 + 328 uo8

GEN.SG. *Katgeyaša*: CKD 324 + 328 co1, uo7, cr1;⁴⁰⁹ 886 B4

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 Young 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. **ṛta-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 /kādɡə/ < **kata-ka-* (BD II: 220; BD IV: 114). If this were the case, the name could have been extracted from compound names containing **kata(-ka)-* ‘house’, as in OIr. **xšaya-kata-* ‘ruling the house’ → Elam. *šá-a-ka-da* (Iranica: §4.2.1981) and perhaps the Bactrian royal name καθφισο, if from **kata-ḥsuyant-iča-* or nom.sg. **kata-ḥsuyans* ‘lord of the house’ (BPN: no. 218).

83. *Kamlana*, PN

Attestations of the base form

DIR.SG. *Kamlana*: CKD 701 oC3; 754 oA5

The Niya PN *Kamlana* possibly reflects a Bactrian name *καμολανο /kām̥lānə/, 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. *bgdn* and Elam. *ba-ka-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*.⁴¹⁰

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 Epigraphical Sanskrit name *Valāna* (Lüders 1961: §30, gen.sg. *Valānas[y]a*;

409 For these readings in CKD 324 + 328, see Schoubben in prep.

410 The Niya name *Kame* (CKD 21 uo2) can perhaps come from a short name **kāma-* as in Elam. *ka-ma* (Iranica: §4.2.915).

§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.).⁴¹¹

84. *Kutge*, PN

Attestations of the base form

DIR.SG. *Kutge*: CKD 11 ur1; 115 oL2; 221 oA1; *Kutgeya*: CKD 125 o1; 523 o4; 898 o3; *Kutgo*: CKD 416 o3

GEN.SG. *Kutgeyaša*: CKD 11 uo2; 103 rB2; 823 o5, r1; 898 o5, o6⁴¹²

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* (§KZ §45; cf. Inscriptional MP *ktwk’n*; Gr. ΚΙΔΟΥΚΑΝ). *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. *κοδγο /kudgə/ in the same way that **razu-ka*- results in Bactr. ροζγο /ruzgə/ ‘vineyard’, namely with *u*-umlaut happening before syncope (cf. Benvenuto & Bichlmeier 2022a: 98; 2022b: 24); and if *κοδγο /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. YAv. *kutaka*- ‘small, less’), whose use as a personal name is suggested by Assyrian ^m*Ku-ta-ki* (see Schmitt 2009: no. 83).⁴¹³ Because of syncope, **kuta-ka*- would also result in Bactr. *κοδγο /kudgə/, and the base form κοδο /kudə/ ‘little, insignificant’ < **kuta*- has recently surfaced in the Bactrian birchbark letters (BD IV: 115).

411 It has been suggested (cf. e.g. Lüders 1961: 67; Albery 2020: 315) that the Epigraphical Sanskrit PN *Ulāna* (Lüders 1961: §119, gen.sg. *Ulānāśya*) 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.

412 The sequence *kutgana* in CKD 819 cr5 may also belong here, but since the context is badly preserved, I leave this form aside here. It remains likewise uncertain whether the partially legible names [*Kutg*] (CKD 129 oK3) and *Kutg.sena* (CKD 684 rD9) have anything to do with the name under discussion here.

413 More generally, there are parallels for Iranian names meaning ‘small’. Cf. e.g. Khwar. *ksyštək* /kasištək/ < **kasišta-ka*- ‘very small, smallest’.

Besides *Kutge*, there also exists a Niya name *Kutaka* (CKD 129 oK1; 204 rE1; 700 rA5 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 *κοδγο and non-syncopated *κοδοκο / *κοδικο / *κοδακο would not be unexpected, as Bactrian also has ζαδγο ‘born’ next to ζαδακο / 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 oB2; *Namilgae*: CKD 288 uo2, cr3f.

The female name *Namilga* should, I submit, 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 derived from OIr. **namadkā*- ‘salt’ (Lurje 2010: no. 778; Colditz 2018: no. 371).⁴¹⁴

Because of the sequence -*aae* in the gen.sg. *Namilgae*, Burrow (LKD: §69) speculated that the final -*a* of Niya *Namilga* may have been long. If true, *Namilga* possibly reflects an early Kushan form *ναμλγα /namilgā/ < **namadkā*-, to be compared with other archaic feminine forms such as λογδα /luydā/ ‘daughter’ < nom.sg. **duxtā*.

86. *Palge*, PN

Attestations of the base form

DIR.SG. *Palge*: CKD 209 o2; *Palgeya*: CKD 209 o2

GEN.SG. *Palgeyaša*: CKD 72 rD4

The Niya PN *Palge* could come from Bactr. *παλγο /pālgə/ < **pāda-ka*- ‘little foot’.⁴¹⁵ This supposed Bactrian name would have cognates in Elam. *ba-da-ka*₄, Bab. *pa-da-ak-ka*, and Gr. ΠΑΔΑΓΟΣ (Iranica: §4.2.1205). Since both lambdacism and syncope have to be assumed, this etymology would only work with Bactrian as a donor language.

414 The element -*ynch* in Sogd. *nm’δkynch* is a feminine suffix (GMS: §§1052f.).

415 Bactr. παλο /pālə/ ‘foot’ < **pāda*- is attested (BD IV: 121).

87. *Pitga*, PN

Attestations of the base form

DIR.SG. *Pitga*: CKD 93 o1; 108 r4; 185 oA2; 571 cr3; 590 uo7; 774 uoA2

GEN.SG. *Pitgaša*: CKD 108 oB3, oC4; 117 oE1; 154 r4; 168 o1; 588 uo5; *Pitgasya*: CKD 588 co1, co4

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.⁴¹⁶ Names with the element **pati-* ‘lord, chief’ are a characteristic feature of Iranian onomastics in general, and Bactrian names form no exception (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 πιδοκο (also πιδικο; πιδακο) < **pati-kka-* (BPN: no. 372). The presumed co-existence of *πιδγο and πιδοκο would be of the same kind as that between ζαδγο ‘born’ < **zāta-ka-* and ζαδακο (also ζαδικο) child’ < **zāta-kka-* (BD II: 210).

The sequence *Pitg-* recurs in the female name *Pitgina* (gen.sg. *Pitginae* in CKD 762 oF4). Yet, the exact analysis of *Pitgina* stays uncertain, since the Bactrian hypocoristic suffix -ινο / -ηνο that could correspond to -*ina* has so far not turned up in inherited names (BPN: 11; cf. also §6.4.1).⁴¹⁷

88. *Lamga*, PN

Attestations of the base form

DIR.SG. *Lamga*: CKD 129 oM2; 686 oA5; *Lamgo*: CKD 80 oA3; 543 oA3

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).⁴¹⁸ **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*; Nisa Parth. *dmydt*; cf. Iranica: §4.2.484; Schmitt 2016: no. 167).⁴¹⁹

416 For the relative chronology of these sound changes, see §3.4.2 s.v. *Kutge*.

417 The Niya name *Pite* (longer form *Piteya*) perhaps reflects Bactr. *πιδο /pidə/ < **pati-* (for the ending -*e(ya)*, cf. §4.4.3).

418 For the Bactrian outcome of *-*mV*k-, 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.

419 Cf. also the South Asian Gāndhārī PN *Damijada* (CKI 42 1, gen.sg. *Damijadasa*) ← Ir. **dāmizād(a)* < **dāmi-zāta-* ‘born through (the will of) the creator’ (§2.1.7.1).

89. *Larsu*, PN

Attestations of the base form

DIR.SG. *Larsu*: CKD 69 o4; 243 o2, r1; 318 uo4; 343 o2; 345 uo1f, uo10, ur15f; 420 o8

INS.SG. *Larsuena*: CKD 345 uo7, uo7f.

GEN.SG. *Larsuša*: CKD 94 r44; 223 cr1; 236 uo3; 239 r1; 318 co2; 345 co2, uo10,⁴²⁰ uo11; cr1; 401 uo2; 558 rA1; *Larsuša*: CKD 345 uo6; 378 o2; 383 o2

Derivatives

ADJ. *Larsuani* ‘of Larsu’: CKD 74 oB2

The Niya PN *Larsu* may reflect Bactr. **λαρσαοο* /*lārsawə*/ < **dāra-sawah*- ‘the one having power’.⁴²¹ *σαοο* /*sawə*/ ‘power’ is one of the more frequent 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).⁴²²

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 -*oya* (-*ova*) to -*o* (cf. §3.2.3 s.v. *piro*).

90. *Vhurmajheva*, PN

Attestations of the base form

DIR.SG. *Vhurmajheva*: CKD 143 uo2; *Vhurmasēva*: CKD 26 o2; *Vhurmaṣeva*: CKD 135 ur1

INS.SG. *Vhurmaṣevēna*: CKD 135 uo3

GEN.SG. *Vhurmajhevaša*: CKD 143 uo3; *Vhurmaṣevaša*: CKD 135 uo2, uo3

The Iranian provenance of the name *Vhurmajheva* is shown by its initial, since the only function of the *akṣara* *ṛ vha* in Niya Prakrit is to render an Iranian *f* (see §2.1.6). The spelling variation between -*jheva*, -*seva*, and -*ṣeva* moreover

One further wonders whether the Niya PN *Lampurta* (CKD 678 uo5) 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).

420 One should read *Larsuša* instead of *Larsuasa* (so KD: 125).

421 Lambdacism combined with syncope rules out other donor languages.

422 Given these compounds with the root **√dar* ‘to hold’, I wonder whether the Niya PN *Larka* in CKD 80 rF2 likewise stands for a Bactrian *Kurzname* **λαργο* /*lārgə*/ < **dāra-ka*-. For the assumed substitution of Bactr. -*ργ*- /*rg*/ with Niya -*rk*-, cf. LKD (§36), where it is pointed out that -*rk*- and -*rg*- frequently interchange in foreign names.

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. *phumāseva*) saw a connection between the element *-jheva* (*-seva* / *-seva*) and OIr. **zaiba-* ‘beautiful, ornament’, attested as a name component in Persian *Aurangzeb*, literally ‘ornament of the throne’.⁴²³ The element *Vhurma-* he left unexplained.

I suggest to compare *Vhurmajheva* to the Bactrian names *φρομασαραζο* and *φρομαριζμο* (also *φραμαριζμο*). These names are either to be accounted for as governing compounds with *φρομα-* in the sense of the verb *φρομυ-* ‘to order’ < **fra-māya-* or as mechanical combinations of *φρομα-*, a shortened form of *φρομανο* ‘command’ < **fra-māna-*, with the frequent name components *σαραζο* < **warāza-* ‘boar’ and *ριζμο* ‘battle’ < **razman-* (see BPN: no. 506).

φρομασαραζο and *φρομαριζμο* display the most common outcome of **fra-* in Bactrian, i.e. *φρο-* /frə/. Yet, already in early Bactrian sources, a variant outcome *φop-* is attested, e.g. *φopζινδο* next to *φροζινδο* ‘descendant(s)’ < **fra-zanti-* (BD II: 274f.; BD IV: 127f.) and *φopδαμσο* ‘at first’ < **fratama-* + **čit* (SK4M 2; SK4A 3; SK4B 4). It thus seems possible that *Vhurmajheva* was borrowed from a source starting in **φopμα-* /furmā/.

I transcribe the *-o-* in **φopμα-* as /u/ because **fra-* may have developed into *φop-* via an intermediary **fɹ-* (cf. Sims-Williams 2009b: 284) and **ɹ* vocalises to Bactr. *-op-* /ur/ in a labial environment (SFBG: 60). What speaks in favour of an intermediary **fɹ-* is the cluster *-βτ-* /št/ in *φopβτυ-*, pret. *φopβταδο* ‘to send’ < **fra-stāya-*, pret. **fra-stāta-* (BD II: 275), which evidently derives from earlier **ɹst-*, given parallels such as *παροβτο* ‘blocked’ < **pari-wɹsta-* (SFBG: 56).⁴²⁴

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 **φopμαζηβο* /furmāžēvə/.

423 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* (e.g. CKD 499 o3) contains the same name element with initial devoicing to *s-*.

424 If one prefers to interpret *φop-* as a metathesised variant of *φρο-*, **φopμα-* 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.

3.5 Loans 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. *gaṃṇā* ‘treasury’

Derivatives

ADJ. *gaṃṇī* ‘of the treasury’: CKD 357 o5; *kaṇī*: CKD 357 o5, o6

Compounds

DIR.SG. *gaṃṇāvara* ‘treasurer’: CKD 310 uo1, ur1

GEN.PL. *kaṃjhavaliyana* ‘idem’: CKD 725 r1f.

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).⁴²⁵ 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. *gaṇjāvara*; Lüders 1961: 100) and *kaṃjhavaliya* (gen.pl. *kaṃjhavaliyana*).⁴²⁶

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. *gāzn* (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

425 The Sanskrit cognate *gaṇja-* ‘treasury’ is attested as a separate word.

426 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).

older form **gazna-*, which in “Median” was metathesised to **ganza-* and from there passed on to Old Persian in Achaemenid times.⁴²⁷

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)*?⁴²⁸ 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 borrowed during the Achaemenid conquest of Gandhāra from OP **ganza-* (so also Henning 1963: 197 = 1977 II: 585),⁴²⁹ 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 *gaṃṇavara* ‘treasurer’ ← OP **ganza-bara-* ‘idem’ (MMP *ganzwar*; ZMP *ganjwar*) can be attributed to lenition processes in Gāndhārī (§2.1.2). As with other Old Persian loanwords (cf. §4.2.2), the Sanskrit cognate *gañjavara-* may therefore have been borrowed through a Gāndhārī intermediary.

92. *thavaṃnaga* ‘cloth’

Attestations of the base form

DIR.PL. *thavaṃnaga*: CKD 141 o3; *thavaṃnae*: CKD 207 r3, r5; *tavanaga*: CKD 476B o1

Derivatives

DIR.PL. *thavaṃnamae* ‘made from cloth’: CKD 534 oA4

Compounds

DIR.SG. *kaśathavaṃnaga* ‘silken cloth’: CKD 897 o5; *kajahavaṃnaga*: CKD 583 uo4;⁴³⁰ 808 uo8; DIR.PL. *kajathavaṃne*⁴³¹: CKD 149 o2

DIR.PL. *oṃnathavaṃne* ‘woollen cloth’: CKD 149 o2; DIR.SG. *uṃnathavanagamae* ‘made from woollen cloth’: CKD 318 cr1

427 The genuine Persian form may be continued by Classical New 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).

428 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, e.g., *svaṭhaṃgha* / *ṣoṭhaṃga* (§3.2.4 s.v.).

429 If we can trust Herodotus 3.94, the Indians paid the largest tribute of the whole empire to the Achaemenid treasury.

430 Not to be read as *kaṭahavaṃnaga*; see below.

431 On this reading (instead of *kaṭathavaṃne*), see the discussion below.

/// *havaṃnaga*: CKD 808 uo8

A survey of the passages in which Niya Prakrit *thavaṃnaga* occurs shows that it denotes a textile product (see Lüders 1936a: 21–24). As first noted by Burrow (1934: 515; LKD: 96f. s.v.), this meaning strongly supports an etymological connection with Khot. *thauna*- ‘cloth’ < **tafna*-.⁴³² Several other forms from the region meaning ‘cloth(ing)’ belong here too: Skt. *thacaṇa*, a misspelling for **thavaṇa*, TB *tono*, and Old Uyghur *ton*.⁴³³

In CKD 476B, the Niya word is spelt 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 a case of unetymological aspiration such as *thavastaga* beside *tavastaga* ‘carpet’ (§3.3.2 s.v.). *-havaṃnaga* illustrates the default Prakrit development from intervocalic *-th-* to *-h-*, whereas a change from unaspirated *-t-* to *-h-* would be highly unusual.

The initial aspirate in *thavaṃnaga* is the main reason for assuming a Khotanese loanword. In Khot. *thauna*- < **tafna*-, the aspirated *th*- results from the **f* later in the word – an instance of “transfer of aspiration” (*Hauchumsprung*), a sound change which is not attested in other Middle Iranian languages (see Sims-Williams 1983: 48 = 2025a: 242, where it is described as “transfer of friction from internal to initial position”).

The apparent rendering of Khot. *-au-* as Niya *-ava-* may suggest that the borrowing took place at a stage when the Khotanese form was still **thāvna*-, with **-āvn-* as an intermediary stage between **-afn-* and *-aun-*.⁴³⁴ 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 formed within Niya Prakrit from an earlier **thavaṃna* ← **thāvna*-, possibly preserved in the derived form dir.pl. *thavaṃnamae* ‘made from cloth’ (CKD 534 oA4). Alternatively, *thavaṃnaga* could be a loan from a variant of Khot. *thauna*- exhibiting the *ka*-suffix, i.e. *thaunaka*-. The latter form is attested, but seemingly only in Late Khotanese and with the more specific meaning ‘silk brocade’ (Duan 2013a:

432 For the reconstruction **tafna*- with a short vowel, see Halfmann (2025b: 109 fn. 148) *contra* Dragoni (2023b: 124) and Schoubben (2024: 223).

433 On these words, see e.g. Schaefer (*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) adds a further comparison with Sogd. *δβn’k* ‘cloth’.

434 This suggestion implies that the development to *-aun-* is recent in Khotanese, perhaps not earlier than the 3rd or 4th century CE.

310f.). Overall, an inner-Prakrit reshaping of **thavaṃna* into *thavaṃnaga* seems the more plausible explanation.⁴³⁵

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 *Ṭ ṭa* in CKD 149 o2, but *kajahavaṃnaga* with *Ṭ ja* in CKD 583 uo4. Noting this inconsistency and observing that *Ṭ ṭa* and *Ṭ ja* can be difficult to distinguish in Niya Kharoṣṭhī, Lüders (1936a: 23) proposed to change the reading *kajahavaṃnaga* in CKD 583 uo4 to *kaṭahavaṃnaga*. New evidence suggests that the transliteration *kajahavaṃnaga*⁴³⁶ was right after all, and that one should rather correct *kaṭathavaṃne* in CKD 149 o2 to *kajathavaṃne*. In the recently edited document CKD 897, a new form *kaśathavaṃnaga* (o5) has surfaced, and given that intervocalically *-ś-* and *-j-* are alternative ways to write */ṣ/* (cf. §2.1.2), this new form makes it clear that the transliteration *kaja-* is preferable over ***kaṭa-*.⁴³⁷

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 does not seem impossible. Yet, I believe that Skt. *kāśi-* ‘fine cloth from Benares’ (BHSD: 181) provides an even better source, since *kaśathavaṃnaga* and its variants could then be seen as cognate with the Old Uyghur expression *kaš agilar üzäki ton* ‘a garment (made) from Benares cloth’ (HWA: 341), where the Indic loanword *kaš* ‘fine cloth from Benares’ combines with the Old Uyghur pendant of Niya *thavaṃnaga*, i.e. *ton* ‘garment’.⁴³⁸ With my etymology, *kaśathavaṃnaga* additionally parallels BSkt. *kāśika- vastra-* ‘a garment made from Benares cloth’ and its Pāli cognate of the same meaning *kāsika- vattha-* (BHSD: 181; Cone 2001– I: 683).⁴³⁹

To summarise, *thavaṃnaga* ‘cloth’ can be derived from **thavaṃna*, a loan from **thāvna-*, itself a more archaic version of the attested Khotanese word

435 Possibly, an analogy with *tavastaga* ‘carpet’ played a role in the hypothesised remodelling to *thavaṃnaga*.

436 Specifically this form is now also attested in CKD 808 uo8.

437 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.

438 Cf. also Zieme (1997), who *inter alia* derives NP *kaṣ* ‘coarse silk’ from the same Indic source as Old Uyghur *kaš*.

439 The comparison with *kāśika- vastra-* (*kāsika- vattha-*) was kindly suggested to me by A. Huard (p.c.).

thauna- ‘cloth’. *thavaṃnaga* can also be compounded with an element *kaša-* / *kaja-*, which I propose to derive from Skt. *kāśi-* ‘fine cloth from Benares’.

93. *darš-* ‘to load (a beast of burden)’

Attestations of the base form

PRET.3SG. *daršida*: CKD 431 cr5 = 432 cr2

PRET.3PL. *daršitaṃti*: CKD 305 o5; 401 uo4

OPT.3PL. *daršeyāti*:⁴⁴⁰ CKD 842 o10

PST.PTCP.INS.SG. *daršidagena*: CKD 40 uo3

GERV. *daršitavo*: CKD 73 oA6, oE5; 305 o7; *daršidavo*: CKD 236 uo2; *daršidavya*: CKD 413 o2, o3

daršida ? ? : CKD 413 o3

Derivatives

DIR.SG. *darša* ‘load’: CKD 329 o4; 796 cr3, cr4⁴⁴¹

Burrow (1934: 510f.; LKD: §23; 97 s.v.) convincingly compared *darš-* ‘to load (a beast of burden)’ to the Plr. root $\sqrt{\text{darj}}$, which is continued by, amongst others, Av. *darəz-* ‘to attach’ and Parth. *darz-* ‘to tie on, load (carrier or pack animal)’ (EDIV: 63f.).⁴⁴²

To account for the Niya cluster *-rš-*, Bailey (1946: 768) reconstructed the direct source of *darš-* as $\sqrt{\text{darz-}} < \text{OIr. } \sqrt{\text{darz(a)ya-}}$, comparing the palatalisation seen in Khot. *dalś-* ‘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. For instance, it would 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. *ṣaṭhaṃgha* / *ṣoṭhaṃgha*).

The absence of lambdacism precludes *darš-* from being a Bactrian loanword,⁴⁴³ and most other Iranian languages do not qualify as a plausible

440 Read alternatively *daršeyānti* (Schoubben 2022b: 346 fn. 5).

441 I follow here Hasuiké’s (1996: 301) reading; Lin’s (1999: 229) *varša* ‘year’ is palaeographically less likely and inappropriate in the context.

442 Khwar *drazīk* ‘to load up’ comes from a derivative of the same Iranian root (Morgenstierne 1936: 667).

443 In Bactrian, the relevant verb may have been $\sqrt{\text{liž-}}$ / $\sqrt{\text{liž}}$ or $\sqrt{\text{lēž-}}$ / $\sqrt{\text{lēž}}$ / $\sqrt{\text{darzaya-}}$ (→ Niya *leš-*; cf. §3.2.3 s.v.), pret. $\sqrt{\text{lipto}}$ / $\sqrt{\text{lirtə}}$ / $\sqrt{\text{dṛṣta-}}$ (→ OIA $\sqrt{\text{larda-}}$ ‘load, cargo’, BSkt. *lardayati* ‘to load’; cf. Schoubben 2022b).

source either.⁴⁴⁴ 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).⁴⁴⁵

94. *divira* ‘scribe’

Attestations of the base form

DIR.SG. *divira*: CKD 348 uo6; 384 rA3; 385 o1; 454 r3; 507 o3; 520 uo2; 552 r1; 569 cr1; 571 co1f., uo2, uo6, cr5, cr6; 572 uo7; 576 co3, uo2, uo3, cr3; 577 co3, uo2, uo8; 579 cr4 (2×); 580 uo6, cr3 (2×); 581 co2; 582 cr6, cr7; 586 co2, uo2, uo3, uo8, uo9; 587 co2, uo2; 588 co2, uo2, uo3, uo4; 589 co2, uo2, uo5, cr2 (2×); 592 co1, uo2; 649 r2; 765 uo4; 788 cr9; 819 co1, uo1; 820 co3, uo8; *tivira*: CKD 90 o3; 157 o1; 222 + 336 co1, uo2, uo4; 234 o1; 415 cr2, cr4; 419 cr3; 422 o10; 436 cr4; 437 cr8; 572 co1, uo2; 573 cr5; 579 co2, uo3, uo5; 581 uo2f., uo4, cr1, cr4 (2×); 582 cr2 (2×); 587 cr2 (2×); 590 co1, uo2 (2×), uo5, uo9, uo10; 591 cr4; 592 cr5; 598 r1, r3; 648 o7; 652 uo4; 654 cr1 (2×), cr2, cr3; 655 cr4; 715 o9, o10; 782 ur4; 883 r2; 889 cr4
GEN.PL. *divirana*: CKD 330 r2; 816 A1; *tivirana*: CKD 422 o7; 436 cr3

Compounds

DIR.SG. *rajadivira* ‘royal scribe’: CKD 575 uo5; INS.SG. *rajadivirena*: CKD 677 cr2

Niya Prakrit *divira* ‘scribe’ and its Sanskrit counterpart *divira-* are most likely loanwords from OP **dipīra-* ‘idem’, whence MP *dibīr*.⁴⁴⁶ 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’,⁴⁴⁷ the Old Persian word has been borrowed into various Iranian and non-Iranian languages, including Bactr. λαβίρο /ləvīrə/⁴⁴⁸ and Arm. *dpir*. Skt. *divira-* may have been adopted

444 Khot. *dalš-* is phonologically incompatible with Niya *darš-*, and no suitable source is found in Sogdian either. Persian seems to preserve no trace of **√darf*, but a hypothetical MP **dāl-* < OP **dard-* (cf. *sāl* ‘year’ < **sardV-*) would in any case not fit the phonology of Niya *darš-*.

445 A somewhat hypothetical option is to assume that *darš-* was borrowed at an early stage from a neighbouring Old Iranian language (cf. Av. *darəz-*).

446 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).

447 See Livshits (1980: 168 fn. 17) against an Old Iranian compound **dipi-bara-* or **dipi-wara-*.

448 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:

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 r2 (3× *dhane* ½)

DIR.PL. *dhane*: CKD 702 r2 (*dhane* 3); *dhanea*: CKI 725 1

abbr. *dha*: CKI 91 1; 173 1; 190 1 (?); 260 1; 262 1; 263 1; 450 1; 716 1; 727 1; 729 1

dhane is a small unit of measure used to weigh pepper (*marica*), cinnamon (*tvaca*), and cardamom (*susmela*) 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 *dānakā-* / *dhānakā-*, the name of a coin (cf. Schmitt 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* ‘¼th of a drachm’. MP *dānag* derives from OP **dāna-kā-* (Schmitt 1991: 160), the source of Elam. *da-na-ka(-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,⁴⁴⁹ 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 *dānakā-* / *dhānakā-*.⁴⁵⁰

227), 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 MP *nibēg* ‘text, writing’, Judaeo-Persian *nywy* ‘inscription’, Sogd. *np’yk* ‘book, scripture’, and Bactr. *vaβηyo* ‘text, writing’, which derive from **dipika-* with the **d-* changed to **n-* by contamination with the outcomes of Plr. **ni* + **√paić* ‘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-*.

449 In any case, a Bactrian intermediary is excluded, since Niya *dhane* and its cognates show no sign of lambdacism.

450 The initial aspirate in Indo-Aryan may be due to folk etymology. Because OP **dāna-kā-* is likely derived from OIr. **dānā-* ‘corn’, Brust (2008²: 233) suggests Skt. *dhānā-* ‘idem’ as the analogical model. One could alternatively think of *dhana-* ‘valued object’ or (as suggested by A. Huard, p.c.) *dhānya-*, a measure (cf. also *dhānyamāṣa-*, a particular measure in the *Carakasamhitā*). It is not clear to me why Brust uses the initial aspirate as an argument that Niya *dhane* is borrowed from Sanskrit.

96. *prahoni* ‘garment’

Attestations of the base form

DIR.SG. *prahoni*: CKD 318 uo7, cr1, cr2

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’.⁴⁵¹ By lack of comparable forms in other Iranian languages, and in view of the corresponding verb *prahauy-* ‘to put on (clothing)’ (SGS: 89), Khotanese is probably also the direct donor of *prahoni* (cf. Bailey 1949a: 121; Weber 1997: 31).⁴⁵²

Niya Prakrit no longer distinguishes between dental and retroflex nasals (§2.1.6 under *ṣ na*), which explains why the Khotanese retroflex nasal is rendered in Niya with *-n-*. The word-final *-i* in *prahoni* may render the Khotanese nom.sg. in *-ā* (Lüders 1936a: 35).

97. *mudra* ‘seal’

Attestations of the base form

DIR.SG. *mudra*: CKI 95 1f; CKD 206 co3; 318 co4; 324 + 328 co3; 332 o4; 380 o3; 421 o3; 574 co3b; 575 co3; 578 co3 (*mudreṣa* ‘this seal’); 582 co4; 749 o3; 787 co4, ur1; 792 co3; 793 A4; 795 co5; 819 uo7; *mum̐dra*: CKD 331 co3; 820 co3; *mutra*: CKD 326 o4; 345 co3; 348 co3; 416 r1; 419 co4; 436 co4; 489 o3; 496 co5; 507 o5; 576 co5; 584 co3; 588 co4; 591 co3; 592 co3; 593 co4; 879 co2; 881 co3; 885 ur1; *mutre*: CKD 889 4; *mum̐tra*: CKD 216 o5; 247 o4 (2×); 330 o4; 383 o3; 454 o1; 461 o1; 568 co3; 569 co3; 570 co4; 577 co5; 604 o1, o2, o3, r2; 676 co3; 788 co3

INS.SG. *mum̐trenā*: CKD 247 o4

Derivatives

DIR.SG. *mudraga* ‘seal’ < **mudra-ka-*: CKD 425 co4

PST.PTCP. *mudrita* ‘sealed’: CKD 493 o3; *mum̐tritaga*: CKD 247 o4; 838 r5

Compounds

DIR.SG. *kilamudra* ‘sealed wedge-tablet’: CKD 3 uo2f; 5 uo2; 6 uo3; 7 cr1; 8 o1; 10 uo2; 12 cr1; 13 uo2f; 14 cr2; 17 cr1; 18 uo3; 19 uo2, etc.; *kilamum̐dra*: CKD 11 uo3; 26 o3; 49 uo3; 54 o3; 57 o2; 62 uo3; 68 uo3; 136 uo2; 198 o2; 223 uo4; 226 o3; 240

451 In Kuča Sanskrit, the same word occurs as *parhūṇa-* / *parhyaṇa-* (Bailey 1966: 32; DKS: 255).

452 For a possible etymology of the Khotanese word, see now Dragoni (2023b: 124 fn. 239).

r1; 256 uo3f.; 274 r1; 310 uo3; 312 uo3; 339 o3; 340 o3; 374 o3; 817 uo3, cr3; *kilamutra*: CKD 15 uo4; 271 + 338 cr3; 308 o2f.; 403 uo4; 408 r1; 520 uo3; 819 uo4; 860 co3; *kilamumtra*: CKD 16 uo3; 33 uo3; 135 uo2; 152 uo5 (2×); 156 uo3; 160 o4; 219 uo2; 251 o2; 295 o4; 296 uo3; 297 uo3; 315 uo3; 356 o2; 366 o3; 375 o4; 400 o3; 427 o4; 430 uo3; 433 uo3; 439 uo3; 440 r1, r3; 474 uo3; 482 uo3; 524 uo5; 540 uo3; 564 uo2; 606 o2; 621 o5; 630 o3; 706 uo3; 719 o2, o3; 743 o2; 816 A3; LOC.SG. *kilamumtrammi*: CKD 160 o4

DIR.SG. *saṃghamudra* ‘community seal’: CKI 183 1; *saghamudra*: CKI 542 1; *saghamudre*: CKI 220 1

There is a consensus (cf. EWAia III: 409f.) that Gāndh. *mudra* ‘seal’ and its Sanskrit cognate *mudrā*-⁴⁵³ are loans from OP **mudrā-* (or: **muδrā-*), 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: *Muδrāya-*) in Old Persian (cf. de Blois 2013: 269).

Referring to a culturally important item *inter alia* used in an administrative context (Garrison 2021),⁴⁵⁴ OP **mudrā-* (or: **muδrā-*) was borrowed into various languages in Achaemenid times, also into Bactrian, where due to lambdacism the word became *μολρο* /mulrə/ ‘seal’.⁴⁵⁵ This Bactrian form can scarcely have been the source of Gāndh. *mudra* and Skt. *mudrā-*, since this would require Bactr. -λρ- /lr/ to have been substituted with Indic /dr/⁴⁵⁶ – a counter-intuitive hypothesis at best. If one takes OP **mudrā-* (or: **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 o1

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

453 The word is attested from the Sanskrit epics onwards. The personal name *Lōpāmudrā-* in *Ṛgveda* 1.179 is insufficient to postulate the existence of *mudrā-* in Vedic (cf. Remmer 2006: 71f.).

454 The sealing practices evidenced by the Niya documents have recently been discussed by Høisæter (2025).

455 For other Old Persian loanwords in Bactrian, cf. Sims-Williams (2002: 227f.).

456 The orthographic variation between <dr> and <tr> in Gāndhārī is probably phonologically insignificant.

donor language for historical reasons, the change of **-ai-* to *-ī-* → Pkt. *-i-* is also typical for Khotanese.⁴⁵⁷

It remains a matter of debate whether *hīnāysa-* is calqued on Gr. στρατηγός ‘general, commander’,⁴⁵⁸ or an Old Iranian formation comparable to, for instance, YAv. *nauuāza-* ‘leader of the ship > helmsman’.⁴⁵⁹ As στρατηγός was borrowed into Gāndhārī as *stratega*,⁴⁶⁰ the first option is 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.

3.5.2 Plausible etymologies

99. *khakhordi* ‘witch’

Attestations of the base form

DIR.SG. *khakhordi*: CKD 58 r1; 63 cr1; *khakhorti*:⁴⁶¹ CKD 880 uo3; *khakhortiya* ‘witchcraft’: CKD 880 uo5

DIR.PL. *khakhordi*: CKD 63 uo2 (*khakhordi stri* 3); *khakhorda*: CKD 248 o4

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).⁴⁶² He further made a convincing

457 In front of a nasal, as is the case here, *-ŋ-* /*ē-* < **-ai-* can, however, also develop further to *-i-* /*ī-* in Bactrian (SFBG: 61f.). In fact, Bactr. **uivo* /*hīnə*/ ‘army’ < **hainā-* may be attested in the PN *uivoσapo* (BPN: no. 482).

458 Thus e.g. Burrow (1934: 514); Tóttössy (1980: 132f.); and Sims-Williams (2023: 3), who also compares Sogd. *sp’ōny* ‘idem’.

459 Thus e.g. Thomas (1936a: 789–791; 1945: 513–515; cf. also Maggi 2016: 77). 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).

460 See recently Candotti & Giudice (2024: 245–252).

461 This variant form (on which cf. Duan & Tshelothar 2016: 15) proves that Burrow (1935a: 780f.; LKD: 86 s.v. *khakhorna*; cf. also Bailey 1955a: 14 fn. 1) rightly preferred the transliteration *khakhordi* over *khakhorni* (as in KI: 341).

462 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. BCE) deals with false accusations of witchcraft (Roth 1997²: 81); and in §47

etymological comparison with YAv. *kax^varəiḏi-* ‘witch’ < **kaxwardi-* (cf. masc. *kax^varəḏa-* ‘wizard’ < **kaxwarda-*), Arm. *kaxard* ‘sorcerer, witch’ (← Ir.),⁴⁶³ and various Late Sanskrit words for ‘evil spirit’, namely *kākhorda-* (BSkt.), *kakkhorda-*, *kharkoda-*, and *khārkoṭa-*.⁴⁶⁴

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 *-pλ-* /*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 *khakhordi* either.⁴⁶⁵ 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. YAv. *kax^varəḏa-*; *kax^varəiḏi-*). 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).⁴⁶⁶

of the Middle Assyrian Laws (11th cent. BCE), it is ordered that those practising witchcraft be put to death when caught in the act (Roth 1997²: 81).

463 According to Asatrian (2024), Arm. *kaxard* (dialectal **k(ə)xárt*) has in turn been borrowed into Avar, a NE Caucasian language, as *xəart* (*xəartai*).

464 **kaxwarda-* / **kaxwardi-* 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).

465 Loukota (2024: 76) also notes that “the term *khakhorda* is unlikely to be Khotanese”.

466 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.

3.5.3 Arguable etymologies

100. *ratu*, a religious title

Attestations of the base form

DIR.PL. *ratu*: CKD 489 r3

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);⁴⁶⁷ and in Bactrian, OIr. **ratu*- may have become **ροδο* /*rudə*/, because of *u*-umlaut as in *ροζγο* /*ruzgə*/ ‘vineyard’ < **razu-ka*-. These languages can thus all be ruled out. A Sogdian source of Niya *ratu* would formally not seem impossible, as OIr. **ratu* is continued in this language as *rtw* (also *rttw*; *rtww*; *rtww*), 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.⁴⁶⁸ Caution is needed, however, before jumping to far-reaching conclusions.

467 Note, for instance, Khot. *bāda*- ‘time’ < **upa-ratu*- (see SVK II: 106f., where the Sogdian cognate *prtw* ‘time, occasion’ is cited).

468 For Zoroastrianism in Bactria, see recently Grenet (2015) and Kreidl & Choksy (2021). For Buddhism, cf. e.g. Fussman (2015) and Härtel (2023: 70–72; 241f.).

3.5.4 Tentative etymologies

101. *denuga*, a title (?)

Attestations of the base form

DIR.SG. *denuga*: CKD 418 o2

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,⁴⁶⁹ perhaps based on the assumption that *denuga* approximately meant ‘religious (specialist)’.

In case this highly uncertain etymology were correct, *denuga* cannot have been an originally Bactrian word. **dayanā*- yielded Bactr. *ληνο /lēnə/, as indirectly preserved in MBactr. *lyn’ng* ‘of the religion’ and *ly(y)nlyryg* ‘Electus’ (Sims-Williams 2009a: 263).

102. *rotamṇa* ‘madder (?)’

Attestations of the base form

DIR.SG. *rotamṇa*: CKD 261 r1; 295 o3; 357 o5; 385 o6 (2×); 450 o7; *rotam*: CKD 252 r2; 272 o8; 387 o6.

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 >

469 According to Burrow, a suffix *-uga* would occur also in Niya *vevatuga* ‘object of (legal) dispute, disputant’, in his view derived with *vṛddhi* from Skt. *vivāda*- ‘dispute’ (cf. LKD: §75).

madder'.⁴⁷⁰ 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, however, the word for 'madder' is not attested in these languages, and the semantics of *rotaṇna* cannot be determined on internal grounds, Burrow's etymology must still be treated with caution.⁴⁷¹

3.6 Iranian loans from an unidentified source

With the loanwords reviewed until now, one can apply Bactrian sound changes to an Old Iranian pre-form to determine whether 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 *pačēvara* '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 whether 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. **fratāra-ka-* 'superior, foremost', but if this etymology is correct, the phonological appearance of *bhaṭaraga* still owes much to a folk etymological influence from Pkt. *bhaṭṭr-* 'lord, husband' < Skt. *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.

470 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 BCE has revealed that madder was likely already used to dye clothes at that time (cf. Zhang, Good & Laursen 2008: 1099).

471 Given that *rotaṇna* 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.

103. *anada* ‘carefully’

Attestations of the base form

ADV. *anada*: CKD 1 co3; 3 uo3; 5 uo3; 7 cr2; 9 uo3; 11 uo3; 12 cr1; 13 uo3 (2×); 15 cr2 (2×); 18 uo3; 19 uo2; 20 uo3; 24 cr1; 26 o3; 27 cr2; 29 cr2; 30 o3; 32 cr2; 33 uo3; 36 uo3; 37 cr1; 38 o3; 39 uo3; 42 uo2; 45 uo4; 46 cr1; 47 uo2; 49 uo3; 53 uo3; 54 o3; 56 cr1; 62 uo4 (2×), co1; 63 uo3; 71 cr2; 124 cr2; 134 o3; 189 o3; 192 r1; 208 o2; 212 cr1; 213 r2; 229 r1; 235 uo3; 240 r1; 243 o4; 256 uo4; 262 uo3; 265 uo3; 272 o2; 283 o2, o4; 291 o2; 297 uo3, cr3, etc.; *aṃnada* (?): CKD 884 co2; *anata*: CKD 223 cr1; 335 co2; 340 o3; 345 co2; 362 o2; 366 o3; 368 o2; 379 o2; 474 uo3; 540 cr1; 576 co4; 577 co4; 588 co3; 635 r3f.; 749 o2; 869 2; *anatha*: CKD 222 + 336 co2; 322 co2; 325 o2f.; 330 o3; 348 co1; 380 o2; 421 o2; 489 o2; 635 r4; 732 co3; 889 co2

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. *ājñaptam* ‘ordered’” (LKD: 74 *pace* Bailey 1946a: 779),⁴⁷² 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, 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).⁴⁷³

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 easily 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)*.⁴⁷⁴

472 Phonologically, a derivation from *ājñaptam* would be unproblematic; cf. Niya *anati* / *anadi* ‘command’ < *ājñapti-*.

473 I leave aside Tumsh. *anād;u* (contract 1, line 22) as its meaning is up for debate; cf. e.g. Hitch (2009: 19), who translates *anād;u* as ‘commanded’ and interprets it as a loan from a MIA derivative of Skt. *ājñapta-*.

474 Dragoni (*apud* Bernard 2025: 126 fn. 107; cf. already DKS: 18) has made a semantically quite attractive comparison with OIr. **nātha-* ‘protection, refuge’, a supposed cognate of Vedic *nāthá-* ‘refuge, help, protector’ that seems to have left some indirect traces in Middle and New Persian (see Bernard 2025: 125–127). Formally, however, this etymology is not self-evident because the *-t-* in Khot. *ānata-* and BSogd. *’n’t(t)* cannot reflect earlier **-θ-*.

104. *kremeru* ‘crimson, scarlet’

Attestations of the base form

DIR.SG. *kremeru*: CKD 318 cr2; 660 oA9

In both of its attestations, Niya Pkt. *kremeru* appears to be an adjective specifying a type of textile product: *paliyarnaga*⁴⁷⁵ *prahoni* ‘a *paliyarnaga* garment’ in CKD 318 and *paṭamca* ‘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 garment’ (SWTF II: 122f.).⁴⁷⁶ BSkt. *kemerūka*- occurs in the *Sarvastivāda*-version of the *Vinayavibhaṅga* and corresponds to a word for ‘red’ in the Tocharian B version of the *Vinayavibhaṅga* (cf. Pinault 2008: 76f.)⁴⁷⁷ and in the Chinese translation of the *Mūlasarvastivāda*-version (cf. Rosen 1959: 107 fn. 1). It follows that BSkt. *kemerūka*- probably means ‘red’, and we may cautiously assume the same for Niya *kremeru*.

Bailey⁴⁷⁸ made the attractive proposal that Niya *kremeru* is an Iranian loanword and connected it to the word for ‘crimson, scarlet’ seen in Arm. *karmir*, Hebrew *karmīl*, and BSogd. *krm’yr* (also MSogd. *qrmyr*; *krmyr*; CSogd. *qyrmyr*; SD: 193; DMSB²: 116; DCS²: 99).⁴⁷⁹

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

475 This is the preferred reading of Boyer *et al.* (KD: 116), but, as they note, *paliyardaga* is 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. *pwrōnk*) continues a base **parda*- ‘variegated’.

476 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.

477 The relevant forms are *rätrem kampāl* ‘red cloak’ in PK AS 18A b1 and *rätrem kampās* ‘red cotton’ in THT 337 a4 (*kampās* may be a mistake for *kampāl*, cf. Pinault 2008: 76). I thank A. Huard for drawing the Tocharian evidence to my attention.

478 See Bailey (1946: 781–783; 1954b: 14f.; KT VII: 85; 97 fn. 242), and cf. also Sims-Williams *apud* Høisæter (2020: 255 fn. 781).

479 For a detailed study of these words, see now Korn (2016). I follow her in leaving MP *karmir* (-*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*-.

French *vermeil* ‘scarlet’ is derived from Latin *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 *kremēru* (and BSkt. *kemerūka*-).⁴⁸⁰

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’ < OIA **pīta-varṇita-ka-* (like *kremēru* attested in CKD 318).⁴⁸¹ As *u*-stems are moribund in Niya Prakrit (cf. LKD: §71), it is, however, much harder to explain the final *-u(ka)* in Niya *kremēru* 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 *kremēru*, 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 *kremēru*.⁴⁸² A. Huard (p.c.) suggests that *kremēru* / *kemerūka*- could have been analogically influenced by a cognate of Pāli *geruka*- (also *gerika*-) ‘red ochre, ruddle’ (Cone 2001– II: 63).

480 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.

481 This would seem most easy from an Iranian source with **kirm-* < **kṛm-*. It is also conceivable that a folk etymology with Gāndh. **krimi* or even **kreṃi* < Skt. *kṛmi*- / *krimi*- ‘worm’ influenced the form of *kremēru*.

482 If *kremēru* were 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 uo5 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 *kṣīrua-* ‘of the land’ ← *kṣīra-* ‘land’ is semantically unattractive, as this Khotanese suffix is typical for local and temporal adjectives (Degener 1989: 156–158), whereas *kremēru* is a colour term.

105. *načira* 'hunting'

Attestations of the base form

DIR.SG. *načira*: CKD 13 uo2, uo4, cr1; 15 uo2, cr1

LOC.SG. *načiraṃmi*: CKD 156 uo1f.

Compounds

DIR.SG. *gavašanačira* 'deer hunting': CKD 509 cr1⁴⁸³

Niya *načira* /naščira/ 'hunting' has an inner-Indic cognate in EpSkt. *naščirapati*- 'person responsible for hunting' (Lüders 1940b: 37f.).⁴⁸⁴ 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(ʼ)yr* /naxšir/ 'wild animal, deer' (SD: 237) and MP/Parth. *naxčir* 'game, quarry, chase' (CPD: 58; DMMP: 249).⁴⁸⁵

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 of *nxš(ʼ)yr* /naxšir/ 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 *naxčir* could easily have been substituted with Niya -č-/šc/ (see §4.3.27). Whether the so far unattested Bactrian cognate of Parth. *naxčir* 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'.⁴⁸⁶ Therefore, I have allocated *načira* to the present category of loanwords.

483 If *ničiri harga* in CKD 677 uo4 means 'hunting tax' (cf. Thomas 1936a: 792; LKD: 101 s.v.; TKD: 139), this expression must be added to the list of attestations too.

484 The Sanskrit title occurs in the Kurā stone inscription of the time of Toramāṇa Šāhi, 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.

485 The earliest trace of this Iranian term is Aram. *nḥšyr* in the Qumran War Scroll (1QM); see de Menasce (1956) and Asmussen (1961). For more cognates, cf. also Ciancaglini (2008: 213).

486 Various unconvincing etymologies have been proposed in the past. See e.g. Bailey (1946a: 774 fn. 1; 1949a: 122) for **naxti-čīθra*- 'originating in the night' (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'.

106. *pačevara* ‘provisions (for a journey)’

Attestations of the base form

DIR.SG. *pačevara*: CKD 19 uo3; 109 r4; 142 r1, r2; 164 o7; 236 uo3; 505 o2 (2×); 509 uo3; 637 o3, o5f.; 714 o8; 842 o10; *pačevari*: CKD 22 o3; *pačevare*: CKD 164 o7; *pačavara*: CKD 382 o1, o2; 671 o1; *pačivara*: CKM 84 recto 5; *pacivara*:⁴⁸⁷ CKD 25 o3

Compounds

DIR.SG. *amnapačevara* ‘provisions of corn’: CKD 637 o6

It has long been known that Niya *pačevara* /paščěvāra/ ‘provisions (for a journey)’ is an Iranian loanword (Burrow 1935a: 784; LKD: 102 s.v.). The following etyma, all with the same meaning as *pačevara*, are to be compared: Elam. *ba-šá-ba-ra*, Aram. *pšbr*, Arm. *pašar* ← Parth. **pašāβar* (cf. Korn 2013a: 76f.), and Sogd. *pš'βr* (also *pš''βr*; *pyš''βr*; 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.⁴⁸⁸ Yet, it is far from obvious what the donor language of Niya *pačevara* could be, in case Weber’s proposal were correct.

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.⁴⁸⁹ Hence, in order to uphold Weber’s etymology, one would probably need to assume that *pačevara* was borrowed from an unattested Middle Iranian dialect preserving *-šc- or that the speakers of Niya Prakrit still recognised the literal meaning of the Iranian compound and

487 Boyer *et al.* (KD: 9) note that the *akšara* <ci> is hardly readable, so it is possible that the correct reading is the more expected *pačivara* (or: *pačevara*).

488 See e.g. Iranica (§4.4.3.9) and Korn (2013a: 76f. with fn. 12). Weber argues that **pasčābara-* would derive its name from the custom of carrying provisions at the end of a caravan. Naveh & Shaked (ADAB: 197) point to an alternative interpretation of the same compound as ‘carrying (food for) afterwards’.

489 The assumption of a Parthian dialect form with *-č- < *-šc- as in Parth. **pc'gryw* ‘deputy (of the king)’ < **pasčā-griwa-* ‘behind the self’ → Syriac *pšgryb*’ (cf. 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.

substituted its first part by the Indo-Aryan cognate *pača* / *pače* ‘after’. Neither option seems particularly plausible, so that 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 uo5; 492 cr1 (?); 552 r3; 575 uo5; 675 o3, o4; 713 r1; 783 o3; 842 o5; 884 uo8

GEN.SG. *bhaṭaragaṣa*: CKI 363 1; CKD 24 cr2; 31 uo3; 34 o1; 89 o1; 104 r1; 133 o1; 247 o1; 259 o1; 288 co1, uo1; 320 o1; 370 co1; 372 o1; 415 uo1; 492 uo3; 498 o1; 563 r1; 573 uo1; 585 ur1, ur4; 696 o1, r1; 722 uo1; 819 cr3; *bhaṭaragasya*: CKD 541 o1 = 541 r1; *bhaṭarasa*: CKI 536 3f. (cf. Baums 2012: 238 fn. 86); *bhaṭarakasa*: CKI 564 2-4

DIR.PL. *bhaṭare*: CKD 524 uo2; 682 r1; *bhaṭari*: CKD 12 + 43 cr1

GEN.PL. *bhaṭaragana*: CKD 157 o1; 164 o1; 216 o1; 278 o1; 552 r1; 585 ur6; 702 o1; 703 o1; 897 o1, o4; *bhaṭaraganām*: CKD 140 co1, uo1; 162 uo1; *bhaṭaraganam*: CKD 698 o1; *bhaṭarana*: CKD 379 o4

bhaṭaraga ///: CKD 216 r5; 285 o1; 372 r1; 772 co1; *bhaṭara* ///: CKD 663 o1

Derivatives

FEM.GEN.SG. *bhaṭariyae* ‘lady’: CKD 755 o1; 756 o1; *bhaṭariyāe*: CKD 697 o1

Compounds

DIR.PL. *goṭhabhaṭare* ‘farm-owner’: CKD 147 o1f.

DIR.PL. *goṭhabhaṭarajaṃna* ‘idem’: CKD 554 o2

In the Niya documents, the lexeme *bhaṭaraga* ‘lord, owner’, fem. *bhaṭari** ‘lady’, can refer to the owner of a particular commodity, including the master of a slave (see e.g. CKD 24; 31; 147; 324 + 328; Agrawala 1953b: 98). In addition, *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.

Gāndh. *bhaṭaraga* corresponds to EpSkt. *bhaṭṭāraka*- ‘great lord, venerable or worshipful person’, fem. *bhaṭṭārikā*- ‘noble lady, tutelary deity’. Traditionally (cf. EWAia III: 362), *bhaṭṭāraka*- is considered an enlargement with the *ka*-suffix of Pkt. *bhaṭṭr*- ‘lord, husband’ < Skt. *bhartṛ*- (nom.sg. *bhaṭṭā*; acc.sg. *bhaṭṭāraṃ*). More recently, Falk (2010b: 75 = 2013a: 246) observed that the earliest attestations of *bhaṭaraga* / *bhaṭṭāraka*- cluster in the NW of South Asia, suggesting that the word originated there (cf. also von Hinüber

2004: 129).⁴⁹⁰ 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.⁴⁹¹ Rather than being derived from Pkt. *bhaṭṭr*-, *bhaṭaraga* / *bhaṭṭāraka*- would thus be an Iranian loanword, although one that still underwent folk etymological influence from *bhaṭṭr*-.

Since (i) **frataraka*- is 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 concur with Schmitt (2015: 154) that Falk’s etymology is “überzeugend”.⁴⁹² At the same time, it seems that the phonological appearance of *bhaṭaraga* / *bhaṭṭāraka*- should still owe much 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*) whereas all the *as* in **frataraka*- are short (but see also below).⁴⁹³

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”.

In the above, I started from the basic assumption that the Old Iranian preform needs to be reconstructed as **frataraka*-. However, as suggested by G.-J. Pinault (p.c.), one could also consider reconstructing **fratāra*-, because there are occasional remnants in Iranian of comparatives in **-tāra*- (possibly from a PIE allomorph **-toro*- with Brugmann’s law; see LIPP I: 212;

490 Consequently, Burrow’s (LKD: §37) assertion that *bhaṭaraga*- is a loan from an eastern MIA dialect appears unlikely.

491 For the use of the same title in Seleucid times (2nd century BCE) by the dynasts of Fārs, see Panaino (2003).

492 Falk’s etymology is also accepted by Ollett (2024: 92–94).

493 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 BCE). Because of the fragmentary preservation of BAPTAP///, this cannot be proved.

II: 473 fn. 108a): for instance, YAv. *atāra*- ‘this one from two’, Av. *katāra*- ‘who of them both’, and YAv. *yatāra*- ‘which of the two’.⁴⁹⁴ This alternative reconstruction would free us from the assumption that the long *-ā-* in EpSkt. *bhaṭṭāraka*- (and presumably Gāndh. *bhaṭaraga*) is due to folk etymology. A further remnant of **fratāra*- with long **-ā-* may be found in the Sogdian adverb *ft’r* ‘much, many; over, in excess’ (SD: 159; DMSB²: 6; DCS²: 80), whose spelling with an aleph suggests it to have a long vowel in between the *t* and the *r*. It should be noted, though, that both (Young) Avestan and Old Persian have *fratara*- ‘more, better’ with a short *-a-* (AIW: 979f.; Schmitt 2014: 177).⁴⁹⁵

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 can as plausibly be explained as inherited 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 318 cr1⁴⁹⁶

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 ‘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

494 Middle Iranian forms such as MP *kadār* ‘who, which’ and BSogd. *kt’r* ‘which’ confirm that the long vowel in these Avestan words is *sprachwirklich* (cf. de Vaan 2003: 100).

495 It is ambiguous whether the Iranian donor form of Aram. *prtrk* had a short *-a-* or a long *-ā-*.

496 One could also consider to read *kharayarda*, but this alternative reading has so far not yielded a better explanation of the word.

true that the Ossetic word is a later borrowing from Turkic *kara* 'black', as argued by Sims-Williams (*apud* Wilkens 2021: 7 fn. 27).⁴⁹⁷

109. *baṃna* 'bundle'

Attestations of the base form

DIR.PL. *baṃna*: CKD 66 oA1, oA2, oA3

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-*.⁴⁹⁸ 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 Skt. *bandha-* (so already Thomas 1935: 56). Compare the infinitive *baṃna(m)nae* 'to bind' < dat.sg. *bandhanāya* in the Niya documents (CKD 590 uo5; 592 uo6) and *baña* 'binding' < *bandha-*, *bañaṇa* / *banaṇa* < *bandhana-* 'bond', and *banava* < *bāndhava-* 'relative' in the *Khotan Dharmapada* (verses 28a; 92d; 146d; 169a; 170a; 261b).⁴⁹⁹

110. *masu* 'wine'

Attestations of the base form

DIR.SG. *masu*: CKD 130 cr2; 140 cr5 (2×); 168 o1, o2, r1; 169 r1, rA2, rB2, oA1; 170 oB1, r2, r3; 172 oB2, oB3, oB4; 173 oA1, oA2, oA3, oA4, oA6, oA7, oB2; 174 oA2, rB1; 175 o2, o3; 176 o1, oA1; 206 uo5, uo7; 207 r6; 208 o1; 225 o7, r1, r7; 244 r3; 247 o3 (4×); 261 r2; 268 r2; 272 o5 (2×), o6 (2×); 299 o2, rA1, rA2, rA3, rB1; 329 o4 (2×), o5 (2×); 345 uo3; 349 o6 (2×); 358 o5; 387 o3, etc.

INS.SG. *masuṇa*: CKD 307 o5f; 728 rA1

GEN.SG. *masuṣa*: CKD 431 uo6 = 432 uo4f; *masuṣa*: CKD 585 cr4; *masusya*: CKD 329 o3, o5; 663 o3

LOC.SG. *masuṇmi*: CKD 291 o5; 333 o6; 531 oB4; *masuṇmi*: CKD 567 cr1

Derivatives

ADJ. *masuvi* 'related to wine': CKD 272 o5; 539 o2; 567 uo2, uo4

497 Sims-Williams and Wilkens do not identify the exact donor language of Oss. *xæræ*. Contrast e.g. Bactr. βαυδο /vandə/ 'bundle, bond' (BD II: 201).

499 The *aṣṣara* ṣ *ña*, an orthographic peculiarity of the *Khotan Dharmapada*, is used for the sound deriving from OIA *-ndh-* (perhaps aspirated /nʰ/). See Brough (62; 98f.), who points out that the outcome of *-ndh-* can alternatively be spelt with simple ṣ *na* (like the outcome of unaspirated *-nd-*).

Compounds

DIR.SG. *masuśaḍa* ‘vineyard’: CKD 90 o2; 187 o4; 419 co2, uo2; 581 uo4; 586 co1; 655 uo5; 779 uo6; 805 cr4, cr5, cr8; *masuśaḍo*: CKD 586 uo2; *masuśaṭa*: CKD 473 uo2, uo3; INS.SG. *masuśaḍena*: CKD 885 uo3f.; GEN.SG. *masuśaḍaṣa*: CKD 581 co1f.; 655 cr2; LOC.SG. *masuśaḍammi*: CKD 581 cr1; *masuśaṭammi*: CKD 586 uo3

DIR.SG. *masuśaḍaũkṣivana* ‘tilling of vineyards’: CKD 565 o2

DIR.SG. *masuvyoṣitaḡa* ‘reimbursement of wine’: CKD 803 r1

Lüders (1933: 1000–1002 = 1940a: 729f.) interpreted Niya *masu* ‘wine’ as a loanword from “East Iranian” **maḍu*- < OIr. **madu*- ‘idem’ (cf. e.g. YAv. *maḍu*-), arguing the spirant *-ḍ- to have been rendered as -s- /z/.⁵⁰⁰

This would seem a viable option, but it must be investigated whether *masu* ‘wine’ can alternatively continue Skt. *madhu*-, whose basic meaning is ‘sweet drink’ but which can also mean ‘grape wine’ (cf. McHugh 2021a: 119–122; 2021b: 53–55; 61f.). If we compare *gohoma* (*gohomi*, also contracted *goma*) ‘wheat’ < Skt. *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’ < Skt. *madhura*- (Brough 1962: 94; Salomon 2000: 85; 232; 2008: 114; 436). It follows that (i) *masu* can also be a loan from a different dialect of Gāndhārī, and (ii) 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 + 336 uo3; 579 uo3; 580 uo2; 582 uo3; 795 uo6; 885 uo4; *akriya*: CKD 580 uo7; *agri*: CKD 654 uo2

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 issue with this argument is that Bailey’s reconstruction is based on LKhot. *graṃṇā*, a hapax in the Khotanese *Rāmāyaṇa* that lacks comparative support from other Iranian languages (cf. DKS: 91) and may have been interpreted

500 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.

wrongly. Another problem is that the semantics of *akri* are very uncertain (cf. LKD: 71 s.v.).⁵⁰¹

112. *ardavaji*, textile product

Attestations of the base form

DIR.SG. *ardavaji*: CKD 59 r4; 83 cr3, cr4; 385 o4; 433 uo2; 714 o3

DIR.SG. *artavaša*: CKD 431 cr8 = 432 cr5

DIR.PL. *ardavaji*: CKD 113 r1

The word under discussion here refers to an unidentified textile product (Lüders 1936a: 20f.; LKD: 77 s.v. *arnavaji*). It has previously been read as *arnavaji*, but a more probable reading is *ardavaji*. This is supported by two considerations: (i) the ligatures 𐭠 *rna* and 𐭡 *rda* are easily confused in Niya Kharoṣṭhī (cf. §3.5.2 s.v. *khakhordī*); and (ii) the form *artavaša*, attested in a document referring various textile products (CKD 431 cr8 = 432 cr5), is likely a variant spelling of the same word. In view of this revised reading, Bailey's (1946: 793) tentative suggestion to analyse the word as a compound containing a derivative of OIr. **warnā*- 'wool' (cf. YAv. *varənā*-) as its first element must be abandoned.

113. *asaṃkharajiya*, textile product

Attestations of the base form

DIR.SG. *asaṃkharajiya*: CKD 207 r5

Given its co-occurrence with words such as *kośava* 'rug, blanket' and *akiṣḍha* 'cover, rug', the hapax *asaṃkharajiya* presumably refers to some type of textile product. However, the reading of this word is highly uncertain (cf. Lüders 1936a: 21 fn. 2), so that Harmatta's (1967: 7–9) comparison with Sogd. *s'yr* 'saddle', itself a hapax of uncertain etymology, can only be tentative.⁵⁰² Since, moreover, Harmatta had to postulate that *asaṃkharajiya* was borrowed from an unattested derivative of *s'yr* with the Sogdian adjectival suffix *-cyk*,

501 Thomas (1934a: 38) argued on the basis of CKD 582 uo2f. [*puranaga*] *miṣiya bhuma huati tade paru eša bhuma akri patida* 'formerly this land was *miṣi* but after that this land fell *akri*' (TKD: 120) that *akri* means 'uncultivated'.

502 The Sogdian word is attested in Mugh document B-19.6 (Livshits 2015: 133; Begmatov 2020: 185f.), mistakenly referenced by Harmatta as B-18. The meaning of *asaṃkharajiya* would, in Harmatta's opinion, be 'saddle cloth'.

and since his etymology depends on several phonological assumptions,⁵⁰³ I consider it preferable to reject his proposal.

114. *ogu*, a title

Attestations of the base form

DIR.SG. *ogu*: CKD 38 o2; 71 cr3; 90 o4; 114 r3; 136 co1, uo1; 165 o1; 193 o1; 198 o1; 209 o1; 214 o2 (2×), r1; 254 o3, o4; 271 + 338 uo1;⁵⁰⁴ 297 cr1; 315 uo2; 320 r7; 345 cr5; 370 uo2; 393 o2; 399 o1; 496 co5, cr1; 506 o2; 518 uo2; 546 o6, o8; 574 co3A, cr5; 575 cr4; 582 co4, cr4; 621 o2; 629 r3; 639 uo1 (2×), ur1; 682 o1; 721 o1, o6; 732 uo3; 734 r2; 740 o2; 788 co3, cr3, cr8; 815 A1, A1; 817 uo1, uo2; 884 co1, uo3, uo4, uo8; 888 o2

GEN.SG. *oguaša*: CKD 377 r3

GEN.PL. *oguaṇa*: CKD 318 co4, uo2; 324 + 328 cr1; 326 o4; 494 cr4; 570 co5, uo2; 578 co4, uo2; 665 r3; 709 uo2; 793 A4

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 OAv. *aogah-* ‘power’. This etymology is, however, formally unconvincing: (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.).⁵⁰⁵

115. *kamaṃṭa* / *kamuṃṭa*, unclear

Attestations of the base form

DIR.SG. *kamaṃṭa*: CKD 272 o8 (*caṃdri kamaṃṭa*); 714 o4 (*suḍae kamaṃṭa*⁵⁰⁶); *kaṃmaṃṭa*: CKD 714 o3 (*cāṃdri kaṃmaṃṭa*)

DIR.PL. *kamuṃṭa*: CKD 207 r6 (*kamuṃṭa 10 4 2*); *kamude*: CKD 357 o6 (*karci kamude*)

The Niya word *kamaṃṭa* / *kamuṃṭa* (also dir.pl. *kamude* 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.⁵⁰⁷ Consequently, proposals to

503 Some of the assumptions are positing a prothetic vowel to explain the initial *a-* in *asaṃkharajīya*, regarding the anusvāra unetymological, and supposing Sogd. -čyk to have been lenited to Niya -jīya /žīya/.

504 My reading *ogu Vyarpala*, for which see Schoubben (in prep.).

505 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).

506 For this word division, see Lüders (1936b: 642 fn. 4) *contra* KD (269).

507 Unlike Burrow (LKD: 81 s.v. *kamuṃṭa*; 89 s.v. *caṃdrikamaṃṭa*; TKD: 38), I follow Lüders (1936a: 6 fn. 2) in assuming that *kamaṃṭa* and *kamuṃṭa* are variants of

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 LKhot. *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 o8 and 714 o3. 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. *caṃdri-kamaṃta*).⁵⁰⁸

116. *kala*, a title

Attestations of the base form

DIR.SG. *kala*: CKD 25 o1; 28 o2; 103 rE4, rF4; 169 oE4; 181 oB3; 202 o1; 210 oE3; 221 oD1 (?); 245 o1; 256 uo2; 278 o2; 279 o2; 294 o1; 295 o1; 307 o2; 322 uo7; 324 + 328 cr2; 331 co3, uo2, cr1; 349 o7; 358 o3, o4 (2×); 360 o1; 363 o1; 366 o2, r1; 379 o1; 383 o2, r8; 384 rB1; 387 o7; 420 o7; 425 uo3; 467 rC1; 495 o8; 513 oD6; 524 uo4; 531 oA1; 558 o3; 586 uo5; 606 o1; 615 rA4; 630 o2, o3, o4; 637 o5, o7, o9, o10, o11; 640 r2; 654 uo7; 715 o7; 812 A2; 815 A1; 817 ur1, uo1; 880 uo8; 882 uo5; 885 uo2; *kāla*: CKD 112 oA2; 147 o1; 210 oF3; 216 r3; 305 o2; 399 rA1; 529 oB1; 571 cr1; 572 uo3; 573 cr4; 579 uo8; 580 uo5, uo6; 581 uo6; 582 uo6; 587 uo6;

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 *spāra* / *spūra* ‘full, completely’).

- 508 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 Skt. *chattra*- ‘covering’.

589 uo6; 590 uo7; 591 co3, uo2, uo3, cr4; 622 o1; 634 o1; 637 o1, o2; 879 co2;
kaṃla: CKD 715 o7

GEN.SG. *kalaṣa*: CKD 28 r1; 637 o7; *kālaṣa*: CKD 132 rF2; 637 o9

DIR.PL. *kale*: CKD 327 o6

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 **kāzala-* ‘protector’ to the root *kāt-*, pret. *kāṣṭa-*, ‘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).⁵⁰⁹

117. *kuṭhakṣira*, unclear

Attestations of the base form

DIR.SG. *kuṭhakṣira*: CKD 741 r1; *kuṭhekṣira*: CKD 771 uo5f.

GEN.SG. *kuṭhakṣiraṣa*:⁵¹⁰ CKD 45 uo3; *kuṭhakṣiraṣa*: CKD 39 uo3, uo4; 553 o2; 569 uo5, uo6; *kuṭhekṣiraṣa*: CKD 331 uo4; *kṣiraṣa*: CKD 415 cr1; 434 uo3

The technical term *kuṭhakṣira* always occurs in the context of a payment to be made when adopting a child; its exact meaning remains unclear.⁵¹¹

According to Bailey (1950a: 397–399), *kuṭhakṣira* would represent an unattested Khotanese compound **gguṣṭa-ṣira-* ‘called > adopted child’.⁵¹² Yet, this etymology is marred with problems. To start with, Niya Prakrit uses *uneyaga*, a word found next to *kuṭhakṣira* in e.g. CKD 569 uo5 (spelt *uniyaga*), in the meaning ‘adopted child’, thus making one wonder what the distinction

509 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).

510 Given that १ *ṭha* and ७ *ṭha* 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.

511 *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).

512 Khot. *gguṣṭa-* is the verbal adj. of the verb *grūs-* ‘to call’ < **xrausa-* (cf. SGS: 32). On **ṣira-*, see below.

between *uneyaga* and *kuḥhakšira* would be, if Bailey's idea were correct. The second element of the presumed compound **ggurṣṭa-šira-* is moreover but a postulated variant of an etymologically obscure word *širka-* 'child'.⁵¹³ In addition, Bailey had to hypothesise a more archaic form of **šira-* with an initial **x-* still preserved to account for the Niya cluster *kṣ-*.⁵¹⁴

Thomas (1934a: 37) and Burrow (LKD: 83 s.v.) started from the assumption that *kuḥhakšira* 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* १ *ḥha* and १ *ṭha* 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 *kuḥha-* back to an OIA source with *-ṣṭh-*: Thomas derived *kuḥha-* from an unattested OIA 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 Skt. root $\sqrt{kuṣ}$ in the meaning 'to extract'. As both proposals do not account for the consistent spelling with १ *ḥha*, I concur with Konow (1943: 72) in rejecting them.⁵¹⁵

118. *kurora*, an adjective specifying a type of land

Attestations of the base form

DIR.SG. *kurora*: CKD 496 uo4; 574 cr5; 678 uo3; 839 uo2

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

513 In a later publication (DKS: 410), Bailey derives *širka-* 'child' from the root $\sqrt{ṣar}$ 'to press' (EDIV: 93). This etymology for *širka-* has little to recommend itself, as $\sqrt{ṣ}$ - normally yields *kṣ-* in Khotanese (e.g. *kṣārma-* 'shame' < $\sqrt{ṣ}$ *ārma-*).

514 Bailey's etymology would further presuppose a substitution of Khot. *gg-* / *g-* with Niya *k-*.

515 The speculative semantics involved are another reason not to accept Thomas' and Burrow's suggestions. The latter, for instance, translated *kuḥhakšira* 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.

lexicographic source, which makes it doubtful whether 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* (C. 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 o3; 272 o8; 357 o5, o6; *crorma*: CKD 714 o4

GEN.SG. *ciormaša*: CKD 622 o5; *curarmaša*: CKD 450 o7

DIR.PL. *crorma*: CKD 264 o2, o4, o5

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.⁵¹⁶

Burrow (LKD: 90 s.v.) observed that in CKD 264 a distinction is drawn between a *ghriti pašu* and a *curorma pašu*, i.e. a sheep (or goat) used to produce ghee (*ghriti*) and one used to produce *curorma*. According to Burrow, this distinction could point to *curorma* signifying ‘cheese’, although this piece of evidence would also fit Thomas’ (1934a: 46 fn. 3) proposal that it means ‘skin’ or ‘leather’.⁵¹⁷ However, neither option has so far resulted in a convincing etymology.

120. *cojhbo*, a title

Attestations of the base form

DIR.SG. *cojhbo*: CKD 1 co1 (2×); 3 co1, uo1; 6 co1, uo1; 7 co1, uo1; 9 co1, uo1; 10 co1; 11 co1, uo1; 13 co1, uo1; 14 co1, uo1; 15 co1, uo1, ur1; 16 uo1; 17 co1, cr1; 18 uo1; 19 co1, uo1; 20 co1, uo1; 23 o1; 24 co1, uo1; 26 o1; 27 co1, uo1; 28 o1; 29 co1, uo1; 30 o1; 31 co1, uo1; 33 co1, uo1; 35 o1; 36 co1, uo1; 37 co1, uo1; 39 co1, uo1; 42 co1, uo1; 44 o1; 45 co1, uo1; 46 co1, uo1; 47 co1, uo1; 49 co1, uo1, uo2, etc.

GEN.SG. *cojhboša*: CKD 247 o4; 370 cr2

516 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. *ciorma*) and syncope (*crorma*).

517 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 *maḳa* and *ogana*, most likely products for human consumption (cf. §3.2.2 and §6.2 s.vv.).

GEN.PL. *cojhboana*: CKD 22 o1; 40 uo1; 55 co1, uo1; 62 co1, uo1; 64 o1; 84 co1; 88 o1; 119 uo1; 126 o1; 214 o1; 322 uo6; 332 o3; 360 o1; 367 o1; 421 o3; 430 co1, uo1; 435 co1, uo1; 438 co1, uo1; 490 o1; 492 uo1; 494 co1, uo1; 515 co1; 532 co1, uo1; 554 o1; 576 cr2; 578 uo2; 582 cr4; 593 co5, uo8; 842 o2; 854 2; 884 uo3; 889 co4, uo3, cr2; *cojhboam̐na*: CKD 709 uo3f.; *cojhboāna*: CKD 107 o3; *cojhboanām̐*: CKD 576 co5

Compounds

DIR.SG. *mahacojhbo* ‘great *cojhbo*’: CKD 259 o1; 288 uo1; 307 o1; 385 r1; 399 rA1; 585 ur4; 897 o1; *mahācojhbo*: CKD 585 co1

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).⁵¹⁸

Niya *cojhbo* and its comparanda still lack a convincing etymology. One proposal goes back to Henning (1936: 12 fn. 6 = 1977 I: 390 fn. 6). Proceeding from a comparison with OAv. *cazdōṇhhuuant-*,⁵¹⁹ he reconstructed the source of Tumsh. *cazbā-* as a nom.sg. **čazdahwāh*. However, Henning’s derivation is unattractive from a phonological point of view (*pace* Tremblay 2005a: 429). **č-* must 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 ‘official scribe’ (so e.g. Duan & Tshelothar 2016: 40f.). The Late Han Chinese form of this title can be posited as *tso^B bá^B*; and, as noted by Ching (2019: 13 fn. 23), it is not clear where the /z/ in Niya Prakrit (written

518 Unless one is willing to assume an unparalleled simplification from **cojhbuveṇa*, the Gāndhārī ins.sg. *cobuveṇa* (CKI 179 3) 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).

519 The meaning of OAv. *cazdōṇhhuuant-* is not precisely known, but it is glossed in Middle Persian as *wizārtār* ‘decider’ (AIW: 583). *cazdōṇhhuant-* is the traditional spelling, but Peschl (2022: 99) notes that the manuscript evidence may rather favour *cazdō.ṇhhuuant-*. The attested forms are dat.pl. *cazdōṇhhuuadābiiō* in *Yasna* 31.3 and acc.sg. *cazdōṇhhuuantəm* in *Yasna* 44.5.

with ʃjha) and Tumshuqese would come from, if this Chinese etymology were correct.

121. *truşga*, unclear

Compounds

LOC.SG. *truşgakalaṃmi*⁵²⁰ ‘at the *truşga* time’: CKD 581 uo3

The concrete meaning of the hapax *truşga* cannot be decided based on the available context. As the word pairs together with *trubhikṣa* < Skt. *durbhikṣa* ‘famine’, one can conjecture *truşga* to refer to some unfavourable situation.

According to Burrow (1934: 511), *truşga* 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’ (cf. e.g. YAv. *huška-*). Semantically, this proposal would be conceivable, as *truşga* could then mean something like ‘drought’ (TKD: 120). Yet, Burrow’s etymology still runs into trouble for formal reasons, since Ir. *-šk- ought to be represented in Niya with -k- and not with the voiced cluster -şg- (Schoubben 2021; §4.3.18).⁵²¹

122. *Nuava*, ancient name of the Shanshan kingdom

Derivatives

ADJ. *Nuaviya* ‘native of Nuava’: CKD 883 1

Compounds

DIR.SG. *Nuavamaharaya* ‘great king of Nuava’: CKD 187 o1; 581 uo1f; 648 o2; 655 uo2; 656 uo1f; INS.SG. *Nuavamaharayena*: CKD 842 o5; GEN.SG. *Nuavamaharayaša*: CKD 884 uo8

LOC.SG. *Nuavarajaṃmi* ‘kingdom of Nuava’: CKD 884 uo8

GEN.SG. *Mahanuavaša* ‘great Nuava’: CKI 363 3

DIR.SG. *Mahanuavaraja* ‘king of great Nuava’: CKD 422 o2; 808 uo2; *Mahanuavaraya*: CKD 495 o2; GEN.SG. *Mahanuavarayaša*: CKD 782 uo2

DIR.SG. *Mahanuavamaharaya* ‘great king of great Nuava’: CKD 1 co1; 3 uo1; 4 uo1; 5 uo1; 6 uo1; 7 uo1; 9 uo1; 10 uo1; 11 uo1; 12 uo1; 13 uo1; 14 uo1; 15 uo1; 16 uo1; 17 cr1; 18 uo1; 19 uo1; 20 uo1; 21 uo1; 22 o1; 24 uo1; 26 o1; 27 uo1; 28 o1; 29 uo1; 30 o1; 31 uo1; 32 uo1; 33 uo1; 36 uo1; 37 uo1; 38 o1; 39 uo1; 40 uo1; 42 uo1; 45 uo1; 46 uo1; 47 uo1; 49 uo1; 52 uo1; 53 uo1; 54 o1; 55 uo1; 56 uo1; 57 o1; 62 uo1; 63 uo1; 64 o1; 68 uo1; 70 uo1; 71 uo1, etc.; *Mahanuavamaharāya*: CKD 209 o1; 604 o1; 617 o1; 828 1; *Mahanuavamaharayā*: CKD 589 uo1; *Mahanuavamaharaya*: CKD

520 Reading *yuşga* (suggested as an alternative by Burrow 1935a: 783f.; LKD: §49; 96 s.v. *truşga*) is palaeographically unwarranted.

521 Burrow’s (1934: 511; LKD: §49) suggestion that *šk* is sometimes voiced intervocalically is phonologically unlikely.

430 uo1; 639 uo1; *Mahanuhavamaharaya*: CKD 339 o1; 401 uo1; 569 uo1; 582 cr3; 593 uo1; 709 uo1; 732 uo1; *Mahanuhavamaharāya*: CKD 478 o1

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. *māhānubhāva- 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. *πιδωνωγαρο* ‘anew, again’).⁵²² 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 (F. 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 o7

INS.SG. *paṃcarena*: CKD 816 A2, A3 (2×), A4, B1

DIR.PL. *paṃcare*: CKD 40 uo4

Derivatives

ADJ. *paṃcaraīṃna* ‘concerning the animal provisions’: CKD 146 oA1, oB2; *paṃcarayina*: CKD 146 oC2; *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’.⁵²³

522 For the derivation of Khot. *nūvara-* adopted here, see BD II (255) *contra* DKS (189) and Degener (1989: 268).

523 Cf. Lüders (1940b: 43): “Es scheint also, daß der *paṃcara* ein bestimmtes Maß Korn war, das den Benutzern der Kamele des königlichen Gestüts zur

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 uo4 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 languages.⁵²⁴ 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 r1

LOC.SG. *potgeyaṃmi*: CKD 204 o1; 397 o2, o3, o4

potge ///: CKD 333 o3

ADJ. *potga*, a type of wine: CKD 225 r7

ADJ.DIR.SG. *potgoña*⁵²⁵, a type of wine: CKD 796 uo7

ADJ.INS.SG. *potgoñena*: CKD 207 r6; 574 uo3, uo6, cr2; 637 o2, o5, o7, o8, o9, o10 (2×)

Derivatives

ADJ. *potgeci* ‘related to the water tank’: CKD 347 r2

Compounds

DIR.SG. *šitgapotgeya* ‘*šitga* water tank’: CKD 259 o4; ABL.SG. *šitgapotgeyade*: CKD 120 o3;

LOC.SG. *šitgapotgeyaṃmi*: CKD 120 o1

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

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.).

524 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. *χoθo* < **hwa-paθya-* (§5.3.4.1).

525 The reading *poñoña* in Baums & Glass (2002b–) is to be corrected to *potgoña*.

rendering Bailey's suggestion of an etymological relationship between *potge* and OIr. **puxta-ka-* 'cooked' obsolete.⁵²⁶

It remains an open question whether 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 NP *may-puxta* 'boiled wine, a sweet decoction of grape-juice or must with spices added' < **madu-* 'wine' + **puxta-ka-* 'cooked' (CPED: 1359; see further §3.7.2 s.v. *mepoga*).⁵²⁷

125. *pothi*, unclear

Attestations of the base form

DIR.PL. *pothi*: CKD 534 oB4

Compounds

DIR.SG. *carmapothithavitaga* 'deposit of a *pothi* made of skin': CKD 17 cr3

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, as conceded by Burrow (TKD: 106), the cluster *-st-* is preserved in Niya Prakrit, including in borrowings from Iranian

526 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 o1, o3; 259 o4) out of OIA **ṣṛta-ka-* '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.

527 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', a less frequent spelling of *ompalskoñne*, is to be analysed as *ompalsko* 'meditation' + abstract suffix *-ñne* (DoT: 125) and does not contain a suffix *-oñe*.

(cf. §4.3.14).⁵²⁸ 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.

126. *miši*, a type of land

Attestations of the base form

DIR.SG. *miši*: CKD 235 uo2, uo3, cr1; 655 uo4; 782 uo4; *mišiya*: CKD 571 uo2; 580 co1, uo2, uo6; 582 uo2; 715 o3; 805 cr5, cr6; *mišiye*: CKD 808 uo5

GEN.SG. *mišiyaša*: CKD 571 co1

ABL.SG. *mišiyade*: CKD 296 uo2; 808 uo6

LOC.SG. *mišiyammi*: CKD 90 o2; 212 uo2; 327 o3; 419 uo3; 571 uo5f; 572 uo2

DIR.PL. *mišiya*: CKD 805 cr6 (*(*bhu)ma mišiya 2*)

Derivatives

ADJ. *mišiyeci*: CKD 582 uo2

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'.⁵²⁹ But the exact relationship between these words is, as shown below, difficult to disentangle, to the point that one cannot be sure whether 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,

528 Turner's (CDIAL I: 478 no. 8414) comparison with Lahnda *pothi* 'fleece' does not solve this problem.

529 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).

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(ś)a*-? Again, the details are complicated. When taking into account that in the earliest Old Khotanese, the nom.sg. of *miš(ś)a*- ended in *-ā* and that the Khotanese vowels *ā* and *i* merged relatively early, one could theoretically regard Niya *miši* and TA *miši* as borrowings from Khotanese.⁵³⁰ TB *miš(ś)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(ś)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(ś)a*-, TA *miši*, and TB *miš(ś)e*. As long as the etymology of these words and the exact paths of borrowing remain unknown, one cannot determine whether 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. *muḳaši*, exchanged woman

Attestations of the base form

DIR.SG. *muḳaši*: CKD 271 + 338 cr4; 279 o2; 474 uo3, uo4; 481 uo3; 555 r1; 585 cr2; 817 uo2, cr2

The semantics and etymology of *muḳaši*, a word mistakenly read as *mukeši* 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 *muḳaši* 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. *muṣḍhaši*). A new attestation of *muḳaši* in the Schøyen manuscript MS 4579/1/2, a Niya document to be published in Baums (fthc.), yields further support for this argument:

(3.35) Schøyen MS 4579/1/2

*asti maṃnuṣa aṣ[ga]ra Lýmirkaya nāma se uthida kāla Rutrayena
saṃñavita stri Suhapriyae nita muḳaši dita stri Cogaroae nama aṃña 3
arohaga aṣpa trevarṣaga 1*

530 Khotanese borrowings into Tocharian normally end in *-o* (← acc.sg. *-u*), however (Dragoni 2023b).

“There is a man, a herald (?)⁵³¹ 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 woman called Cogaroae. In addition (*aṃṇa*), (he gave) a mountable (*arohaga*) three-year-old horse.” (tr. mine).

As it is clearly the case in (3.35) that the woman (*strī*) Cogaroae should first be given (*dita*) as a *mukāṣi* before Suhapriyae can marry with Lýimirke, 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 **μoḱkoḱi* /*muškəšī*/ ‘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)*-.⁵³² Consequently, *mukāṣi* remains for now without a convincing etymology.

128. *mepoga*, unclear commodity

Attestations of the base form

DIR.SG. *mepoga*: CKD 721 o6

Henning (1948: 603 fn. 3 = 1977: 317 fn. 3) compared Niya *mepoga*, a hapax legomenon of unclear semantics, to NP *may-puxta* ‘boiled wine, a sweet decoction of grape-juice or must with spices added’.⁵³³ As it would be hard to explain a simplification of Persian *-xt-* to Niya *-g-* /*γ*/, Henning’s etymology is best viewed with scepticism.

531 For the provisional translation of *aṣḡara* as ‘herald’, see §3.2.3 s.v.

532 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. *μυδο* < **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. *μυδο* (see Skjærvø 2005: 315; Cheung 2009: 53–57).

533 *maipuxte* was also borrowed into Syriac as *mypwkt*’ (Ciancaglini 2008: 205).

129. *śīti* ‘side, direction’

Attestations of the base form

LOC.SG. *śītiyaṃmi*: CKD 604 o3

Compounds

LOC.SG. *dakṣinaśītiyaṃmi* ‘southern side’: CKD 678 uo2f.

The Niya word *śīti* is attested twice in the loc.sg.⁵³⁴

(3.36) CKD 604 o3

*yaṃ kālāṃ Ramakaṣa śītiyaṃmi Caṣgeya soṃgha anita taṃ k[a]lāṃ
muṃtra biṃnitaga ṣoṭha[m]gha Līpeya.*

“When Caṣgeya brought *soṃgha* (= ?) to (in) the *śīti* of Ramaka, at that time the *ṣoṭhaṃgha* Līpeya broke the seal.” (after TKD: 128).

(3.37) CKD 678 uo2f.

*se Cimaka Kroraṃṇaṃmi mahaṃta nagaraṣa dakṣina śītiyaṃmi
bhuma kurora tre milimi pramaṇna Yapguvasya vaṃti vikrita.*

“This Cimaka sold to Yapgu *kurora* land with a capacity (for seed) of three *milima* (situated) on the south *śīti* (*dakṣina śītiyaṃmi*) of the great city.” (after TKD: 139).

Drawing chiefly on (3.37), Burrow (1934: 511) plausibly assigned the meaning ‘side, direction’ to *śīti*.

Since *śīti* lacks an obvious Indo-Aryan cognate, Burrow (1934: 511f.; LKD: 125 s.v. *śītiyaṃmi*) suspected it to be an Iranian loanword. He proposed that *śīti* could have been borrowed from a cognate of YAv. *š(a)iti-* ‘dwelling, house’ (~ Skt. *kṣiti-*), although he had to admit that Ir. *š-* would be more likely borrowed with *ṣ-* in Niya Prakrit.⁵³⁵ To address this problem, Burrow considered the possibility of a palatalisation of **ši-* > *śi-*. Yet, it should be noted that an onset *ši-* is attested in Niya Prakrit loanwords, e.g. in *ṣitgapotge* (see §3.7.2 s.v. *potge*). Another difficulty with Burrow’s proposal is the non-trivial semantic shift required from ‘dwelling’ to ‘side, direction’. For these reasons, I do not accept Burrow’s etymology.

534 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 *ʾyi* instead of *ʾśi*.

535 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’.

130. *sanapru*, unclear

Attestations of the base form

DIR.SG. *sanapru*: CKD 660 oB2; *sānapru*: CKD 660 oA3

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,⁵³⁶ and there is only a weak phonological similarity with the Iranian words cited.⁵³⁷ Thus, it seems best to reject Bailey’s etymology.

131. *soṃstaṃni* ‘trousers’

Attestations of the base form

DIR.PL. *soṃstaṃni*: CKD 149 o3

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 BSkt. *sunthāṇā-* (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 (~ LKhot. *kaumadai* ‘trousers’; Bailey 1938: 532); and *svasthāna-* (v.l. *svasthagana-*) in the *Harṣacarita* (Agrawala 1951: 16). Further cognates are found in NIA, e.g. Hindi *sūthan*, Lahnda *sutthan*, Romani *sosten*; and Nuristani languages, e.g. Ashkun *šātū* / *šātū*, Waigali *so(n)ta* (CDIAL I: 777 no. 13468).

According to Bailey (1955b: 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. Bailey is required to postulate a change from

536 Bailey drew a comparison with *paṭa paṃdura* (also CKD 660 oA1), 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 *-ṇḍ-* / *nd-* (cf. perhaps *dhamta* ‘punishment, fine’ < *daṇḍa-* in CKD 348 cr1; 419 cr5).

537 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.

*-*starana*- over *-*starna*- to Niya -*staṃna*-. But while both these steps can be paralleled independently of one another, they are never found in one and the same word.⁵³⁸ Still worse is that out of *-*sr*-, one would expect an initial retroflex in Niya Prakrit and not the dental *s*- shown by *soṃstaṃni*.⁵³⁹ 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. Yet, 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)'
11. *valaga* 'animal keeper'
12. *śadavida* 'chief of a hundred households'
13. *śada* 'pleased, happy'
14. *Suliga* 'Sogdian'
15. *stora* 'large animal, horse, camel' (also *storabala* 'animal flock'; *storavara* 'horse driver'; *storvana* 'groom')
16. *śpara* / *śpura* 'full, completely'

538 For the first step, cf. Niya *vastarna* 'bedding' (CKD 565 rB4) next to *vastarana* < Skt. *upastaraṇa*-, and for the second, cf. Niya *vaṃna* 'colour' (CKD 501 o4) < Skt. *varṇa*-.

539 Ashkun *ṣātū* / *ṣātū* is the only form with an initial retroflex. Could this be due to contamination with NP *šalwār* 'trousers'?

Plausible loanwords from Bactrian (§3.2.2)

17. *aṃtagi* 'belonging to the district'
18. *are* 'a half'
19. *aśpista* 'lucerne'
20. *Khotamṇa* 'Khotan'
21. *jenavida* 'armourer'
22. *nihaṃñ-* 'to deposit, to put down'
23. *picara* '(mark of) honour'
24. *maḱa* 'bean'
25. *milima*, a unit of measure
26. *yatma* 'measurer of rations'
27. *vāṣe* 'garments'
28. *saste* 'day, elapsed'

Arguable loanwords from Bactrian (§3.2.3)

29. *aṃbaṃjaya* 'wrapper (?)'
30. *aṃbukaya*, a title
31. *aco* 'frontier, border post' (also *acoviṃna* 'border official'; *Acomena*, toponym)
32. *aḍini* '(broomcorn) millet'
33. *atga* 'additional, complementary'
34. *avalika* 'swaddle'
35. *aṣgara* 'herald (?)'
36. *oḍ-* 'to let go'
37. *caṃkura* 'imposer of penalties'
38. *tim-* 'to be concerned about, to be angry'
39. *tomga*, a title
40. *nihala* 'settlement, agreement'
41. *pake* 'allotment, share'
42. *picav-* 'to hand over'
43. *piro* 'military post, fort'
44. *badho* 'pledge, mortgage'
45. *muṣḍhaṣi*, exchanged woman
46. *leṣ-* 'to dispatch, to conduct'
47. *vaṣḍhiga*, festival on the mountain
48. *ṽapga* 'weaver'
49. *sujinakirta* 'needlework, embroidery'

Tentative loanwords from Bactrian (§3.2.4)

50. *kilme* 'family estate' (also *vegakilme* 'outside (?) the family estate')

51. *taravara* 'sword'
52. *Remena*, toponym
53. *laṭhana* 'plain, open land (?)'
54. *lastuga*, textile product
55. *ṣvaṭhaṃgha* / *ṣoṭhaṃga* 'finance officer'

Secure loanwords from Bactrian or another language (§3.3.1)

56. *ajhate* 'free, noble'
57. *spāsa* 'watching, guarding'
58. *harga* 'dues, tax'

Plausible loanwords from Bactrian or another language (§3.3.2)

59. *aṭa* 'flour'
60. *aṃana* 'village, territory of a clan'
61. *gavaša* 'deer, stag'
62. *tavastaga* 'carpet'
63. *dramga* 'office' (also *dramgadghara* 'office holder')
64. *namata* 'felt'
65. *paraša* 'abduction, plundering'
66. *parivanae* 'burden, provisions'
67. *pravaṃnaga* '(authoritative) document'
68. *maravara* 'accountant'
69. *vara* 'load; time, occasion'

Arguable loanwords from Bactrian or another language (§3.3.3)

70. *agiṣḍha* 'cover, rug'
71. *aḡeta* 'tax collector'
72. *kavaji* 'shoe(s), boot(s) (?)'
73. *kojava* 'rug, blanket'
74. *namanaga* / *namaṃniya* 'exchange'
75. *pajhavamta* 'breastband (?)'
76. *raji* 'cloak, woollen cloth (?)'
77. *rasamna* 'rope (?)'
78. *ṣamna* '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. *pačēvara* 'provisions (for a journey)'
107. *bhaṭaraga* 'lord, owner'

Rejected etymologies: possibly Indo-Aryan words (§3.7.1)

108. *kharayarna* 'donkey-coloured (?)'
109. *baṃna* 'bundle'
110. *masu* 'wine'

Rejected etymologies: words of unknown origin (§3.7.2)

111. *akri*, a type of land

112. *ardavaji*, textile product
113. *asaṃkharajiya*, textile product
114. *ogu*, a title
115. *kamaṃta* / *kamuṃta*, unclear
116. *kala*, a title
117. *kuḥhakšira*, unclear
118. *kurora*, an adjective specifying a type of land
119. *curorma*, an agricultural product
120. *cojhbo*, a title
121. *trušga*, unclear
122. *Nuava*, ancient name of the Shanshan kingdom
123. *paṃcara* 'animal provisions'
124. *potge* 'water tank'; *potga*/*potgoña*, a type of wine
125. *pothi*, unclear
126. *miši*, a type of land
127. *mukāši*, exchanged woman
128. *mepoga*, unclear commodity
129. *šiti* 'side, direction'
130. *sanapru*, unclear
131. *soṃstaṃni* 'trousers'

CHAPTER 4 Iranian loanwords: Analysis

In this fourth chapter, I shall 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

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.¹

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

1 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.

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? 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 whether 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.).²

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 Kushan domination of the Tarim Basin.³

4.2 Iranian languages 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

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- 2 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.
 - 3 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.

Bactrian and Niya Prakrit based on historical considerations and linguistic features of the assembled loanwords (§4.2.1). Related to this, I also briefly 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 CE (Høisæter 2020: 91–103), which implies that the loanwords cannot have been borrowed later than the Kushan period (1st–3rd century CE). Dating the contact between Bactrian and Niya Prakrit to the Kushan era is also historically plausible (cf. §1.4.3; §§7.2–7.3), but it is still worth exploring how the linguistic evidence relates to these historical considerations.

A first linguistic observation is that none of the loanwords is so archaic phonologically as to require borrowing before the first written attestations of Bactrian in the 1st century CE. One may contrast Tocharian B, which did borrow words from Pre-Bactrian.⁴ The most notable instance is TB *mālo* ‘alcoholic drink’ ← Pre-Bactrian **malu-* < **madu-* ‘wine’, which shows lambdacism but predates the *u*-umlaut reflected in attested Bactr. *μολο* /*mulə*/.⁵ Another example is TB *sapule* ‘pot, jar’, which should be compared with Bactr. *σαβολο* ‘idem’ < **sapauda-*. This term co-occurs with *μολο* ‘wine’ in B5f. and may originally have denoted a wine jar of standardised proportions.⁶ The archaic feature of TB *sapule* is its final *-e*. Bernard and Chen (2022: 17 fn. 41) derive this vowel from Bactrian final **-ə*. I would rather opt for an old nom.sg. ending in *-i* /*i*/ < **-ah* as in Sogdian and Khotanese – a view now also adopted in Bernard (2025: 56).⁷ The same explanation can be

4 As noted in Bernard (2024: 289f.; 292; 2025: 248), there are no clear instances of Pre-Bactrian loans into Tocharian A.

5 Cf. Benvenuto & Bichlmeier (2022a: 98 with fn. 36; 2022b: 23 with fn. 28) and Del Tomba (2023a: 130; 144f.).

6 The Middle Persian cognate of *σαβολο*, *sabōy*, can also refer to a wine jar. See the examples in Asefi (2025: 9; 11f.).

7 See now Michetti (2025: 194–197) for some attestations of a Bactr. nom.sg. in *-i* /*i*/ < **-ah*. An indirect witness of the change of word-final **-ah* to *-i* /*i*/ may be provided by Bactr. *μσιδο* ‘moreover’, which consists of **μσι* (attested *μισο*) < **masyah* ‘more’ and the particle *-δο* < **uti* (BD II: 233).

applied to the suffix *-ike*, which may derive from **-īgi*, the nom.sg. of **-īga-* (Bactr. *-īyo*) < **-iya-ka-* rather than from **-īgə*.⁸

Most Bactrian loanwords in Niya Prakrit are *a*-stems rather than *i*-stems (see §§4.4.1–4.4.2). Thus, unlike these Pre-Bactrian loans in Tocharian B, they were probably not borrowed from a nom.sg. in *-i* /*i*/ < **-ah*. Instead, they are more likely to have been adopted from the attested dir.sg. in *-o*, which at the time probably represented either /ə/ or -Ø (cf. §2.2.2).

At the same time, a few Bactrian or potentially Bactrian words in Niya Prakrit do end in vowels other than *-a*.⁹ Two such items, i.e. *nokṣari* ‘month of the new year’ and *laṣi* ‘gift’, are certainly borrowed from Bactrian, yet the Bactrian forms are attested only as *νωγοσαρλο** and *λαβνο*, i.e. without any clear trace of a final *-ī*. To account for the Niya Pkt. *-i*, I have cautiously proposed reconstructing more archaic forms **νωγοσαρλι* /*nōgsarli*/ < **nawa-ka-sardi-* and **λαβνι* /*lāšni*/ < **dāšini-*. Although it is hard to prove that these words continue an old *i*-stem (§3.2.1 s.vv.), such an assumption seems preferable to positing that they uniquely preserve a reflex of an archaic nom.sg. ending in *-i* /*i*/ < **-ah*.¹⁰ Another word, *muṣḍhaṣi* ‘reward woman’, may have been borrowed either from a Bactrian compound ending in **-ḡi* /*ṣi*/ < **-stri-* or from a fem.sg. **μοζδοḡi* < **miždušī-*, though its etymology remains uncertain (§3.2.3 s.v.; cf. also §3.7.2 s.v. *muḡaṣi*). The adverb *ajhatu* ‘free’ (CKD 152 uo5) could be a borrowing from an Iranian language in which the **-am* of an adverbial neuter **āzātam* yielded **-u*. Whether this donor language was Bactrian is, however, difficult to determine (§3.3.1 s.v. *ajhate*). Similarly, it is unclear whether *kavaji* ‘shoe(s), boot(s) (?)’ and *raji* ‘cloak, woollen cloth (?)’ are loans from **καḡḡi* /*kafṣi*/ < **kaḡṣi-* (attested pl. *καḡḡivo*) and **ραγṣi*

8 I would date this stratum of Pre-Bactrian loans in Tocharian B to the Hellenistic period (323 BCE–31 BCE). The development **malu-* < **madu-* shows that lambdacism preceded *u*-umlaut, which in turn must have preceded syncope, as illustrated by *ροζγο* /*ruzgə*/ ‘vineyard’ < **razu-ka-*. Since (i) all of these sound changes had been completed by the 1st century CE, and (ii) lambdacism can be tentatively dated to the Late Achaemenid and early Hellenistic period (see §3.2.2 s.v. *milima*), the phonology of the Pre-Bactrian loanwords suggests a Hellenistic date for their adoption. This conclusion is also historically plausible, as both *mālo* and *sapule* pertain to viniculture (cf. above), and archaeobotanical evidence dates the introduction of grape cultivation to Xinjiang to around 300 BCE (Jiang *et al.* 2009).

9 In what follows, I leave aside loanwords ending in *-e*, which are dealt with in §4.4.3, and *aḡini* ‘(broom)corn millet’, whose *-i* could be secondary (§3.2.3 s.v.).

10 I also see no linguistic or cultural reason why *nokṣari* and *laṣi* would have been borrowed earlier than the other loanwords.

/rayži/ < *ragzi- < *razgi- (attested παγαζο) or from cognates in another Iranian language (§3.3.3 s.vv. *kavaji*; *raji*).

If such loanwords were borrowed from Bactrian forms preserving final vowels inherited from Old Iranian, these borrowings could still date to the Kushan period, since the early Kushan inscriptions, such as the Rabatak inscription (first half of the 2nd century CE), do occasionally preserve traces of final vowels, e.g. a 1sg. ending in -μι (later -μο) < *-mi or an infinitive ending in -δο (later -δο) < *-tayai (Sims-Williams & Cribb 1995–96; Michetti 2025).

As concerns the question of where these loanwords were borrowed, it is worth noting that 12 of the 55 Bactrian loanwords (= 21.8%) and 6 out of 25 loanwords from Bactrian or another language (= 24%) have cognates in South Asian Gāndhārī and/or other Indo-Aryan languages. See the list below.¹¹ For these words, it seems most likely that they were adopted before Niya Prakrit was introduced to the Tarim Basin (cf. LKD: viii).

Secure Bactrian loanwords (§3.2.1)

- (2.) *kšuna* ‘date, reign, regnal year’ ← χρονο /xšunə/ ← Gr. χρόνος ‘time (period)’. Likewise attested in SA Gāndh.
- (3.) *gušura* ‘prince’ ← γοσοβοργο /yušvūrgə/ < *wisah puθra-ka- (or: *γoσβορο /yušvūrə/ < *wisah puθra-). Likewise attested in SA Gāndh., including a variant form *gušuraka**. Cf. also EpSkt. *gušūra*-; *gošūra*-; *gaušūra*-; *gašūra*-; *gišūra*- ‘idem’.
- (7.) *prigha* ‘(monochrome) damask’ ← πριγγο* /prīngə/ (attested πριγγο-οαβγο) < *pir-aina-ka-. Cf. BSkt. *prīnga*- ‘idem’.
- (11.) *valaga* ‘animal keeper’ ← οαλαγο /wālāgə/ < *wād-āka- ‘leader’. Possibly attested as a PN in SA Gāndh.
- (13.) *šada* ‘pleased, happy’ ← παδο /šādə/ < *čyāta-. Likewise attested in SA Gāndh.
- (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /suyligə/ (attested βονοσογολιγο ‘Sogdian estate’) < *sugdiya-ka-. Cf. Skt. *śūlika*- (variant *sūlika*-) ‘idem’.
- (15.) *stora* ‘large animal, horse, camel’ ← στωρο /stōrə/ < *staura-. Cf. BSkt. *sthora*- ‘pack animal’.

Plausible loanwords from Bactrian (§3.2.2)

- (23.) *picara* ‘(mark of) honour’ ← πιδοφαρο /pidšarə/ (attested πιδοφαρο) < *pati-ššarV-. Likewise attested in SA Gāndh.

11 The same is true of three Iranian loanwords from an unidentified source (§3.6): (i) *kremeru* ‘crimson, scarlet’ (cf. BSkt. *kemerūka*- ‘idem’); (ii) *načira* ‘hunting’ (cf. EpSkt. *naścīrapati*- ‘person responsible for hunting’); and (iii) *bhaṭaraga* ‘lord, owner’ (also SA Gāndh. and cf. EpSkt. *bhaṭṭāraka*- ‘idem’).

- (28.) *saste* ‘day, elapsed’ ← σαχτο /saxtə/ < *saxta-. Likewise attested in SA Gāndh.

Arguable loanwords from Bactrian (§3.2.3)

- (32.) *aḡini* ‘(broomcorn) millet’ ← *αρζινο /aržinə/ < Pre-Bactrian *arzani-. Cf. Pashai *aṛín*, Dameli *āṛin*, and other NIA forms of the same meaning.
 (36.) *oḡ-* ‘to let go’ ← *ωυιρζ- /ōhirz/ < *awa-hṛza-. Cf. SA Gāndh. gerv. *praoḡidave* ‘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)

- (56.) *ajhate* ‘free, noble’ ← αζαδο /āzādə/ < *āzāta-. Cf. SA Gāndh. *ajhade* in the unpublished loan contract in Bajaur fragment 15 (CKM 278).

Plausible loanwords from Bactrian or another language (§3.3.2)

- (59.) *aṭa* ‘flour’ ← αρδο /ārdə/ < *ārta-. Cf. Skt. *aṭṭa-* ‘food’, Hindi *āṭā* ‘flour, meal’, etc.
 (63.) *draṃga* ‘office’ ← δραγγο* /draŋgə/ (attested δραγγα in DilT5, line 4 and δδραγγοληρο ‘office-holder’) < *dranga-. Cf. Skt. *draṅgā-* ‘stronghold, watch-station’.
 (64.) *namata* ‘felt’ ← *ναμαδο /namadə/ < *namata-. Cf. Pāli *namataka-* ‘a felt covering for a knife’; *nantaka-* ‘dirty or ragged cloth; rag’; BSkt. *namata-* ‘felt to make a monk’s garment’; *nāmatika-* ‘wearing garments of felt’; Skt. *namata-* / *navata-* ‘felt, woollen stuff’.
 (69.) *vara* ‘load; time, occasion’ ← βαρο /vārə/ < *bāra-. Cf. Skt. *vāra-* ‘time, occasion’, Pāli *vāra-* ‘idem’, etc.

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.¹²

Secure loanwords from Old Persian (§3.5.1)

- (91.) *gaṃṇā* ‘treasury’ < **gaṃj(h)a* ← OP **ganza*- ‘treasury’ (cf. ZMP *ganj*; MMP *ganz*) ← “Median” **ganza*- < OIr. **gazna*-. Cf. Skt. *gañja*- ‘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. *dānakā*- / *dhānakā*-, name of a coin.
- (97.) *mudra* ‘seal’ ← OP **mudrā*- (or: **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 BCE, Niya Prakrit could also preserve lexical traces of early contact with other Old Iranian languages.¹³ Conclusive proof is missing, however.

12 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.

13 Cf. the famous example of Skt. *√sav* ‘to go’, borrowed from an Iranian form related to Av. *š(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 Vedic *kācā*- ‘gem’ (attested from *Kāṭhaka-saṃhitā* onwards), 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).¹⁴

4.2.4 Parthian

As already indicated in §1.5.1, one expects the Indo-Parthian rule in Gandhāra (1st–3rd century CE) 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.).¹⁵

14 If *masu* ‘wine’ were indeed a loan from **maδu-* < OIr. **maδu-* (but see §3.7.1 s.v.), it would probably have to be a borrowing from an Old Iranian language.

15 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 would like to add is that Arm. *ašxarh* ‘land’ ← Early Parth. **xšahr* (later *šahr*) < **xšaθra-*

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.¹⁶

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*; *ṣpara* / *ṣpura*; §3.3.2 s.v. *gavaṣa*). 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. *miṣi*).

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. **tafna-*

(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

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*.

16 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.

because of the existence of a corresponding verb *prahaury-* ‘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.¹⁷ These people moreover left some written records of their activities in the form of a few letters contemporaneous with the Niya documents,¹⁸ 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*; *pravamnaga*; *vara*; *raji*; *pajhavamta*). 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.¹⁹ This observation does not exclude the possibility of Sogdian loanwords in Niya Prakrit. Still, Ockham’s razor would suggest 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 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).

17 For Sogdian trading activities in the region, see recently Zh. Zhang (2019) and Høisæter (2020: 370–374; 405–413).

18 See Sims-Williams & Bi (2018) and Sims-Williams (2020; 2023: 25ff.).

19 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.

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 Kushan 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 Kushan inscriptions. This is, for instance, the case with the famous term *hora* ‘donation’,²⁰ 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).²¹ 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.²²

For now, it suffices to conclude that at least Niya Prakrit provides no conclusive indication of contact with this “Indo-Scythian” language.

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.

20 Attested in CKI 328 1. See also *horaka* ‘donor’ in CKI 48 A9 and dir.sg. *horamurto* ‘donation master’ in CKI 149 4, 5.

21 See e.g. Lüders (1913: 420ff. = 1940a: 249ff.; 1961: 95ff.) and KI (cxviif.; 37f.; 148).

22 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 *hauś-* / *hoś-* ‘to steal’ < **fra-wāzaya-* (SGS: 155f.). Burrow’s etymology needs the assumption that this word was borrowed into a midland Prakrit as **hoṣṭha-* 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* /*hōre*/ in BC 11 recto 40 (Schlosser 2022: 136f.; 218; 292), where an original cluster **-ṣṭ-* should have been preserved as such, written with 𑀧𑀭𑀯𑀭𑀮 *ṭha*.

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 in this (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 BCE) (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 BCE 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 Kushans (1st–3rd century CE), 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 CE 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

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.²³ 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.

23 I will not discuss obvious substitutions of the type Bactr. -ṃ- /m-/ → Niya -m-.

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: the triad -β-, -γ-, and -δ- (§§4.3.8–4.3.13) and the sibilants and affricates -σ-, -β-, and -ζ- (§§4.3.14–4.3.21). I will then continue with the rendering of Bactr. -o- /w/ and -u- /h/ (§§4.3.22–4.3.23), the substitution of some clusters involving -p- /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.²⁴ 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.²⁵

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 /nōgsarlī/ (attested βιδδιγονωγοσαρλο ‘second new year’) < *nawa-ka-sardī-
- (8.) *laṣi* ‘gift’ ← *λαβνι /lāšni/ (attested λαβνο) < *dāšini-
- (9.) *lastana* ‘dispute, lawsuit’ ← λασταανο /lāstānə/ < *dāta-stāna-

24 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.

25 See additionally §3.2.2 s.vv. *aṃtagi*; *are*; *āspista*; *nihaṃñ*; *picara*; *maḥa*; *yatma*; *vaṣe*; *saste*, §3.2.3 s.vv. *aṃbaṃjaya*; *aṃbukaya*; *aco*; *aḍini*; *atga*; *avalika*; *aṣgara*; *caṃkura*; *nihala*; *picav*; *vaṣḍhiga*; *vaṃga*, §3.2.4 s.vv. *taravara*; *laṭhana*; *ṣvaṭhaṃga* / *ṣoṭhaṃga*, §3.3.1 s.vv. *ajhate*; *ṣpaṣa*; *harga*, §3.3.2 s.vv. *aṭa*; *ayana*; *gavaṣa*; *tavastaga*; *draṃga*; *namata*; *paraṣa*; *parivanae*; *pravaṃnaga*; *maravara*; *vara*, §3.3.3 s.vv. *agiṣḍha*; *aḡeta*; *kavaji*; *pajhavamta*; *raji*; *rasaṃna*; *ṣaṃna*; *hastama*, and §3.3.4 s.v. *ujhmayuga*. In the case of the arguable etymology *caṃkura*, -αp- /ar/ would be rendered as Niya -ur-, for which see the discussion §3.2.3 s.v. On the possibility that Bactr. -ηυα- /ēha/ was substituted with Niya -e-, cf. §3.2.3 s.v. *aco* (on *Acomena*); §3.2.4 s.v. *Remena*; §4.3.23.

- (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.) *šada* ‘pleased, happy’ ← παδο /šādə/ < *čyāta-
 (15.) *storabala* ‘animal flock’ ← στωροβαλο /stōrəbalə/ (or: /stōrəvalə/) < *stauro-pada-; *storavara* ‘horse driver’ ← *στωροβαρο /stōrəvārə/ < *stauro-bāra-; *storvana* ‘groom’ ← *στωροβανο /stōrvānə/ < *stauro-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 spelt with -ava-) ← *ταβασταγο /tāvastəgə/ or a cognate thereof.

Plausible loanwords from Bactrian or another language (§3.2.2)

- (62.) *tavastaga* (19× -ava-; 1× -āva-) ‘carpet’ ← *ταβασταγο /tāvastəgə/ < *tāpasta-ka-

Besides, one can witness a change of -oa- /wā/ to Niya -o- in the case of *Khotamna* and *tomga*.

Plausible loanwords from Bactrian (§3.2.2)

- (20.) *Khotamna* ‘Khotan’ ← *χοαδαβο /xwadanə/ (or: *χοαταβο /xwatanə/) ← Khot. *hvatana*-

Arguable loanwords from Bactrian (§3.2.3)

- (39.) *tomga*, a title ← *τ(ο)οαγγο /t(u)wāŋgə/ < *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).²⁶ One may

26 Ir. *xwa*- can alternatively be rendered with Gāndh. *khva*-. This rendering is, for instance, seen in the Khotan Prakrit PN *Khvarnarse* (CKD 661), which contains Mlr. **xwar* < OIr. **hwar*- ‘sun’ as its first element (Burrow 1935a: 789 correcting 1934: 515). It may additionally be seen in the Gāndhārī rendering of Bactr. *χοαδηοιγγο βαυαρο* /xwadēwīŋgə vəhārə/ ‘Lord’s vihāra’ (Sims-Williams 2013b). This name of a Buddhist monastery in present-day Termez (Uzbekistan) also occurs on locally found potsherds inscribed in Kharoṣṭhī script (Fussman 2011: 48–50; 61f.; 72f.; 76f.; 81; Scherrer-Schaub, Salomon & Baums 2012: 151–155). The first *akṣara* of these Kharoṣṭhī renderings is typically read as *ḥ kha* (= older *kha*): *khadevaka*- (e.g. CKI 630); *khadeuka*- (CKI 762); *khadeka*- (CKI 744b). Yet, the subscript stroke attached to *ḥ kha* in several instances “curves up toward the right” (Scherrer-Schaub, Salomon & Baums 2012: 152; see e.g. CKI 762 = Fussman’s 56 KT Nord). I therefore prefer to interpret this *akṣara* as *ḥ khva*, transcribing the name of the

further compare the parallel change of *-va-* to *-o-* in *ṣvaṭhaṃgha* to *ṣoṭhaṃ(h)a* and the royal name *Aṃkvaṃga* / *Aṃgvaka* (also *Aṃguvaka*) to *Aṃgoka* (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)

(31.) *aco* ‘frontier, border post’ ← **αδοβαοο* /*adšāwə*/ < **ati-čyāwa-*

(44.) *badho* (4× *-o*; 4× *-ava*; 2× *-ova*; perhaps 1× *-avo*) ‘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*.²⁷

4.3.2 *-α-* /*ə*/

As we saw in §2.2.2, Graeco-Bactrian <α> does not always stand for /*ā*/; 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.²⁸

Secure Bactrian loanwords (§3.2.1)

(1.) *aviṃdama* ‘fine, recompense’ ← *αβινδαμο* /*əvindāmə*/ derived from **αβιν-* < **upa-ayanā-*

Arguable Bactrian loanwords (§3.2.3)

(34.) *avalīka* ‘swaddle’ when ← **αβαλιρκο* /*əvalīškə*/ < **upa-dṛṣṭa-ka-* rather than ← **αβολιρκο* /*avəliškə*/ < **abi-dṛṣṭa-ka-*

(41.) *pake* ‘allotment, share’ ← **παρκο* /*pəškə*/ < **piṣṭa-ka-*

monastery as *khvadevaka* (etc.). We then have the same rendering of Ir. *xwa-* (Bactr. *χοα-*) with Gāndh. *khva-* as in *Khvarnarse*. An additional advantage of my reading is that it brings the Kharoṣṭhī spelling more in line with the Brāhmī spelling of the same name, which is *khudevuka* (EpSkt.; Fussman 2011: 100).

27 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).

28 The list does not include the word-final sequence /*əgə*/ < **-aka-*, which can be alternatively spelt 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).

Arguable loanwords from Bactrian or another language (§3.3.3)

- (74.) *namanaga* / *namaṇniya* (5× -*aga*; 8× -*iya*; 6× -*i*) ‘exchange’ ← **ναμανο* /*nəmānə*/ < **ni-mānV-*, **ναμαναγο* /*nəmānəgə*/ < **ni-māna-ka-*, or **ναμανιγο* /*nəmānigə*/ < **ni-māni-ka-*

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* / *ṣoṭhaṃga* 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)

- (55.) *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-*

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 not a 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.²⁹

29 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*); *Remena*, and §3.3.3 s.v. *ageta*.

Secure Bactrian loanwords (§3.2.1)

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

Plausible Bactrian loanwords (§3.2.2)

- (21.) *jenavida* ‘armourer’ ← ζηνοβιδο /zēnəvidə/ < *zaina-pati-

4.3.5 -ι- /ĩ/

The Graeco-Bactrian grapheme <ι> writes both short /i/ and long /ĩ/;³⁰ 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.³¹

Secure loanwords from Bactrian (§3.2.1)

- (1.) *aviṃdama* ‘fine, recompense’ ← αβινδαμο /əvindāmə/ 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 /nōgsarĩ/ (attested βιδιγονωγοσαρλο ‘second new year’) < *nawa-ka-sardī-
- (7.) *prigha* ‘(monochrome) damask’ ← πριγγο* /prīgə/ (attested πριγγο-οαβγο) < *pir-aina-ka-
- (8.) *laṣi* (also 3× *laṣa*) ‘gift’ ← *λαβνι /lāšnĩ/ (attested λαβνο) < *dāšinī- (this reconstruction with final *-ī is admittedly debatable; cf. §3.2.1 s.v.)
- (12.) *sadavida* ‘chief of a hundred households’ ← *σαδοβιδο /sadəvidə/ < *sata-pati- with adaptation of the first part of the compound
- (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /suyliɡə/ (attested βονοσογολιγο ‘Sogdian estate’) < *sugdiya-ka-

Plausible loanwords from Bactrian (§3.2.2)

- (19.) *aspista* ‘lucerne’ ← *ασπιστο /aspištə/ < *aspa-sti-

30 Especially but not exclusively in Kushan sources, the digraph <ει> can also be used to write /ĩ/ (or sometimes /i/); see §2.2.2.

31 That *-iya-ka- yields /īgə/ is confirmed by Kushan Bactr. λαδειγο ‘righteous’ < *dāt-*iya-ka-*, whose <ει> unambiguously points to a long vowel. For arguable and tentative etymologies in which -ι- /ĩ/ is rendered as -i-, cf. §3.2.3 s.vv. *aḍini*; *avalika*; *tim-*; *niḥala*; *picav-*; *piro*; *muṣḍhaṣi*; *vaṣḍhiga*; *sujinakirta*, §3.2.4 s.v. *kilme*, and §3.3.3 s.v. *aḡiṣḍha*; *raji*. The arguable etymology *oḍ-* ‘to let go’ ← *ωυριζιδο /ōhirzida/ (§3.2.3 s.v.) is a special case, on which cf. §4.3.23.

- (21.) *jenavida* ‘armourer’ ← ζηνοβιδο /zēnəvidə/ < *zaina-pati-
 (22.) *nihamñ-* ‘to deposit, to put down’ ← νιυανζ- /nihan(d)z/ < *ni-θanjā-
 (23.) *picara* ‘(mark of) honour’ ← πιδοβαρο /pidšarə/ (attested πιδοφαρο) < *pati-šarV-
 (25.) *milima*, a unit of measure ← μελιμνο /melimnə/ or μυλιμνο /milimnə/ ← Gr. μέδιμνος

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)

- (54.) *lastuga*, textile product ← *λιστογο /lištəgə/ < *dasta-ka- ‘of the hand’

Yet, as I discuss in §3.2.4 s.v., it seems not impossible that the -i- /i/ in *λιστογο was phonetically realised as a central vowel (e.g. [i]) 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-.³²

Secure loanwords from Bactrian (§3.2.1)

- (6.) *noḵsari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarlī/ (attested βιδδιγονωγοσαρλο ‘second new year’) < *nawa-ka-sardī-
 (15.) *stora* ‘large animal, horse, camel’ ← στωρο /stōrə/ < *staūra-

The arguable etymology *sujinakirta* may be an exception to this correspondence.

Arguable loanwords from Bactrian (§3.2.3)

- (49.) *sujinakirta* ‘needlework, embroidery’ ← *σωσινοκιρδο /sōtsinəkirdə/ < *saučanya-kr̥ta- or *σοσινοκιρδο /sūtsinəkirdə/ < *sūčanya-kr̥ta-

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 /sūtsinəkirdə/ < *sūčanya-kr̥ta- and not as *σωσινοκιρδο /sōtsinəkirdə/ < *saučanya-kr̥ta-.

32 For arguable etymologies in which Bactr. -ω- /ō/ → Niya -o-, see §3.2.3 s.vv. *oq̣-*; *piro* and §3.3.3 s.v. *kojava*.

4.3.7 -o- /ǔ/

In the Graeco-Bactrian script, <o> can, amongst other things, stand for both short /u/ and long /ū/.³³

The three secure etymologies listed below show that Bactrian short /u/ could be rendered as Niya -u-.³⁴

Secure Bactrian loanwords (§3.2.1)

- (2.) *kṣuna* ‘date, reign, regnal year’ ← χβονο /xṣunə/ ← Gr. χρόνος ‘time (period)’
- (3.) *guśura* (also SA Gāndh. *guśuraka**) ‘prince’ ← γοσοβοργο /γuśvǔrgə/ < **wisah puθra-ka-* (or: **γοσβορο* /γuśvǔrə/ < **wisah puθra-*)
- (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /suγlīgə/ (attested βο νοσογολιγο ‘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 *ambukaya*, would suggest that long /ū/ was rendered in the same way in Niya Prakrit as its short counterpart.

Arguable Bactrian loanwords (§3.2.3)

- (30.) *ambukaya*, a title ← αμβουκαο /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. *-r- in a labial environment.³⁵

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 *-r-, 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).

33 For spellings with the digraph <ou>, see §2.2.2.

34 For arguable and tentative etymologies showing the same correspondence, see §3.2.3 s.v. *muṣḍhaṣi* and §3.3.4 s.v. *ujhmayuga*.

35 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 **f̥r-* (see §3.4.2 s.v.).

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 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.³⁶

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*.³⁷

Secure loanwords from Bactrian (§3.2.1)

- (1.) *aviṃdama* ‘fine, recompense’ ← αβινδαμο /əvindāmə/ derived from *αβιν- < *upa-ayanā-
- (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/ < *stauro-bāra-; *storvana* ‘groom’ ← *στωροβανο /stōrvānə/ < *stauro-pāna- (discussed s.v. *stora* ‘large animal, horse, camel’)

Plausible loanwords from Bactrian (§3.2.2)

- (21.) *jenavida* ‘armourer’ ← ζηνοβιδο /zēnəvidə/ < *zaina-pati-

Secure loanwords from Bactrian or another language (§3.3.1)

- (57.) *spāṣavamna* ‘guard, watchman’ ← *σπασοβανο /spāsəvānə/ < *spāsa-pāna- (discussed s.v. *spāṣa* ‘watching, guarding’)

Plausible loanwords from Bactrian or another language (§3.3.2)

- (62.) *tavastaga* ‘carpet’ ← *ταβασταγο /tāvastəgə/ < *tāpasta-ka-
- (66.) *parivanae* ‘burden, provisions’ ← *παροβανδαγο /parəvandəgə/ < *pari-banda-ka- ‘bound around (the beast of burden)’

36 I will not treat the position after a nasal, on which see §3.2.3 s.v. *aṃbukaya*; §3.3.3 s.v. *hastama*; §4.3.29.

37 For arguable etymologies in which -β- < *p → Niya -v-, cf. §3.2.3 s.v. *avalika*; *piro*. For arguable and tentative examples of -β- < *b → Niya -v-, see §3.2.4 s.v. *taravara* and §3.3.3 s.v. *pajhavamta*.

(68.) *maravara* ‘finance officer’ ← *υμαροβαρο /hmārāvārə/ < *hmāra-bāra-

These etymologies could be seen as a confirmation that the change of OIr. *p to Bactr. /v/ had already been completed in Kushan 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)’ < *staura-pada- stands for /b/, this is not necessarily a counter-argument against the idea that *b- < OIr. *p- had already lenited to /v/ in Kushan Bactrian, as a compound boundary sometimes blocks lenition in Bactrian.³⁸

One secure etymology, i.e. *gušura* (*gušuraka**), may provide additional evidence that Bactr. <β> from OIr. *p- already stood for /v/ in Kushan times. Secure loanwords from Bactrian (§3.2.1)

(3.) *gušura* (also SA Gāndh. *gušuraka**) ‘prince’ ← γοσοβοργο /γυśvūrgə/ < *wisah puθra-ka- (or: *γοσβορο /γυśvūrə/ < *wisah puθra-)

It seems more likely that the -ś- in *gušura* 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- and, if a Bactrian word, *vara* ← βαρο < *bāra-.³⁹

Secure loanwords from Bactrian (§3.2.1)

(10.) *vaga* ‘rent (paid for the use of land)’ ← βαγο /vāyə/ ‘share, part, portion’ < *bāga-

Plausible loanwords from Bactrian or another language (§3.3.2)

(69.) *vara* ‘load; time, occasion’ ← βαρο /vārə/ < *bāra-

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.).

38 Cf. e.g. νικανδο ‘dug’ < *ni-kanta-, where OIr. *k- is continued as -κ- /k/.

39 For arguable and tentative examples of this correspondence, cf. §3.2.3 s.v. *vaṣḍhiga*; §3.2.4 s.v. *kilme* (on *vegakilme*). See also §3.2.4 s.v. *ṣvaṭhaṃgha* / *ṣoṭhaṃga* for a tentative example of -ζβ- /zv/ being borrowed as ṣv-.

Arguable loanwords from Bactrian (§3.2.3)

(48.) *yapga* ‘weaver’ ← *οαβγο** /wāvgə/ (attested *πριγγοοαβγο*) < *wāba-ka-

As 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* ← *νωχσοαρλι /nōgsarī/ seems to represent a voiced /g/ (cf. §4.3.11).⁴⁰

4.3.9 -β- /b/

In one case, i.e. *badho* ← *βαμδαοο, initial β- corresponds to Niya Pkt. *b-*.

Arguable loanwords from Bactrian (§3.2.3)

(44.) *badho* ‘pledge, mortgage’ ← *βαμδαοο /bāmdāwə/ ← *βαμδο ‘loaned’ (cf. βαμδιγο ‘loan’) < *apāmita- + suffix -αο

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.).⁴¹

On the intervocalic -b- in *storabala* ‘animal flock’ ← *στωροβαλο* /stōrəbalə/ (or: /stōrəvalə/) < *staūra-pada-, see the preceding subsection.

For the position after a nasal, see §4.3.29.

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 other cases. This section briefly discusses how Niya Prakrit substituted /γ/ in

40 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. *ιαβγο* (BD II: 215). If the -βγ- in *ιαβγο* stands for /vg/ – as perhaps suggested by its being rendered in Gāndhārī as *yavuga* (also *yavua*; *yaūa*) on coins of Kujula Kadphises – *Yapgu* ← *ιαβγο* may even provide a parallel for the fortition required to derive *yapga* out of *οαβγο** /wāvgə/.

41 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.

initial position and intervocalically.⁴² 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.) *gušura* (also SA Gāndh. *guśuraka**) ‘prince’ ← γοσοβοργο /γuśvūrgə/ < **wisah puθra-ka-* (or: *γοσβορο /γuśvūrə/ < **wisah puθra-*)

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* ‘family estate’ ← *γιρλομηνο /γirlmēhə/ < **gr̥da-maiθa-* ‘dwelling of a household’

Plausible loanwords from Bactrian or another language (§3.3.2)

- (61.) *gavaša* ‘deer, stag’ ← *γαοαζνο /γawaznə/ < **gawazna-*

The apparent fortition of Bactr. γ- /γ/ to Niya *g-* /g/ in *gušura* and possibly *gavaša* 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* (2× -*g-*; 3× -*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). This lenition explains why intervocalic -γ- /g/ typically corresponds to Niya -*g-* /γ/, as can be seen from the list below.⁴³

42 For clusters involving /γ/, see §3.2.1 s.v. *Suliga*; §3.2.3 s.v. *vaṣḍhiga*; §3.3.3 s.v. *raji*; §4.3.27.

43 For arguable and tentative examples of the same correspondence, cf. §3.2.3 s.v. *vaṣḍhiga* (5× -*iga*; 1× -*ika*), §3.2.4 s.vv. *kilme* (on *vegakilme*); *lastuga* (6× -*uga*;

Secure loanwords from Bactrian (§3.2.1)

- (4.) *jheniga* (28× *-iga*; 2× *-iya*) ‘in charge of, under the care of’ ← *ζηνιγο /zēnīgə/ (attested ζινιγο) < *zainiya-kā-
 (11.) *valaga* (18× *-g-*; 5× *-k-*) ‘animal keeper’ ← οαλαγο /wālāgə/ < *wād-āka- ‘leader’
 (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /suyliɡə/ (attested βονοσογολιγο ‘Sogdian estate’) < *sugdiya-ka-

Plausible loanwords from Bactrian (§3.2.2)

- (17.) *aṃtagi* ‘belonging to the district’ ← *aṃtaga** ‘district’ ← ανδαγο /andāgə/ (or: /andāgə/) 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)

- (62.) *tavastaga* (18× *-aga*; 2× *-ae*) ‘carpet’ ← *ταβασταγο /tāvastəgə/ < *tāpasta-ka-
 (66.) *parivanae* ‘burden, provisions’ < *parivanaga ← *παροβανδαγο /parəvandəgə/ < *pari-banda-ka- ‘bound around (the beast of burden)’
 (67.) *pravaṃnaga* (44× *-aga*; 1× *-aka*; 1× *-ae*; 1× *-a*) ‘(authoritative) document’ ← παροοαναγο /parwānəgə/ < *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*; *pravaṃnaga*). 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 /nōgsarli/, one observes a substitution of Bactr. /gs/ with Niya *-kṣ-*.

Secure loanwords from Bactrian (§3.2.1)

- (6.) *nokṣari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarli/ (attested βιδδιγωνωγοσαρλο ‘second new year’) < *nawa-ka-sardī-

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

1× *-uka*), §3.3.3 s.vv. *agiṣḍha* (4× *-g-*; 4× *-k-*); *aḡeta*; *namanaga* / *namaṃniya*, 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 1b, 1c, 2l; 509 1b) ← βαγομαρηγο /vaḡəmarēgə/ < *baga-marya-ka- ‘servant of god’ and *Miramarega* (CKI 325 1) ← μι(υ)ρομαρηγο /mi(h)rəmarēgə/ < *miθra-marya-ka- ‘servant of Mithra’.

[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).⁴⁴

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.⁴⁵ 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** /pṛiṅgə/ (attested *πριγγο-οαβγο*) < **pir-aina-ka-*

Arguable loanwords from Bactrian (§3.2.3)

- (37.) *camkura* ‘imposer of penalties’ ← *ζιαγγαρο /ǰ(i)yāṅgarə/ (attested ζιανο κῑρ-) < **ziyāni-kara-*
 (39.) *tomga* (58× -*ṃg-*; 34× -*ṃgh-*; 5× -*gh-*), a title ← *τ(ο)οαγγο /t(u)wāṅgə/ < **tuwāna-ka-* ‘strong’

Tentative loanwords from Bactrian (§3.2.4)

- (55.) *ṣvaṭhamgha* / *ṣoṭhamga* (99× -*ṃg-*; 76× -*ṃgh-*; 1× -*g-*) ‘finance officer’ ← *αζβαρσταγγο /əzvarstāṅgə/ < **uz-bara-stān-āna-ka-* ‘the person in charge of the place disbursements are stored’ with haplology of -*ān-*

Plausible loanwords from Bactrian or another language (§3.3.2)

- (63.) *dramga* (16× -*ṃg-*; 7× -*ṃgh-*) ‘office’ ← *δραγγο** /draṅgə/ (attested *δραγγα* in DilT5, line 4 and *δδραγγοληρο* ‘office-holder’) < **dranga-*

44 No discussion is needed on *harga* ‘dues, tax’ ← *ναργο* /hargə/ (§3.3.1 s.v.). For the clusters -*tg-* ← -*δγ-* /dg/, -*sg-* ← -*ζγ-* /zg/, and -*pg-* ← -*βγ-* /vg/, see §3.2.3 s.vv. *atga*; *aṣṣgara*; *vaṇga*; §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-*, -*sg-*, and -*pg-* may have a graphic rather than a phonetic background.

45 An inherited word exemplifying this type of orthographic variation is *upaśamk-* (CKD 515 uo3) next to *upaśamg-* (CKD 86 r5; 272 o3) and *upaśamgh-* (CKD 88 r1; 722 uo7) < Skt. *upa* + √*śank* ‘to suspect’.

prigha,⁴⁶ *tomga*, *ṣvaṭhamgha* / *ṣoṭhamgha*, and *draṃga* are usually spelt with <ṃgh> or <ṃgh>, and *camkura*, an arguable etymology, is consistently written with <ṃmk>.

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)

- (63.) *draṃga* (19× *dr-*; 4× *tr-*) ‘office’ ← δραγγο* /*drangə*/ (attested δραγγα in DilT5, line 4 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 *ṣata* ← βαδο.⁴⁷

Secure loanwords from Bactrian (§3.2.1)

- (5.) *daśavida* (99× *-d-*; 21× *-t-*) ‘chief of ten households’ ← λασοβιδο* /*lasəvidə*/ (attested λασοβιδιγο) < **dasa-pati-* with adaptation of the first part of the compound
- (12.) *śadavida* (22× *-d-*; 7× *-t-*) ‘chief of a hundred households’ ← *σαδοβιδο /*sadəvidə*/ < **sata-pati-* with adaptation of the first part of the compound
- (13.) *śada* (34× *-d-*; 8× *-t-*) ‘pleased, happy’ ← βαδο /*šādə*/ < **cyāta-*

Plausible loanwords from Bactrian (§3.2.2)

- (20.) *Khotamna* ‘Khotan’ (80× *-t-*; 1× *-th-*; 1× *-d-*) ← *χοαδανο /*xwadənə*/ (or: *χοατανο /*xwatanə*/) ← Khot. *hvatana-*
- (21.) *jenavida* ‘armourer’ ← ζηνοβιδο /*zēnəvidə*/ < **zaina-pati-*

Secure loanwords from Bactrian or another language (§3.3.1)

- (56.) *ajhate* (6× *-t-*; 5× *-d-*) ‘free, noble’ ← αζαδο /*āzādə*/ < **āzāta-*

Plausible loanwords from Bactrian or another language (§3.3.2)

- (64.) *namata* ‘felt’ (20× *-t-*; 1× *-th-*) ← *ναμαδο /*namadə*/ < **namata-*

⁴⁶ For the absence of anusvāra, see §3.2.1 s.v.

⁴⁷ For an arguable example, cf. §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).

-*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. /*ḍ*/ (see §2.1.2). The fact that Bactrian intervocalic -*ḍ*- is substituted with Niya /*ḍ*/ should, however, not be taken as evidence for a Bactrian phoneme /*ḍ*/, since nothing excludes that Bactr. /*d*/ was substituted with Niya /*ḍ*/, 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. <*ḍ*>.

Finally, two consonant clusters should be briefly discussed, i.e. -*ḍm*- /*dm*/ and -*ḍγ*- /*dg*/.⁴⁸

Plausible loanwords from Bactrian (§3.2.2)

- (26.) *yatma* ‘measurer of rations’ ← **αδμα* /*yādmā*/ (later **αδμο* /*yādmə*/) < **yāta-mā*-

Arguable loanwords from Bactrian (§3.2.3)

- (33.) *atga* ‘additional, complementary’ ← **αδγο* /*adgə*/ < **ati-ka*-

The consistent rendering of Bactr. -*ḍm*- /*dm*/ as Niya -*tm*- seen in *yatma* ← **αδμα* /*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).⁴⁹ The substitution of Bactr. -*ḍγ*- /*dg*/ with Niya -*tg*- 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 §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.

48 Other clusters are treated in more detail elsewhere and therefore not included here: -*ḍop*- /*dš*/ in §4.3.18; -*ζḍ*- /*žd*/ in §4.3.21; -*ρḍ*- /*rd*/ in §4.3.24; -*γḍ*- /*γd*/ in §4.3.27; and -*νḍ*- /*nd*/ in §4.3.29. For -*μḍ*- /*md*/, see §3.2.3 s.v. *badho*.

49 There is an example of -*dm*- in Kuča Prakrit, the PN *Yodma(m)re* in CKD 838 o3 (2×).

In this subsection, I discuss the secure and plausible examples of Bactr. /s/ in the loanword corpus (see the list below).⁵⁰ 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.⁵¹

Secure loanwords from Bactrian (§3.2.1)

- (14.) *Suliga* ‘Sogdian’ ← σογλιγο* /suylīgə/ (attested βονοσογολιγο ‘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 -s- /z/ in *spāṣa* (cf. §3.3.1 s.v.).⁵²

Secure loanwords from Bactrian or another language (§3.3.1)

- (57.) *spāṣa* ‘watching, guarding’ ← σπασο /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*).⁵³

Secure loanwords from Bactrian (§3.2.1)

- (9.) *lastana* ‘dispute, lawsuit’ ← λαστανο /lāstānə/ < *dāta-stāna-

- (15.) *stora* ‘large animal, horse, camel’ ← στωπο /stōrə/ < *staūra-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (62.) *tavastaga* ‘carpet’ ← ταβασταγο /tāvastəgə/ < *tāpasta-ka-

The cluster -σπ- /sp/ shows two different substitutions.

50 As in the rest of this chapter, I also include loanwords where it cannot be decided whether the donor was Bactrian or another Iranian language.

51 For an arguable etymology exhibiting the same correspondence, cf. §3.2.3 s.v. *suḥinakirta*.

52 If Niya *rasaṃna* ‘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).

53 On the substitution of Bactr. -ρστ- /rst/ with Niya -tḥ- /ṣṭ^(h)/ presupposed by the tentative etymology *ṣvaṭhaṃgha* / *ṣoṭhaṃga* ← *αῖβαρσταγγο /əzvarstāṅgə/ (§3.2.4 s.v.), cf. §4.3.24.

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 /*aspištə*/ < **aspa-sti*-

Secure loanwords from Bactrian or another language (§3.3.1)

- (57.) *sp̥aša* (also 1× with *sp-*, 1× 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’ < Skt. *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 /*nōgsarlī*/, 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,⁵⁴ 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*/ (1× also -*s*-).

Plausible loanwords from Bactrian or another language (§3.3.2)

- (65.) *paraša* (9× -*ṣ*-; 2× -*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

54 Cf. e.g. *tsamgīna*, 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.⁵⁵

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*-.⁵⁶ The issue with this argument is that the Manichaean fragment is late and the observed palatalisation thus potentially a post-Kushan (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 Kushan times.

Secure loanwords from Bactrian (§3.2.1)

- (3.) *guśura* (also SA Gāndh. *guśuraka**) ‘prince’ ← γοσοβοργο /γυśvūrgə/ < **wisah puθra-ka*- (or: *γσοβορο /γυśvūrə/ < **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’ → *aspista* could be assumed to stand for /št/.

Plausible loanwords from Bactrian (§3.2.2)

- (19.) *aspista* ‘lucerne’ ← *ασπιστο /aspištə/ < **aspa-sti*-

55 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 Gāndh. *uśiāṇa* ‘settling on’ (SĀ⁵⁵ recto 7; 11), which is probably not a direct continuant of OIA **ut-sīdana*- (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 *uśiāṇa* can be set up as OIA **u-sīdana*-, meaning that the -ś- /z/ in *uśiāṇa* does not result from **-ts*- but from **-s*-.

56 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.

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/.⁵⁷

Another indecisive case is *kojava* (also *košava*) ‘rug, blanket’.

Arguable loanwords from Bactrian or another language (§3.3.3)

(73.) *kojava* (18× *-j-*; 7× *-š-*) ‘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/ (spelt as *-j-* or *-š-*) 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 *-t-* /ī/. The main reason for this hypothesis was the cluster *-nž-* /ndž/ in MBactr. *y’wyd’nžyg* ~ ιασηδανζιγο ‘eternal, for ever’ < *yāwaitāna-čiya-ka-.⁵⁸ Does the loanword corpus provide more evidence?

In the case of *sujinakirta*, Bactr. **-σ-* < **-č-* in front of *-t-* /i/ corresponds to Niya *-j-* /ž/.

Arguable loanwords from Bactrian (§3.2.3)

(49.) *sujinakirta* ‘needlework, embroidery’ ← *σωσινοκίρδο /sōtśinəkirdə/ < *saučanya-kṛta- or *σοσινοκίρδο /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.).

§5.2.2 will present a quite secure grammatical borrowing where we see that Bactr. *-σι-* < **-či-* is rendered with Niya Pkt. *-ci-* without subsequent

57 The tentative etymology *lastuga*, textile product ← *λίστογο /lišṭəgə/ would be another example of this kind (§3.2.4 s.v.).

58 If this argument is correct, one could either say that depalatalisation of *č to /ts/ did not occur in front of *ī, parallel to what happened in Khotanese and Tumshuqese (Emmerick 1989: 213). Else, one could assume a secondary reversal from *tśī out of *čī back to /tśī/.

lenition: the adoption of the Bactrian appurtenance suffix $-\sigma(\varepsilon)\iota\gamma o < *-\check{c}iya-ka-$ as Niya $-ci$.

I would cautiously conclude that these examples provide further evidence that OIr. $*\check{c}$ yielded Bactr. $/t\acute{s}/$ in front of $-i-$ $/\check{i}/$. The etymologies themselves do, however, not depend on the correctness of this argument; as pointed out by N. Sims-Williams (p.c.), there are at least two other options: Bactr. $-\sigma-$ $/ts/$ could have had an allophonic pronunciation $[t\acute{s}]$ before $-i-$ $/\check{i}/$, or Bactr. $-\sigma i-$ $/ts\check{i}/$ could have been approximated as Niya $-ci-$ as the closest sound combination available.⁵⁹

4.3.18 $-\text{p-} / \check{s}/$

The substitution of Bactr. $-\text{p-} / \check{s}/$ is overall quite simple: it typically corresponds to the retroflex sibilant $-\check{s}-$ in Niya Prakrit. In Anlaut, this substitution is exemplified by *ṣada* (see also §3.3.3 s.v. *ṣaṃna*).

Secure loanwords from Bactrian (§3.2.1)

- (13.) *ṣada* ‘pleased, happy’ ← $\text{p}\alpha\delta o / \check{s}\acute{a}d\acute{o} / < *čyāta-$

The plausible etymology *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’ ← $*o\alpha\text{p}o / wa\check{s}\acute{o} / < *wastra-$

As concerns clusters, *kṣuna* yields evidence for Bactr. $\chi\text{p-} / x\check{s}/$ being rendered as Niya $k\check{s}-$ ($k\check{s}-$), and *laṣi* for Bactr. $-\text{p}\nu-$ $/ \check{s}n /$ corresponding to Niya $-\check{s}-$ $/ \check{s}n /$.⁶⁰

Secure loanwords from Bactrian (§3.2.1)

- (2.) *kṣuna* (also *kṣ-*) ‘date, reign, regnal year’ ← $\chi\text{p}o\upsilon o / x\check{s}un\acute{o} /$ ← Gr. $\chi\rho\acute{o}\nu o\varsigma$ ‘time (period)’

- (8.) *laṣi* ‘gift’ ← $*\lambda\alpha\text{p}\nu i / l\check{a}\check{s}n\check{i} /$ (attested $\lambda\alpha\rho\nu o$) $< *dā\check{s}in\check{i}-$

The fact that Indo-Aryan loanwords into Bactrian display the same sound correspondence makes me conclude that Bactr. $-\text{p-} / \check{s}/$ was most likely

59 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 uo2), dir.pl. in $-i < -e$ made from *savatsa** (LKD: §60), and (ii) *vatsiya* ‘with a calf’ (CKD 676 uo4, uo5), an adj. made from *vatsa* ‘calf’ with the suffix $-i$ (LKD: §75).

60 See also §3.2.4 s.v. *laṭhana* and §4.3.27 for a possible substitution of Bactr. $-\chi\text{p}\tau-$ $/ x\check{s}t /$ with Niya $-\text{th-} / \check{s}t^{(h)} /$.

The plausible etymology of *maḳa* illustrates a correspondence between Bactr. -ḡk- /šk/ and Niyā -k-.⁶²

(24.) *maġka* 'bean' ← *μα**β**κο /māš**k**ə/ < *māša-kǎ-

The substitution of Bactr. -δορ- /dš/ with Niya -c- exemplified by the plausible etymology *picara*⁶⁴ may have to do with Bactrian phonetics.

(23) *picara* ‘(mark of) honour’ ← *πιδοφαρο /pidšarə/ (attested πιδοφαρο) < *pati-š̥sarV-

If one accepts that the phonetic value of Bactr. /dʃ/ was [tʃ], its substitution with Gāndh. *-c-* may also shed light on the phonetic value of Gāndh. *-kʃ-* (also *-kʃ̌-*). It is sometimes stated that the latter represents [tʃ] (see §2.1.6); however, if that were the case, one might expect Bactr. /dʃ/ (~ [tʃ]) to have been approximated with Gāndh. *-kʃ-* rather than with the palatal *-c-*. I would therefore not exclude that *-kʃ-* simply stood for [kʃ], a view for which additional support may be found in Bactr. ρακβαζο ‘rākṣasa’ (obl.pl. ρακβαζανο and fem. ρακβαζανζο ‘rākṣasī’ in h7, lines 2, 4, 8; Sims-Williams 2006: 112). Given its voiced *-ʒ-* /*z-*/, ρακβαζο must be a loan from Gāndh.

64 Two arguable etymologies illustrate the same correspondence. See §3.2.3 s.vv. *aco*; *picav*-.

**raḱṣaṣa* /rākṣaṣa/ rather than from Skt. *rākṣasa*-.⁶⁵ Yet, we still find that -*ḱṣ*- is rendered as -*ḱṣ*- /kṣ/, a substitution that is more readily explained if Gāndh. -*ḱṣ*- corresponds to [kṣ] than if it were [ṣ̪].

In one arguable etymology, -*ḱṣ*- /ṣ̪/ would be rendered with a palatal -*j*- /-ṣ̪- rather than a retroflex.

Arguable loanwords from Bactrian or another language (§3.3.3)

(72.) *kavaji* (2× -*j*-; 1× -*ṣ̪*-) ‘shoe(s), boot(s) (?)’ ← **καφῑ* /kafṣi/ (attested pl. *καφῑνο*) < **kafṣi*-

As noted in §3.3.3 s.v. *kavaji*, this exceptional substitution may be explicable if we assume that the articulation of -*ḱṣ*- /ṣ̪/ was a bit more fronted when preceded by a labial /f/ and followed by a front vowel /i/.

4.3.19 -*ḱṣ*- /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 𑖦 *jha*. This *aḱṣara* 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 phoneme inventory of Gāndhārī, 𑖦 *jha* became interchangeable intervocalically and in certain consonant clusters with 𑖧 *sa* and the newly created sign 𑖧 *ṣa*.

§2.2.4.3 concluded that <ṣ̪> 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) /ṣ̪/ when continuing OIr. **j*, possibly also from a palatalised **z*; (iii) /ṣ̪/ if the result of OIr. **ṣ̪* or clusters whose voiceless counterpart yields -*ḱṣ*- /ṣ̪/; (iv) /dz/ when due to postnasal voicing of /ts/ < OIr. **č* or deriving from *-*tVz*-; and (v) /ḱṣ/ as a palatalised variant of /dz/ in front of -*i*- /ī/, possibly also from OIr. **j* preceded by a nasal.

In this subsection, I study how Bactr. /z/ was substituted in Niya Prakrit (examples are listed below). The substitution of /ṣ̪/ and /ḱṣ/ is treated in §4.3.20 and that of /ṣ̪/ in §4.3.21. Because there is no secure example of /dz/ in the loanword corpus, this phonological value does not require further discussion.

65 Because of its -*ṣ̪*- /s/, the variant *ραḱṣαο* in *za*12 (BD II: 174f.; 259) may be an independent loan from the Sanskrit form. For other Bactrian words containing the cluster -*ḱṣ*-, i.e. *βυḱṣο* ‘monk’, *ιαḱṣο* ‘yakṣa’, *ραḱṣο* ‘protective amulet’, and *σαḱṣο* ‘witness’, we lack phonological arguments to help us decide whether they are loans from Gāndhārī or from Sanskrit.

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 ζινιγο) < *zainiya-kā-

Plausible loanwords from Bactrian (§3.2.2)

- (21.) *jenavida* ‘armourer’ ← 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 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)

- (56.) *ajhate* (10× *-jh-*; 1× *-s-*) ‘free, noble’ ← αζαδο /āzādə/ < *āzāta-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (65.) *paraśa* (9× *-s-*; 2× *-s-*) ‘abduction, plundering’ (and derivatives) when ← *παράζο /parāzə/ < *parāza- ‘taking away’ rather than παρασο /parātsə/ ‘away’ < *parāčā

Arguable loanwords from Bactrian or another language (§3.3.3)

- (75.) *pajhavamta* (1× *-jh-*; 1× *-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 *pajhavamta* is once spelt with *-jh-* and once with *-s-*.⁶⁶

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)

- (61.) *gavaśa* ‘deer, stag’ ← *γαοαζβο /yawaznə/ < *gawazna-

Independent of whether *gavaśa* is a loan from Bactr. *γαοαζβο /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

66 Concerning the non-Bactrian loanwords, it can be noted that Khot. *-ys-* /z/ is substituted with *-jh-* in the case of *hinajha* ‘army commander’ ← *hināysa-*.

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, *aṣṣgara* ← **αζγαρο* /*azgarə*/ and *ṣvaṭhaṃgha* ← **αζβαρσταγγο* /*əzvarstāṅgə*/ would both suggest that *-z-* could be rendered as *-ṣ-* /*z-* in this type of cluster (cf. §3.2.3; §3.2.4 s.vv.).

Arguable loanwords from Bactrian (§3.2.3)

- (35.) *aṣṣgara* ‘herald (?)’ ← **αζγαρο* /*azgarə*/ (attested PN *αζγαρακο*) < **azda-kara* < **azdā-kara*

Tentative loanwords from Bactrian (§3.2.4)

- (55.) *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-*

A third instance of this substitution could be the PN *Maṣḍhige* if, as proposed in §3.4.1, this represents Mlr. **mazdīg(ə)* < **mazd-īya-ka* ← **mazdā-* ‘wisdom’ and **-zd-* was thus borrowed as *-ṣdh-* /*zḍ^(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 *-ṣ-* /*z-* in clusters.⁶⁷

First, one can invoke the parallel of the non-Bactrian loanword *darṣ-* ‘to load’ ← **darz-*; unless one follows Bailey (1946: 768) in positing the donor form as **darz-* < OIr. **darz(a)ya-*, this loanword exemplifies a substitution of Ir. **-rz-* with Niya *-rṣ-* (§3.5.1 s.v.).⁶⁸

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-* / ***-jhg-*, and ***-jhv-*,

67 Interestingly, Thomas (1921: 280) already mentioned “the possibility that some of the ṣ’s, e.g. in *aṣṣgara*, were pronounced as z’s”.

68 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 5. If correct, **-rz-* would in the same word be rendered as either *-rjh-* and *-rṣ-*, but the reading and interpretation of *arṣaṇo* are uncertain (see also Baums 2024: 280f.).

respectively. In reality, these clusters do not occur 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 *-ṣ-* /sn/ ← *zn-, does not seem too attractive either: there are no attestations of **sd- in the Gāndhārī corpus; *-sg-* occurs only twice;⁶⁹ and *-sv-* is mainly limited to Sanskritisms because OIA *-sv-* developed to Niya *-śv-/ -ṣp-* (LKD: §49). The clusters *-ṣdh-*, *-ṣg-*, and *-ṣv-*, on the other hand, typically occur in loanwords,⁷⁰ making them suitable candidates to be approximations of **-zd-*, **-zg-*, and **-zv-*.

4.3.20 -ṣ- /ž/ and /dž/

The instances of /ž/ and /dž/ in my loanword corpus are all special cases discussed in more detail in other sections: the plausible etymology *nihamñ-* ‘to deposit, to put down’ ← *νιυανζ- /nihan(d)ž/ (§3.2.2 s.v.) and the arguable etymology *aṃbaṃjaya* ‘wrapper (?)’ ← αμβανζο /ambandžə/ (§3.2.3 s.v.) concern the position after a nasal, which is treated in §4.3.29; the etymologies of *aḍini* ‘(broomcorn) millet’ and *oḍ-* ‘to let go’ from respectively *αρζινο /aržinə/ and pres.3sg. *ωυιρζιδο /ōhiržidə/ (§3.2.3 s.vv.) are based on the idea that Bactr. /rž/ could be substituted with Niya *-d-* /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/, illustrate a substitution of Bactr. *-γζ-* /γž/ with Niya *-j-* / (ž)ž/, as discussed further in the respective lemma (§3.3.3 s.v.).

4.3.21 -ṣ- /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, i.e. that Bactr. *-ṣ-* /ž/ is borrowed with Niya *-ṣ-*,

69 The examples are the theonym *Acokisgiya* (CKD 361 o2, but see also §3.2.3 s.v. *aco*) and the anthroponym *Casgeya* (CKD 601 rD4). The latter is otherwise always written with <sg> (more than 40 attestations), which suggests that the instance in CKD 601 is a mistake.

70 It has been argued that Niya Pkt. *muṣga* is an inherited word meaning ‘testicle’ < Skt. *muṣka-* (LKD: §49; Duan & Tshelothar 2016: 8; 76). Since, however, the implied voicing of OIA *-ṣk-* to Niya *-ṣg-* is phonologically implausible, I do not accept this interpretation. *-ṣv-* is rare in Niya Prakrit; besides *ṣvaṭhaṃgha*, this cluster only occurs in the foreign PN *ṣvalīyaya* (CKD 709 co3), also written as *ṣpālīyaya* (CKD 579 cr2; 709 uo3) and *ṣpālīyaya* (CKD 817 uo2).

Secure loanwords from Bactrian (§3.2.1)

- (11.) *valaga* ‘animal keeper’ ← *οαλαγο* /wālāgə/ < *wād-āka- ‘leader’

Plausible loanwords from Bactrian (§3.2.2)

- (27.) *vase* ‘garments’ ← **οαπο* /wašə/ < *wastra-

Arguable loanwords from Bactrian (§3.2.3)

- (31.) *aco* (also loc.sg. *acovaṃmi*; cf. also *acoviṃna* ‘border official’) ‘frontier, border post’ ← **αδοραοο* /adšāwə/ < *ati-čyāwa-
 (42.) *picav-* ‘to hand over’ ← **πιδοραο-* /pidšāw/ < *pati-čyāwa-
 (44.) *badho* (also 4× -*ava*; 2× -*ova*; perhaps 1× -*avo*) ‘pledge, mortgage’ ← **βαμδαοο* /bāmdāwə/ ← **βαμδο* ‘loaned’ (cf. *βαμδιγο* ‘loan’) < *apāmita- + suffix -αο
 (48.) *ṽappa* ‘weaver’ (5× *ṽ-*; 1× *v-*) ← *οαβγο** /wāvgə/ < *wāba-ka-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (60.) *ayana* (98× -*ṽ-*; 12× -*v-*) ‘village, territory of a clan’ ← **οαωνανο* /āwahanə/ < *ā-wahana- ‘dwelling’
 (61.) *gavaša* ‘deer, stag’ ← **γαοαζνο* /gawaznə/ < *gawazna-
 (67.) *pravamaṇaga* ‘(authoritative) document’ ← *παροαανγο* /parwānāgə/ < *parwānākā- (with analogical adaptation to *pramana* ‘authority’)

So far, only the arguable etymology *ṽappa* shows a nearly consistent rendering of Bactr. -o- /w/ as Niya *ṽ-*. One potentially Bactrian loanword, i.e. the plausible etymology *ayana*, has most often -*ṽ-* (98 tokens), but sometimes also -*v-* (12 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 -*ṽ-*, 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 -*ṽ-* is the weak distinction between these two sounds (LKD: §29), which also frequently interchange in inherited vocabulary, e.g. *viṃṇāyati* beside *viṃṇāveti* ‘(s)he orders’ < Skt. *viññāpayati*.

4.3.23 -v- /h/

Both Bactrian and Niya Prakrit have a phoneme /h/. Therefore, the default expectation must be that, except in some clusters, Bactr. -v- /h/ is rendered as Niya -h-. This expectation is met by *nihaṃṇ-*, *nihala*, and, if indeed a Bactrian loanword, *harga*.

Plausible loanwords from Bactrian (§3.2.2)

- (22.) *nihaṃṇ-* ‘to deposit, to put down’ ← **νιυανζ-* /nihan(d)z/ < *ni-ṭhanja-

Arguable loanwords from Bactrian (§3.2.3)

- (40.) *nihala* ‘settlement, agreement’ ← *νιυαλο /nihālə/ ← *νιυαλ- ‘to settle’ (attested νααλ-) < *ni-šādaya-

Secure loanwords from Bactrian or another language (§3.3.1)

- (58.) *hargā* ‘dues, tax’ ← ναργο /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)

- (31.) *Acomena*, toponym ← *αδοβαοομηυανο /adšāwəməhənanə/ < *ati-čyāwamaiθana- ‘dwelling located at the border’ (discussed s.v. *aco* ‘frontier, border post’)
- (36.) *oḡ-* ‘to let go’ ← *ωυιρζ- /ōhīrz/ < *awa-hrza-

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* ‘family estate’ ← *γιρλομηυο /γīrlməhə/ < *grda-maiθa- ‘dwelling of a household’
- (52.) *Remena*, toponym ← *ρη(ο)μηυανο /rē(w)mēhənanə/ < *raiwa-maiθana- ‘rich dwelling’

Plausible loanwords from Bactrian or another language (§3.3.2)

- (60.) *ayana* ‘village, territory of a clan’ ← *αοαυανο /āwahənanə/ < *ā-wahana- ‘dwelling’

The same phonological process is occasionally observable in inherited vocabulary in variations of the type *danagrana* / dānagrana (CKD 577 uo3; 588 co2, uo5f.) next to *danagrahana* ‘giving and taking’ or *goma* (e.g. CKD 718 r1) besides *gohuma* / *gohumi* / *goduma* < *godhūma*- ‘wheat’. Therefore, I would say that the loanwords and forms such as *danagrana* / *dānagrana* 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.⁷⁴

74 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

Also worth mentioning is *maravara* ‘accountant’.

Plausible loanwords from Bactrian or another language (§3.3.2)

(68.) *maravara* ‘accountant’ ← ***υ**μαροβαρο /**hm**ārēvārə/ < **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.).

Arguable loanwords from Bactrian or another language (§3.3.3)

(79.) *hastama* (10× **ha**-; 5× **a**-) ‘quarrel, dispute’ ← *(**υ**)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 ***υ**ασταμβο and *ασταμβο < **ha(m)-stamba*- could have co-existed in the same way that **υ**αμοπαλο and **α**μβαλο ‘accordingly, immediately’ < **hama-pada*- did (BD II: 272).

In short, Bactr. **-υ-** /**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.

4.3.24 **-ρ-** before a dental: **-ρδ-** /**rd**/ and **-ρστ-** /**rst**/

Here and in the following subsections, I will be concerned with three types of Bactrian clusters involving the phoneme **-ρ-** /**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 **-ρ-** /**r**/ precedes a dental, i.e. **-ρδ-** /**rd**/ and **-ρστ-** /**rst**/. For **-ρδ-** /**rd**/, there are two relevant examples: (i) *sujinakirta* where **-ρδ-** /**rd**/ would be substituted with *-rt-*, and (ii) *aṭa* where,

historical spellings, the preservation of the *-h-* in *nihamññ-* and *nihala* may have been motivated by the synchronically obvious morpheme boundary after *ni-* (cf. §3.2.3 s.v. *nihala*).

if not a loan from another Iranian language, -pδ- /rd/ would correspond to -ṭ- /ṭṭ/.⁷⁵

Arguable loanwords from Bactrian (§3.2.3)

- (49.) *suḷinakirta* ‘needlework, embroidery’ ← *σωσινοκιρδο /sōtsinəkirdə/ < *saučanya-kṛta- or *σοσινοκιρδο /sūtsinəkirdə/ < *sūčanya-kṛta-

Plausible loanwords from Bactrian or another language (§3.3.2)

- (59.) *aṭa* ‘flour’ ← αρδο /ārdə/ < *ārta-

In my view, the apparent discrepancy between these two words can be accounted for without recourse to the assumption that *suḷinakirta* 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’ < Skt. *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 < Skt. *kartavya-* or *aḍha* /aḍḍha/ ‘half’ next to *ardha* < Skt. *ardha-*.

My hypothesis is that Niya -rt- ← Bactr. -pδ- /rd/ could still undergo this assimilation and result in a retroflex geminate -ṭ- /ṭṭ/. Under this scenario, the apparent discrepancy between *suḷinakirta* and *aṭa* would be of the same kind as that between *kaṭavo* /kaṭṭavo/ and *kartavo* /kartavya. In other words, *suḷinakirta* could be a historical spelling and *aṭa* a linguistically more innovative form.⁷⁶

75 We would have another example of Bactr. -pδ- /rd/ → Niya -rt- if the PN *Laṃpurta* (CKD 678 uo5) represents Bactr. *λαμβορδο /lāmburdə/ < *dāmi-bṛta- ‘carried by the creator’ (see §3.4.2 s.v. *Laṃga*). In the case of the non-Bactrian loanword *khakhordi* (also *khakhortiya*) ‘witch’ (§3.5.2 s.v.), Ir. *-rd- was rendered both as -rd- and -rt-. If *bhaṭaraga* ‘lord, owner’ continues Ir. *fratāra-ka- (§3.6 s.v.), its -ṭ- /ṭṭ/ could continue *-rt- or *-rd- in the Iranian pre-form, but it could also be due to a folk etymology with Pkt. *bhaṭṭr-* ‘lord, husband’.

76 A possible reason for this difference could be that *aṭa* was more deeply integrated into the language than *suḷinakirta*. 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 *suḷinakirta* is a hapax legomenon occurring in a list of textile products.

The substitution of Bactr. -ρστ- /rst/ with Niya -*ṭh-* /ṣṭ/ required by my tentative etymology of Niya *ṣvaṭhaṃgha* / *ṣoṭhaṃgha* ‘finance officer’ could be accounted for along similar lines (cf. §3.2.4 s.v.).

Tentative loanwords from Bactrian (§3.2.4)

- (55.) *ṣvaṭhaṃgha* / *ṣoṭhaṃgha* ‘finance officer’ ← *αζβαρσταγγο /əzvarstāṅgə/ < *uz-bara-stān-āna-ka- ‘the person in charge of the place disbursements are stored’ with haplogy 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.⁷⁷

Secure loanwords from Bactrian (§3.2.1)

- (6.) *nokṣari* ‘month of the new year’ ← *νωγοσαρλι /nōgsarlī/ (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-

Tentative loanwords from Bactrian (§3.2.4)

- (51.) *taravara* ‘sword’ ← *ταρλοβαρο /tarlənṽrə/ < *tarda-bāra- ‘splitter’

If one subscribes to the tentative idea that *kilme* continues Bactr. *γῆρλομηνο /γῆρλῆμηῶ/, 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’ ← *γῆρλομηνο /γῆρλῆμηῶ/ < *gṛda-maiṭha- ‘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.

77 NP *falāxan* ‘sling’ ← Bactr. *φορλαχανο ‘sling’ < *fra-daxṣanā- illustrates a similar type of simplification from Bactr. -ρλ- /rl/ to NP -l- (Sims-Williams 2011c: 194).

4.3.26 -pʒ- /rʒ/

The two words listed below may exemplify a substitution with Bactr. -pʒ- /rʒ/ (from OIr. *rʒ in front of -i- /i/) as Niya -ḡ- /ɾ/.⁷⁸ 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)

(32.) *aḡḡini* ‘(broomcorn) millet’ ← *aḡḡivo /arʒinā/ < Pre-Bactrian *arʒani-

(36.) *oḡḡ-* ‘to let go’ ← *ωυιρʒ- /ōhirz/ (3sg. *ωυιρʒιδο /ōhirʒidə/) < *awa-hrʒa-

A first observation has to do with the possible phonetics of Niya -ḡ- /ɾ/. Like von Hinüber (2001²: §201) and Baums (2009: 141), I consider it probable that /ɾ/ corresponds to IPA [ɽ] 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”, [ɽ] is pronounced in Hindi and other NIA languages somewhat more fronted than retroflex stops, i.e. in the post-alveolar region of the mouth (Ladefoged & Maddieson 1996: 27). 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. -pʒ- /rʒ/ would be the result of a palatalised dental *z, it could also have been realised as a post-alveolar (approximately IPA [ʒ]); and, if so, the places of articulation of Bactr. -pʒ- /rʒ/ and Niya -ḡ- /ɾ/ 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 *darʃ-* ‘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 motivated⁷⁹ 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 Skt. root √*dr̥ś* ‘to see’, and it certainly is not a marker of loanwords,

78 In the case of *oḡḡ-* ‘to let go’, this idea requires that it was the 3sg. *ωυιρʒιδο /ōhirʒidə/ that was borrowed. See §3.2.3 s.v. and §4.4.4.

79 Cf. e.g. *paruvarʃi* ‘of last year’ ← *paruvarʃa* ‘last year’ + suffix -*i* or *darʃitavo* (and variants) ‘to be loaded’ ← *darʃ-* ‘to load’ + gerundive ending -*itavo*.

whereas Niya *-ḡ- /r/* 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 *-ḡ- /γ/* can, as discussed in §4.3.10, be faithfully substituted with Niya *-ḡ- /γ/*. 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*).⁸⁰ 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 *-ḡ- /γ/* would be rendered as part of a consonant cluster. Yet, the long-known Iranian loanword *načira* /našcira/ ‘hunting’ ← Ir. **naxčir* (see §3.6 s.v.) indicates that at least one option was to borrow velar fricatives in consonant clusters with sibilants.

Two newly proposed etymologies (listed below) seem to strengthen that conclusion, although the evidence they provide is somewhat indirect.

Plausible loanwords from Bactrian (§3.2.1)

(28.) *saste* ‘day, elapsed’ ← σαχτο /saxtə/ < *saxta-

Arguable loanwords from Bactrian (§3.2.3)

(47.) *vaṣḍhiga*, festival on the mountain ← βαγδιγο /vaγdigə/ ‘tribute’ ← βαγδο ‘distributed’ < *baxta- + suffix -ιγο

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-*.

A second instance of this type of sound substitution is provided by *vaṣḍhiga*, festival on the mountain ← βαγδιγο /vaγdigə/ ‘tribute’. This etymology is arguable, but the phonological reasoning behind it is similar to what I assume for *saste*. For *vaṣḍhiga*, I hypothesise that **-zd-* would have been option number one to render the foreign cluster /yd/. **-zd-* faced,

80 Cf. also the non-Bactrian loanword *khakhordi* ‘witch’ (§3.5.2 s.v.), whose internal *-kh-* renders Ir. **-x-*. For the substitution of χβ- /xš/ with kš-/kš-, see §4.3.18.

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.⁸¹

A typological parallel for the substitution of a velar fricative with a palatal sibilant is provided by Arm. *štoros* ‘yellow, green, pale’, which is a loanword from Gr. χλωρός ‘idem’ attested in *Revelation* 6.8 (Kölligan 2020: 138).⁸² Also noteworthy is the pronunciation of *š* and *ḡ* in Pashto dialects. In NE Pashto, these are pronounced as velars, i.e. [x] and [g]; but in other dialects, they are realised as palatals or postalveolars (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], [ɕ], or [j] and [j̥], [ɟ], or [ʒ], respectively. Usually, segmental triggers like front vowels induce this type of change. In certain German dialects, /x/ (spelt <ch>) is, for example, fronted to [ç] after [i], as in *Licht* ‘light’.⁸³ Velar fronting can also occur at syllable end before a coronal consonant (Kümmel 2007: 216). Depending on syllable divisions in Bactrian, this phonetic environment would apply to σαχτο /saxtə/ and *βαγδιγο /vaydiga/.

Finally, the observed rendering of a velar fricative as a (palatal) sibilant is of some importance for the field of Kharoṣṭhī palaeography, since this sound correspondence can 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 𐤑 *ḥēth*. As *ḥēth* 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 (Steiner 2005; Cook 2022: 20), adopting Aramaic 𐤑 *ḥēth* as Kharoṣṭhī 𑀓 *śa* conceivably reflects the same type of sound substitution as discussed above.

81 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. *mazdīgā < *mazd-iyā-ka- (§3.4.1 and §4.3.19).

82 Elsewhere in the Bible translation, Armenian borrows Gr. χ as k’ /kʰ/, e.g. *k’lamid* ‘cloak, mantle’ ← χλαμύς, gen. χλαμύδος ‘idem’. The most likely reason for the different treatment in *štoros* 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 /kʰ/ but as a velar fricative /x/ (cf. Kölligan 2020: 134 fn. 10).

83 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 -i- /i/ and the γ- /ɣ/ in γέροντας ‘old man’ as [j̥] in front of -ε- /e/.

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)

- (37.) *caṃkura* ‘imposer of penalties’ ← *ζαγγαρο /ʒ(i)yāṅgarə/ (attested ζιανο κίρ-) < *ziyāni-kara-

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* ‘family estate’ ← *γίρλομηνο /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 *gaṃṇā* ‘treasury’, also 1× *kañi* ‘of the treasury’; 1× *kaṃjhavaliya* ‘treasurer’, ← OP **ganza*- ‘treasury’ (cf. ZMP *ganj*; MMP *ganz*) or *divira*, also 51× *tivira*, ‘scribe’ ← OP **dipīra*- (cf. MP *dibīr*).⁸⁴ 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 the etymologies proposed here 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. *pal̥yi* ‘tax’ < Skt. *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 /ʒ/ as in *ζαγγαρο and initial /γ/ as in *γίρλομηνο 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).⁸⁵

84 Cf. also foreign names of the type *Giraka* besides *Kiraka* or *Jimoya* besides *Cimoya*.

85 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 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*.

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.) *nihamñ-* ‘to deposit, to put down’ ← *νιῶανϑ-/ *nihan(d)ž-* / < **ni-θanja-*

Plausible loanwords from Bactrian or another language (§3.3.2)

- (66.) *parivanae* ‘burden, provisions’ ← *παροβανδαγο / *parəvandəgə* / < **pari-banda-ka-* ‘bound around (the beast of burden)’

Arguable loanwords from Bactrian or another language (§3.3.3)

- (79.) *hastama* ‘quarrel, dispute’ ← *(υ)ασταμβο / *(h)astambə* / < **ha(m)-stamba-*

At the same time, this change seems not to have happened with five other loanwords, including a secure one.⁸⁶

Secure loanwords from Bactrian (§3.2.1)

- (1.) *avimdama* (12× *-(m)d-*; 5× *-(m)t-*; 4× *-(m)dh-*) ‘fine, recompense’ ← αβινδαμο / *əvindāmə* / derived from *αβιν- < **upa-ayanā-*

Plausible loanwords from Bactrian (§3.2.2)

- (17.) *amtagi* ‘belonging to the district’ ← *amtaga** ‘district’ ← ανδαγο / *andāgə* / (or: / *andāyə* /) with debated etymology

Arguable loanwords from Bactrian (§3.2.3)

- (29.) *ambamjaya* ‘wrapper (?)’ ← αμβανζο / *ambandžə* / ‘idem (?)’ < **ham-banda-čiya-*
- (30.) *ambukaya*, a title ← αμβουκαο / *ambūkā(y)ə* / (?) with unknown etymology

⁸⁶ Due to the absence of a Kharoṣṭhī grapheme <ñ>, one would not be able to discern a change from /ŋg/ to /ŋ/. Therefore, I leave Bactrian loanwords containing a cluster -γγ- /ŋg/ aside here; they are treated in §4.3.12. If, as suggested §3.4.2 s.v. *Lamga*, the Niya PN *Lampurta* is a loan from Bactr. *λαμβορδο / *lāmburdə* / < **dāmi-bṛta-* ‘carried by the creator’, this would be an additional example where /mb/ is preserved (spelt with *-mp-*).

Arguable loanwords from Bactrian or another language (§3.3.3)

(75.) *pajhavamta* ‘breastband (?)’ ← *παζοβανδο /pāzəvandə/ < *pāza(h)-
banda- ‘bound around the breast’

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’ < Skt. *daṇḍa*-.⁸⁷ 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 oA7) besides *baṃnidaga* (CKD 436 uo3) / ins.sg. *baṃnitagena* (CKD 767 uo3).⁸⁸ Therefore, loanwords such as *aviṃdama* or *aṃtagi* could likewise be historical spellings, whereas the spelling of *nihaṃñ-*, *parivanae*, and *hastama* may have reflected the actual pronunciation more faithfully.⁸⁹

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. For this 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).

87 Contrast Gāndh. **kaṇa* ‘stick, stroke’ < Skt. *kāṇḍa*-, whence Tumsh. *kaṇa*- ‘idem’ (Hitch 1988b: 149f.; 2009: 19).

88 The Old Persian loanword *gaṃña* ← OP **ganza*- is another example of this type. This word is normally spelt with -*ṃñ*- but the compound *kaṃjhaṃliya* ‘treasurer’ presents us with a historical spelling with -*ṃjh*-.

89 Cf. the argument made about the substitution of Bactr. -*ṛd*- /*rd*/ in §4.3.24.

4.4.1 Parts of speech

As the list below shows,⁹⁰ most of the words certainly or possibly borrowed from Bactrian are nouns (69 cases ~ 86.3%). Adjectives/adverbs and verbs occur too, but they are decidedly less frequent (6 cases ~ 7.5% and 5 cases ~ 6.3%, respectively).⁹¹

These statistics are in line with typological expectations.⁹² 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).⁹³ 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 (~ 86.3%)

Secure loanwords from Bactrian (§3.2.1): 13 cases

aviṃdama ‘fine, recompense’ (also verb pret.3sg. *aviṃdamavita* ‘he imposed a fine’) (1.); *kṣuna* ‘date, reign, regnal year’ (2.); *gušura* ‘prince’ (3.); *dašavida* ‘chief of ten households’ (5.); *noḁsari* ‘month of the new year’ (6.); *prigha* ‘(monochrome) damask’ (7.); *laši* ‘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,

90 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 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.

91 Leaving out the tentative etymologies hardly alters the picture. If one does so, there are 62 nouns (~ 86.1%), 5 adjectives/adverbs (~ 6.9%), and 5 verbs (~ 6.9%). 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.

92 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.

93 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.

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* 'armourer' (21.); *picara* '(mark of) honour' (23.); *maḱa* '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): 16 cases

aṃbaṃjaya 'wrapper (?)' (29.); *aṃbukaya*, a title (30.); *aco* 'frontier, border post' (also *acoviṃna* 'border official'; *Acomena*, toponym) (31.); *aḍini* '(broomcorn) millet' (32.); *avalika* 'swaddle' (34.); *aṣgara* 'herald (?)' (35.); *caṃkura* 'imposer of penalties' (37.); *toṃga*, a title (39.); *nihala* 'settlement, agreement' (40.); *paḱe* 'allotment, share' (41.); *piro* 'military post, fort' (also adj. *pirovi* 'of the fort') (43.); *badho* 'pledge, mortgage' (44.); *muṣḍhaṣi*, exchanged woman (45.); *vaṣḍhiga*, festival on the mountain (also adj. *vaṣḍhigaṃ*) (47.); *yapga* 'weaver' (48.); *sujinakirta* 'needlework, embroidery' (49.).

Tentative loanwords from Bactrian (§3.2.4): 6 cases

kilme 'family estate' (also *vegakilme* 'outside (?) the family estate') (50.); *taravara* 'sword' (51.); *Remena*, toponym (52.); *laṭhana* 'plain, open land (?)' (53.); *lastuga*, textile product (54.); *ṣvaṭhaṃgha* / *ṣoṭhaṃga* 'finance officer' (55.).

Secure loanwords from Bactrian or another language (§3.3.1): 2 cases

śpaṣa 'watching, guarding' (also *śpaṣavaṃna* 'guard, watchman') (57.); *harga* 'dues, tax' (58.).

Plausible loanwords from Bactrian or another language (§3.3.2): 11 cases

aṭa 'flour' (59.); *aṃana* 'village, territory of a clan' (also adj. *aṃanemci* 'belonging to the village') (60.); *gavaṣa* 'deer, stag' (61.); *tavastaga* 'carpet' (62.); *draṃga* 'office' (also *draṃgadharma* 'office holder') (63.); *namata* 'felt' (64.); *paraṣa* 'abduction, plundering' (also denominative pret.3pl. *parasitaṃti* / *paraṣitaṃti* 'they abducted', etc.) (65.); *parivanae* 'burden, provisions' (66.); *pravaṃnaga* '(authoritative) document' (67.); *maravara* 'accountant' (68.); *vara* 'load; time, occasion' (69.).

Arguable loanwords from Bactrian or another language (§3.3.3): 10 cases

agiṣḍha 'cover, rug' (70.); *ageta* 'tax collector' (71.); *kavaji* 'shoe(s), boot(s) (?)' (72.); *kojava* 'rug, blanket' (73.); *namanaga* / *namaṃniya* 'exchange' (74.); *pajhavaṃta* 'breastband (?)' (75.); *raji* 'cloak, woollen cloth (?)' (76.); *rasaṃna*

'rope (?)' (77.); *šaṃna* 'hemp, hempen (?)' (78.); *hastama* 'quarrel, dispute' (79.).

Adjectives and adverbs: 6 cases (~ 7.5%)

Secure loanwords from Bactrian (§3.2.1): 3 cases

jheniga 'in charge of, under the care of' (4.); *šada* 'pleased, happy' (also denominative pres.1sg. *šademi* 'I am happy', etc.) (13.); *špara* / *špura* 'full, completely' (16.).

Arguable loanwords from Bactrian (§3.2.3): 1 cases

aṭga 'additional, complementary' (33.).

Secure loanwords from Bactrian or another language (§3.3.1): 1 cases

ajhate 'free, noble' (also special adv. *ajhatu*) (56.).

Tentative loanwords from Bactrian or another language (§3.3.4): 1 case

ujhmayuga 'trustworthy, skilled (?)' (80.).

Verbs: 5 cases (~ 6.3%)

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' (36.); *tim-* 'to be concerned about, to be angry' (38.); *picav-* 'to hand over' (42.); *leṣ-* 'to dispatch, to conduct' (46.).

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).⁹⁴ 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).

94 For Bactrian loanwords ending in *-o*, such as *aco* 'frontier, border post' or *piro* 'military post, fort', cf. §4.3.1.

Besides, there may be some evidence among the Bactrian and potentially Bactrian loanwords in Niya Prakrit for the preservation of *i*-stems < OIr. *-i 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.⁹⁵

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.⁹⁶

Plausible loanwords from Bactrian (§3.2.2)

- (18.) *are* 'a half' ← *αρο /arɪə/ < *arda- or *αραγο /arɪəgə/ < *arda-ka-
 (27.) *vase* 'garments' ← *οαφο /waʃə/ < *wastra-
 (28.) *saste* (cf. loc.sg. *sasteyamī*) 'day, elapsed' ← σαχτο /saxtə/ < *saxta-

Arguable loanwords from Bactrian (§3.2.3)

- (41.) *paḱe* 'allotment, share' ← *παρκο /pəʃkə/ < *pišta-ka-

Tentative loanwords from Bactrian (§3.2.4)

- (50.) *kilme* 'family estate' ← *γιρλομηνο /γṛlmēhə/ < *grda-maiθa- 'dwelling of a household'

Secure loanwords from Bactrian or another language (§3.3.1)

- (56.) *ajhate* 'free, noble' ← αζαδο /āzādə/ < *āzāta-

95 The same observation holds for the non-Bactrian borrowings in Niya Prakrit (§3.5). The exceptions are *khakhordi* (also 1× *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.

96 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 /kādɡə/ < *kāta-ka- (or: *καδγο /kadɡə/ < *kata-ka-)

(84.) *Kutge* ← *κοδγο /kudɡə/ < *katu-ka- or *kuta-ka-

(86.) *Palge* ← *παλγο /pālɡə/ < *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.⁹⁷

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.).⁹⁸ 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. 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 erstwhile existence in *Niya Prakrit* is strongly suggested by the abl.sg. in *-ade* (-āde) < OIA *-ātaḥ (cf. Śaurasenī -ādo; Mahārāṣṭrī -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 may have retained archaic forms no longer found in common nouns due to their being less well integrated morphologically.

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.

97 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.

98 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-.

or the dir.pl.⁹⁹ This possibility was already entertained by Maggi (2017: 157; 2022b: 152), who derived the Niya hapax *vāṣe* ‘garments’ from the dir.pl. **oāḥe* /*waše*/ of Bactr. **oāḥo* /*wašə*/ ‘garment’ < **wastra-*;¹⁰⁰ and I have previously (2021: 53) suggested that *pāke* ‘share’ comes from a dir.pl. **πāḥke* of Bactr. **πāḥko* /*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 *pāke* are attested with numerals higher than one (cf. *vāṣe* 4 in CKD 534 oB2 or *pāke* 3 in CKD 66 oB3).¹⁰¹ 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 (i) *are* ‘a half’ is never attested with a numeral higher than one, and (ii) a word meaning ‘half’ is 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 KSPlate 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 oA1) and frequently combines with *jaṃna* ‘people’,¹⁰² which can take plural concord because of its semantics.¹⁰³ 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*.

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

99 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*).

100 Conceivably, *vāṣe* / **oāḥe* was used as a general term for ‘clothes’ 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).

101 At least *pāke* is also used as a singular; cf. e.g. *pāke* 1 in CKD 66 oB1, oB2.

102 See CKD 120 o2f, r1; 272 o10; 593 uo8; 889 cr3.

103 Cf. e.g. *ajhade jaṃna abhisaṃmitaṃti* ‘the free people came to an agreement’ (CKD 120 o2f) or *ajhate jaṃna ... abomata kareṃdi* ‘the free people disobey’ (CKD 272 o10).

inherited words, e.g. *prahare* ‘blows’ (CKD 209 r2; 462 r1; 554 o3; 609 r1) next to more frequent *prahara* ‘idem’ < Skt. *prahāra*-. Interestingly, the same ending also occurs with six (possibly) Bactrian loanwords, where one wonders whether 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; *spāṣavaṃne(ya)* / *spāṣavaṃne* ‘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.¹⁰⁴ Similarly, Bactrian verbs either use a 3sg. present ending in *-iḍo /idə/* (class A) or in *-ḍo /də/* (class B), whilst 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?

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’ ← **νιανζ-* /*nihan(d)z-* < **ni-θanja-*: no present tense forms attested.

104 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).

Arguable loanwords from Bactrian (§3.2.3)

- (36.) *oḍ-* ‘to let go’ ← *ωυρζ- /ðhirz/ (3sg. *ωυρζιδο) < **awa-hṛza-*: 3sg. *oḍeti* attested.
- (38.) *tim-* ‘to be concerned about, to be angry’ ← *τιμ- /tīm/ < **tāmya-*: no present tense forms attested.
- (42.) *picav-* ‘to hand over’ ← *πιδοβαο- /pidšāw/ (3sg. *πιδοβαοιδο) < **pati-čyāwa-*: 3sg. *picaveti** reconstructable based on 2sg. *picavesi*; 2pl. *picavetu*.
- (46.) *leṣ-* ‘to dispatch, to conduct’ ← *λιζ- /liž/ or *ληζ- /lēž/ < **darzaya-*: no present tense forms attested.

Of *nihaṃñ-*, *leṣ-*, and *tim-*, no present forms are currently attested, so not much can be said about their morphology.¹⁰⁵ Yet, we can at least say something about the morphological integration of the other two verbs, i.e. *oḍ-* and *picav-*. Both verbs belong to the *eti*-class, and it is plausible that their hypothesised Bactrian sources *ωυρζ- and *πιδοβαο- formed their pres.3sg. in -ιδο (class A), given that the base verbs υρζ- and βαο- are attested in the pres.3sg. as υρζιδο and βαοιδο, 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 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

105 There are likewise no present tense forms attested of *dars-* ‘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.).

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).¹⁰⁶ With the latter group, we cannot be entirely sure whether they are all borrowed from Bactrian. Therefore, 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: 56 words ~ 70%)
- (ii) Textiles and clothing (§4.5.3: 15 words ~ 18.8%)
- (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 “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.; Dragoni 2023b: 229).

106 The number of loanwords which can be securely ascribed to donor languages other than Bactrian is too scanty to warrant a full-scale semantic analysis. See §4.2 for some brief notes.

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 (56 words ~ 70%) belong to the category of “administrative, political, military, and economic terms”, thus reflecting the role played by the ancestor of Niya Prakrit in the Kushan administration (see §7.3). Whilst 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 ~ 25%)
- (ii) Legal terminology (13 words ~ 23.2%)
- (iii) Economic terms (8 words ~ 14.3%)
- (iv) Geographical terms and administrative units (7 words ~ 12.5%)
- (v) Transport and travel (6 words ~ 10.7%)
- (vi) Military terminology (5 words ~ 8.9%)
- (vii) Calendrical terms (3 words ~ 5.4%)

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: *acoviṃna* ‘border official’ (§3.2.3 s.v. *aco*); *śpaśavaṃna* ‘guard, watchman’ (§3.3.1 s.v. *śpaśa*); and *draṃgadhara* ‘office-holder’ (§3.3.2 s.v. *draṃga*).¹⁰⁷ Haspelmath and Tadmor do not have a separate semantic domain for this type of word.

Secure loanwords from Bactrian (§3.2.1)

guśura ‘prince’ (3.)

daśavida ‘chief of ten households’ (5.)

valaga ‘animal keeper’ (11.)

śadavida ‘chief of a hundred households’ (12.)

Plausible loanwords from Bactrian (§3.2.2)

jenavida ‘armourer’ (21.)

yatma ‘measurer of rations’ (26.)

107 *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.

Arguable loanwords from Bactrian (§3.2.3)

aṃbukaya, a title (30.)*aṣgara* 'herald (?)' (35.)*caṃkura* 'imposer of penalties' (37.)*toṃga*, a title (39.)*yaṃga* 'weaver' (48.)

Tentative loanwords from Bactrian (§3.2.4)

ṣvaṭhaṃgha / *ṣoṭhaṃga* 'finance officer' (55.)

Plausible loanwords from Bactrian or another language (§3.3.2)

maravara 'accountant' (68.)

Arguable loanwords from Bactrian or another language (§3.3.3)

aḡeta 'tax collector' (71.)

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.¹⁰⁸

Secure loanwords from Bactrian (§3.2.1)

aviṃdama 'fine, recompense' (1.)*jheniga* 'in charge of, under the care of' (4.)*laṣi* 'gift' (8.)*lastana* 'dispute, lawsuit' (9.)*vaga* 'rent (paid for the use of land)' (10.)

Arguable loanwords from Bactrian (§3.2.3)

niḡala 'settlement, agreement' (40.)*badho* 'pledge, mortgage' (44.)*muṣḡhaṣi*, exchanged woman (45.)

Secure loanwords from Bactrian or another language (§3.3.1)

aḡhate 'free, noble' (56.)

Plausible loanwords from Bactrian or another language (§3.3.2)

pravaṃnaga '(authoritative) document' (67.)

Arguable loanwords from Bactrian or another language (§3.3.3)

namanaga / *namaṃniya* 'exchange' (74.)

108 Of the official titles listed above, *caṃkura* 'imposer of penalties' has probably the closest connection to legal activities (see §3.2.3 s.v.).

hastama ‘quarrel, dispute’ (79.)

Tentative loanwords from Bactrian or another language (§3.3.4)

ujhmayuga ‘trustworthy, skilled (?)’ (80.)

A group of eight words encompasses “economic terms”, e.g. units of measure and other words related to taxation.¹⁰⁹ There is no exact correspondent in Haspelmath and Tadmor’s list of semantic domains, but the units of measure and words such as *špara* / *špura* ‘full, completely’ or *are* ‘a half’ would fit under “quantity”, their domain no. 13.

Secure loanwords from Bactrian (§3.2.1)

špara / *špura* ‘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] (33.)

paḳe ‘allotment, share’ (41.)

vaṣḍhiga, festival on the mountain (47.)

Secure loanwords from Bactrian or another language (§3.3.1)

harga ‘dues, tax’ (58.)

Plausible loanwords from Bactrian or another language (§3.3.2)

draṃga ‘office’ [place where taxes are stored] (63.)

Seven lemmata can be attributed to the subcategory “geographical terms and administrative units”.¹¹⁰ 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.)

109 Official titles belonging to the same semantic sphere are *dašavida* ‘chief of ten households’; *šadavida* ‘chief of a hundred households’; *yatma* ‘measurer of rations’; *švaṭhaṃgha* / *šoṭhaṃga* ‘finance officer’; *maravara* ‘accountant’; and *aḡeta* ‘tax collector’.

110 Cf. also the toponym *Acomena* discussed §3.2.3 s.v. *aco*.

Khotamna ‘Khotan’ (20.)

Tentative loanwords from Bactrian (§3.2.4)

kilme ‘family estate’ (50.)

Remena, toponym (52.)

laṭhana ‘plain, open land (?)’ (53.)

Secure loanwords from Bactrian or another language (§3.3.1)

ayana ‘village, territory of a clan’ (60.)

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).¹¹¹

Plausible loanwords from Bactrian (§3.2.2)

nihamñ- ‘to deposit, to put down’ (22.)

Arguable loanwords from Bactrian (§3.2.3)

oḡ- ‘to let go’ (36.)

picav- ‘to hand over’ (42.)

leṣ- ‘to dispatch, to conduct’ (46.)

Plausible loanwords from Bactrian or another language (§3.3.2)

parivanae ‘burden, provisions’ (66.)

vara ‘load; time, occasion’ (69.)

A sixth subgroup consists of “military terminology”, mostly concerning the defence of the outer borders of the Shanshan kingdom.¹¹² There are five words in this category, which in essence corresponds to Haspelmath and Tadmor’s semantic domain no. 20, i.e. “warfare and hunting”.

Arguable loanwords from Bactrian (§3.2.3)

aco ‘frontier, border post’ (31.)

piro ‘military post, fort’ (43.)

111 Niya Prakrit *dars-* ‘to load (a beast of burden)’ (§3.5.1 s.v.) and *pačevana* ‘provisions (for a journey)’ (§3.6 s.v.) are additional examples of this type of word from the broader category of Iranian loanwords. *toṃga* is an example of a functionary who was responsible for transport (see §3.2.3 s.v.).

112 Some official titles listed above are probably also related to the military, viz. *guśura* ‘prince’ [listed amidst military officers in CKD 478]; *jenavida* ‘armourer’; and *aṃbukaya*, whose presumed Bactrian source αμβουκαιο may be a military title.

Tentative loanwords from Bactrian (§3.2.4)

taravara ‘sword’ (51.)

Secure loanwords from Bactrian or another language (§3.3.1)

śpaśa ‘watching, guarding’ (57.)

Plausible loanwords from Bactrian or another language (§3.3.2)

paraśa ‘abduction, plundering’ (65.)

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 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.¹¹³ The Niya documents thus provide additional

113 Besides the textile products listed below, Niya Prakrit may also have borrowed a word for ‘weaver’ from Bactrian, i.e. *yapga* (cf. §3.2.3 s.v.).

linguistic evidence for a flourishing manufacture of textile products in ancient Afghanistan.¹¹⁴

Secure loanwords from Bactrian (§3.2.1)

prigha ‘(monochrome) damask’ (7.)

Plausible loanwords from Bactrian (§3.2.2)

vaše ‘garments’ (27.)

Arguable loanwords from Bactrian (§3.2.3)

ambamjaya ‘wrapper (?)’ [used to put a bowstring in] (29.)

avaliḱa ‘swaddle’ (34.)

sujinakirta ‘needlework, embroidery’ (49.)

Tentative loanwords from Bactrian (§3.2.4)

lastuga, textile product (54.)

Plausible loanwords from Bactrian or another language (§3.3.2)

tavastaga ‘carpet’ (62.)

namata ‘felt’ (64.)

Arguable loanwords from Bactrian or another language (§3.3.3)

agiṣḍha ‘cover, rug’ (70.)

kavaji ‘shoe(s), boot(s) (?)’ (72.)

kojava ‘rug, blanket’ (73.)

pajhavamta ‘breastband (?)’ (75.)

raji ‘cloak, woollen cloth (?)’ (76.)

rasamna ‘rope (?)’ (77.)

ṣamna ‘hemp, hempen (?)’ (78.)

Based on the linguistic evidence presented here (15 loanwords), one would expect the textiles discovered in the archaeological record of the Shanshan kingdom to include imports from Bactria and/or the design of the locally produced textiles to have been influenced by Bactrian models.¹¹⁵ Pending an

114 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).

115 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.

interdisciplinary investigation into these matters,¹¹⁶ it can already be noted that the carpets found in Niya (cf. *kojava* ‘rug, blanket’ and *tavastaga* ‘carpet’) have been shown closely to resemble contemporary carpets from ancient Bactria (see H. Zhang 2019). In addition, Cohen (1999) has demonstrated 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).¹¹⁷ 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.)

Plausible loanwords from Bactrian (§3.2.2)

aśpista ‘lucerne’ [= “agriculture and vegetation”] (19.)

maḱa ‘bean’ [= “agriculture and vegetation”] (24.)

Arguable loanwords from Bactrian (§3.2.3)

aḍini ‘(broomcorn) millet’ [= “agriculture and vegetation”] (32.)

116 This type of 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).

117 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 *Journal of the Royal Asiatic Society* 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 or another language (§3.3.2)

aṭa ‘flour’ [= “food and drink”] (59.)

gavaša ‘deer, stag’ [= “animals”] (61.)

Concerning the plant names, the first thing to note is that, according to a famous story from the Chinese annals, lucerne, Niya Pkt. *ašpista*, was brought to the Han emperor Wu by envoys returning from a mission to Central Asia (Laufer 1919: 208–219).¹¹⁸ Beans, *maḳa*, 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 BCE due to its capacity to grow well in arid regions (Spengler 2019: 79f.).¹¹⁹

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*). *gavaša* ‘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.* 2025).¹²⁰

4.5.5 Emotions and values

Three Bactrian loanwords do not easily fit into one of the semantic categories posited in the previous sections.¹²¹ 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)

šada ‘pleased, happy’ (13.)

118 Unfortunately, there is currently only limited archaeobotanical data for the early domestication of lucerne (Spengler 2019: 172f.).

119 The preservation of the word for ‘(broomcorn) millet’ in NIA languages from the region 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.

120 Biologists draw a further distinction between the *Cervus hanglu bactrianus* living in Afghanistan and the *Cervus hanglu yarkandensis* living in the Tarim Basin. *gavaša* could have referred to both species.

121 As a typical component of epistolary formulae, *šada* ‘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.

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’ (38.)

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).¹²² 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 Kushan times, and, if so, how widespread the practice was. Yet, αζαβο and its comparanda 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.¹²³

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); and (iv) the

122 Another instance could be TA/TB *perāk* ‘faithful, credible’ (DTTA: 295; DoT: 424), if borrowed from Bactr. **πῆραγο* /pērāgə/, an agent noun in *-āka- from the attested verb *πῆρ-* ‘to believe’ < **parya-* (cf. also the noun *πῆρο* ‘faith’). The commonly cited BSogd. *pyr’k* ‘believer’ (SD: 336) is a misreading of Old Uyghur *bālāk* (spelt *pyl’k*) ‘gift’ (see Sims-Williams 1983: 44). For further discussion on Bactrian Buddhist terms in the Tarim Basin languages, see Schoubben (2025c), where I propose that LKhot. *varga-* ‘fruit (of an action)’ is a loan from Bactr. **βαργο* ‘idem’ < **bara-ka-* (= MBactr. *βrg*).

123 It may also be noted that the Middle Persian and Parthian cognates of Bactr. *πδοφαρο* came to be used as a technical term in Manichaean texts, thus further underlining the potential religious connotations of this word. Regarding Bactr. *παδο*, it is noteworthy that its Sogdian and Khotanese cognates developed a new meaning ‘rich’ in a Buddhist context due to the influence of BSkt. *bhoga-* ‘enjoyment, wealth’ (see Bernard 2025: 189).

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.

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 Kushan 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.

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CHAPTER 5 Grammatical loans from Bactrian

This fifth chapter examines potential instances of grammatical loans 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).¹ 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.).

1 See in more detail Matras & Sakel (2007).

Under this heading, Burrow listed, for example, some instances of loan translations (calques).² One such case is Niya *šavatha khad-* ‘to eat an oath > to swear an oath’ (CKD 577 uo4; 820 uo4), an expression which should probably be compared to NP *sawgand xwardan* ‘idem’ (CPED: 709).³ Another likely example is the use of Niya *širo* < Skt. *śiras-* ‘head’ to mean ‘end’ in CKD 187 o7, similar to how MP/Parth. *sar* signifies both ‘head’ and ‘end’. There probably are still more loan translations of this type to be discovered,⁴ 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),⁵ 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 also 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 of Khotanese substrate influence on the alignment of the Niya preterite will be discussed in §5.4.

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- 2 “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).
 - 3 The Iranian formula is discussed in detail in Goldman (2015: 65–69). For a possible instance in (Late) Bactrian, see Sims-Williams (2010: 207).
 - 4 One hitherto unnoticed example concerns the pleonastic addition of *ma(m)nuša* ‘man’ after a noun of profession, in *acovimna ma(m)nuša* ‘border official’ (CKD 133 o5; 323 r1; 563 r4), *spāṣavaṃnaga maṃnuša* ‘guard’ (CKD 541 o6 = 541 r5), *cora manuša* ‘thief’ (CKD 345 uo9, uo12), and *dajha ma(m)nuša* ‘slave’ (CKD 143 uo2; 324 + 328 uo3). 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 manuša* even finds an exact parallel in Bactr. μαρηγο μαρδο and Sogd. *βntk mrty* ‘slave man’.
 - 5 One could draw a comparison with the disappearance of aspirated consonants from the phoneme inventory of Sinhalese due to contact with Dravidian (e.g. Masica 1991: 132).

Where Chapters 3–4 were intended as a more or less comprehensive investigation into lexical borrowings from Iranian languages into Niya Prakrit, this chapter should rather 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.⁶

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 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.

6 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 Skt. $\sqrt{kr}$ ‘to do’ and $\sqrt{bhū}$ ‘to be(come)’.

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* /āniḡə/ < **-ān-iya-ka-*, and in §5.2.2, I propose that the second is a loan from Bactr. *-σ(ε)ιyo* /tśiḡə/ < **-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.⁷

Attestations

Aṃṇayani: CKD 117 oF2; *Anugayani*: CKD 629 r3; *Aśogani*: CKD 621 o2; *Aşgarani*: CKD 110 oB2; 536 r1; *O ? kani*: CKD 66 oB1; *Kaṃgucani*: CKD 471 r1; *Kaṃciyani*: CKD 384 rB1; *Kaṃjagani*: CKD 74 oA3; *Kapgeyani*: CKD 437 uo2, cr4; 706 uo3; *Karmayani*: CKD 326 o2, r1, r1f, r2, r3, r4; *Kalaşdhani*: CKD 706 uo4; *Kunḡeyani*: CKD 129 oM2; *Kenigani*: CKD 235 uo2; *Koṇayani*: CKD 571 co1; *Koteyani*: CKD 176 oB2, r3; *Koletani* (*Koleyani*): CKD 525 o1; 558 rC2; *Koļiṣani*: CKD 15 uo4; *Camagani*: CKD 66 oB3; *Carakani* (*Carakāni*): CKD 706 uo2 (2×); *Calmasani*: CKD 552 oA4; *Cinaşenani*: CKD 375 o2; *Cinikani*: CKD 552 oB3; *Cimolani*: CKD 244 r1; *Jeyakani*: CKD 210 oF2; *Jeyaşani*: CKD 320 r7; *Ḍhagiyani*: CKD 552 oA1; *Ḍhamajani* (*Ḍhamaşani*): CKD 581 co1; 586 co1; *Taṃjakani*: CKD 117 oE3; *Tsinani*: CKD 415 co1; 517 oC1; *Daroyni*: CKD 695 o3; *Dharmaladani*: CKD 652 co1; *Namarajhmani*: CKD 163 r3; *Patraani*: CKD 614 oA2; *Purnabalani*: CKD 28 o2; 358 o4; *Pulayani*: CKD 552 oB2; *Ponigani*: CKD 266 oB2; *Priyatatiyani*: CKD 87 oB4; *Maṇḡeyani*: CKD 587 uo2; *Maşḡhigeyani*: CKD 152 cr3f; *Micgeyani*: CKD 116 o4; 558 rC4; *Muldeyani*: CKD 574 co1; *Mogatani* (*Mogayani*): CKD 579 co1; 588 urA7; *Yitayani*: CKD 117 oH1; *Yipiyani*: CKD 582 co1; *Ricikani*: CKD 547

7 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 o2 *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 r4 examples of the suffix under discussion.

rB2; Rutra(ya)ni: CKD 74 oA2; 667 r2; Larsuani: CKD 74 oB2; Lýiptani: CKD 587 co1; Vasulani: CKD 552 oB1; Śapukani: CKD 368 o4; Śarsenani: CKD 593 uo4; Śirmitrani: CKD 117 oB5; 601 oG1; Śronapremāni: CKD 79 oC2; Saṃgilani: CKD 318 co1, uo5; Saṃceyāni: CKD 558 rB2; Sagimāni: CKD 580 co1; Signayāni: CKD 572 co1; Suḡitani: CKD 552 oA3; Sunaṃdani: CKD 516 o2; Sunayāni: CKD 117 oG1; Sumatani: CKD 117 oB2; Suryamitrani: CKD 552 oA2; Socarāni: CKD 6 uo3; Svārcikani: CKD 631 oB1

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*).⁸ *Kenigani* ‘son (?) of Keniga’ in sentence (5.1) is a typical example.

(5.1) CKD 235 uo2

Kuunge viṃṇayeti yatha edaṣa miṣi bhuma anahetu Kenigani Suḡika achimṇati.

“Kuunge reports that Suḡika (son ?) of Keniga is appropriating *miṣi*-land belonging to him without just reason.” (TKD: 44).

Contrary to Burrow (1935a: 790; LKD: 100 s.v. *nī*) 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 oB2), 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 uo2,⁹ 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 I: 410 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.¹⁰

8 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 co1.

9 In the same document, the form without length mark (*Carakani*) occurs too.

10 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

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. *hīvi* ‘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) *Sanghāṭasūtra* §261.2

u bāṣṣe lova gyastā balysā hīvi hvanau ātaudānde u [ysūṣṭānde].

“... and all people desired and [valued] the Lord Buddha’s own speech”
(Canevascini 1993: 116).

In this type of example, *hāvya-* / *hivya-* reinforces a noun in the genitive. Yet, *-ani* is a suffix that replaces a genitive.¹¹ 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,¹² Konow’s (1938: 155) comparison with the

own sake’ ~ Skt. *nijaṃ dadāti* in CKI 1177 has been corrected to *nijadeti* ‘he hands over’ < Skt. *niryātayati* (cf. Baums and Glass 2002a– s.v.); and Falk’s (2020–21: 120) reading *ṇia śpiho* ‘as our own, for ourselves’ ~ Skt. *nijaṃ svīyaṃ* in CKI 328 is not secure either.

- 11 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.
- 12 14.5% of Indic names versus 85.5% of non-Indic names (counted per type). The following names have been omitted: (i) the poorly preserved *O ? ka* (CKD 66 oB1); (ii) *Ramaka* (CKD 517 oC1), either < OIA **Rāma-ka-* or ← Bactr. **ραμοκα*, a hypocoristic to the attested *ραμο* (BPN: no. 388); and (iii) *Dharmalada* (CKD 652 co1), either comparable to Skt. *Kumārālāta-* or perhaps a mixed name consisting of Indo-Aryan *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 oF2) seems the same as the Sanskrit PN *Jayaka-*; (ii) *Cinaṣena* (CKD 375 o2) can be equated with the Sanskrit PN *Jinasena-* with devoicing of the initial *j-* (G.-J. Pinault, p.c.; cf. §2.1.4, §6.3.1, and Pinault 2002: 247f. on Tocharian names starting in *Cina-* ← Indo-Aryan *Jina-*); and (iii) *Sunaṃda* (CKD 516 o2) likely corresponds to Skt. *sunanda-* ‘pleasing well’ (also attested as a PN).

Khotanese adjectival suffix *-āna-* < **-āna-* (fem. *-āṃgya-* < **-āna-čī-ā-*) seems more promising, especially since Khot. *-āna-* can also be attached to personal names (cf. Degener 1989: 83–87). As, however, Khotanese does not seem to have exerted any considerable influence on the Niya Prakrit lexicon (cf. §4.2.5), it would 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.; BD IV: 106).

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*.¹³ I can think of two options. One possibility is that the final *-i* came about by analogy with the two other appurtenance suffixes *-i* and *-ci*. Alternatively, *-ani* can come from Bactr. *-aviyo* /*ānīgə*/ ← *-avo* + *-iyo* < **-iya-ka-* (BD IV: 106),¹⁴ as in *οαραζαγανιyo* ‘belonging to Warazagan’ (BD II: 241; BD IV: 120) and *σπανδαγανιyo* ‘belonging to Spandagan’ (BD II: 265). The latter option requires that **-aniga* ← *-aviyo* /*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. *-siyo* /*tśīgə*/).

5.2.2 The suffix *-ci*

The suffix *-ci* (secondary allomorphs *-eṃci* and *-iṃci*¹⁵) 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.¹⁶

13 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.

14 Bactr. *-iyo* /*īgə*/ can be added to other adjectival suffixes without overtly changing their meaning (BD II: 217).

15 How these allomorphs came into being will be discussed below.

16 Not included are well-attested but etymologically obscure nouns always ending in *-ci*, e.g. the official title *klaseṃci*.

Attestations

ayanem̐ci ← *ayana* ‘village’

DIR.SG. *ayanem̐ci*: CKD 713 o8, o8f.; *avam̐ci*: CKD 841 uo4 (2×); GEN.PL. *avam̐ciyana*: CKD 841 uo5f.; DIR.SG. *Amtuayanem̐ci* (or: *Vamtu-*): CKD 496 uo5; DIR.PL. *Amtuayanem̐ci* (or: *Vamtu-*): CKD 296 uo4; GEN.PL. *Ajiyamaayanem̐ciyana*: CKD 817 uo4; DIR.SG. *Catiṣadeviayanem̐ci*: CKD 474 uo2; GEN.PL. *Trasaayanem̐ciyana*: CKD 326 r5; *Trasaayanem̐ciyana*: CKD 326 o1; GEN.PL. *Navagaavanem̐ciyana*: CKD 841 uo5f.; *Navagaavanim̐ciyana*: CKD 366 o4; DIR.SG. *Petaayanem̐ci*: CKD 32 uo2; 46 cr2; 124 ur2; DIR.PL. *Petaayanem̐ci*: CKD 124 cr2; *Petaayanem̐ciye*: CKD 164 o8; GEN.PL. *Petaayanem̐ciyana*: CKD 839 uo9; *Petaavanem̐ciyana*: CKD 162 uo4; *Petaayani-ciyana*: CKD 110 o1; DIR.SG. *Yayeayanem̐ci*: CKD 532 cr1; 740 o2; *Yaveavanem̐ci*: CKD 474 uo2; DIR.PL. *Yayeayanem̐ciya*: CKD 37 cr1; *Yaveavanim̐ciye*: CKD 401 uo2; GEN.PL. *Yayeayanem̐ciyanana* (?): CKD 37 ur1; *Yayeayani(m̐)ciyana*: CKD 431 uo1 = 432 uo1; *Yayiaayanim̐ciyana*: CKD 745 o3

Opim̐tem̐ci ← *Opim̐ta*, toponym

DIR.PL. *Opim̐tem̐ci*: CKD 686 oA2

kilmeci ← *kilme* ‘family estate’

DIR.SG. *kilmeci*: CKD 209 o2; 278 r6f.; 279 o2 (2×); 297 uo2; 331 uo2; 358 o7; 437 uo2, cr5; 474 uo2 (2×); 495 o3; 519 r2; 581 uo4; 585 uo4, uo5; 621 o2 (2×); 806 A1, A2, A3; 884 uo5 (2×); *kilmeciya*: CKD 381 o2; 393 o2; 532 uo2; 806 A2; DIR.PL. *kilmeci*: CKD 632 o3; *kilmem̐ci*: CKD 639 uo2; *kilmeciye*: CKD 152 uo6; 271 + 337 uo3 (2×), cr2; 279 o3; 307 o4; 468 cr1, cr2; 817 cr1; *kilmem̐ciye*: CKD 713 o7; GEN.PL. *kilmeciyanana*: CKD 16 uo2; 254 o3; 271 + 338 cr4; 374 o2; 468 uo2, uo3, cr1, cr2; 734 r2; 819 uo6; 848 3; *kilmiciyana*: CKD 261 r1; 358 o5; *kilmec[ç]*: CKD 257 o4; GEN.PL. *Yayekilmeciyanana* ‘belonging to the *Yaye* family estate’: CKD 431 uo2f. = 432 uo2

kilyigam̐ci ← unknown base form

GEN.PL. *kilyigam̐ciyana*: CKD 164 o9

kuhaneci ← *kuhani* ‘capital’

DIR.SG. *kuhaneci*: CKD 571 cr2; *khuyanem̐ci*: CKD 489 r2

Kroraim̐ci ← *Kroraim̐na*, toponym [Loulán]

DIR.SG. *Kroraim̐ci*: CKD 678 uo2; DIR.PL. *Kroraim̐ci*: CKD 370 cr3; *Krorayim̐ci*: CKD 383 r9; GEN.PL. *Kroraim̐ciyana*: CKD 277 oB1

Khemaci ← *Khema*, toponym

DIR.SG. *Khemaci*: CKD 879 uo6, ur1

Caḍodem̐ci ← *Caḍota*, toponym [ancient Niya]

DIR.SG. *Caḍodem̐ci*: CKD 437 uo1f.

Calmataṃci ← *Calmatana*, toponym

DIR.SG. *Calmataṃci*: CKD 305 o5; 582 uo7; *Calmadaci*: CKD 419 cr1; DIR.PL.

Calmadanṃci: CKD 686 oA4

tsakeṃci ← unknown base form

DIR.PL. *tsakeṃci*: CKD 376 o2

Tsagaṃci ← *Tsaga*, toponym

DIR.SG. *Tsagaṃci*: CKD 146 rAB2; 147 o2; *Tsagayṃci*: CKD 80 oA1

Tsegeci ← *Tsega*, toponym

GEN.SG. *Tsegeciyaša*: CKD 556 r1; DIR.PL. *Tsegeci*: CKD 505 o1

Navoteṃci ← *Navote*, toponym

DIR.PL. *Navoteṃciye*: CKD 754 o1

Ninaci ← *Nina*, toponym

DIR.SG. *Ninaci*: CKD 879 uo5f.; *Ninaṃci*: CKD 500 o2; 859 cr1; *Ninaṃciya*: CKD 157 o4

paṃthaci ← *paṃtha* 'road'

DIR.SG. *paṃthaci*: CKD 637 o5

potgeci ← *potge* 'water tank'

DIR.PL. *potgeci*: CKD 347 r2

Buṃniṃci ← *Buṃni*, toponym

DIR.SG. *Buṃniṃci*: CKD 147 oB1

Bhagaṣaci ← **Bhagaša*, toponym

DIR.SG. *Bhagaṣaci*: CKD 131 r1; DIR.PL. *Bhagaseṃci*: CKD 195 + 726 uo2;

Bhagaṣaṃciya: CKD 788 cr2; GEN.PL. *Bhagaseṃciyana*: CKD 195 + 726 co1

Bhotici ← *Bhoti*, toponym [perhaps Tibet]

DIR.SG. *Bhotici*: CKD 84 cr2f.

Masiṃci ← *Masina*, toponym

DIR.SG. *Masiṃci*: CKD 839 uo9; DIR.PL. *Masiṃciye*: CKD 777 uo3

miṣiyeci ← *miṣi*, a type of land

DIR.PL. *miṣiyeci*: CKD 582 uo2

motirciya ← unknown base form

DIR.SG. *motirciya*: CKD 277 oB3; 304 oC1

Yurvaṣkaṃciya ← *Yurvaška*, toponym [Qizil]

DIR.SG. *Yurvaṣkaṃciya*: CKD 869 7

lautgaṃci ← unknown base form

DIR.PL. *lautgaṃci*: CKD 272 o4

Sacici ← *Saca*, toponym [perhaps Endere]

DIR.SG. *Sacici*: CKD 436 co1, uo2, cr1; 573 uo2; 879 cr2; DIR.PL. *Saciṃciye*: CKD 1 co2; 160 o9f.; GEN.PL. *Saciṃciyana*: CKD 97 o4

simici ← *sima* 'boundary'

DIR.SG. *simici*: CKD 436 cr2f.

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 uo1f.); (ii) *Caḍodade maṃnuśa* (abl.sg. in *-ade*; CKD 575 uo2); or (iii) *maṃnuśa ... Caḍoti* (*i*-suffix; CKD 575 uo3f.), 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, I agree that it is a borrowing. 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: TA *atroñci* 'of a hero' ← *atār* 'hero', *aneñci* 'interior' ← *ane* 'inside', *kuleñci* 'female, feminine' ← *kuli* 'woman', and *šmeñci* 'pertaining to the summer' ← *šme** 'summer' (DTTA: 7; 10; 144; 502).¹⁷ 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 *aṃana* '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 *'wccwrcyk* 'from Učur [perhaps Shorchuk]' ← *'wccwr** 'Učur' (DMSB²: 39).¹⁸ As the final velar in

17 Banti (2000: 4) additionally cited *ātlanñci* 'manly' ← *ātāl* 'man'. This form is not lemmatised in the recent dictionary of Tocharian A (DTTA), but it might be found in the otherwise unclear sequence *-ñcāt lāñci* in A 230 a6 (see Schmidt 2021: 6).

18 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.

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).¹⁹

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 toponyms and nouns of location (BD II: 263). Examples include *αστιλγανσειγι* / *υαστιλγανζειγι* 'inhabitant of Hastilgan' ← **(υ)αστιλγανο*; *χαγοσιγο* 'inhabitant of Khag' ← *χαγο**; *ωδαγοσιγο* 'inhabitant of a district' ← *ωδαγο* 'district'; *ρηγοανζειγο* 'inhabitant of Rewgan' ← *ρηγοανο*; 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 Kushan 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 */tʃiɡə/* with palatalisation of the affricate before **i* (on this see §2.2.4.3; §4.3.17, and cf. MBactr. *y'wyd'nzyg* 'eternal, for ever' < **yāwaitāna-čiya-ka-*), and (ii) a more archaic form **-ciga*, corresponding still closer to *-σ(ε)ιγο* */tʃiɡə/*, 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*).²⁰

As kindly pointed out by N. Sims-Williams (p.c.), Niya *-ci* could alternatively be a loan from an early Bactrian suffix **-σει* / **-σι* / */tʃi/*, 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

19 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.

20 The Bactrian by-forms *-σιuo* and *-σιwo* show complete lenition of *-γ-* / *g* / already in Bactrian, but this development only starts appearing in texts from about 700 CE onwards (cf. SCBD: 61), too late to be of relevance for the Niya Prakrit suffix.

arguments may still speak in favour of the derivation from $-\sigma(\epsilon)\iota\gamma\omicron$ / $-\sigma\iota\gamma\omicron$. First, the latter is attested much more frequently than $*-\sigma\epsilon\iota$ / $*-\sigma\iota$ / $-\sigma\omicron$;²¹ and second, there is at least one occurrence of an older form *-ciga*, i.e. *Bhagasamciga* ‘inhabitant of Bhagasa’ (CKD 788 cr2) to be compared with *Bhagāsaci* (CKD 131 r1), *Bhagaseṃci* (CKD 195 + 726 uo2) and the gen.pl. *Bhagaseṃciyana* (CKD 195 + 726 co1). Therefore, I still have a slight preference to derive *-ci* from the longer form $-\sigma(\epsilon)\iota\gamma\omicron$ / $t\acute{s}ig\omicron$.

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 *paṃtha-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 *Calmataṃ-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*.²² If so, it is possible to compare the Bactrian voicing of $-\sigma(\epsilon)\iota\gamma\omicron$ / $t\acute{s}ig\omicron$ after nasals seen in, for instance, $\rho\eta\gamma\alpha\nu\zeta\iota\gamma\omicron$ / $r\acute{e}wgand\acute{z}ig\omicron$ ‘inhabitant of Rewgan’ ← $\rho\eta\gamma\alpha\nu\omicron$ / $r\acute{e}wgan\omicron$, 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. $-\alpha\nu\omicron$ / $\tilde{a}n\omicron$ / or $-\alpha\nu\iota\gamma\omicron$ / $\tilde{a}n\acute{i}\gamma\omicron$ / and $-\sigma(\epsilon)\iota\gamma\omicron$ / $t\acute{s}ig\omicron$ / . To conclude the investigation into these suffixes, this section will briefly contextualise the main findings from a typological perspective.

21 The statistics may admittedly be slightly skewed because we do not have many texts in Kushan Bactrian, and $-\sigma(\epsilon)\iota\gamma\omicron$ / $-\sigma\iota\gamma\omicron$ may have gradually replaced $*-\sigma\epsilon\iota$ / $*-\sigma\iota$ / $-\sigma\omicron$ over time.

22 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 cr4) next to *aḍi(m)ni* / *aḍina* or *gamaṃ* ‘going’ (CKD 646 cr5) for *gama(m)na* (see also LKD: §13).

Both examples discussed above belong to the category of derivational affixes;²³ 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”.²⁴

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).²⁵

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,

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- 23 *-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).
 - 24 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).
 - 25 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”.

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.

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 *χοβοσαρο*) ‘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.²⁶

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

26 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 (2024: 186f.) 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.

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 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 b(h)iti* ‘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. $\chi\theta\beta o$ / $\chi\theta\beta i\gamma o$ ‘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 $\chi\theta\beta o$ / $\chi\theta\beta i\gamma o$. §5.3.8 concludes the investigation.

5.3.2 Reciprocals

There are three reciprocal pronouns in Niya Prakrit (LKD: §88): (i) *aṃṇāmaṃṇā*, corresponding to Skt. *anyonya-*;²⁷ (ii) *parospara* / *parosṣpara*, related to Skt. *paraspara-*;²⁸ and (iii) *eka b(h)iti* < **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 not included).

Attestations of *aṃṇāmaṃṇā*

GEN.SG. *aṃṇāmaṃṇāsa*: CKD 889 cr2

GEN.PL. *aṃṇāmaṃṇāna*: CKD 357 o3; *aṃṇāmaṃṇāna*: CKD 357 o4

Attestations of *parospara* / *parosṣpara*

INS.SG. *parosparena*: CKD 34 o3; *parosṣarena*: CKD 345 uo8

27 The Niya form matches that in other MIA languages (e.g. Pāli *aññamañña-*). 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).

28 The use of cognates of Skt. *paraspara-* is rare in MIA (Kulikov 2014: 142f.), whereas *parospara* / *parosṣpara* is still used nine times in Niya Prakrit (cf. infra). The use of *parospara* / *parosṣpara* in the Niya documents may therefore be an archaic retention or, more likely, a Sanskritism.

ABL.SG. *paros̥pārade*: CKD 788 uo5

GEN.SG. *paros̥pāraṣa*: CKD 97 o4; 593 uo7; *paros̥pāraṣya*: CKD 271 + 338 cr2; 272 o8f.; 468 cr1

GEN.PL. *paros̥pārana*: CKD 817 cr2²⁹

Attestations of *eka b(h)iti*

DIR.SG. *eka biti*: CKD 709 uo6; *eka bhiti*: CKD 348 uo4; 732 uo5

INS.SG. *eka bitiyena*: CKD 574 cr3

GEN.SG. *eka bitiyaṣa*: CKD 187 o8; *eka bhitiyaṣa*: CKD 425 uo5; *ega bi[ti]yaṣa*: CKD 709 cr4

GEN.PL. *eka bhitiyana*: CKD 577 uo6; 820 uo7; *aṃṇa bhitiyana* (apparently a blend of *aṃṇamaṃṇa* and *eka biti*): CKD 577 co2f.

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 cr2

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 uo6f.

ahuno Kupṣuta Suḡuta Balaṣena Śrustingaṣa ca paros̥pāraṣa vaṃti nasti dagrana.

“Now Kupṣuta, Suḡuta, Balaṣena, and Śrustinga have no claim to payment from each other.” (TKD: 127).

(5.5) CKD 425 uo4f.

edeṣa śramaṃna 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).³⁰

In these examples, the reciprocal pronouns are all inflected in the gen.sg.: *aṃṇamaṃṇaṣa*; *paros̥pāraṣa*; *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.

29 My reading (based on the picture in Baumer 2000: 57). Hasuikē (1999: 164) mistakenly reads *p[un]o ṣpāra na*.

30 For variants of the same formula with *eka b(h)iti*, see CKD 577; 709; 732; 820.

The lack of cognates of *eka b(h)iti* 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 word for 'one' with that for 'second', e.g. Khot. *śśū-jāta-* (DKS: 401f.) or Parth. *ēw bid* (pl. *ēw bidān*; Brunner 1979: 81f.).³¹

Because this type of reciprocal pronoun is not restricted to one Iranian language in particular, one cannot easily determine the donor language of *eka b(h)iti*. Bactrian is at least a possibility, as there are two instances of Bactr. *ιωγο* 'one' + *λιβδιγο* (later *βιδδιγο*)³² 'second' in the function of a reciprocal ("one ... the other"):

(5.6) **kh20f.**

βαγο καλδο στα[] καρνο ιωγαβο λιβδιγο[] κ[] γο βοοηο
 "... sir, if ... the people should be ... one to another!" (BD IV: 25).³³

(5.7) **X19-21 ~ X19'-21'**

ωσο κιδασο μαχο ασο σοφαρο βραδο ασιμο σαχονο ... ανδαρζαγγο
 κираμο αλο ιωγο αλο βιδδιγο ναγο ζοοαμο ...
 "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).³⁴

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

31 The fact that *eka b(h)iti* is an innovation hints at its being the living form. I have, however, been unable to find additional clues that *eka b(h)iti* would belong to a less formal register than the other pronouns. One indication of a register difference could be that the use of *aṃhāmaṃhā* and *parospara* / *paros̥para* would be restricted to legal formulae. This holds for the rarely attested *aṃhāmaṃhā*, but *parospara* / *paros̥para* also occurs in non-formulaic examples like *ede bharyapadaya paros̥parade vina huvamti* "This couple lived separated from one another" (CKD 788 uo4f.; tr. mine).

32 On the phonological development of *λιβδιγο* < **dwitīya-ka-* to *βιδδιγο*, see BD IV (4 fn. 9; 115).

33 *ιωγαβο* consists of *ιωγο* 'one' and the preposition *αβο* 'to', the latter being dependent on the opt.3sg. *βοοηο* 'should be'.

34 The preposition *αλο* 'with' used between *ιωγο* 'one' and *βιδδιγο* 'second' is probably dependent on the verb *ζοοαμο* 'we live', as in **X9 ~ X9'**. *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).

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 whether the features not paralleled in other MIA languages are found in neighbouring Iranian languages, particularly Bactrian. The first and third steps require me first to 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,³⁵ 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.³⁶ 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

35 Sen’s historical syntax of MIA only briefly mentions the reflexives in Niya Prakrit and South Asian Gāndhārī (Sen 1953: 90f.) and does not discuss the other languages. Bubeník’s historical syntax of late MIA (Bubeník 1998) does not treat reflexive pronouns at all.

36 Schwarzschild (1959) has argued that Apabhramśa *tanaya-* ‘one’s own, belonging to’ is also a cognate of Niya *tanu(vaga)*. If true, *tanaya-* could be a northwestern dialect feature in Apabhramśa, like the preservation of *-Cr-* clusters which grammarians prescribe for Apabhramśa (cf. De Clercq 2009: 9; Ollett 2024: 87–89).

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 languages increase the potential for contact-induced change (see e.g. Bown 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. *χοβο* / *χοβιτο* 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 cr2; 26 o2; 33 uo3; 49 uo3; 58 r2; 59 r3 (2×); 90 o2; 106 cr3; 130 uo4, cr1; 135 uo5; 160 o6; 161 cr4; 165 o6; 190 o2; 211 r3; 235 cr1; 271 + 338 uo4; 278 r4 (?); 292 o5; 324 + 328 uo5, uo6; 326 r2, r3, r4, r5; 331 uo6; 358 o7; 366 o4; 387 o9; 471 r2; 473 cr1 (2×); 482 uo3; 492 uo3; 509 cr2; 547 o3; 553 o3; 568 uo4; 569 uo5; 572 uo2; 573 uo7; 574 cr4; 575 uo6; 582 cr7; 585 uo4, uo5, cr5; 624 o5; 713 o8 (2×), o9; 714 o7, o8; 734 r2 (2×); 769 uo3; 889 uo4; *tanuvaga*: CKD 90 o4; 235 uo3; 437 uo8; 491 uo3; 656 uo2; 677 uo4; 836 4; 884 uo9, uo10; *tanuvagā*: CKD 661 o2, o5; *tanuvaga*: CKD 506 o6; 509 o9; 545 uo4; 574 cr4; 709 cr3; 719 o3; 770 uo3; 779 uo7; 898 o5, o5f.; *tanovaga*: CKD 837 A3; 871 A2; *tanuvaga*: CKI 1177 1; *danu*: CKD 318 cr4; 358 o5, o6; 359 o9; 743 o3; 783 o4

DIR.SG.FEM. *tanuyi*: CKD 39 cr1; 545 cr3; 551 r1

ABL.SG. *tanuvagade*: CKD 305 o5, o7; *tanuyade*: CKD 635 r5

LOC.SG. *tanuvae*: CKI 60 3; 178 1; *tanuakami*: CKI 241 1; 564 1-5; *tanuakami*: CKI 368 B5; *tanukaami*: CKI 241 1; *tanuvakammi*: CKI 153 1

DIR.PL. *tanuyae*: CKD 279 o3

GEN.PL. *tanuakana*: CKI 564 2-5

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 (5.8)–(5.9): in (5.8), *tanuvaga* is used in the meaning ‘property’, whereas *tanu* is used in the same function in (5.9).

(5.8) CKD 437 uo7f.

taha ahuno sã kuḍi Saganāpaae etaṣa Maṣḍhigeyaṣa tanuvaga huda.

“so now that girl Saganāpaae has become the property of this Maṣḍhige.” (TKD: 90).

(5.9) CKD 575 uo6

se maṃnuṣa Cмага Kuyayiciyaṣa tanu huda.

“That man Cмага was the property of Kuṣayici.” (TKD: 116).

When *tanu(vaga)* is not, as in the preceding, combined with a genitive complement,³⁷ it is co-referential with the agent of the sentence³⁸ or the recipient of a ditransitive construction. In example (5.10), the adj. *danu* is co-referential with the dir.sg. *Viharavala*, agent of pres.3sg. *viheḍeti* ‘wastes’ and *vinajeti* ‘destroys’.

37 The locative is used when *ayana* ‘village’ is the complement of *tanu(vaga)* (CKD 279 o3; 326 r2). Khotan Pkt. *mayi* in *mayi ... tanuvagā* (CKD 661 o2) is best understood as a gen. and not as a loc. (see LKD: §28; §78).

38 The examples in Gāndhārī inscriptions are all of this co-referential and adjectival type. In CKI 48 A13 and 165 1, 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 B5, 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 358 o5

Viharavala atra danu kilmiciyana masu mamtsena suṭha viheḍeti vinajeti.

“... Viharavala is wasting and destroying the wine and meat of his own tenants.” (TKD: 70).

A similar example is (5.11), where the co-referent of the adj. *tanuvaga* is the agent *Mogeya Cimagāṣa ca* ‘Mogeya and Cimagā’.

(5.11) CKD 709 cr3

tanuvaga muliyena Mogeya Cimagāṣa ca nikhaliṭamṭi.

“Mogeya and Cimagā got him from there with a price paid out of their own property.” (TKD: 142).

(5.12) 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).

(5.12) CKD 568 uo3f.

ahaṃ Kapgeya Suḡutaṣa paṣu 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 (5.13). 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 Lýipeya* ‘the vasu Lýipeya’ in the main clause.

(5.13) CKD 144 uo2

ísa vasu Lýipeya viṇṇāyeti yatha edaṣa dajha Kacana nama hoati.

“Here, the *vasu Lýipeya* informs us that he has a slave called Kacana.” (TKD: 26).

Reduplicated *tanu(vaga)* has a distributive sense, as in (5.14), where *tanu tanu* corresponds in the translation to “each man’s ... separately”.

(5.14) CKD 59 r3

sā aṇṇa teṣa jaṇṇaṣa tanu tanu nadha ísa 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 (5.15). 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’.

(5.15) CKD 734 r1f.

yo atra ugu Bhimaṣeṇaṣa tanu kilmeciyana bhumakṣetra Rutraya Paṃcamaṣa ca tanu darṣayeti.

“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 o3, where no *tanu* is added, it seems as if ***ogu Bhimaṣeṇaṣa kilmeciyana* would have been grammatically correct in (5.15) 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. (5.16), 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’.

(5.16) CKD 58 r2f.

yo taya arthadana giṭamti ṣadha tanu Pugo Lýipeya giṇnidavya.

“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 *giṇn-* ‘to take, receive’ (CKD 545 cr3; 574 cr4f.), the meaning is ‘to take as one’s own’. Therefore, the same may be intended in (5.16), even though *ṣadha* ‘together’ would then fit less easily into the syntax. Given these uncertainties, I will not base conclusions on example (5.16).³⁹

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. *χααδο* ‘idem’ (§5.3.4.2). *sveya*, the

39 Sometimes, Burrow translates *tanu* as an intensifier, but this is never a necessary interpretation. In CKD 624 o5, 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”.

regular outcome of Skt. *svayam* ‘oneself’, is typically found in its etymologically expected usage as an intensifier (LKD: §86).⁴⁰

Attestations

ADV. *sveya*: CKD 292 o4; 621 o4; 842 o1, o6; 884 uo1; *sveyam*: CKD 22 o2; *sve*: CKD 193 r1; *svaya*: CKD 709 uo2

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 uo2, 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 gaṃdavya* (CKD 22 o2), 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 uo5; TKD: 24). According to this interpretation, *sveyam eva* would be a so-called exclusive intensifier (§5.3.1).⁴¹

5.3.3.3 *apana* ‘oneself’

Niya *apana* ‘oneself’ is not frequently attested (2 or 3 examples), yet its morphosyntactic usage is not noticeably 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’.

40 For the use of Skt. *svayam* (also in Vedic), see e.g. Speyer (1886: §§263–268) and Orqueda (2019: 128–144).

41 *sveya* can also be used in compounds, e.g. *sveyaviṣeya* ‘one’s own territory’ (CKD 292 o4; 621 o4; 842 o6) ~ loc.sg. *tanuvaga viṣeyami* ‘idem’ (CKD 884 uo9). Compounds with *sva-* only rarely occur in Niya Prakrit. The only clear examples are ins.sg. *svamaramṇena* ‘with one’s own death’ (CKD 40 uo3; cf. Lüders 1940b: 43; Wüst 1966: 44), *svakama* ‘of one’s own will’ (CKD 497 r1), and *svachamdi / svachamtaga* ‘idem’ (CKD 555 r1; 639 uo2). 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).

Attestations

DIR.SG. *apane*: CKD 139 o5; 502 o4 (?)

GEN.SG. *apanasya*: CKD 201 o5

The clearest example is *tuo apane acovina paśidavo* “you must yourself (*apane*) inspect the *acovinas* [border officials]” (CKD 139 o5f.; TKD: 25).⁴² 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 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 (5.17). Burrow takes *apane* to be ‘outlet’, assuming an etymological connection with Skt. *apanaya*- ‘leading away, taking away’.

(5.17) CKD 502 o3–5

a[tra] anada pruchidavo yati Apñiyaša udaga yajitaga huati tade udagade aṃñeša ditaga siyati atha va apane na ditaga siyati eda prace Apñiyaša vaṃti nasti parihaša.

“... careful investigation must be made (to find out) if this water was borrowed by Apñiya and (part) of this water⁴³ 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.⁴⁴

42 *apanasya kritaga* in CKD 201 o5 seems to mean ‘your own deeds’, but the reading of this imperfectly preserved document is not entirely certain.

43 Burrow’s translation has “(water) from this water”.

44 The South Asian Gāndhārī cognates are mainly found in reliquary inscriptions (cf. CKI 60; 69; 158; 223; 369; 373; 564 (2×)). These are usually genitives, e.g. gen.sg. *atvaṇasa* in CKI 69 1 *at[va]ṇasa ṇatimitrasalohidana arogadaḥṣiṇae* “for his own reward of health and that of his relatives, friends, and kinsmen” (tr. mine).

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: (i) that 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 $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ and $\chi\omicron\beta\iota\gamma\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$. 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’ glossaries (BD II: 279; BD IV: 129).⁴⁵ 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-*,⁴⁶ thus being a cognate of MP *xwē(ba)š*, Parth. *wxēbēh*, Sogd. *xypθ* / *xypt*, Khot. *hāvya-* / *hivya-*, and so forth.⁴⁷ $\chi\omicron\beta\iota\gamma\omicron$, 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; BD IV: 129).⁴⁸

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

45 Some notes on the syntactic behaviour of the Bactrian reflexives can also be found in Jügel (2015: 428–437).

46 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 Olr. **hw-apah-* (< Plr. **hu-Hapah-*) ‘with a good work > good’ does not necessarily seem less likely to me (*pace* Sims-Williams), as derivatives of **hw-apah-* are attested in most neighbouring Iranian languages, e.g. MP *xūb* ‘good’ or Sogd. *xwp* ‘idem’.

47 For the Middle Persian and Parthian cognates, see Brunner (1979: 73–78) and GW (§780). Cf. also TB *waipecce* ‘possession’, a loan from the “Old Steppe Iranian” outcome of **hwai-paθya-* (Bernard 2025: 71f.).

48 There is now also one attestation of a form $\chi\omicron\beta\eta\lambda\omicron$ ‘one’s own’ < $\chi\omicron\beta\omicron$ + the suffix *-ηλῶ* (BD IV: 129).

preposed complement indicates the possessor, e.g. the obl.pl. σαλαρανο ‘leaders’ in (5.18).

(5.18) **V13’**

ασο μιροσανο κινο οδο παροκινο αγγαραγο ασιδο σαλαρανο χοβο.

“... 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-Kushan 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* (**dd5**) and ταιο < **tawa* (**U13 = U16**’),⁴⁹ 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.⁵⁰

If there is no complement, χοβο and χοβιγο are, like *tanu(vaga)*, most often co-referential with the agent of the sentence.⁵¹ (5.19) 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’.

(5.19) **cm12f.**

τακαλδ[ο] ασαφαγο 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 (5.20). Here, the adj. χοβο is co-referential with το χογο ‘your lordship’, possibly the indirect object of an impersonal verb subj.3sg. σινδαδο ‘will please’ (cf. BD II: 264).⁵²

(5.20) **cg9f.**

ταδο το χογο σινδαδο πιδο χοβο βιζγο ταδηιο ταρο πιδοροβο.

“So, (if) it should please your lordship in your goodness, receive him there (with you).” (BD II: 80).

49 Note also ταιοηλο in **J14 = J11’**, τωιοηλο in **L15 = L12’**, and τηιο in **Tt13**.

50 Enclitic pronouns can be used too, e.g. χοβομο μαρηγανο ‘my own servants’ in **Tt8f**.

51 An enclitic pronoun is sometimes pleonastically added to χοβο where the co-referentiality would already be clear had χοβο been used on its own (e.g. **Uv3–5**; BD IV: 51).

52 For the phraseology, cf. also πιδο μο χοβο σιν[δο] ‘according to (our) own wish’ (**I5’**) and the adjective χοασινδο ‘out of one’s own wish’.

Besides, *χοβο* / *χοβιγο* can co-refer with the recipient in a ditransitive construction; in (5.21), *αβο χοβο*, literally ‘for his own’ (BD II: 279), is co-referential with *φαρο χοαδησοανινδο* ‘to Khwadew-wanind’.

(5.21) **bg11f.**

ταδανο [το] χοηο πιδονωγαρο φαρο χοαδησοανινδο 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.⁵³

When reduplicated, *χοβο* and *χοβιγο* have distributive sense. Note, for instance, sentence (5.22), where not only *χοβιγο* but also *δρουμινο* ‘enemy’ is repeated.

(5.22) **N30f.**

οτο δρουμινο δρουμινο ερκαραμο 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 Kushan 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 μανανο βαγο χοβο αδογαμο* “This (is) the income belonging to/of the god Mana” (Sims-Williams 2013a: 194).

53 The only counterexample would be the restored *χοβο* in **xp7**: *μισιδο [το χοη]ο ζανο κοαδο πορλαγγοζινο αλο χοασραο [χοβο οσι]ρδοβιδο οαρο οδο λαδο κηρδο* “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 L20’f. *οηιο παδοαχβανηιο ασο μαβαρο απαρσο τοι βαζανοκο αλο ι χοβο καδγιγαγο αβο ι μασκο ναβιχιτιγο 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 βαζανοκο* ‘you, B.’ in front of it. Therefore, I suggest to restore in **xp7** rather the oblique pronoun *ταοο* / *ταοι* ‘you’ in possessive function (SFBG: 101f.).

Finally, there is one unusual instance of *χοβο* in **W29**⁵⁴ where it is used as an intensifier, corresponding to *χοαδο* ‘oneself’ in the parallel **W29**. I would interpret this case as a scribal mistake.

5.3.4.2 *χοαδο* ‘oneself’

Bactr. *χοαδο* /*xwadə*/ ‘oneself’ < **hwatah* is only used as an intensifier (BD II: 278; BD IV: 129; SFBG: 108–110), corresponding on this point with Niya Pkt. *sveya* ‘idem’ (§5.3.3.2).⁵⁴

A typical example of the use of *χοαδο* can be seen in (5.23), one of the many variants of the Bactrian epistolary greeting formula.

(5.23) **ch3–5**

οτανο οαλο βαταρανο καλδανο αζο μαρηγο μαρδο αβο το χοηο χοαδο
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, *χοαδο* 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. *χοαδο* also occurs in the function of an exclusive intensifier. One such case is cited in (5.24), where the implication is that Paroz (παρωζο) and nobody else will have to pay the taxes (pres.3sg. τωζιδο ‘pays’).

(5.24) **je8–11**

οιδρο καλδο αμαχο ι τωγιγο πιδοσησαμο τασιδο σασκο παρωζο
ωζαδγο τωγο αστο ταδο χοαδο τωζιδο.

“Until we determine the tax arrangements, whatever tax is due on the
part of Paroz he (will) pay (it) himself.” (BD I²: 130).

5.3.4.3 *χοβισαρο* (later *χοβοσαρο*) ‘oneself’

The less frequently attested pronoun *χοβισαρο* (later *χοβοσαρο*) is etymologically based on a univerbation of the obl.sg. *χοβι* ← *χοβο* ‘one’s own’

⁵⁴ 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.

and *σαρο* ‘head’ < OIr. **sarah-* (cf. Psht. *xpasar*).⁵⁵ *χοβισαρο* is typically used as a canonical reflexive (BD II: 279f.; BD IV: 129; SFBG: 110), as in (5.25), where it is co-referential with the agent, i.e. the 3sg. clitic *-ηα* ‘by him’ (in *οτηα*).

(5.25) Rab. 11–14

οτηα φρομαδο αβειμοανο βαοναγο κηρδι αβο κοζουλο καδφισο βαο ...
οδο αβο ι χοβισαρο κανηρκε βαο.

“... and he gave orders to make (images of) these kings: King Kujula Kadphises ..., and himself, King Kanishka.” (Sims-Williams 2008c: 56f.).

In **bc**12f., the exact function of *χοβοσαρο* is more challenging to evaluate because we do not know the meaning of the verb *εδρ-* (2pl. *εδρηδο*): *στο ιωγο μαρδο χοβοσαρο εδρηδο* ‘and you shall ... one man yourselves’ (BD II: 56). 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*.⁵⁶

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: reflexives 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 Bactrian make, and it lists the commonalities shared by the different pronouns, in particular Niya *tanu(vaga)* and Bactr. *χοβο* / *χοβιγο*.⁵⁷

	Niya Prakrit	Bactrian
1	<i>tanu(vaga)</i>	<i>χοβο</i> / <i>χοβιγο</i>
	adj. ← Vedic <i>tanú-</i>	< OIr. * <i>hwa(i)-paθya-</i>
	‘body, person, self’	(+ adj. suffix <i>-ιγο</i>)
	– adj. ‘one’s own’ + noun ‘property’	
	– co-referential with agent or recipient	
	– co-referential at the same clause level	
	– distributive sense when reduplicated	

⁵⁵ The title *λοιχοβοσαρο* / *αλιχοβοσαρο* (SK4M 8; SK4A 11; SK4B 12) probably also contains *χοβοσαρο* as its second element (Sims-Williams 2008c: 65).

⁵⁶ As argued by Yoshida (2025: 177), the expression *πιδο χοβοσαρο ονααγο* in doc. F6f. ~ F5f. and F15 ~ F13f. can be taken to mean ‘price for (your)self’.

⁵⁷ The examination conducted above did not reveal any significant divergences in usage between the reflexives in Niya Prakrit and Bactrian.

– can be pleonastically added after a gen.

2	<i>sveya</i> < Skt. <i>svayam</i>	χοαδο < OIr. * <i>hwatah</i>	– in- or exclusive intensifier ‘oneself’
3	<i>apana</i> < Skt. <i>ātman-</i>	χοβισαρο; χοβοσαρο χοβι + σαρο ‘head’	– canonical reflexive + intensifier ‘oneself’ – only rarely used in extant text corpus

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).

Unfortunately, the Niya Prakrit and Bactrian reflexives cannot meet these criteria.⁵⁸ 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 χοβο / χοβιγο with both agent and recipient and the fact that co-referentiality needs to be at the same clause level are characteristic

58 Meyer (2023: 219f. fn. 13) rightly observes that “corpus languages frequently cannot live up to the modern methodological standards propounded by Poplack and Levey and others.”

features of Niya Prakrit and Bactrian or also found in closely related languages.⁵⁹

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. *āmreḍita* compounds).⁶⁰ 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.⁶¹ An Apabhraṃśa example is *aṇaṅgahō 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. *aṇaṅgahō* ‘of Kāma’ and the dir.sg. *toraṇu* ‘arch’.⁶²

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

59 Intuitively, these two features of *tanu(vaga)* and $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ seem the most important parallels.

60 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.

61 The same phenomenon is moreover also attested in Iranian languages other than Bactrian. Cf. §5.2.1 on Khot. *hāvya-* / *hivya-* ‘own’.

62 On these possessive adjectives in later Indo-Aryan, cf. Schwarzschild (1954).

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)* ~ χοβο / χοβιγο), (ii) an intensifier (*sveya* ~ χοαδο), and (iii) a canonical reflexive pronoun, also used as an intensifier (*apana* ~ χοβισαπο; χοβοσαπο), 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 χοβο / χοβιγο (§§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 χοβο / χοβιγο 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 χοβο / χοβιγο 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 (5.26) and (5.27), 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 (5.26) and subj.1sg. τωζανο in (5.27). In addition, the Niya Pkt. abl.sg. *tanuyade* ‘out of one’s own (property)’ equals Bactr. ασο χοβο ‘idem’.

(5.26) CKD 635 r4f.

yati eta ahuṃno anatha na kariṣyaṣi eta aṃna puna tuo tanuyade śodheyiṣyaṣi.

“If you do not do this carefully now, you will later have to pay this corn out of your own.” (after TKD: 132).⁶³

63 Cf. also CKD 165 o6 and 714 o7, where *tanu goṭhade* ‘out of one’s own farm’ is combined with the verb *vyoṣe-* ‘to reimburse’. *tanu goṭhade* has an exact parallel in Bactr. ασο χοβο καδυο (ca7f.). In CKD 305, two other instances of the abl.sg. *tanuvagade* in the meaning ‘out of one’s own (property)’ are attested.

(5.27) K13f.

καλδο πιο νατωζ(α)δο ταδαζο τητο ασο χοβο τωζα[ν]ο.

“so, if Piy should not pay, then I, Tet, shall pay from (my) own (property)”. (BD I²: 56).⁶⁴

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. (5.28) is a Niya Prakrit example, (5.29) 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.

(5.28) CKD 553 o3

ahuno eda uneyaga tanu Budhamitraṣa picavesi.

“Now (however) you are handing over this adopted child to Budhamitra as his own.” (TKD: 110).⁶⁵

(5.29) bg11f.

ταδανο [το] χοηο πιδονωγαρο 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.), Niya 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

64 Additionally note ασο χοβο οδο ασο ανδαρουανο “from their own (property) and from (that of) the others” (ef15f.). When χοβο is not co-referential with the agent of the sentence, a genitival complement is necessary, as in ασο ιμανο χοβο ‘out of my property’ (dd5).

65 For further examples, see CKD 235; 366; 471; 545; 568; 719.

instances from Niya Prakrit, i.e. (5.30)–(5.31), and one from Bactrian, i.e. (5.32).

(5.30) CKD 292 o5

/// *na tanu saṃñā paripālitaṃ.*

“... are to be looked after as if they were your own.” (TKD: 53).

(5.31) CKD 331 uo6

yath[ā] tanu dita saṃñā janidava.

“She is to be regarded as his own daughter.” (TKD: 63).⁶⁶

(5.32) ec8–10

οδαλο ποσανανο μαρο φορτιο ταδηνο ασκαδαρο παροβαλανο
σαγονδο ιχοβο οδαλινο ναφορτιο τασιδομο τας 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) 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. *paripālitaṃ* ‘to be looked after’ in (5.30) can be compared with subj.1sg. παροβαλανο ‘I will take care’, especially since the Bactrian verb παροβαλ- is a loan from Pkt. *parivāl-* < *paripāl-* (BD II: 252); (ii) the conjunction *yathā* meaning ‘as’ in (5.31) corresponds to σαγονδο ‘idem’; and (iii) the reflexive *tanu* in both (5.30) and (5.31) equals χοβο.⁶⁷ 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.

66 Additional examples in CKD 161 and 585 (2×). Note also *eṣa Upaṣena tatra goṭhaṃmi yatha aneyagaputra saṃñā janidavya* “this Upaṣena is to be regarded as an adopted son in that family” (CKD 31 + 764 cr1f.; TKD: 7). Here, *tanu* is missing before *aneyagaputra* ‘adopted son’, but *yatha* ‘as’ is again added as in CKD 331.

67 The combination of *tanu* with (*saṃñā*) *janidava* ‘to be regarded’ is also reminiscent of ταδοιανο χοβο ναζανηιο “and then you would not recognise (it as) his property” (bg9; BD II: 64), where χοβο co-occurs with the Bactrian cognate of *jan-* ‘to know, recognise’, i.e. ζαν- ‘idem’.

As concerns reciprocals, I elaborated on Burrow's hypothesis that the Niya Prakrit reciprocal *eka b(h)iti* 'one the second > one another' was calqued on an Iranian pattern, suggesting that the direct source may have been Bactr. $\omega\gamma\omicron \lambda\iota\beta\delta\iota\gamma\omicron$ (later $\beta\iota\delta\delta\iota\gamma\omicron$) '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. Owing 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 $\chi\omicron\beta\omicron$ / $\chi\omicron\beta\iota\gamma\omicron$ 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 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*

(also *-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, i.e. that Bactrian had a much more profound impact on Niya Prakrit than Khotanese, I will reinvestigate the possibility of 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*-.⁶⁸

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.⁶⁹ They were replaced by an innovative preterite synchronically consisting of a stem in *-t/-d* (and variants)⁷⁰ 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 (denadī)</i> ‘(s)he gives’	<i>kareti (karedī)</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’

68 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).

69 One exception is the pret.3sg. *asi / aṣi* ‘(s)he/it was’ < Skt. impf.3sg. *āsīt*. In South Asian Gāndhārī, this archaic type of preterite still occurs more often, but mainly in texts translated from “Buddhist Middle Indic”. See e.g. Salomon (2008: 153–159) on the evidence from the *Anavataptaḡāthā*.

70 On the formation of the past stem, see in more detail LKD (§107).

- 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 r1) is most likely a mistake for *-etha*.
- ad 3pl. There seems to be an orthographic rule to write *-ati* instead of *-amti* when the final consonant of the preterite stem is written with 𑀅 *da* and not with 𑀅 *ta* (LKD: §105; §109).

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.⁷¹ The 1sg., 2sg., and 1pl. can be derived from the combination of a nom.masc.sg. **dittah* (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’ < *saḥ* (cf. §5.4.7); and **-sm- > *-(m)m-* as in loc.sg. *-a(m)mi* < **-asmin* (LKD: §49).

- 1sg. *ditemi* ‘I gave’ < **ditte ’m(m)i* < **ditte ’smi* < OIA **dittah asmi*
- 2sg. *ditesi* (*diteṣi*) ‘you gave’ < **ditte ’si* < OIA **dittah asi*
- 1pl. *ditama* ‘we gave’ < **dittā (m)ma* < **dittā sma* < OIA **dittāḥ sma*

71 I follow Burrow (1936: 431), *pace* Turner (CDIAL I: 351 no. 6140), in reconstructing an OIA 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).

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 *ditamti* ‘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 **-eṃti.

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. *aham 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 somebody)’.⁷² In such transitive constructions, a potential agent must be marked with the ins. or, less frequently, the gen. case.⁷³ 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

72 For the terms agent-orientation and patient-orientation and their application to the verbal system of Sanskrit, see Hock (1986).

73 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 the present work.

(§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).⁷⁴ Based on her analysis, I understand the alignment of the Niya preterite to be a mix of three systems, i.e. nom.-acc. alignment, neutral (or direct) alignment, and semantic alignment.⁷⁵

The first type of alignment shown by the Niya preterite concerns demonstrative pronouns and is not very common. Unlike nouns, adjectives, or 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”.

(5.33) and (5.34) 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 (5.33), 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’.

(5.33) CKD 52 uo2

eṣa iṣa klasenadharmena mahi maharayaṣa uṭa liṣita.

“he dispatched a camel to me the great king according to the *klasena* arrangements.” (TKD: 12).

In (5.34), 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*.

(5.34) CKD 644 r4

eda uṭa paruvarṣami iṣa 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

74 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 M. 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 Bynon (2005: 33–35) and Barchi & Peschl (2022: 411–413).

75 For these types of alignment, see Coghill (2016: 6–12), Dahl (2021: 414–419; 2022: 3–13), and Meyer (2023: 61–68).

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”.⁷⁶

The following three sentences, taken from Barchi & Peschl (2022: 411f.), exemplify the use of “neutral” or “direct” alignment in Niya Prakrit. In (5.35), 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.

(5.35) CKD 63 uo2

atra khakhordi stri 3 nikhalitaṃti.

“there they took out three witch-women.” (after TKD: 13).

In (5.36), 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’.

(5.36) CKD 63 uo2f.

eda prace tu Ap[ge]yade⁷⁷ anati giḍesi Lýipeyaṣa stri patena stavidavya hoati.

“About this matter you received a command from Apgeya that recompense was to be made to Lýipeya for this woman.” (TKD: 14).

In (5.37), finally, the dir.sg. *śramaṃna Yipiya* ‘the monk Yipiya’ is the agent and the dir.pl. *aṣpa tre* ‘three horses’ the patient of the pret.3sg. *giḍa* ‘he received’.

(5.37) CKD 582 uo3

taha ṣoṭhaṃgha Ramṣotsaṣa paride bhumāṣa muli śramaṃna Yipiya giḍa aṣpa tre.

“From the *ṣoṭhaṃgha* Ramṣotsa 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. (5.37)). But if the

⁷⁶ Meyer (2022: 280) uses the same terminology with reference to Armenian.

⁷⁷ It is possible that *Apgeyade* is a mistake for *Apgeya*(**ṣa asiya*)**de* ‘from the mouth of Apgeya’; cf. Schoubben (2025a: 94f.) and p. 215 fn. 406.

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).⁷⁸ With this third alignment system, in essence a subtype of the second, argument marking is thus not only determined by syntactic criteria but also by semantic factors such as animacy.⁷⁹ We can therefore refer to it as “semantic alignment” (for which cf. e.g. Dahl 2022: 7–10).⁸⁰

To illustrate how this semantic alignment system works in practice, I briefly discuss two relevant sentences below (adopted from Jamison 2000: 73). In example (5.38), 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.

(5.38) CKD 29 uo3

aṃṇa Līpeyaṣa stri Kolīṣaṣa bhratu Aūgalena vijida.

“Moreover, Aūgala, the brother of Kolīṣa, wounded a woman of Līpeya.” (tr. Barchi & Peschl 2022: 413).

In example (5.39), 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. *Sūguta* (also a PN). In this case, the patient is the dir.sg. *tavastaga* ‘carpet’, so there is no need for an ins.sg. ***Sūgutena*. The contrast

78 For exceptions to the animacy rule, including archaic instances of agent marking with the instrumental 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. *Paginena aloṭa viloṭade purva Mokṣapriyaṣa vaṃṭi 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 uo2f.; 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 Casmina our agent (ins.sg. *Ca[smi]nena* ... *asmagena caragena*)” (CKD 86 r3; TKD: 17). Such instances deserve further study.

79 For animacy as a semantic feature, see Santazilia (2023: 175; 329).

80 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*).

in animacy between the PN *Suṅuta* and the inanimate noun *tavastaga* suffices to discriminate between the agent and patient of the sentence.

(5.39) CKD 578 uo4–6

tena Suṅutaśa stri Koloae naṃma Priyavagena dita striyae pratiprahūḍa Priyavagaśa Suṅuta dita tavastaga hasta 4 4.

“Therefore Priyavaga gave a woman called Koloae to Suṅuta. As a counter-gift for the woman Suṅuta gave to Priyavaga a carpet eight hands (in length).” (after TKD: 118).

With patient-oriented formations, such as gerundives and the verbal adjective in **-taka-*, the agent is by contrast marked in the genitive case and not in the instrumental (cf. LKD: §119).⁸¹ In sentence (5.40), the agent of the gerv. *gaṃdavo* ‘must come’ is, for instance, the gen.sg. *Caṃpeyaśa* (a PN).

(5.40) CKD 83 uo4

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 the 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

81 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).

preterite.⁸² The main take away point is the three syntactic uses of the 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 §5.4.9.⁸³

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 o1, also *mṛta potaga* in o2). 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’ (uo2) and *Soganaṣa taḍidagena* ‘because of Sogana’s beating’ (co1), and once in the abl.sg., i.e. *taḍitagade pača* ‘after the beating’ (co3).

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 (5.41). *mṛtaga* not only indicates that Anaṣena (ins.sg.

82 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).

83 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).

Anaṣenena) died at some undetermined point in the past; it also highlights the result of this past event, i.e. *Anaṣena* being dead now.⁸⁴

(5.41) CKD 399 rB1f.

evaṃ ca ahuno iśa veyā pa[pa]śra[ve]na śrudemi Anaṣenena mṛtaga.

“And now here I have heard the bad news that *Anaṣena* 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 (5.42), for example, the *pravamṇaga* ‘invoice’ referred to (loc.sg. *pravamṇagaṃmi*) is the direct result of the writing process implied by *lihitaḡa* ‘(has been) written’.

(5.42) CKD 59 r2f.

palī aṃṇa jaṃṇaṣa nama nama pravamṇagaṃmi lihitaḡa.

“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. Firstly, the verbal adj. in **-taka-* can be combined with a present tense copula, i.e. 3sg. *hoati* (*huati*; *uhati*) ‘is’ and 3pl. *hvaṃti* ‘are’.⁸⁵ 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.⁸⁶

This equivalence can be shown by comparing example (5.43) to (5.42). Whereas *lihitaḡa* is not combined with a copula in example (5.42), it is in

84 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”.

85 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 Gāndh. pres.3sg. *hovadi* ‘is’ (Lenz 2003: 140; 264; 2010: 47; 174) and pres.3pl. *hovati* ‘are’ (CKI 249 2a–b *te ma[ye] Śeṇavarmeṇa kiḡa hovati* “These (stūpas) have been repaired by me, Śeṇavarma”). 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 o4 (2×)) < Skt. *bhavet* and opt.3pl. *huveyu* ‘may be’ (MĀN XII 7) < Skt. *bhaveyuh*. There is only one example of a **-taka-*form being combined with *bhavati* ‘is’, i.e. *ciṃtitaga bhavati* ‘is reckoned’ in CKD 435 uo3. I did not find an example with pres.3sg. *hoṭi* or *astī* ‘is’.

86 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.

(5.43). Yet, in both cases, the context suggests an interpretation of the verb as a resultative. In (5.42), the result of the writing process is explicitly referred to by the loc.sg. *pravamṇagaṃmi* ‘on an invoice’. In (5.43), the same function is fulfilled by the loc.sg. *eda lekhami*.

(5.43) CKD 770 uo3f.

*yam ca Yakana[sa u]pajiva jivita Puṣga[ri](*yaṃmi)⁸⁷ 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 (5.44), the 3pl. *palayitae hutaṃti* ‘(had) fled’ is part of a subordinate clause dependent on *viṇayeti* ‘informs (that)’.⁸⁸

(5.44) CKD 632 o1–3

ahuno i[śa Jha]gimoya viṇayeti 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-*.⁸⁹ 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

87 The restoration is mine. There are no other examples of *paryaṃta* ‘as far as’, but the related adverb *acamta* ‘to the end of’ governs a loc. in CKD 367 o3, so I suppose the same for *paryaṃta*. For the form *Puṣga[ri](*yaṃmi)*, cf. abl.sg. *Puṣgariyāde* (CKD 660 oA2).

88 For another example in a subordinate clause, see *dutiyae gataga āsi* ‘was gone on an embassy’ in CKD 637 o6.

89 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).

construction is anterior to that of the main verb, one can interpret it as some form of future (or sometimes conditional) perfect (so 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 (5.45), the 2pl. *viṣarjīdāe hakṣatu* '(will) have sent' occurs in a conditional clause introduced by *yadi*; the main verb is the gerv. *viṣajidavo* 'must be sent'.

(5.45) CKD 4 uo2f.

yadi uṭa na viṣarjīdāe hakṣatu tade ede uṭa cavala Līṣipeyaṣa hastami Calmadanaṃmi viṣajidavo.

"If you have not sent the camels, then the camels must be quickly sent to Calmadana in the hand of Līṣipeya." (TKD: 1).

In sentence (5.46), 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'.

(5.46) CKD 439 uo4

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.⁹⁰

A pertinent example is (5.47). The 3sg. *ditae siyati* 'must be given' used in this sentence can be compared in function to the gerv. *dadavo* 'to be given' in *anati dadavo ... uṭa cavala tasyati* "a command must be given ... that he will quickly give the camel" (CKD 797 cr2; tr. mine).

(5.47) CKD 385 o5

avaśa teṣa piḍita anati ditae siyati cavala eda iśa preṣeyamti.

90 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, *varidae hotu* ‘are to be prevented’ in (5.48), corresponding in sense to Skt. pass.imp.3sg. *vriyatām* ← $\sqrt{vr}$ ‘to prevent’.⁹¹

(5.48) CKD 272 o9

ede samṛdhae jaṃna varidae hotu ma im ci daramnagena 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, namely from Khotanese.

Morphologically, Khotanese distinguishes an intransitive from a transitive preterite, also called “perfect” (SGS: 220–228; Emmerick 1989: 222; HK: 310f.).⁹²

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 differentiates between masculine and feminine forms. See the (partly reconstructed) paradigm of *hām-* ‘to be(come)’ below.

91 Cf. examples where, in similar contexts, the gerv. *varidavo* ‘to be prevented’ is used instead of *varidae hotu*, e.g. *jaṃna varidavo ma im ci bhuya načira gachamti* “people are to be prevented from going hunting again” (CKD 13 uo4; TKD: 3).

92 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.

The transitive preterite consists of a synchronically opaque⁹³ type of verbal noun or participle agreeing in person, number, and gender⁹⁴ with the agent and endings usually identifiable with present forms of the copula. Compare the (partly reconstructed) paradigm of *dai-* ‘to see’ given infra.⁹⁵

	Intransitive preterite	Transitive preterite
1sg.	masc. <i>hāmātāmā</i> fem. <i>hāmātāmā</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> fem. <i>dātāmā</i> < <i>dātātā</i> + 1sg. <i>-mā</i> ‘I saw’
2sg.	masc. <i>hāmātī</i> (< <i>*-tā</i> + 2sg. <i>-ī</i>) fem. — ‘you became’	masc. <i>dātai</i> < <i>dāte</i> + 2sg. <i>-ī</i> fem. — ‘you saw’
3sg.	masc. <i>hāmātā</i> (<i>-tā</i> < <i>*-tah</i>) fem. <i>hāmāta</i> (<i>-ta</i> < <i>*-tā</i>) ‘(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> (<i>-ta</i> < <i>*-tā</i>) fem. <i>hāmāte</i> (<i>-te</i> < <i>*-tāh</i>) ‘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

93 No consensus exists on the etymological origin of the transitive preterite. See Sims-Williams (1997c = 2025a: 161–170) 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.

94 There is no gender distinction in the plural.

95 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.⁹⁶ In (5.49), nom.sg. *balysä* ‘Buddha’ is the agent of intr.pret.3sg. *āstā* ‘he remained’.

(5.49) *Zambasta* 2.2

rājagṛhā āstā gṛddhrakūṭu ttu scātu ggaru vāte balysä.

“The Buddha remained at Rājagṛha at that time, on Mount Gṛddhrakūṭa.”

In (5.50), 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’.

(5.50) *Zambasta* 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 (5.51), where the 1sg. obl. pronoun -ομο⁹⁷ marks the agent, and the patient is marked by dir.2sg. to ‘you’ and the ending -ηιο in the verb υρηηιο, pret.2sg. of υρηζ- ‘to let go’.

(5.51) F7f.

οτ=ομο το ζηρο αζαδο ... υρηηιο.

96 In this section, the example sentences and their translations are taken over from Barchi and Peschl.

97 I follow Jügel (2015: 222 with fn. 542) in positing the 1sg. enclitic pronoun as -ομο (cf. MBactr. -wm) rather than as -μο.

“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.⁹⁸ 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.⁹⁹ 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 *hamber-* ‘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 Khotan to be the centre of diffusion of MIA literacy to other parts of the Tarim Basin.¹⁰⁰ 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

98 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”.

99 Barchi and Peschl do not explicitly address the small number of identifiable loanwords from Khotanese (for which cf. §4.2.5).

100 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).

used in Khotan” (p. 423) like the variety of Prakrit employed in document CKD 661.

In my view, there are four main problems with Barchi and Peschl’s argument of a Khotanese substrate influence: (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 Morphosyntactic 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, 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,¹⁰¹ 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

101 Note in particular the 2pl. auxiliary *sta* ‘you are’, which can hardly be mistaken for an ending.

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.¹⁰² 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 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.¹⁰³

102 In general, "clear-cut cases of borrowing [of alignment patterns] seem to be comparably rare" (Dahl 2022: 13).

103 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

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 which can be securely ascribed to Sogdian; and the Bactrian words in Niya Prakrit can have been borrowed outside the Tarim Basin.¹⁰⁴ 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, namely to Bactrian and other Iranian languages spoken in Gandhāra.¹⁰⁵

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 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,

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).

104 See further Chapter 6, where I argue that there is likewise hardly any compelling evidence for language contact between Niya Prakrit and Tocharian.

105 This conclusion was anticipated by Wright (1998: 237), who also compared the Niya situation to Dardic active preterites historically derived from passive participles.

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.¹⁰⁶

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 (5.52) 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).

(5.52) Av^{L1} verso 143f.

kam[a] keno śamaneno [du]ve thaviga grahi[di]ga corehi grahida.

“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’ < OIA **likhita-ka-*. 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. *aśvaśidae* ‘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

106 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.

discussed for Niya Prakrit in §5.4.2.4. I cite the relevant passages below in (5.53) and (5.54).¹⁰⁷

(5.53) BC 4 recto 20

*edeṇa dukhañāṇaṇisamarthañāṇeṇa sarve dukha uadiṇae aṣivaṣidaē
hakṣadi uekṣidaē hakṣadi (*·) sarve suhe paricatae aṣivasidaē 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).

(5.54) BC 6 verso 4f.

*tatra ca purve bahu taṇua saṇa karavida(*e) + + + ? vitrae ca siadi (*·)
tatra ca purve suhe vitrasua ṇa karavidaē siadi (*·) saithida ca pura vi
saṁthidaē 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, should not be caused. And also [what was] scattered (?) before should be made composed.” (after Schlosser 2022: 151).¹⁰⁸

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).¹⁰⁹ Thus,

107 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.

108 There may be another instance of such a periphrastic future in Av^{L1} verso 182f. *yadi sadharma atarahide hakṣa[di] ? aha pracageboṣ(*i) praūni[ṣa]*. 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. *praūniṣa* 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”.

109 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).

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 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 languages other than Khotanese¹¹⁰ 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-).¹¹¹ Instances of voiced consonants being assimilated to a preceding nasal include *Samñia-* 'the *deva* Sañjaya' (Bailey 1942: 912), *Mañušria-* 'the bodhisattva Mañjuśrī' (Habata 2007: lxiv with ref.), and the verb *van-* 'to honour', if this is a borrowing from Gāndh. **van-* < Skt. *vand-* 'to pay homage' (Schoubben *apud* Dragoni 2023b: 127 fn. 251). 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

110 Bactrian examples are *νακανδο* 'dug' < **ni-kanta-* (*-nt- > -vδ- /nd/) and *αμβαρο* 'store' < **ham-pārV-* (*-mp- > -μβ- /mb/).

111 See e.g. LKD (§46) and Brough (1962: 100).

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' < Skt. *samprāpta*- in graffiti from Hunza and the Alam bridge as an example for voicing after a nasal in South Asian Gāndhārī.¹¹²

In addition, he mentions that there is variation in the treatment of consonants after nasals within the *Khotan Dharmapada* itself. The relevant 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 Gāndh. *-d-* and not ***n-* as in other parts of the *Khotan Dharmapada*.¹¹³

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.).¹¹⁴

The first word is *μανοσιπο*, to be compared with the aforementioned Khotanese form *Mañušria*- (BD II: 230). *μανοσιπο* is evidently borrowed from

112 The form *sabratu* is attested in CKI 274 1; 291 2, 5; 413 1; 417 2; 430 2; 432 2; 433 1. Cf. also the variants *sabatu* in CKI 272 1; 273 3; 302 2; 308 2; 310 2; 313 2; 316 2; 418 1; 484 2f.; 495 1 and *sabato* in CKI 317 4; 493 2. 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.

113 The examples are the PN *Budhaṇadi* < Skt. *Buddhanandin*- and the abs. *vaditva* 'having praised' < Skt. *vanditvā* (Brough 1962: 177; 281).

114 In general, many Buddhist terms and names in this document are Gāndhārī rather than Sanskrit. The name of a bodhisattva *σιγγοβικρηριδο* is, for instance, plausibly interpreted by Sims-Williams (BD II: 263) as *Siṃhavikrīḍita*- '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 Gāndh. *-ḍ-* /r/ with Bactr. *-p-* /r/. Gāndh. *siṃg(h)a* < Skt. *siṃha*- occurs in CKD 511 r6 (Gāndhārī Hybrid Sanskrit) and CKM 105 recto 5.

a Gāndhārī outcome of Skt. *Mañjuśrī*, where *-j-* had been assimilated to the preceding palatal nasal *-ñ-*, as one would otherwise have expected **μανζοστρο 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 13b, and I would argue that Bactr. κοβανο comes from a dialect form **kuvhaṇa*. In *kuvhaḍa*, OIA *-ṇḍ-* has resulted in Gāndh. *-ḍ-*, while **kuvhaṇa* → κοβανο would show a development from OIA *-ṇḍ-* to Gāndh. **-ṇ-*. In other words, **kuvhaṇa* would be another example of the loss of an originally voiced consonant after a nasal.¹¹⁵

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

115 Also noteworthy is Bactr. κινδαρο 'a mythical being, *kinnara*', where Bactr. *-vḍ-/nd/* corresponds to Indic *-nn-* (cf. also TB nom.fem.sg. *kindarīa* 'of the *kinnaras*' in THT 1245; 2996 + 2999). Perhaps, κινδαρο is based on a hypercorrect Gāndhārī form **kimḍara* or the like where *-nn-* was "reversed" to an etymologically unjustified **-ṇḍ-/nd/*.

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 entails that Niya Prakrit would be “a derivative” of Khotan Prakrit. To support this linguistic scenario, they refer to Høisæter's (2017; cf. also 2020: 124–131) hypothesis that long-term interregional exchange networks between the Kushan 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.¹¹⁶ In this section, I argue that the linguistic features of Khotan Prakrit render it improbable that it is the direct ancestor of Niya Prakrit.

If we understand Barchi and Peschl's remark literally and take the language of CKD 661 as representative of Khotan Prakrit,¹¹⁷ Niya Prakrit cannot have descended from it, given that CKD 661 exhibits linguistic innovations absent from Niya Prakrit. Most importantly, Khotan Prakrit underwent vowel raising of *-e-* to *-i-* and *-o-* to *-u-*, a development scarcely attested in Niya Prakrit (Burrow 1934: 515; 1936: 430). In addition, CKD 661 shows a development of word-final *-am* to *-u* (also *-o*), e.g. *avhiñānu* ‘recognition mark’ < *abhijñānam* (o3), whereas in Niya Prakrit final *-am* regularly became *-a*, as seen in the direct singular forms deriving from the OIA

116 Høisæter's view differs from the “domination theory” which posits a direct Kushan rule over (parts of) the Tarim Basin (e.g. Brough 1965 = 1996: 276–308; 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 Kushan 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 Kushan 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 Kushan empire during the reigns of Kanishka and Huvishka in the 2nd century CE and not to the later period of decline.

117 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 2, pp. 467–474.

acc.sg. in *-am* (LKD §53). These features alone preclude the possibility that Niya Prakrit descends from the variety of Khotan Prakrit attested in CKD 661.

Burrow (1936: 430–434) attributed the linguistic differences between Niya Prakrit and CKD 661 primarily to two factors: (i) the greater archaism of the Khotan variety, and (ii) divergent forms of substrate interference within the Tarim Basin. A Khotanese substrate would account for features such as vowel raising and the nom.sg. and acc.sg. endings in *-ā* (*-ā̃*) and *-u* (*-o*) in Khotan Prakrit. Conversely, a Tocharian substrate would explain several phonological and morphological idiosyncrasies of Niya Prakrit, such as the confusion between voiced and voiceless stops. Despite these differences, Burrow still regarded both dialects as deriving from a common source.

Now, if one combines Burrow's account¹¹⁸ with Barchi and Peschl's proposal that Niya descends from Khotan Prakrit, the resulting scenario places the last common ancestor of the two dialects in a Khotanese-speaking area. This ancestor would already have undergone the alignment shift in the preterite owing to Khotanese substrate interference. Yet, the vowel raising, the nom.sg. and acc.sg. endings in *-ā* (*-ā̃*) and *-u*, and other features of CKD 661 attributable to a Khotanese substrate would necessarily postdate the split of Niya Prakrit from the common ancestor of the two dialects. Otherwise, one encounters the same difficulties that arise from assuming Niya Prakrit to be a direct descendant of the Khotan Prakrit attested in CKD 661.

Although such a chronology is theoretically possible, it raises several problems. It would require the alignment shift in the preterite to predate the more conspicuous morphological influence of Khotanese on the nominative and accusative endings of Khotan Prakrit. It also implies that the Niya-type preterite existed already in the common ancestor of Niya and Khotan Prakrit.

However, none of the five verbal adjectives in *-ta-* in CKD 661 (see passage (5.55)) provides conclusive evidence that this type of preterite was as developed in Khotan as in Niya Prakrit. As Burrow notes, 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” (1936: 433). Moreover, most verbal adjectives in *-ta-* in CKD 661 are construed with an agent in the instrumental or genitive, thus aligning with the syntactic patterns of OIA and most MIA languages.

118 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.

(5.55) CKD 661 o4–7

tasya uṭasya kidā Vagiti Vadhagā niravaśiṣo mulyo maśā dhitu Khvarnarsasya grahidu śudhi uvagadu aji uvadayi so uṭā Vagiti Vadhagasya tanuvagā saṃvritā yathagamagaranīyā sarva kica karanīyā ... 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 he likes. ... By me Bahudhiva this document (?) was written (*likhidu*) at the request of Khvarnarse.” (after TKD: 137).¹¹⁹

As often with derivatives of *√likh* ‘to write’ in Gāndhārī (cf. the examples in Baums 2022), the agent of *likhidu* ‘written’ appears 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 of *uvagadu* ‘reached, obtained’ stands in the gen.sg., i.e. *Khvarnarsasya*, the case most commonly employed 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 prudent not to draw far-reaching conclusions from this single example.

Moreover, in contrast to Niya Prakrit, transitive and intransitive verbs are 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. the Old Persian *manā kṛtam* construction). The lone example of an intransitive verb, i.e. *saṃvritā* ‘been’,

119 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 Skt. *upagata-*, but note the parallel *asti śramamṇa Dharmaladha nama ṣe vikrida bhuma eka milimi tivira Līpatgaṣa yaṃti giḍa muli masu khi 10 aḡiṣḍha 3 śudha uvagada* (CKD 652 uo2–5), 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”.

agrees in gender, number, and case with its subject nom.sg. *so uṭā* ‘this camel’.¹²⁰

It is difficult to determine whether this distinction between transitive and intransitive verbs in Khotan Prakrit is an archaism or whether it should be compared to the existence of two types of preterite in Khotanese, one for transitives, one for intransitives. Regardless, one can conclude that there are too many doubts about the preterite in Khotan Prakrit confidently to reconstruct the existence of a Niya-type preterite for a potential common ancestor of Niya and Khotan Prakrit.

As an alternative to the hypothesis of a shared ancestor, Burrow (1936: 433) briefly considered that the divergent features of Khotan and Niya Prakrit might stem from “original dialect differences in their Indian sources”, though he ultimately deemed this assumption unnecessary. While the evidence does not definitively refute Burrow, certain linguistic features raise questions about whether the two variants truly derive from a single source.

Burrow (1936: 432) regretted that CKD 661 offers no conclusive evidence for the development of OIA *-aḥ*, a crucial criterion for classifying dialects of MIA (and Gāndhārī in particular; cf. also Barchi & Peschl 2022: 424f.). In Niya Prakrit, the 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. In Khotan Prakrit, the nom.sg. ends in *-ā/-ā* (some *e*-like sound), likely due to Khotanese influence (nom.sg. in *-ā*), and is therefore unreliable for establishing the outcome of OIA *-aḥ* (Burrow 1936: 433f.). Forms of the abl.sg. are also absent from CKD 661.¹²¹ 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* < Skt. *saḥ*.¹²² Thus, we have some evidence, however flimsy, that *-aḥ* may have developed to *-o* in Khotan Prakrit rather than *-e*, as in Niya Prakrit.

The final *-o* in the demonstrative pronoun is not the only feature suggesting that Khotan and Niya Prakrit may derive from different Gāndhārī dialects. Elsewhere (Schoubben 2025a), I argue that the synthetic locative case in Niya Prakrit is, with few exceptions, restricted to inanimate nouns; for animate nouns, the Niya Prakrit scribes employed the locative postposition

120 The same is true about the (transitive) gerv. *garanīyā* / *karaniyā*; see (5.55).

121 As noted by Burrow, an adverbial form like *puradu* ‘in front of’ < *purataḥ* (CKD 661 o7) 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 recto 12 (CKM 278).

122 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* < Skt. *tam*.

vaṃti ‘in, at, to’ < Skt. loc.sg. *upānte* ‘in the proximity of’. In Khotan Prakrit, by contrast, the postposition *sagaji* is used (Schoubben 2025a: 105f.; cf. already Noble 1931: 453). As *sagaji* is derived from the Skt. loc.sg. *sakāśe* ‘in the proximity of’, it will have 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.¹²³

Minor lexical differences further support the possibility of separate origins. Examples include Khotan Pkt. *kidā* ‘on account of’ < loc.sg. *kr̥te* vs. Niya ins.sg. *kritena* / *kridena* ‘idem’ or Khotan Pkt. *puradu* ‘in front of’ < *purataḥ* vs. Niya *paraṭha* ‘idem’ < *purastāt*.¹²⁴

Are these morphosyntactic and lexical differences attributable solely to recent developments in Central Asia, as Burrow (1936: 434) suggests?¹²⁵ The data do not allow a definitive answer. Nonetheless, it is possible that Niya and Khotan Prakrit derive from separate sources that experienced contact influence at different times and places, eliminating the necessity for Niya Prakrit to be a descendant of Khotan Prakrit.

If this scenario is correct, one must still construct a historical account of when, why, and whence multiple Gāndhārī dialects were introduced into the Tarim Basin. I cannot address this fully here, but the following point seems worth making: Peyrot (2018b: 276f.) proposes that the legendary foundation of Khotan during Aśoka’s reign may reflect the arrival of Indian speakers of Gāndhārī in the southern Tarim Basin. 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 Kushan times: if there were two (or more) dialects of Gāndhārī introduced to the Tarim Basin, they could have come at different periods in time.

If Gāndhārī and the Kharoṣṭhī script were first introduced to Khotan in Aśokan times, a parallel can be drawn with the spread of (Sinhala) Prakrit and the Brāhmī script to Sri Lanka. Buddhist traditions attribute the introduction

123 Another noteworthy morphological distinction between Niya and Khotan Prakrit is that the latter has gen./dat.sg. *mayi* ‘I’ < Skt. *mahyam* (Vedic also *māhya* without *-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.

124 For more lexical differences between CKD 661 and the Niya documents, see Appendix 2, pp. 467–474.

125 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.

of Buddhism to both Khotan and Sri Lanka to Aśoka and his family, and inscriptions in Sinhala Prakrit dating back to the 3rd century BCE 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 summary, the relationship between Niya and Khotan Prakrit is complex, and the data do not allow definitive conclusions. It is, however, clear enough that Niya Prakrit cannot be interpreted straightforwardly as a descendant of Khotan Prakrit: the innovations attested in CKD 661 preclude such a direct lineage. While a shared ancestor remains possible (cf. Burrow), Barchi and Peschl's substrate hypothesis requires that this ancestor already underwent Khotanese substrate interference to explain the alignment of the preterite. For their scenario to hold, this influence must predate vowel raising and other contact-induced changes seen in CKD 661 but absent from Niya Prakrit. While not entirely impossible, this chronology seems hard to accept. Although it requires itself further testing,¹²⁶ an alternative hypothesis would be that Niya and Khotan Prakrit descend from different dialects of South Asian Gāndhārī. In that case, the assumption of a Khotanese substrate in Niya Prakrit would be superfluous.

5.4.8 Summary: four counterarguments

Based on §§5.4.4–5.4.7, four counterarguments can be raised against Barchi and Peschl's proposal of a Khotanese substrate influence on the formation and alignment of the Niya preterite.

Counterargument 1: There are significant morphological discrepancies between the Khotanese and Niya preterite, and even their alignment systems, Barchi and Peschl's central point of comparison, do not correspond in a one-to-one fashion (§5.4.4).

Counterargument 2: Linguistic differences between Niya Prakrit and South Asian Gāndhārī, including those pertaining to the formation and alignment of the preterite, may reflect differences in text type rather than geography. In other words, one of Barchi and Peschl's principal reasons to opt for Khotanese influence on the Niya preterite rests on an argument from silence (§5.4.5).

Counterargument 3: The phonological arguments advanced by Barchi and Peschl in support of a Khotanese substrate are not compelling, and the

126 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.

alignment of the Niya preterite cannot bear the burden of proving a Khotanese substrate on its own (§5.4.6).

Counterargument 4: Barchi and Peschl interpret their sociolinguistic scenario, itself based on Høisæter's model of long-term interregional exchange networks in the Kushan period, as implying that Niya Prakrit descends from Khotan Prakrit. However, once the linguistic differences between Niya Prakrit and the Khotan Prakrit of CKD 661 are taken into account, it becomes difficult to understand how Niya Prakrit could plausibly derive from the Khotan variant without having to invoke ad hoc assumptions (§5.4.7).

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 Kushan 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.¹²⁷

	Copula	Intransitives	Transitives
1sg.	-ημο (-ιμο) 'I am'	αγαδ(δ)ημο (-ιμο) 'I came'	λαδ(δ)ημο (-ιμο) 'X gave (to) me'
2sg.	-ηιο (-ηο) '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'
1pl.	-αμο 'we are'	αγαδαμο 'we came'	λαδαμο 'X gave (to) us'
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'

ad 1sg. In Kushan sources, there are some archaic forms in -ημι / -ημε, viz. σταδημι / σταδημε 'I was' (KSplate 1; 3) and ωσταδημι 'X established me' (KSplate 2); cf. Sims-Williams (2015: 259f.).

ad 3sg. Negated forms are made by adding νιστο 's)he is not' in front of the preterite form. There is also one example of an archaic negated pret.3sg. with νιστι < **nai(d) asti*, i.e. νιστι χοτο 'he did not seek out (?)' in SK4B 5f. (the parallel versions SK4A 4 and SK4M 3 have νιστο χοτο; cf. now Schoubben 2026).

ad 1pl. There is one instance of a negated pret.1pl., i.e. ναμο βιαδο 'we were not able' (P13').

127 The paradigm is an idealisation; not every form given occurs in actual texts.

ad 3pl. In Kushan Bactrian, there are occasional examples of archaic pret.3pl. in -ινδι, like αγδινδι ‘they followed (?)’ (DilT5, line 11) or φροχορτινδι ‘X brought them away’ (SK4B 8). Negated forms are made by adding νινδο ‘they are not’. There is also one instance of an archaic negated pret.3pl. with νινδι < **nai(d) hanti*, i.e. νινδι πατο ‘X did not call them’ (DilT5, line 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. -ηο, 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 Kushan Bactrian -ημι /ēmi/ (later -ημο /ēmə/) and in the 1pl., Niya *-ama* matches Bactrian -αμο /āmə/. While not an exact fit, one also cannot deny a certain resemblance between the 2pl. -ηδο /ēdə/ and Niya *-etha* /-etu and the Kushan 3pl. -ινδι /indi/ (later -ινδο /ində/) 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. ναυρητο ‘X did not let you go’ (F16) structurally agrees with how preterites are negated in Niya Prakrit.¹²⁸

128 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.

5.4.9.3 “Contact-facilitated grammaticalisation”

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”.¹²⁹ Following Burrow (LKD: §§105f.), §5.4.2.2 argued that, when taking the Niya outcome of OIA *-sm-*, *-aḥ*, 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 became reinterpreted as a verbal ending (decategorialisation); and (iii) certain phonological developments facilitated the univerbation of the verbal adj. in *-ta-* with the copula (erosion ~ phonetic reduction).¹³⁰

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 *-am̐ti* (rather than ***-em̐ti*) if there has been analogical influence from the *e*-class presents.

Assuming 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* < **dittah 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*).¹³¹ 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.

129 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.

130 For these grammaticalisation mechanisms, see e.g. Kuteva *et al.* (2019²: 3).

131 For more discussion on potential bilingualism between Bactrian and (the ancestor of) Niya Prakrit, see Chapter 7.

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 *ditamti*. 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 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.¹³² Also functionally, the Niya and Bactrian verbal adjectives in *-taka- resemble each other closely, as I will try to show below.¹³³

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 *deyadharmā* made (κηδδικο) by me’ (TiS 4f.) and for the latter, *φρητογο* ‘messenger’ < **fra-išta-ka-* ‘sent’ (cf. MP *frēstag*, Parth. *frēštāg*).

Second, both languages use these verbal adjectives to make compound tenses. In Bactrian, the perf.3pl. is, for instance, made by adding the enclitic

132 See e.g. GW (§354; §506) for the Middle Persian and Parthian cognates of Bactr. *-δογο* / *-τογο*.

133 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).

3pl. -ινδο ‘they are’ to the verbal adj. in **-taka-*, e.g. *ναβιχτιγινδο* ‘they are written’ (archaic form *νιβιχτιγενδι*).¹³⁴ There is also one occurrence of a plpf.3pl. *κιρδδιγο ασταδινδο* ‘they had been made’ (M4f.) consisting of the verbal adj. *κιρδδιγο* ‘made’ and the pret.3pl. *ασταδινδο* ‘they were’.¹³⁵

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’.¹³⁶ In (5.56), *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’¹³⁷ more frequently found in this type of context; see example (5.57) and note that *αβο μασκο* ‘herein’ is used in both sentences.

(5.56) C19f. ~ C21’f.

οτο φιφασο 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).

(5.57) N26–28 ~ N18’–20’

οτο 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

134 In **km6** (BD IV: 32), one could interpret *νοβιχτογο α[στ]αδο* ‘might be written’ as a periphrastically formed subj.perf.3sg. (verbal adj. *νοβιχτογο* + subj.pres.3sg. *ασταδο* ‘will be’).

135 On *κιρδδιγο ασταδινδο*, cf. also Jügel (2020: 289), who interprets it as a past stative.

136 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).

137 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.

unmarked perf.3sg. and not only a “ppp” as it is labelled in Sims-Williams’ glossaries (BD II: 237; BD IV: 118).¹³⁸

The following examples provide still more evidence for this conclusion. In (5.58), 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’.

(5.58) KSPlate 3f.

ταδι εμο κηρι μανο οαρο κιδ[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 (5.59) and dir.pl. βαγε ‘idem’ in (5.60), 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).

(5.59) Rab. 11

εμοανο βαγανο κιδι μασκα νιβιχτιγενδι.

“... of these gods who are inscribed hereupon ...” (Sims-Williams 2008c: 56).

(5.60) Rab. 17

εμιδβα 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 *lihitaga* ‘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

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

138 Niya *lihitaga* ‘written’ (~ Bactr. νιβιχτογο) can also interchange with passive 3sg. *lihyati* ‘it is written’ (~ Bactr. νιβισιδο) in the same type of context, as can be seen from a comparison between CKD 701 r1 *potge ra[kṣam]na jaṃna lihitaga* “the people guarding the *potge* were written down.” (TKD: 141) and CKD 224 r1 *S(*u)naṃta Biṃna uvatae jaṃna lihyati* “Beginning with Sunaṃta and Biṃna the people are written down.” (TKD: 42).

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).¹³⁹ 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 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 tripartite¹⁴⁰ 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

139 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).

140 Tripartite alignment means that the subject, agent, and patient of a sentence are all marked differently. See (5.68) for a Bactrian example of such a structure.

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.¹⁴¹ 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.

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 Kushan 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.¹⁴² 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

141 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 *Ubhayasārikā* 2.25: *cireṇa vijñātāsmi bhavantam. abhivādāyāmi*. "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' < Skt. *asmi* in the meaning 'by me' in the Mahārāṣṭrī *Lilāvai* (he compares Niya Prakrit on pp. 283f.).

142 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.

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 Kushan 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.¹⁴³

1sg. and 2sg. personal pronouns continued to differentiate between a dir. and an obl. form, i.e. αζο vs. μανο and τoo (and variants) vs. ταoo (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;
- 3pl. -ηνο (-ηνο).

Bactrian treats intransitive and transitive preterites differently. For intransitive preterites, the agent (= subject) of the sentence agrees with the verb. In (5.61), 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'.

(5.61) KSPlate 1

ταδηο αζο μο νοκονζικο ι πιορο μαρηγο σταδημι αμβουκαο.

"I, Nukunzik, his father's servant, was then *amboukao*." (Sims-Williams 2015: 257).

143 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 (2025). 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. πιορο 'father' < gen.sg. **piθrah* next to dir.sg. πιδα (later πιδο) < nom.sg. **pitā* (Sims-Williams 2015: 259). In addition, there are traces of a nom.sg. in -ι /i/ < *-ah (Michetti 2025: 194–197) and an abl.-ins.sg. in -α /ā/ in Kushan 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 2025: 189–193).

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 (5.62), 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 (5.61). The agent is instead marked by the 3sg. pronominal clitic -ηο ‘(by) him’; hence the translation with ‘he established me’.

(5.62) KSPlate 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 (5.63), the verbs πορογατο ‘surveyed (?)’, κανδο ‘dug’, οζοοαστο ‘brought out’, and οιλιδο ‘fitted’ agree with the patients μα λιζο ‘the citadel’, ευο 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.

(5.63) SK4M 11–13

ταδηιο μα λιζο πορογατο ταδηιο ευο σαδο κανδο οτηιο αβο οζοοαστο
οτηιο πιδο ασαγγε ιθο οιλιδο.

“then he [Nukunzik] surveyed(?) the citadel, he dug this well, and he brought out the water, and he fitted it with stones.” (Sims-Williams 2012: 79).

When nouns and certain demonstrative pronouns fulfil the role of the agent, they are, at least in early Kushan Bactrian, put in the oblique case. For orthotonic 1sg. and 2sg. personal pronouns, this pattern holds throughout the attested history of Bactrian.

In example (5.64), the dir.sg. ευο βαγολαγγο ‘this sanctuary’ is the patient of the sentence and thus in agreement with the verb, the tr.pret.3sg. κηρδο ‘made’. The obl.sg. βαφαρε καραραγγε ‘Shafar the lord of the marches’ takes up the function of the agent.

(5.64) Rab. 15

ταδι βαφαρε καραραγγε κηρδο ευο 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 (5.65), neither the agent of tr.pret.3sg. *λαδο* ‘gave’, i.e. *μαχο* ‘we’, nor the patient (= subject), i.e. *βονο οαρζιαο* ‘the farming of the estate’, are overtly marked for case.

(5.65) U6f.

ταδο μαχο ωσο λαδο αβοφαγο βηκο βονο 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).¹⁴⁴

The loss of case marking in nominal morphology created a second environment where neutral alignment was possible. One such case is (5.66), where *το χοηο* ‘this lordship’, the agent of tr.pret.3sg. *φοβταδο* ‘sent’, and *ι γασικο* ‘the concubine’, the patient, are not differentiated morphologically.

(5.66) cf7

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 order¹⁴⁵ 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.).¹⁴⁶

(5.67) and (5.68) exemplify the consequences which the use of DOM had on the alignment patterns of the Bactrian preterite. The unmarked form *ι χοηο*

144 “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.).

145 For Bactrian word order, see SFBG (201–215) and Jügel (2015: 393–403; 593f; 2022).

146 Most examples of DOM come from later Bactrian, but there are indications that DOM was already in use in Kushan Bactrian (Sims-Williams 2011b: 36).

‘the lord’ is the agent of sentence (5.67). At the same time, it is interpretable as the subject of tr.pret.3sg. φορταδο ‘sent’, because the patient ιαμφοσπαλο βορνικανο (a PN) is overtly marked as the direct object of the sentence by the addition of the DOM marker αβο.

(5.67) **ca3–5**

μισιδο ι χοηο αβο ιαμφοσπαλο βορνικανο ταρο αβιδο καρανο
φορταδο.

“Moreover, the lord has sent Yamsh-spal Burnikan thither to you.” (BD II: 68).

(5.68) 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.

(5.68) **cm9f**.

ταδομο πιδο ταμαχο σαχ[οανο] [αβο ρ]ωβιγο ... βαστινδο.

“Because of your sta[tement], I bound the men of Rob.” (BD II: 90).

I concur with Gholami (2009: 137) that (5.67) would be an example of nom.-acc. alignment and (5.68) 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.¹⁴⁷ 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.

147 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 Kushan Bactrian forms in -δανι/-δανε (βαοδανι ‘kingship’ in Rab. 2; βαοδανε in DN1, line 6; χοαδοδανι ‘lordship’ in KSPlate 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 2025: 196f.).

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:

- (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, can 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.¹⁴⁸

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 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 CE (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 Huvishka. By the time of Huvishka’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 CE, 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 Huvishka: it occurs in the colophon of version B of the Surkh Kotal inscription (Tremblay 2003: 128 fn. 23), here cited as (5.69). The different versions of the Surkh Kotal inscription still distinguish *dir.* from *obl.* case forms, as also shown by the *obl.sg.* *κοζγαρκι* ‘of Kuzgashk’ and *νοκονζικι καταλραγγι* ‘of Nukunzuk the

148 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.

lord of the marches' in (5.69). Yet, the agent of the pret.3sg. κῖρδι 'made', i.e. the PN βορζομιορο, is morphologically not distinguished from the patient of the sentence, i.e. μο σαδο 'this well'. The nouns in apposition with βορζομιορο, i.e. π[ο]υρο 'son', υαστιλγανζ[ε]ιγο 'inhabitant of Hastilgan', and μαρηγι 'servant', are, except the last one, likewise not marked in the expected obl. case.

(5.69) SK4B 24–27

οτ[ο]]μο σαδο βορζομιορο κῖρδι ι κοζγαβκι π[ο]υρο υαστιλγανζ[ε]ιγο
νοκονζικι καραλραγγι μαρηγι πιδο χοαδιο φρομαγο.

"And Burzmihr 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' 2012: 79 translation of SK4M 20–25).

The above fragment is accordingly one other indication that already in Kushan times neutral alignment patterns were possible for the Bactrian preterite.¹⁴⁹

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 μανο ναβιχτο 'I have written' or μανο αγγιτο / πιδοροβδο '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 μανο ναβιχτο < OIr. **manā nipixštam*, for instance, matches, except for the case of the pronoun, with Niya *maya lihta*

149 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, however, 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.

(and variants) < Skt. *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 $\mu\alpha\nu\sigma \nu\alpha\beta\iota\chi\tau\omicron$, 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.¹⁵⁰

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.¹⁵¹ 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.¹⁵² For *ditemi* ‘I gave’ to keep the same type of alignment as its supposed model * $\lambda\alpha\delta\eta\mu\iota$ (later $\lambda\alpha\delta\delta\eta\mu\omicron$) ‘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)

150 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.

151 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).

152 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.).

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.¹⁵³

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.¹⁵⁴

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

153 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 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.

154 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.

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 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.¹⁵⁵

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.

155 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.).

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 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 Bactrian¹⁵⁶ 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 *-δoyo / -τοyo* (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

156 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 (Kushan) 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, it has been argued 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).¹

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 (e.g. Lin 1996: 196; Carling

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- 1 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).

2005: 47; Adams 2017²: 453; Kogan 2017: 232; Trombert 2020: 387f.); and still others, including the present author, 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, however, 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,² 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.

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

2 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.

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.³ 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 r4; 195 + 726 uo4; 383 r4; 561 uo3; 590 uo3; 592 uo3; 897 o4; *aklatsa*: CKD 569 uo6; *agiltsa*: CKD 422 o6

DIR.PL. *aklatsa*: CKD 330 o2

The technical term *aṃklatsa*⁴ 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).

As part of his argumentation on "Tocharian C", Burrow (1935b: 675; LKD: 71 s.v. *aṃkra'tsa*) proposed to equate *aṃklatsa* with TA *āknats* / 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

3 I leave aside the comparison between TA *šoṣṭaṅk** 'finance officer' and Niya *svaṭhaṃgha* / *šoṭhaṃga* (LKD: ix), as, in this case, the Tocharian form is most likely borrowed from Niya Prakrit; cf. §3.2.4 s.v.

4 In the early literature on Niya Prakrit, the reading of this word was still *a(m)kra'tsa* (e.g. KD: 329). *kla* is the current transliteration of *ṛ*, an uncommon Kharoṣṭhī sign that consists of a default *ṛ ka* and an additional stroke crossing the stem of the *ṛ ka* horizontally. In CKD 897 o2 (2×), o4, 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 believe that Jiang's reading should be corrected to *kulaśulka* 'bride-price'. If this interpretation is correct and *ṛ* could also stand for *lka*, one can compare the character *ṛ lpa*, which is formed by adding a St. Andrew's cross to the stem of a standard *ṛ pa*.

“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 owing 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.⁵ 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 *āknats* / 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).⁶ Yet, no convincing etymology has presented itself so far.

2. *ogana*, an agricultural product

Attestations of the base form

DIR.SG. *ogana*: CKD 154 r3; 207 r3; 713 o8, o9; 714 o3

Attestations as a PN

DIR.SG. *Ogana*: CKD 286 o2; 701 rA6; GEN.SG. *Oganaša*: CKD 562 uo2; 562 cr1

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,

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- 5 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.
 - 6 Note also that another unexplained term for camels, i.e. *putgetsa*, contains the typically Bactrian cluster *-tq-* (← *-δy-* / *-dg-*) and perhaps also the same element *-tsa* as *aṃklatsa*.

this etymology is unconvincing, as it leaves the element *-ana* in *ogana* without an explanation.⁷

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.⁸ In addition, there are no good parallels for the phonological development assumed by Bailey.⁹ Consequently, also his etymology is not persuasive.¹⁰

3. *kitsaitsa*, a title

Attestations of the basic form

DIR.SG. *kitsaitsa*: CKD 187 o2, o8; 245 o1; 327 o6; 377 o1; 437 co3, uo6; 495 o7 (2×); 549 o6; 571 cr1; 572 uo3; 579 uo8; 580 uo4; 581 uo6; 582 uo6; 586 uo5; 587 uo6; 589 uo6; 590 uo6; 606 o1; 640 r1; 648 o6 (2×); 654 uo7; 655 cr1; 656 uo4; 666 o2; 715 o7; 719 o1; 730 o1; 797 co1, uo1; 809 cr1; 849 5; *kitsayitsa*: CKD 436 uo5; 561 uo2, cr1; 859 co2; 879 co2; *kiṃtsayitsa*: CKD 415 uo4, uo6; *kitsatsa*: CKD 574 co3a–3b, cr6; 652 cr2; 704 o1; 808 uo9

GEN.SG. *kitsaitsaṣa*: CKD 579 cr6

GEN.PL. *kitsaitsaṃna*:¹¹ CKD 671 r1

Being an official title from the judicial sphere, *kitsaitsa* 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

7 *oko* is mainly used metaphorically as the Tocharian equivalent of Skt. *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.

8 The normal Sanskrit word for ‘rice’ is *vrihi-*. 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.).

9 Bailey cites Gāndhārī loanwords into Khotanese that show a loss of intervocalic **d*. As **d* is, however, also lost in inherited words (e.g. Khot. *pāa-* ‘foot’ < **pāda-*), Bailey’s examples are not necessarily informative on Gāndhārī.

10 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.

11 This plural form proves that Atwood (1991: 176 fn. 11) was mistaken in claiming there to have been only one *kitsaitsa* at a time.

semantically and formally conceivable, various scholars have accepted it, be it with more or less hesitation.¹²

Also approving of Burrow’s etymology, Peyrot (2022: 86) has recently discussed what the exact source form of *kitsaiṭsa* may have looked like. He sees three options. First, *kitsaiṭsa* may reflect an archaic form **kəṭ^saiṭ^sṭ^e* 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 *ktsaiṭse* may have been borrowed with *i*-epenthesis in the first syllable (similarly Banti 2000: 6). Third, depending on the chronology of the 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, *kitsaiṭsa* 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 *kälyme* and TB *kälymiye* ‘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 1; CKD 26 o2; 78 oB10; 103 rB1; 126 o2; 143 uo2, uo3; 147 oA2; 157 o6; 160 o2; 187 o2; 259 o2; 375 o2, r1; 390 o2; 422 o2, o6; 436 cr3; 494 co1, uo1; 495 o6; 506 o2; 507 r2; 517 o1; 525 o2; 531 oB3, oB5; 533 r1; 552 r4, r5; 554 o1; 558 o3; 580 uo6; 588 cr1; 637 o8 (2×), o12; 639 co1, uo1; 648 o5; 676 co3, uo2; 709 uo3; 749 o1; 774 uoC2; 788 ur1; 805 cr8; 808 uo4, uo9

GEN.PL. *tasucana*: CKD 884 uo3

Compounds

DIR.SG. *rajyatasuca* ‘*tasuca* of the kingdom’: CKD 883 3 (2×)

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:

12 Cf. e.g. Thomas (1944: 66), Banti (2000: 6), Padwa (2007: viii; 271; 280), and DoT (263).

110) tentatively proposed to explain *tasuca* as an agent noun in *-uca* derived from the Tocharian B root *tās-* ‘to put, to place’.¹³

There are a number of linguistic problems with this suggestion. First, it is not obvious why a noun meaning ‘placer’ would have been used as 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. TB *taş(ş)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).¹⁴ 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, which are 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-.

8. *śuka*, a type of wine

Attestations of the base form

ADJ. *śuka*: CKD 272 o5, o6; 283 o4 (?); *śuki*: CKD 169 r1; 349 o6; 431 uo1 = 432 uo1, uo3 = uo2; *śukha*: CKD 387 o3¹⁵

In all of 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.).

¹³ For the Tocharian B agent nouns in *-uca*, see now Friis (2024: 271–276).

¹⁴ M. 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-*.

¹⁵ The compound *śukamuli* ‘dues payment’ (CKD 59 r3; 211 r8; 309 o3) must be put aside. In this case, *śuka-* may instead come from Skt. *śulka-* ‘price’ (TKD: 13; 40; 56).

According to Burrow, *śuka* would be an inherited word derived from Skt. *śuṣka-* ‘dry’ (LKD: 125f. s.v.).¹⁶ The variant spelling *śukha* could then be the phonologically regular outcome and *śuka* a deaspirated form (cf. *nikhal-* next to *nikal-* ‘to take out, provide’ < Skt. *niṣkālaya-*).¹⁷

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 (Late) Khotanese collocation *haṣka gūra* ‘dry grapes’ (DKS: 87; 494).¹⁸ Pace Burrow, it would, however, be unwarranted to assume on this basis that *masu* means ‘grape’ when combined with *śuka*, given that the meaning of *masu* is otherwise 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 *šamiyo*, are clearly not inherited (§3.7.2 and §6.2 s.vv.). It therefore seems worth considering that *śuka* is a loanword as well.

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: 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.

16 Burrow mentions two more possibilities, i.e. OIA **śukna-* ‘fermented’ next to Skt. *śukta-*, like Pkt. *mukka-* ‘released’ < OIA **mukna-* next to Skt. *mukta-*, and Skt. *śukla-* ‘bright’. The derivation from OIA **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.).

17 Burrow does not account for the variant *śuki*.

18 More recently, Trombert (2020: 397) also wrote about the Shanshan kingdom that “il est très probable que le raisin sec (en grappes ou en grains) ait été une denrée de consommation courante et même une marchandise commercialisée”.

9. *ṣamiyo*, a type of wine/corn

Attestations of the base form

DIR.SG. *ṣamiyo*: CKD 225 r7

INS.SG. *ṣamiyena*: CKD 637 o12; 703 r4, r6; 796 uo7–cr1; 797 uo3f.¹⁹

ṣamiyo (ins.sg. *ṣamiyena*) is always combined with either *aṃna* ‘corn’ (thus in CKD 703) or *masu* ‘wine’ (thus 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*.²⁰ 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 *oṃkalmem* ‘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’ does not receive any support from the contexts (cf. supra). I therefore conclude that a convincing etymology for *ṣamiyo* remains to be found.

10. *ṣilýoga* ‘document, written tablet’

Attestations of the base form

DIR.SG. *ṣilýoga*: CKD 470 o3

INS.SG. *ṣilýogena*: CKD 492 uo5

LOC.SG. *ṣilýogaṃmi*: CKD 140 cr1; 359 r2

19 *ṣamiya* in CKD 770 uo6 is probably unconnected.

20 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).

Compounds

DIR.SG. *ṣilyogalihitaga* ‘document, written tablet’: CKD 470 o3; *ṣilyogalihidaga*: CKD 471 r3f.; *ṣilyokalihitaga*: CKD 359 r1; *ṣilyokalihidaga*: CKD 312 uo2; 561 uo3, cr2; *ṣulgalihidaga*:²¹ CKD 582 cr6

DIR.SG. *ṣilyogahastalekha* ‘idem’: CKD 729 r1

The available contexts leave no doubt that the general meaning of *ṣilyoga* is ‘document, written tablet’. According to Lüders (1936b: 652–654; so also LKD: ix; 127 s.v. *ṣilpoga*), *ṣilyoga* needs to be compared with TA *ṣlyok* ‘strophe’, next to *ślok* ← Skt. *śloka*- (DTTA: 484; 503).²² As *śloka*- would have resulted in Niya **śiloga*,²³ 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 I: 739 no. 12748). It thus seems advisable to disconnect TA *ṣlyok* and Niya *ṣilyoga*; the etymology of the latter 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 which the supposedly non-Indian and non-Iranian nouns and personal names in the Niya documents would seem to share with Tocharian.²⁴

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,

21 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. *Caḍotamtimi* instead of *Caḍotammi* ‘in Caḍota’ and the personal name *Ramaṣtso* (also gen.sg. *Ramaṣtsoaṣa*) instead of *Ramṣotsa* (also gen.sg. *Ramṣotsaṣa*).

22 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’.

23 Cf. the SA Gāndh. ins.sg. *śilogano* in Av^{L6} recto 25.

24 Burrow’s ninth item, i.e. “no attempt is made to represent the reduced vowel *ā*, 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.

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 likewise has only unvoiced stops in its phoneme inventory.

Devoicing initial consonants is probably the strongest phonological argument in favour of a Tocharian substrate in Niya Prakrit.²⁵ Yet, it can hardly bear the burden of proof on its own, especially since there are sporadic instances of initial devoicing in South Asian Gāndhārī, e.g. *caṇa* 'meditation' next to *jaṇa* / *jaṇa* / *jhaṇa* < Skt. *dhyāna*- (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 much 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

25 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. βοδδο / 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; cf. also BD IV: 109 s.vv. βαταριλο and βατᾱροκο). 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. Δηβαυπο 'arrest' ← Parth. *dēbahr* or MBactr. *b'gyg* 'having a share' ← Parth. (?) **bāgig* (cf. Sims-Williams 2009a: 258).

Tocharian substrate.²⁶ 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-. This absence was compared by Burrow (1935b: 669) to the rarity of such fricatives in Niya Prakrit. In Iranian names, -f- is rendered as ʔ *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 discuss in more detail in §4.3.27.

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.²⁷ 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* 𑖅 *va*, phonologically /w/, occurs in non-Indic personal names, e.g. *Varpa*, while at the same time also interchanging with 𑖅 *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

26 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).

27 The Bactrian sibilant 𑖅 /š/ may have been a retroflex (cf. §2.2.4.1 and §4.3.18), but the same is true about Tocharian <š>.

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 𑖦 *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 lya* (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 phoneme 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*”).²⁸

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 *tsamgīna*, a type of corn, and the PN *Tsīna*. 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.

28 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. *λiako* /l(i)yākə/ < **dahyu-k(k)a*- (SA Gāndh. *Liaka*, cf. §3.4.1) shows that *l̥ya* could also occur in Bactrian names occurring in the Niya documents.

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 *-iṃ*), 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* (*-iṃ*) would correspond to a Tocharian A adjective suffix *-iṃ*, for which he refers his readers to Sieg, Siegling & Schulze (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 *-iṃ* 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 *ṣuliyiṃ* (A 77 b3), the obl.sg. of *ṣuli** ‘mountainous’ ← *ṣul* ‘mountain’.²⁹ In other words, a suffix *-iṃ* 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* (*-iṃ*) occurs in two of the potential Bactrian loanwords in Niya Prakrit discussed in §§3.2.3–3.2.4. These are *acovimṇa* from *aco* ‘frontier, border post’ ← *αδοπαοο /adšāwə/ < *ati-čyāwa- and *vaṣḍhigaṃ* from *vaṣḍhiga*, festival on the mountain ← *βαγδιγο /vaγdigə/ ‘tribute’ from βαγδο ‘distributed’ < *baxta- + -iγo < *-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

29 Of *āriñci**, there are no other forms attested (cf. DTTA: 42f.). For *ṣuli**, cf. additionally the nom.pl. *ṣulīni* (A 75 a1; A 318 + 319 b4) and the obl.pl. *ṣulinās* (A 200 a3).

suffix -ηνο/-ινο in Bactrian.³⁰ This suffix is attested in some personal names, e.g. ράρτηνο < **rāšt-aina*- ‘related to justice’, in the adjective σιμνο ‘made from silver’ based on *σιμο ‘silver’ ← Gr. ἄσημος, and perhaps in the place name σαγγινο (Korn & Olsen 2012: 214).³¹ Nevertheless, there is so far only little evidence that -ηνο/-ινο was an inherited suffix in Bactrian. Sims-Williams (BPN: no. 125) noted that all of the personal names ending in -ηνο/-ινο 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).³² In order to confirm -ηνο/-ινο 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*.³³

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)ιγο /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’.

30 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*.

31 It seems conceivable that σαγγινο is a derivative from σαγγο* ‘stone’, indirectly attested in personal names (cf. BPN: no. 401 and note also obl.sg./dir.pl. ασαγγε ‘stone(s)’ in SK4M 13; SK4A 18; SK4B 17).

32 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 -*inaa*- also have a more general meaning ‘affected with, related to’ (cf. Degener 1989: 138–152; Korn & Olsen 2012: 205f.). Therefore, if -ηνο/-ινο was also a native Bactrian suffix, its general meaning may also have been ‘related to’, fitting with -*ina* in Niya Prakrit.

33 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).

In his article about “Tocharian C” (1935b: 672), Burrow noted that the use of the suffix *-i* became “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 cākkār* ‘wheel of the dharma’ ~ Skt. *dharmacakra*- ‘idem’.³⁴

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 *-iyo* /*igə*/ < **-iya-ka*-. As the usage of *-iyo* closely resembles that of *-i* in Niya Prakrit (cf. BD II: 217 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)ṣa*]. Examples include *Smagasa* (CKD 71 uo3, gen.sg. *Smagasae*), *Apiṣa* next to masc. *Apika* / *Apita* (CKD 11 uo2, gen.sg. *Apiṣae*), and *Kuñiṣa* next to masc. *Kuñita* (CKD 110 oA4, gen.sg. *Kuñi[sae]*). Outside personal names, another instance of a feminine marker *-s-* may occur in the otherwise unexplained adjective *tirsa*.³⁵ This form is twice combined with *vaḍavi* ‘mare’ (CKD 39 cr1; 771 uo6), whereas the similarly looking *tirṣa* by default modifies *aśpa* ‘horse’ (CKD 39 cr1; 45 uo3; 434 uo4; 573 uo7). Put differently, *tirsa* is probably the feminine equivalent of masculine *tirṣa* (cf. LKD: 95 s.v.).³⁶

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

34 In fact, the translation of Sanskrit compounds into Tocharian is more complicated than Burrow presents it. See recently Meunier (2015).

35 Sylvain Lévi’s (*apud* Bloch 1937: 52) suggestion that *tirsa* means ‘three years old’ does not receive strong support from the available contexts.

36 In a handwritten note added to his copy of LKD (106), Burrow suggested that the adjective *pursa(ka)*, like *tirṣa* / *tirsa* used for animals, is another feminine form containing the same suffix *-sa*. That *pursa(ka)* could be used for female animals is shown by CKD 383 r1, where the gen.fem.sg. *taya* < *tasyāḥ* ‘her’ is co-referential with an aforementioned *pursaka* camel.

preterite participle of *yām-* ‘to do’ is TA/TB *yāmu* ‘done’, its nom.fem.sg. is TA *yāmus* / TB *yāmusa*.³⁷ 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 (1996a: 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).³⁸ The Bactrian suffix referred to typically occurs as *-so* (*-zo* after nasals).³⁹ Yet, the Kushan Bactrian adjective *αβαβσα* ‘waterless’ (Ayrtam 4, cited p. 163, fn. 248), 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)sa*), 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 = 2025a: 84; 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 /tsā/. Unless /ts/ could occasionally be simplified to /s/ in Bactrian (e.g. in certain clusters),⁴⁰ one therefore has to presume a simplification (and subsequent voicing) of Bactr. /ts/ to Niya *-s-* / *-š-* / *-z-*. If one derives it out of Bactr. *παρasso* /parātsə/ ‘away’ < **parāčā*, Niya *paraša* ‘abduction, plundering’ (also 1× with *-s-*) would be a parallel for this sound substitution (on which see §3.3.2 s.v. *paraša* and §4.3.15).

In brief, Sims-Williams’ idea to derive Niya *-(i)sa* (*-(i)sa*) out of the Bactrian feminine suffix *-σα* (later *-so*) is to be preferred over Burrow’s comparison with Tocharian.

37 On the formation of the Tocharian preterite participles, including the feminine, see Peyrot (2010).

38 Not having spread to the inherited lexicon, the suffix *-(i)sa* (*-(i)sa*) 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).

39 Cf. e.g. the female PN *βαγοαζιασο* < **baga-āzāyata-čī-* ‘dear to god’ (BPN: no. 45) and the adjective *φομανζο* ‘commanding, possessing authority’, seemingly a feminine to **φομαγγο* < **fra-māna-ka-*.

40 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.

6.4.5 The plural/collective in *-u* in *paḳeyu* ‘allotments, shares’

Compare §3.2.3 s.v. *pake* for a rejection of Burrow’s comparison between the plural/collective *paḳeyu* ‘allotments, shares’ and the rare Tocharian A plural in *-u*, as in *cmolu* ‘births’ ← sg. *cmol*.

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 formation⁴¹

aśpaṃca ‘horses’: CKD 387 o5; 681 oC2

uṭaṃca ‘camels’: CKD 132 r1; 387 o8;⁴² 665 o3; 681 o1; 696 o3

jaṃdunaṃca ‘worms’: CKD 565 rB1

dajhaṃca ‘slaves’: CKD 133 r1

paṭaṃca ‘silk rolls’: CKD 660 oA8; 660 oB1

paśunaṃca ‘sheep’: CKD 683 r1

bhumaṃca ‘lands’: CKD 366 o2; 366 o4; 713 o6; 713 o7

makaḍaṃca ‘monkeys’: CKD 565 rB5

mahatvaṃca ‘magistrates’: CKD 696 o6

śaḍaṃca ‘enclosures, vineyards’: CKD 85 oF1

storaṃca ‘horses’: CKD 13 uo2

striyaṃca ‘women’: CKD 552 r4; 552 r5

Forms in *-aṃca* combine with (i) dir.pl. *ede* ‘these’;⁴³ (ii) numerals higher than one;⁴⁴ and (iii) verbs with unambiguous plural morphology.⁴⁵ There is consequently no doubt that they are indeed plurals. Leaving aside that *-aṃca*

41 I have excluded *valagaṃ ca* (CKD 367 o2, o3) from this list of attestations, as this probably means ‘and a guard’ rather than ‘guards’. In CKD 797 cr1, 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 Hasuiké (1996: 307), I read and translate the relevant sentence as *tuo aṭa namdha goṭhammi thaviteṣi* ‘you deposited a load of flour in the farm’ (cf. also §3.3.2 s.v. *aṭa*).

42 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 *ṭ* *ṭa*.

43 CKD 366 o4: *ede bhumaṃca* ‘these lands’; 387 o8: *ede uṭa[m]ca* ‘these camels’.

44 CKD 660 oA8, oB1: 4 3 *paṭaṃca* ‘seven silk rolls’; *paṭaṃca* 2 ‘two silk rolls’; 665 o3: *uṭaṃca* 10 ‘ten camels’. Cf. also CKD 85 oF1: *śaḍaṃca sarva* ‘all enclosures, vineyards’.

45 CKD 681 oC2: *aśpaṃca ... khayitaṃti* ‘horses ... ate’; 696 o6: *mahatvaṃca ... kareṃti* ‘magistrates ... do’.

is much less frequently attested than *-a*, it has, however, proved impossible to discern a difference in usage or distribution between the two plurals.⁴⁶

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.⁴⁷

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*) < Proto-Tocharian **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' (my example). 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.⁴⁸

46 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.

47 See Barnett (1927) and Thomas (1928) for further debate on this proposal.

48 CKD 13 uo2: *vaḍavi storaṃca* 'mares and horses'; 387 o5: *khulaūṭa aśpaṃca* 'camels from the herd and horses'.

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 rB1) and *paśunaṃca* ‘sheep’ (CKD 683 r1) are later analogical formations. Yet, if so, it is not entirely clear how one can account for their morphology. According 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.⁴⁹

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.⁵⁰ 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. In any case, *-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

49 Irrespective of whether this is diachronically also the correct analysis, *jaṃdunaṃca* and *paśunaṃca* look more like a gen.pl. followed by *-(ṃ)ca* (cf. gen.pl. *paśuna* < Skt. *paśūnām* in CKD 725 r3).

50 First, *uṭa* is probably not the phonologically regular outcome of Skt. *uṣṭra-*. Given its semantics (cf. §6.2 s.v. *aṃklatsa*), it could be a Bactrian loanword, perhaps from *οτρο /otrə/ < OIr. **uṣtra-*, with **-št-* to Bactr. *-t-* /t/ (SFBG: 47). As there is, however, no parallel for the development of **-štr-* 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 śaḍa*). Yet, this etymology is not very attractive as *śaḍa* would be the only instance of *-ḍ-* /ɾ/ corresponding to Skt. *-l-*. Third, the etymology of *paṭa* ‘silk roll’ and its Indo-Aryan cognates remains uncertain (EWAia III: 298), so this may also be a recent loanword.

syntactic similarities between Tocharian and Niya Prakrit. In this section, I argue that neither of them is necessarily the result of language contact.

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).⁵¹ 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.⁵² 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 kuṣaiṃne ostwane* ‘in/to towns, villages, and houses’. Yet, once again, there is no need to invoke external influence. The

51 Sieg, Siegling & Schulze (TG: 205ff.) discuss Tocharian A group inflection in detail. The situation in Tocharian B is largely comparable.

52 See Caillat (1990: 11ff.; 23 n. 18) and von Hinüber (2001²: §295) with the references listed there.

conjunction *ca* has hardly left a trace in NIA (cf. Bloch 1965: 310; CDIAL I: 246 no. 4533), and its infrequency in Niya Prakrit may merely be an early sign of its general disappearance.⁵³ 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 *kitsaitsa* 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, *kitsaitsa* 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 Kushan times, the Bactrian elements in Niya Prakrit should not make us believe that Bactrian was the substrate language spoken by the Shanshan people.⁵⁴ 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 BCE to 650/550 BCE, can be identified with the arrival of speakers of Proto-Tumshuqese-Khotanese to the region.⁵⁵ Based on this identification, he suggests that the area east of Khotan and the Keriya river “was Iranian-

53 Cf. the disappearance in Niya Prakrit of the Sanskrit 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.

54 Even during Kushan times, it seems unlikely that a large part of the population had shifted their language to Bactrian.

55 Dragoni’s examination of Proto-Tumshuqese-Khotanese loanwords in Tocharian has added linguistic evidence to this hypothesis (Dragoni 2023b: 254f.).

speaking before Middle Indian was introduced there”, although “the details and consequences of this hypothesis need further study” (Peyrot 2018b: 276).⁵⁶ 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.

56 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 have argued in §5.4.

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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 Kushan 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 Kushan 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 55 were probably, and another 25 potentially borrowed from Bactrian (respectively 56.7% and 25.8%). 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 the loanwords which can be securely or possibly ascribed to a Bactrian source. We arrived, amongst others, at the following conclusions: the Bactrian loanwords were adopted in the Kushan period (1st–3rd century CE), 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. $\omega\gamma\omicron\lambda\iota\beta\delta\iota\gamma\omicron$ (later $\beta\iota\delta\delta\iota\gamma\omicron$) ‘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).¹

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 Kushan period not occurring in Niya Prakrit but covering the same type of semantic domains.²

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.

- 1 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.
- 2 Falk (2010b: 76–79 = 2013a: 247–250) gives an overview of Kushan 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 emphasises that these loanwords are often administrative and/or military terms.

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 CE by the Kushan emperor Kujula Kadphises. As a result of his conquest, Gandhāra was ruled by the Kushan dynasty for about two centuries.³ During this period, a Kushan 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.⁴ The Kushan kings also facilitated trade over the land routes connecting northern India with Bactria and other parts of Central Asia.⁵ 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.⁶

The contact between Bactrian and the predecessor of Niya Prakrit would be a second, (slightly) more intense contact situation that resulted in more 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 Kushan empire

In my opinion, the Bactrian influence on Niya Prakrit should be interpreted against the backdrop of the Kushan administration system. The Kushan dynasty ruled over a vast empire, which brought with it a need for an efficient

3 On the conquests of Kujula Kadphises and the Kushan rule in South Asia, see e.g. Sims-Williams & Cribb (1996: 107); Neelis (2011: 132–135); Falk (2015b: 88); Benjamin (2018: 185).

4 On the administration of the Kushan empire, see in more detail §7.3.

5 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 Kushan empire in facilitating long-distance trade is also highlighted in Benjamin (2018: 176ff.).

6 For the difference between these two mechanisms, see §3.1.1 and the references mentioned there.

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 Kushans 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 Kushans survived the change of dynasty (Bracey 2020: 128f.).

Gāndhārī literacy goes back at least to Aśokan times (3rd century BCE), and the continuation of formulaic phrases and writing practices from Achaemenid Official Aramaic, the earlier chancellery idiom of the region,⁷ suggests that Gāndhārī was used for administrative purposes in, for example, monasteries long before the Kushan conquest. When the Kushan 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 Kushans,⁸ and there are good reasons to think so: Gāndhārī inscriptions have been found in the heartland of the Kushan empire in Afghanistan, where Bactrian was the main vernacular;⁹ when conquering Gandhāra in the early-mid 1st century CE, Kujula Kadphises continued to mint coins with Kharoṣṭhī script legends;¹⁰ the Bactrian inscription erected by Vima Taktu in Dašt-i Nāwūr is accompanied by a Gāndhārī version (CKI 231; Fries *et al.* 2025); 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

7 For the Aramaic heritage in Gāndhārī, see §2.1.1 and the references cited there.

8 “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).

9 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.).

10 Adopting Gāndhārī as an administrative language may have happened concomitantly. The use of the Kharoṣṭhī script on Kushan coins was discontinued during the reign of Kanishka I in the 2nd century CE, but this does not prevent that accounts, letters, and contracts continued to be written in Gāndhārī.

extent of the Kushan dominions at the time of Vima Kadphises (Skinner 2017: 63f.; Salomon 2024: 524).¹¹

More than likely, Niya Prakrit is an offshoot of a type of Gāndhārī used for administrative documents by the Kushans. This conclusion is, *inter alia*, supported by the official titulature of the Shanshan kings, which, especially in the earliest Niya documents, undoubtedly continues a Kushan prototype (see Brough 1965: 596f. = 1996: 291f.). If the ancestor of Niya Prakrit was used by the Kushans, this may also explain some of the palaeographic peculiarities of Niya Kharoṣṭhī; the modified *akṣara* 𑀘𑀓𑀭𑀮, for instance, is so far only attested in the Niya documents and on Kushan coins (cf. Glass 2000: 98; Falk 2009: 111 = 2013a: 190) and may have been invented by the Kushan chancellery to represent the Bactrian sound /w/ (cf. §4.3.22).¹²

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 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 Kushan officials, who had to fulfil official duties in Gandhāra and lived there, but whose mother tongue was Bactrian.¹³

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

11 Kushan 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.

12 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 Kushans. One could make the same argument about the Niya Kharoṣṭhī sign 𑀘𑀓𑀭𑀮, if Hitch (1984: 199f.; cf. also Brough 1962: 72f.) is right that 𑀘𑀓𑀭𑀮 developed from an earlier conjunct 𑀘𑀓𑀭𑀮𑀭𑀮 (e.g. attested in the *Khotan Dharmapada*), and both signs were originally intended to write the Iranian cluster xš.

13 Some Iranian names occurring in Indian inscriptions can also be linked to Kushan 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 whether people having Bactrian names also functioned as scribes.

authorised by the Kushan 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 Kushan dynasty, should at least have been a spoken medium in the imperial chancellery.¹⁴

If it is accepted that native speakers of Bactrian used Niya Prakrit as a chancellery idiom, 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 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 $\omega\gamma\omicron \lambda\iota\beta\delta\iota\gamma\omicron$ (later $\beta\iota\delta\delta\iota\gamma\omicron$) ‘one another’ as Niya *eka b(h)iti* ‘one another’. In this case, Bactrian would not be the superstrate but the substrate language.¹⁵

7.4 A comparison with Achaemenid Official Aramaic

The idea that the use of Gāndhārī for administrative purposes by Kushan officials was responsible for the Bactrian influence visible in Niya Prakrit can

14 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 Kushans. 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 Kushan and Achaemenid empires will be given in §7.4.

15 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 substrate 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.).

be strengthened further by comparing the language policy of the Achaemenid empire and the role played therein by Achaemenid Official Aramaic.¹⁶ The official language of the Achaemenid dynasty was Old Persian, an Iranian language documented on monumental inscriptions which commemorate politically important events. Yet, Aramaic served as a nation-wide chancellery language for official correspondence, legal documents, financial accounts, and so forth.¹⁷ 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 Kushan 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 Kushan empire, Tassob emphasises the use of Bactrian as a nation-wide official language. She 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 Kushan empire is, I suggest, more closely paralleled by that of Old Persian in Achaemenid times; like Old Persian, Kushan Bactrian was the official language of the ruling dynasty;¹⁸ used in their stylistically refined inscriptions;¹⁹ and only understood by people in the heartland of the empire, not in conquered territories.

Whether Kushan 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 Kushan period. If Bactrian was used in the written administration of the Kushan 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).

16 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).

17 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).

18 Bactrian may have taken over its function as the official language of the Kushan empire from Greek during the reign of Kanishka I (cf. e.g. Fussman 1976; Sims-Williams & Cribb 1996: 110f.; Cribb 1998).

19 Occasionally, the Old Persian and Kushan Bactrian inscriptions also share phraseological parallels (see now Härtel 2023: 128–157 with ref.).

Achaemenid Official Aramaic can be more fruitfully compared to Gāndhārī in its function as a chancellery language of the Kushan 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 Kushan dynasty ruled over Bactria and conquered Gandhāra (cf. §7.3). As the Achaemenids did with Aramaic, the Kushan rulers took over an already existing administrative tradition in a language that was spoken by a significant part of the population of their empire.²⁰ For the Kushan officials, Gāndhārī was not their mother tongue, but nor was Aramaic the native 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.²¹

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).²² Examples include Aram. **zgnd* ‘messenger’ ← OIr. **zganda-*; *hmrkr* ‘accountant’ ← **hamāra-kara-*; *hndyz* ‘garrisoned’ ← **han-daiza-*; *hndrz* ‘instruction, order’ ← **han-darza-*; *krtnk* ‘bodyguard’ ← **kāra-tanū-ka-*; *ptgm* ‘message, report’ ← **pati-*

20 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).

21 A minor difference between Achaemenid Official Aramaic and Gāndhārī is that the latter was never used throughout the whole territory of the Kushan empire; cf. e.g. the use of Epigraphical Hybrid Sanskrit rather than Gāndhārī in the Kushan inscriptions from Mathura, and note Strauch (2012: 164 fn. 32): “What we know of the language policy [of the Kushan empire] seems to indicate that the language and script of the respective region was used in administrative affairs”.

22 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.

gāma-; *ptp* (also *ptp'*; *ptw'*) 'ration' ← **piθwa-*; and *'sprn* '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. *'krst*, a type of garment ← OIr. **ā-kṛsta-* (textile); *'spmng* 'horse-hemp' ← **aspa-manga-* (plant name); *dwg* 'yoghurt, sour milk' ← **dūga-* (food); and *y'sšt* '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. *'hr* 'then, afterwards' in Achaemenid-period texts has, for instance, been argued to be modelled after that of OP *pasāva* 'idem'.²³ 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.²⁴

The most well-known example of Old Persian influence on Aramaic morphosyntax is the *qṭl l-* resultative construction, which is generally assumed to be based on the Old Persian *manā kṛtam* construction.²⁵ 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 Kushan empire, i.e. that of a chancellery language.

23 For a list of Old Persian expressions and idioms calqued into Aramaic, including *'hr*, see Tavernier (2017: 344–347; 2020: 84–87).

24 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".

25 Cf. e.g. Gzella (2004: 184–194), Ciancaglini (2008: 30–37), and Coghill (2016: 162ff.).

CHAPTER 8 Concluding remarks

This study 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 *-ani*) 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 Kushan dynasty (1st–3rd century CE) 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 Kushan 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 Kushan 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 Kushan 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 Douglas 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 Kushan 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 Kushan 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).¹

The hypothesis that the Kushans 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 found,² and which is connected to the Tarim Basin via the Karakorum mountain range. For the results of this study to remain unaffected, it suffices that the predecessor of Niya Prakrit originated in a region under Kushan rule (as is almost inevitable).

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- 1 According to Härtel (2023: 387), the kingdoms in the Tarim Basin were “vassal states” of the Kushan Empire “with a high degree of both internal and external autonomy”.
 - 2 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) whether 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) whether Bactrian loanwords in the Tarim languages may have passed through a Gāndhārī intermediary.

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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.).¹ For five other Greek loanwords in Niya Prakrit, a Bactrian intermediary cannot be proved. Their etymology is briefly examined in this appendix.²

1. *khi*, a unit of measure

Attestations of the base form

DIR.SG. *khi*:³ CKD 2 rA1, rA2, rA3, rB1, rB2, rB3, rC1, rC2, rC3, rD1; 108 oA4, oB2, oB3, oC3, oC4, r1, r2, r3; 131 oA3; 142 r1; 151 r2; 154 oB1, oB2; 167 oA2, oA3, oA4, oB3, oC2; 196 oB3, etc.

INS.SG. *khiyena*: CKD 580 uo2

DIR.PL. *khi*: CKD 25 o3; 60 rA1, rB2; 67 o1, o5; 76 oA2, oA3, oA4, oA5, oA6, oA7, oA8; 89 o7; 93 oA2, oA3, oC1, oC2, oC3, oD1, oD2b, oD3, oD4, rA2, rA3, rB2, rB3, rB4, rC1, rC2, rC3, rD1, rD2, rD3; 94 r24, r28, r29, r35; 98 o2; 104 o3; 108 oA1, oA2, oA3, oA5, oB1, oB4, oB5, oC1, oC2, oC5, r4; 115 oB2; 131 oA1 (2×), oA2, oA3, oA5, oA6 (2×), oA7, oA9, oB1, oC1; 137 oB1, oB2, oB3, oB4, oC1, oC2, oC3, oC4, oD2, oD3, oD4, rA1, rA2, rA3, rA4, rB3; 140 cr1, cr3; 146 oB2; 148 oB3, etc.; *khi[y]*. (*khi[y]*(**e*)?): CKD 656 uo3

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).⁴ Yet, this comparison is doubtful,

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- 1 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.
 - 2 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).
 - 3 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.
 - 4 The same unit of measurement may also be attested in Tumshuqese (cf. Ogihara & Ching 2024: 310 fn. 27).

as *kha* has been argued to be a Tibetan loanword (Emmerick 1985: 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. μέδιμος. *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 whether *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 3–4.⁵

The main issue with Burrow's etymology is why χοῦς, phonologically /k^hūs/ 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.⁶ <ει> started already in the 4th century BCE to

- 5 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); also Mairs (2014: 27–56) and Wallace (2016: 223–225).
- 6 The earliest literary attestation of χοεῖς seems to be in Dicaearchus of Messene fr. 23 (4th century BCE), quoted by Athenaeus, *Deipnosophistae* IV 141 a ff.: ... συμφέρει δ' ἕκαστος εἰς τὸ φιδίτιον ἀλφίτων μὲν ὡς τρία μάλιστα ἡμμέδιμνα Ἀττικά, οἴνου δὲ χοεῖς ἑνδεκά τινας ἢ δώδεκα παρὰ δὲ ταῦτα τυροῦ σταθμόν τινα καὶ σύκων, ἔτι δὲ εἰς ὀψωνίαν περὶ δέκα τινας Αἰγινάιους 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 Aeginetan obols to buy the food." (Verhasselt 2018: 127). Observe the combination of χοεῖς 'pitchers' with the numerals ἑνδεκά 'eleven' and δώδεκα 'twelve'.

be pronounced as /ī/ (see VG³: 69–75), meaning that χοῖς was probably pronounced at the time as /kʰoĩs/ or /xoĩs/.

The assumption that *khi* is borrowed from χοῖς /kʰoĩs/ or /xoĩs/ would provide a straightforward explanation for the *-i-* in *khi*, and the assumed loss of final *-ç* /s/ can be paralleled in other Greek loanwords into Gāndhārī, including *stratega* ‘general, commander’ ← στρατηγός and *meridarkha* (and variants) ‘district official’ ← μεριδάρχης.⁷ My proposal requires that the *-o-* /o/ in Gr. χοῖς 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 *-ç* /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. *kšuna*). Consequently, χοῖς /kʰoĩs/ 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 can 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 *-vi-* /wi/ is only found after another vowel, never after another consonant.⁸

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. χοῖς rather than the nom.sg. χοῦς.

7 The loss of final *-ç* can be attributed to the general MIA constraint against final consonants other than *-ṃ*. Deriving *khi* from the nom.sg. χοῦς of course also necessitates the final *-ç* to have been lost.

8 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 r2

DIR.PL. *drakhma*: CKD 702 r2; *trakhma*: CKD 324 + 328 uo5

abbr. *dra*: CKI 90 1; 173 1; 190 1; 241 1; 260 1; 450 1; 716 1; 722 1; 729 1; *tra*: CKI 721
1

drakhma is borrowed from Gr. δραχμή, originally a type of coin, but later also used as a measure of weight.⁹ There is no concrete indication, phonological or other, to assume that *drakhma* was borrowed from Bactr. Δραχμο (δδραχμο) rather than directly from Greek.

3. *paraṃpula* ‘military camp’

Attestations of the base form

ABL.SG. *parabulade*: CKD 415 uo6 (cf. TKD: 83f.)

LOC.SG. *paraṃpulaṃmi*: CKD 586 cr1

Thomas (1936b) plausibly connected Niya *paraṃpula* to Gr. παρεμβολή in its Hellenistic meaning ‘military camp’.¹⁰ 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, however, 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 /pirōvā/ ‘fortress’, Bactr. π /p/ would correspond to *b* in Ossetic and not to **f* (cf. §3.2.3 s.v. *piro*). Due to the uncertainty of the Ossetic evidence, I will leave it out of consideration here.

Recently, a Bactrian cognate παραμβολο ‘military camp’ has surfaced in line 14 of the birchbark letter **ks** (BD IV: 40, 121).¹¹ One could therefore argue that this Bactrian word is the direct source of *paraṃpula*. Yet, I cannot think of any linguistic argument which excludes Niya *paraṃpula* and Bactr. παραμβολο from being independent loans from Gr. παρεμβολή: the final *-a* in *paraṃpula* contrasting with the *-η /ē/* in παρεμβολή merely means that the

9 Cf. Bailey (1949a: 128f.); Tóttössy (1980: 131f.); Wang (2004: 67). See further s.v. *sadera*.

10 For this meaning, cf. e.g. Polybius 3.74.5.

11 The context in which παραμβολο occurs is not very clear, however.

word has been adopted into the productive *a*-declension and has no phonetic relevance; the apparent substitution of Gr. -ε- /e/ with Gāndh. -a- is paralleled by, amongst others, *Arthamisiya*, a month name borrowed from Gr. ἀρτεμίσιος (CKI 152 1; 159 1a; 509 1a);¹² and the required rendering of Gr. -ο- /o/ as Gāndh. -u- finds parallels in the calendrical term *yambulima* ‘intercalary’ ← Gr. ἐμβόλιμος ‘idem’ (CKI 328 5) 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). As a result, I did not include *parampula* in the list of Bactrian loans discussed in Chapter 3.

4. *sadera*, a unit of measure

Attestations of the base form

DIR.PL. *sadera*: CKD 702 r2; 808 uo7 (?); CKM 430 2 (*su sadera*)

abbr. *sa*: CKI 91 1; 190 1; 241 1 (2×); 260 1; 262 1; 450 1; 716 1; 717 1; 718 1; 721 1;¹³ 722 1; 724 1; 725 1; 727 1; 728 1; 729 1; *s[ɣ]a* (*sa* intended by the scribe?): CKI 90 1; 263 1; 714 1; *śa*: CKI 715 1; *sade*: CKI 173 1; *śa*: CKI 241 1

Compounds

DIR.SG. *suyarnasadera* ‘golden stater’: CKD 419 uo3f; 889 cr8; *suyarnaśadera*: CKD 431 cr6 = 432 cr3; DIR.PL. *suyarnaśadera*: CKD 12 + 43 uo3; *suyarnasatera*: CKD 324 + 328 uo5

As first noted by Thomas (1924), *sadera* is another Greek loanword.¹⁴ 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*, Syriac ‘*styr*’ (Ciancaglini 2024: 98f.), MP *satēr* (as per Bailey 1930: 17), Sogd. *st’yr*, Khot. *satīra-*, TB *satera*, and Old Uyghur *sītir*.¹⁵

All forms simplify the initial *st-* to *s-*, presumably due to a dissimilatory effect of the *-t-* in the next syllable.¹⁶ 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

12 For the alternative rendering of Gr. -ε- /e/ as Gāndh. -i-, cf. §3.2.2 s.v. *milima*.

13 Read as *dra* by Falk (2001: 314 = 2013a: 53), but see now Baums (2024: 281) for the reading [*sa*].

14 See also Agrawala (1953c); Falk (2001: 309–314 = 2013a: 48–53); Wang (2004: 66f.).

15 For its use as a weight in Bactrian and Sogdian, see Sims-Williams (2016a).

16 Note, however, the Bactrian abbreviation στα for ‘stater’, where the dissimilation seems not to have happened (Dan, Grenet & Sims-Williams 2018: 233).

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 3–4.¹⁷

5. *sotira*, a title

Attestations of the base form

DIR.SG. *sotira*: CKD 580 uo6

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 (cf. Härtel 2023: 164f.).¹⁸

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.

17 In the case of Gāndh. *stratega* ‘general, commander’ ← Gr. στρατηγός, dissimilation may have been blocked by the additional *-r-*.

18 The usual Gāndhārī equivalent of σωτήρ is *tradara* (and variants) < Skt. *trātṛ-* ‘protector’. In a later article (1970), Burrow added Pkt. *soḍīra-* / *soṇḍīra-* and Skt. *śautīra-* / *śauṇḍīra-* ‘heroic’ as potential further derivatives from σωτήρ (accepted in EWAia III: 498).

APPENDIX 2 A linguistic analysis of CKD 661

This appendix complements §5.4.7 by presenting an exhaustive list of the linguistic features in which the Khotan Prakrit document CKD 661 differs from Niya Prakrit. Although CKD 661 has already been examined in several studies,¹ I believe that there is still room for new observations; and it will, in any case, be helpful to have a comprehensive overview. The features are organised into three categories: (i) lexicon; (ii) orthography and phonology; and (iii) morphology.

1. Lexicon

- (i) *kidā* ‘on account of’ (o4, o6)

kidā < loc.sg. *kr̥te*, whereas Niya Prakrit always has ins.sg. *kritena* / *kridena* in the meaning ‘on account of’.

- (ii) *dhalavagu* ‘document (?)’ (o7)

A hapax of uncertain etymology not used in Niya Prakrit.

- (iii) *dheva* ‘god, lord’ (o1)²

This term is used in Khotan Prakrit as a king’s title instead of the usual *devaputra* ‘son of god’.

- (iv) *nagaragā* ‘city-dweller’ (o2)

This adjectival formation does not occur in the Niya documents, but compare the gen.sg. *[na]garaka[sa]* in CKI 78 1.

- (v) *puradu* ‘in front of’ (o7)

The corresponding postposition in Niya Prakrit is *puraṭha* ‘in front of’ < *purastāt*, like Khotan Pkt. *puradu* < *purataḥ* frequently used to identify witnesses (cf. LKD: §92). Boyer *et al.* (1920–29) read a Niya form *purata* ‘in front of’ in CKD 377 r3, a possible cognate of Khotan Pkt. *puradu* (cf. LKD: 106 s.v.), but Burrow (TKD: 76) corrected this reading to *puraṭha*.

1 See Noble (1931); Burrow (1934: 514f.; 1936: 430–434); Konow (1936); Salomon (2011b: 182f.); Dragoni, Schoubben & Peyrot (2020); Peyrot (2025: 286–290).

2 For the reading *dheva*, see Konow (1936: 234).

(vi) *śudhi* ‘clearing, payment’ (o5)

i-stem (cf. Skt. *śuddhi*-), whereas the Niya equivalent is *śudha* (cf. Skt. *śuddha*-).

(vii) *saṃvritā* ‘been’ (o5)

Derivatives of Skt. *saṃ* + √*vṛt* are not used as a copula in Niya.

(viii) *hinajha* ‘general’ (o1)

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 of *-e-* > *-i-* and *-o-* > *-u-* and the vowel <ā> (Burrow 1934: 515; 1936: 430; Konow 1936: 239f.)

A defining feature of Khotan Prakrit is the raising of *-e-* to *-i-* and *-o-* to *-u-*. The relevant examples are loc.sg. *kali* ‘time’ < Skt. *kāle* (o2, o6); *sagaji* ‘to’ < *sakāśe* ‘in the proximity of’ (o4); *niravaśiṣo* ‘without remainder’ < *niravaśeṣa-* (o4); *uvadayi* ‘starting with’ < *upādāya* (o5); opt.3sg. *cudiyadi* ‘he would complain’ (~ Niya Pkt. *codeyati*) (o6); opt.3sg. *vidiyadi* ‘he would inform’ (~ *vedeyati*) (o6); opt.3sg. *uthaviyadi* ‘he would raise’ (~ *uthaveyati*) (o6);³ pres.3sg. *dhinadi* ‘he gives’ (~ *denati*) (o7); ins.sg. *ajiṣanayi* ‘at the order of’ < *adhyeṣaṇā-* (o7); and *puradu* ‘in front of’ < *purado* < Skt. *purataḥ* (o7). In the introductory part of the document, where Sanskrit influence is generally more visible (Burrow 1936: 422), *-e-* and *-o-* are preserved: loc.sg. *saṃvatsare* ‘year’ (o1); loc.sg. *maṣe* ‘month’ (o1);⁴ *Khotana*° ‘Khotanese’ (o1); *dheva* ‘god, lord’ (o1).

Since the vowel raisings are reminiscent of the Khotanese sound changes **-ai-* > **-ē-* > *-ī-*, e.g. *hīnā-* ‘army’ < **hainā-*, and **-au-* > **-ō-* > *-ū-*, e.g. *ggūna-* ‘colour’ < **gauna-*, they are probably the result of Khotanese substrate interference (Burrow 1936: 430; Konow 1936: 239f.; Peyrot 2025: 287). At the same time, the word accent seems to have played a role: Peyrot (2025:

3 Wrongly read as *uthaviyadi* by Boyer *et al.* (KD: 249). In contrast to the other instances of *ṛ vi* in CKD 661, the third *aḥsara* of *uthaviyadi* has a small but clearly written rightward-going stroke at its bottom, thus favouring the reading *ṛ vi*. Compare also *uthaveyamti* in CKD 345 cr3, which is likewise written with *ṛ*.

4 In reading *maṣe* instead of *maṣe* (KD: 249), I follow Noble (1931: 446f.). See also Peyrot (2025: 287 fn. 16).

289f.) notes that, if the accent in Khotan Prakrit fell on the last long vowel of the word, the raised vowels (nearly) all occur in unaccented syllables.⁵

In CKD 661, one also finds that a single dot transcribed as <â> appears above certain *aḥṣaras* where an *e-mātrā* would normally be expected. Word-internally, <â> occurs in pres.3sg. *madrādi* 'he says' (~ *Niya ma(m)treṭi*) (o2), ins.sg. *mulyāna* 'price' (~ *muliya*) (o3), and ins.sg. *tāna* 'this' (~ *tena*) (o6). Word-finally, it appears in nom.sg. *nagaragā manuśā* 'a man of the city' (o2), dir.pl. *maśā* 'coins' (o3, o4), the postposition *kidā* 'on account of' < *kṛte* (o4, o6), and the personal names *Vadhagā* (o4, o9), *Bahudhivā* (o7), *Śāśivakā* (o9), and *Spaniyakā* (o9).

Although <â> is often interpreted as indicating a modified *e*-like vowel (KD: 299; Burrow 1936: 432; Konow 1936: 237f.; Peyrot 2025: 289f.), Glass (2000: 37f.) observed a complementary distribution between *aḥṣaras* with <â> and those with <e>, suggesting that <â> may simply be a cursively reduced *e-mātrā*.⁶ The word-internal instances of <â> occur in syllables where vowel raising would have been blocked because the syllables were accented according to Peyrot's rule, e.g. *madrādi* = *madrēdi*. If <â> is equated with <e>, one must assume a seemingly unmotivated interchange between <â>/<e> and <i> in word-final position, e.g. *kidā* 'on account of' < *kṛte* vs. loc.sg. *kali* 'time' < Skt. *kāle*. This is acceptable, however, since the acc.sg. ending shows a parallel fluctuation between -o (e.g. *uṭo* 'camel') and -u (e.g. *avhiṇanu* 'recognition mark'). See further below (section 3.(i)) on the nom.sg. ending -ā (-aḥ).

- (ii) The spelling of dental stops and fricatives (Burrow 1936: 430f.; Konow 1936: 234ff.)

↳ *ta* is used for initial *t*- (e.g. *tanuvagā* 'own' in o2, o5) and for a geminate /tt/ in *dhitu* 'given' < OIA **ditta*- (o4) and *saṃvritā* 'been' < *saṃvṛtta*- (o5).⁷

Intervocally, OIA -*t*- and -*d*- merge. The outcome of this merger was probably a fricative /δ/, in view of the parallel merger of the velars -*k*- and -*g*- to -*g*- /γ/ (cf. e.g. *nagaragā* 'city-dweller' < Skt. *nāgaraka*-, o2). In Niya Prakrit, /δ/ can be written with either ↳ *ta* or ↳ *da* (cf. §2.1.2). In CKD 661, by contrast,

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- 5 *niravaśiṣo* 'without remainder' < *niravaśeṣa*- would be an exception to the accent rule.
- 6 Reading -ā as -e has the additional advantage that all the personal names in CKD 661 end in the same vowel in the nom.sg. Otherwise, there is an unmotivated distinction between *Khvarnarse* (o2) and the names in -ā, e.g. *Vadhagā* (o4, o9).
- 7 ↳ *ta* is also used in the name *Vagiti Vadhaga*. If Sims-Williams (in Grenet, Sims-Williams & de la Vaissière 2001: 102 fn. 3) is right that *Vagiti* stands for Sogd. βγϣϥ 'of the gods', Khotan Pkt. -*t*- would correspond here to the Sogdian cluster -št-.

5 *da* is used consistently.⁸ The examples are: gen.sg. *Vijidasimḥasya*, PN < *Vijita-simḥa*- (o2); pres.3sg. *madrādi* 'he says' (o2); pres.3sg. *haradi* 'he carries' (o3); *idani* 'now' < *idānīm* (o3); *kidā* 'on account of' < *kṛte* (o4, o6); *grahidu* 'taken' < *grḥita*- (o5); *uvagadu* 'approached' < *upagata*- (o5); *uvadayi* 'starting from' < *upādāya* (o5); opt.3sg. *cudiyadi* 'he would complain' < $\sqrt{cud}$ (o6); opt.3sg. *vidiyadi* 'he would inform' < $\sqrt{vid}$ (o6); acc.sg. *vivadu* 'dispute' < *vivāda*- (o6); opt.3sg. *uthayiyadi* 'he would raise' < *ud* + $\sqrt{sthā}$ (o6); pres.3sg. *dhinadi* 'he gives' (o7); opt.3sg. *syadi* 'he would be' (o7); *likhidu* 'written' < *likhita*- (o7); and *puradu* 'in front of' < *purataḥ* (o7). In addition, the *akṣara* 5 *da* is used in the ligature 𑀅 *dra*; see *madrādi* 'he says' (o2) and *tadriju* 'such' (o3).

All the instances of 𑀅 *tha* in CKD 661 occur in word-internal position. In the verb form *uthayiyadi* 'he would raise' (o6), -*th*- is used for /tʰ/ (cf. Skt. -*tsth*- in *utsthāpayati*). The other instances of 𑀅 *tha* occur in the outcomes of Skt. *tathā* 'thus' (o2, o6) and *yathā* 'as' (o5, o7). Konow (1936: 237) observed that the *th* in these words is written somewhat differently from the *th* in *uthayiyadi*, namely with a rightward-going stroke at the bottom of the *akṣara*. He interpreted this stroke as the *cauda* found in 𑀅 *ga* /ɣ/ and other *akṣaras* indicating a fricative, thus proposing the transliterations *tāṭha* and *yāṭha*.⁹ He further argued that -*ṭh*- was pronounced as /θ/ due to Khotanese substrate interference. This phonological interpretation, however, can no longer be upheld, as Khot. *th* probably represents /tʰ/ and not /θ/ (cf. HK: 8; 285). Since the stroke at the bottom of *th* may alternatively be equated with the length mark also seen in *vikrināmi* 'I buy' (o3), *garanīyā* 'to be done' (o5), and *karanīyā* (o6), I prefer to read *tathā* and *yathā*. Consequently, every instance of 𑀅 *tha* in CKD 661 can be assumed to stand for either /tʰ/ or /tʰ/.

𑀅 *dha* is used consistently to spell the outcome of OIA #*d*-. The examples are: *dhivajha* 'day' < *divasa*- (o1); *dheva* 'god, lord' < *deva*- (o1); *dhahiaghi* 'a branded mark' with first element continuing $\sqrt{dah}$ 'to burn' (o3); *dhitu* 'given' < OIA **ditta*- (o4); *dhaḍu* 'punishment' < *daṇḍa*- (o7); and pres.3sg. *dhinadi* 'he gives' ~ *denati* (o7).¹⁰ Since 𑀅 *dha* is also used in the PN *Vadhaga* to render the unaspirated cluster -*nt*- /nd/ of Sogd. *βntk* / *βnty* 'slave, servant',¹¹ I find it

8 In the introductory part (o1), there are two exceptions: *Khotana*° 'Khotanese' and *rayatiraya* 'king of kings' < *rājātirājan*-.

9 "tath'a" and "yath'a" in Konow's notation. Boyer *et al.* (KD: 249) have *tatha* and *yatha*, probably because they did not notice the stroke at the bottom or deemed it insignificant.

10 The etymology of *dhalavagu* 'document (?)' (o7) is unknown (cf. *supra*).

11 Similarly, the cluster /ng/ in *dhahiaghi* 'a branded mark' (Skt. *aṅka*- 'mark') is also written with an unetymological aspirate.

plausible that the initial *dh-* in a word like *dhivajha* represents unaspirated /d/.¹² There are two words in which 𑖦 *dha* writes an etymological aspirate: a singleton in *rajadharmu* ‘law of the kingdom’ (o7; Skt. *rājyadharmā-*) and a geminate in *śudhi* ‘payment’ (o5; Skt. *śuddhi-*).

In my view, the spelling of the dentals results chiefly from a desire on the part of the scribe(s) to maintain a roughly consistent orthographic distinction between voiceless and voiced sounds (𑖧 *ta* and 𑖧 *tha* for voiceless and 𑖧 *da* and 𑖦 *dha* for voiced) and between stops and fricatives (𑖧 *ta*, 𑖧 *tha*, and 𑖦 *dha* for stops and 𑖧 *da* for fricatives). That 𑖦 *dha* is used not only for etymological aspirates but seemingly also for /d/ may be due to the lack of a phonological distinction between voiced and voiced aspirated stops in Khotanese (cf. HK: 8; 285).¹³ By using 𑖦 *dha* for /d/, the scribe(s) were also free to employ 𑖧 *da* as a specialised device for writing the fricative /ð/ (except in the cluster *-dr-*).¹⁴

(iii) *ija* ‘here’ and the spelling of palatal sibilants

In Niya Prakrit (and many other forms of Gāndhārī), the reflex of Skt. *iha* ‘here’ is normally written as *īsa*. The Khotan Prakrit form *ija* (o1) represents the only instance in which this word is spelt with 𑖧 *ja*. A plausible explanation for this spelling is that the scribe(s) sought to create an orthographic distinction between voiceless and voiced palatal sibilants, parallelling the distinction between voiceless and voiced dentals treated above (section 2.(ii)).¹⁵

12 In other words, I do not accept Konow’s (1936: 239) argument, regrettably taken over in Dragoni, Schoubben & Peyrot (2020: 346), that Khotan Pkt. *#dh-* stands for /ð/. Konow’s idea hinges on the assumption that Khot. *#d-* stands for /ð/, but this can no longer be accepted, as it is nowadays thought that Khot. *#d-* represents a stop and not a fricative (cf. HK: 285 “there is ... no evidence for ... [ð] in Khotanese”).

13 Since Khotanese does have a phonemic opposition between voiceless and voiced aspirated stops (HK: 8; 285), a parallel confusion between unaspirated 𑖧 *ta* and aspirated 𑖧 *tha* would not be expected.

14 In some types of Kharoṣṭhī, 𑖧 *ta* and 𑖧 *da* were employed to write intervocalic /ð/ (cf. §2.1.2), but these signs have (so far) not been found in Central Asian Kharoṣṭhī, and using them has the drawback that they are easily confused with 𑖧 *tra* and 𑖧 *dra*.

15 In CKD 661, 𑖧 *śa* appears in *manuśā* ‘man’ (o2), the camel mark *va śo* (o3), *niravaśiṣo* ‘without remainder’ (o4), *śudhi* ‘clearing, payment’ (o5), and the etymologically obscure PN *Śaśivakā*. The word-initial *ś* of *śudhi* is, of course, voiceless, and the *ś* of *manuśā* represents a geminate /śś/, being derived from the OIA cluster *-ṣy-*. The *-ś-* of *niravaśiṣo* is intervocalic and reflects an OIA singleton (Skt. *niravaśeṣa-*), but being found at a morpheme boundary, it need not have undergone intervocalic lenition. In Niya Prakrit, 𑖧 *ja* and 𑖧 *śa* are used indiscriminately to represent /ž/.

(iv) The use of 𑖦𑖩a

Niya Prakrit never uses the special sign 𑖦𑖩a to write /z/, whereas this is the normal practice in CKD 661 (cf. Konow 1936: 237). See dir.pl. *maṣṣā* ‘coins’ (o3, o4); *niravaśiṣo* ‘without remainder’ (o4); and ins.sg. *aḷiṣanayi* ‘at the request of’ (o7). Cf. also §2.1.2.

(v) Ligatures with an initial sibilant as their first part

The cluster /sṭ/ is spelt with the ligature 𑖦𑖩𑖦𑖩a in Khotan Pkt. *aṣṭi* ‘eight’ and not with 𑖦𑖩𑖦𑖩a, for which no example occurs in CKD 661.¹⁶ A second ligature with an initial sibilant appears in line o6, in a phrase previously read as either *pacema kali* ‘at a later time’ or *pachima kali* ‘idem’, corresponding to Niya Pkt. *pačima kalaṃmi* ‘idem’ (Skt. *paścima*-).¹⁷ What earlier editors have interpreted as a combination of two *aḷṣaras*, either 𑖦𑖩𑖦𑖩𑖦𑖩a or 𑖦𑖩𑖦𑖩𑖦𑖩a, should, in my view, be understood instead as a single compound *aḷṣara* 𑖦𑖩𑖦𑖩a.¹⁸ Accordingly, I read *paśca kali* ‘at a later time’, corresponding to Niya Pkt. *pača kalaṃmi* ‘idem’ (Skt. *paścāt*). This provides an additional instance in which Khotan Prakrit employs a ligature with an initial sibilant (-śc-), whereas Niya Prakrit exhibits a different, more abbreviated, orthography (-č- /śc/). Notably, the Khotan Prakrit document CKD 843 likewise contains a unique ligature 𑖦𑖩𑖦𑖩a (*maṣṭa* in recto, line 4). Thus, ligatures whose first element is a sibilant appear to be a characteristic feature of Khotan Prakrit orthography.

(vi) Minor observations

Intervocalic *-bh-* normally develops to *-h-* in Niya Prakrit, but in the Khotan Prakrit document the labial element is still preserved in acc.sg. *avhiṇanu* ‘recognition mark’ < Skt. *abhijñāna*- (o2f.).

CKD 661 has *aji* ‘today’ < Skt. *adya* (o5). In the Niya variant, the default spelling of this word is *aja* (cf. Noble 1931: 453; Konow 1936: 236f.).

16 According to Burrow (1936: 431), the final *-i* in *aṣṭi* ‘eight’ (o3) may be due to the influence of Khot. *haṣṭā*. This explanation, however, seems unlikely, since *haṣṭā* is a late development of the older form *haṣṭa* (HK: 304).

17 *pacema kali* is the reading of Boyer *et al.* (KD: 249); *pachima kali* is Konow’s (1936: 240 fn. 1).

18 The principal problems with the readings *ce ma* and *chi ma* are that (i) the secure instances of *ma* in CKD 661 look quite different, and (ii) there is no space between the presumed *ce* / *chi* and *ma*, while the other *aḷṣaras* in CKD 661 are consistently and clearly separated. My interpretation of the presumed *ma* as ś- is supported by comparison with the other instances of 𑖦𑖩a in this document.

3. Morphology

(i) Nominative

In contrast to Niya Prakrit (and most forms of Gāndhārī), but as in Khotanese, the nom.sg. and acc.sg. of *a*-stems remain distinct in the Khotan Prakrit of CKD 661. Except for neuter nouns (cf. section 3.(ii)), the nom.sg. is typically indicated by two dots placed above the final *akṣara* of the word. In Sanskrit texts written in Kharoṣṭhī (e.g. CKD 523), these dots represent *visarga*, and Boyer *et al.* have transcribed them as such in CKD 661 as well (KD: 249; 300). Given that CKD 661 contains some Sanskritisms, most notably the gen.sg. in *-sya* (section 3.(iii)), one could indeed assume its nom.sg. to end in *-aḥ* under Sanskrit influence (thus Burrow 1936: 432).¹⁹ However, it is unlikely to be coincidental that Khotanese likewise marks the nom.sg. of *a*-stems with two dots above the final *akṣara*. In Khotanese studies, these dots are transcribed as *-ā* and interpreted as a reduced front vowel. I follow Konow (1936: 237f.) and Peyrot (2025: 288) in applying the same transcription to Khotan Prakrit: *uṭā* ‘camel’ (o2 (2×), o5); *tanuvagā* ‘own’ (o2, o5); *saṃvritā* ‘been’ (o5); *garanīyā* / *karaniyā* ‘to be done’ (o5, o6). With Konow and Peyrot, I also assume that the Khotan Prakrit nom.sg. ending *-ā* results from Khotanese influence.

Occasionally, the nom.sg. ends in *-ā*, as in *nagaragā manuśā* ‘a man of the city’ (o2) and the personal names *Vadhagā* (o4, o9), *Bahudhivā* (o7), *Śaśivakā* (o9), and *Spaniyakā*, PN (o9). As discussed above (section 2.(i)), *-ā* is likely a cursive form of *-e*, which word-finally can alternate with *-i*. It thus indicates a front vowel that could easily be confused with *-ā*, assuming that *-ā* represents a centralised front vowel, as in Khotanese (cf. again Konow 1936: 237f.; Peyrot 2025: 289).

Interestingly, the nom.sg. of the demonstrative pronoun is *so* and not *se* < *saḥ*, as in Niya Prakrit (LKD: §80): see *so uṭā* in o2 and o5. The acc.sg. *so uṭo* (o3) is probably an error for ***to uṭo* (cf. p. 399, fn. 122).

(ii) Accusative and neuter nouns

The acc.sg. and nom./acc.neut.sg. ending is *-u*, sometimes *-o*. The attested examples are *avhiñanu* ‘recognition mark’ (o2f.); *tadriju* ‘such’ (o3); *uṭo* ‘camel’ (o3); *niravaśiṣo* ‘without remainder’ (o4); *mulyo* ‘price’ (o4); *dhitu* ‘given’ (o4); *grahidu* ‘taken’ (o5); *uvagadu* ‘reached, obtained’ (o5); *vivadu*

19 Yet, one would have to assume that *-aḥ* was generalised to positions in which a different sandhi form would be used in Sanskrit.

‘dispute’ (o6); *dhaḍu* ‘punishment’ (o7); *rajadharmu* ‘law of the kingdom’ (o7); *dhalavagu* ‘document (?)’ (o7); and *likhidu* ‘written’ (o7).

(iii) Genitive

CKD 661 exclusively uses the Sanskritic gen.sg. ending *-sya*. The attested examples are *Vijidasimhasya*, PN (o2); *Vagiti Vadhagasya*, PN (o4, o5); *tasya* ‘this’ (o4, o6); *uṭasya* ‘camel’ (o4, o6); and *Khvarnarsasya*, PN (o5, o7). The gen./dat.sg. of the 1sg. personal pronoun is *mayi* (o2), contrasting with Niya *mahi* < *mahya(m)* (cf. LKD: §78).

(iv) Locative

The word for ‘time’, *kala* < Skt. *kāla-*, forms its loc.sg. in *-i* < *-e*, i.e. *kali* (o2, o6), 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’ (o4) 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 and Schoubben 2025a: 105f. for more details).

(v) Preterite

For transitive verbs, the pret.3sg. ends in *-u* in Khotan Prakrit: *dhitu* ‘given’ (o4); *grahidu* ‘taken’ (o5); *uvagadu* ‘reached, obtained’ (o5); *likhidu* ‘written’ (o7). The intransitive pret.3sg. *saṃvritā* ‘been’ (o5) 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).

APPENDIX 3 Revised readings in the Niya documents

In the preceding chapters and in some of my articles, I have occasionally revised readings found in printed editions of the Niya documents.¹ For ease of reference, this appendix collects these scattered revisions. It additionally includes new corrections, in which case no cross-reference is given. When a correction is uncertain (e.g. because I could not access a good photograph of the relevant document), it is preceded by a question mark.

CKD 17 cr2: *guṭathanaṃmi* (KD: 6) → *gujathanaṃmi* (see p. 21, fn. 13)

(?) CKD 25 o3: *pa[ci]vara* (KD: 9) → *pa[ci]vara* (or: *pa[ce]vara*) (see p. 240, fn. 487)

(?) CKD 35 o1: *ṣoṭhaṃga* (KD: 12) → *ṣoṭhaṃga* (see p. 167, fn. 258)

CKD 44 o1: ? ? *Vuktoṣa* (KD: 15) → *(*tomga) Vuktoṣa*

CKD 59 r4 *et passim*: *arnavaji* (e.g. KD: 19) → *ardavaji* (see §3.7.2 s.v. *ardavaji*)

CKD 63 uo2: *Apgeyade* (KD: 21) → *Apgeya(*ṣa asiya)de* (Schoubben 2025a: 94f.; see also p. 215, fn. 406; p. 377, fn. 77)

(?) CKD 123 o3: *soṭhaṃgha* (KD: 48) → *ṣoṭhaṃgha* (see p. 167, fn. 258)

CKD 149 o2: *kaṭathavaṃne* (KD: 59) → *kajathavaṃne* (see §3.5.1 s.v. *thavaṃnaga*)

CKD 159 oB4: *Caḍota* (KD: 63) → *Caḍota*

CKD 164 o2: *divyaśariraarogi* (KD: 65) → *divyaśariraarogi*

CKD 164 o9: *pakepalī* (KD: 66) → *pak(*e)palī* (Schoubben 2021: 52 fn. 25)

CKD 165 o4: *tommihi* (KD: 66) → *tomgehi* (see p. 137, fn. 179)

CKD 166 o1: *priya ? tu* (KD: 66) → *priya(*bhra)tu*

CKD 195 and 726 can be joined (Schoubben in prep.)

CKD 222 and 336 can be joined (Schoubben in prep.)

CKD 247 o1: *piṃcara* (KD: 94) → *picara* (see p. 110, fn. 113)

CKD 247 o2: *arog. +* (KD: 94) → *arog(*etu)* (Schoubben 2022c: 19)

CKD 265 co1: *ṣoṭhaṃga* (KD: 100) → *ṣoṭhaṃga* (see p. 167, fn. 258)

CKD 271 and 338 can be joined (Schoubben in prep.)

1 See also pp. 280f., fn. 26, where I propose to correct a reading in some of the Kharoṣṭhī graffiti on potsherds from Termez.

- CKD 271 + 338 uo1: *priya bhratu* (KD: 101) → *priya{da}bhratu* (Schoubben in prep.)
- CKD 271 + 338 uo1: ... *Lýi[pe]ya* (Burrow 1940: 48) → *ogu Vyarpala* (Schoubben in prep.)
- CKD 271 + 338 uo3: ? *amti* (KD: 101) → *u[hām]ti* (Schoubben in prep.)
- CKD 271 + 338 uo4: ?? ? *putra* (KD: 101) → *[deva]putra* (Schoubben in prep.)
- CKD 271 + 338 uo4: *eta* (KD: 101) → *et[e]* (Schoubben in prep.)
- CKD 271 + 338 uo5: *ničiye* (KD: 101) → *ni ci ye* (Schoubben in prep.)
- CKD 271 + 338 uo5: *[taha] ?* (KD: 101) → *tadriša* (Schoubben in prep.)
- CKD 271 + 338 uo5: ? *[yaṃgami]* (KD: 101) → *teyaṃgami* (Schoubben in prep.)
- CKD 271 + 338 uo6: *proṭhavana* (KD: 101) → *prastovena* (or: *praṃstovena?*) (Schoubben in prep.)
- CKD 271 + 338 uo6: ?? ? *syati* (KD: 101) → *bha[vi]syati* (Schoubben in prep.)
- CKD 271 + 338 cr1: *tatri śa[dro]ḍami* (KD: 123) → *tadriša ? ḍami* (Schoubben in prep.)
- CKD 271 + 338 cr1: *prasavetu* (KD: 123) → *praṣavetu* (Schoubben in prep.)
- CKD 272 o2: *śpasa* (KD: 102) → *śpaśa* (see p. 174, fn. 281)
- CKD 279 o2 *et passim: mukeṣi* (e.g. KD: 104) → *muḱaṣi* (Schoubben 2021: 54; see also §3.7.2 s.v. *muḱaṣi*)
- CKD 311 r2: *prahuḍa* (KD: 113) → *prahuḍa*
- CKD 316 o2: *paṃjhavaṃta* (KD: 115) → *pajhavaṃta* (see p. 206, fn. 374)
- CKD 316 o3: *coṭaga* (KD: 115) → *coḍaga* (see p. 21, fn. 13)
- CKD 324 and 328 can be joined (Schoubben in prep.)
- CKD 324 + 328 co1: + + *[śa] ??* (KD: 119) → *(*maṃnu)[śa Sa](*rpina)* (Schoubben in prep.)
- CKD 324 + 328 co1: *ka ???* (KD: 119) → *Ka(*tgeyaśa)* (Schoubben in prep.)
- CKD 324 + 328 uo3, uo5f.: *vasu* (KD: 118) → *vasu* (Schoubben in prep.)
- CKD 324 + 328 uo3: *Samrpina* (KD: 118) → *Sarpina* (Schoubben in prep.)
- (?) CKD 324 + 328 uo5: *[tanuṃ]ga* (Burrow 1940: 61) → *[na chama]ga* (Schoubben in prep.)
- CKD 324 + 328 cr1: *Katgayaśa* (KD: 119) → *Katg[e]yaśa* (Schoubben in prep.)
- CKD 324 + 328 cr2: *cakuraya* (KD: 119) → *ca[m]kura {śa}* (Schoubben in prep.; see also p. 132, fn. 167)
- CKD 340 o3: *[ca] ? taṃmi* (KD: 123) → *[Ca](*ḍo)taṃmi* (Schoubben 2025a: 114 fn. 69)

- CKD 345 uo10: *Larsuasa* (KD: 125) → *Larsuaša* (see p. 220, fn. 420)
- CKD 346 o1: *ma ra vara kuḍi* /// (KD: 126) → *maravara Kuyi* /// (*ñeya ...) (see p. 191, fn. 328)
- CKD 361 o2: *prahaṃda* ? (KD: 131) → *prahaṃda*(*vo)
- CKD 373 r2: *tura* (KD: 135) → *dura*
- CKD 385 o6: + + *śa iśa a mi* (KD: 138) → (*ava)śa iśa ami
- CKD 387 o8: *uṭa ca* (KD: 139) → *uṭa[m]ca* (see p. 440, fn. 42)
- CKD 392 o1: *Kolýisa* (KD: 140) → *Kolýiśa*
- CKD 399 rA2(f.): *stovaṃnena*, *stovaṃna*, and *stovaṃnaša* (KD: 143) → *storvanena*, *storvana*, and *storvanaša* (see §3.2.1 s.v. *stora*)
- CKD 400 o1: *soṭhaṃga* (KD: 143) → *soṭhaṃga* (see p. 167, fn. 258)
- CKD 401 uo4: *maḱe* (Burrow 1940: 82) → *maḱa* (Schoubben 2021: 50; see also p. 113, fn. 122)
- CKD 432 uo7: *agiṣḍha* (KD: 157) → *agiṣḍha* (see p. 197, fn. 349)
- CKD 489 r1f.: *iśa* /// *mi* (KD: 176) → *iśa* /// (*kṣunaṃ)mi vel sim. (see §3.2.1 s.v. *kṣuna*)
- CKD 489 r2: *navaka bh.* /// (KD: 176) → *navaka bh*(*i)///(*kṣava) vel sim.
- CKD 489 r9: *pra* /// (KD: 176) → *pra*///(*hara)
- CKD 492 co1: ... *ya Lapayaša ca* (KD: 177) → (*Patra)ya *Lapayaša ca*
- CKD 505 o3: *gaḍa* (KD: 182) → *g*{*i}ḍa (cf. TKD: 98 “received”)
- CKD 519 o2: *naṃmakurvati* (KD: 190) → *naṃmakurvati* (Schoubben 2021: 50 fn. 19)
- CKD 524 uo3: *kitaṃti* (KD: 192) → *kiḍaṃti*
- CKD 571 uo3: *paḍichida* (KD: 210) → *paḍichida*
- CKD 571 uo7: *siyati ko* (KD: 210) → *siyati taha ko*
- CKD 571 uo7f.: *pacima* (KD: 210) → *pačima*
- CKD 583 uo4: *kaṭahavaṃnaga* (Lüders 1936a: 23) → *kajahavaṃnaga* (KD: 218) (see §3.5.1 s.v. *thavaṃnaga*)
- CKD 590 uo4: *sutramuli* (KD: 223; TKD: 125) → *suḍamuli* (cf. CKD 580 uo4)
- CKD 590 uo4: *taya striya* (KD: 223) → *taya stri*
- CKD 621 o5, o6: *viheṭa* (KD: 234) → *viheḍa* (see p. 21, fn. 13)
- (?) CKD 637 o3: *aconaṃmi* (KD: 240) → *Aco*{*me}naṃmi (see p. 124, fn. 149)
- CKD 640 o1: *traghade* (KD: 241) → *tra*[m]ghade (see p. 183, fn. 303)
- CKD 661 o2, o6: *tatha* (KD: 249) → *tathā* (see p. 470)

- CKD 661 o3, o4: *maṣā* (KD: 249) → *maṣā* (see p. 22, fn. 17)
- CKD 661 o4: *niravaśiṣo* (KD: 249) → *niravaśiṣo* (see p. 22, fn. 17)
- CKD 661 o5, o7: *yatha* (KD: 249) → *yathā* (see p. 470)
- CKD 661 o6: *pacema kali* (KD: 249) / *pachima kali* (Konow 1936: 240 fn. 1) → *paścakali* (see p. 472)
- CKD 661 o6: *uthaviyadi* (KD: 249) → *uthaviyadi* (see p. 468, fn. 3)
- CKD 661 o7: *ajiṣanayi* (KD: 249) → *ajiṣanayi* (see p. 22, fn. 17)
- CKD 709 uo3: *Laṣa cojhbo* (KD: 267) → *l[d]aṣa cojhbo*
- CKD 709 uo3: *Bhugta* (KD: 267) → *Tsugta* (cf. names like *Tsugelga*)
- CKD 770 uo3: *tanuyaga* ? ? (Burrow 1937: 113) → *tanuyaga* (*huta)
- CKD 770 uo4: *Puṣga[ri]* ? ? (Burrow 1937: 113) → *Puṣga[ri]*(*yaṃmi) (see p. 382, fn. 87)
- CKD 788 uo4, uo9, uo10: *oḍita* (Wu 2020: 151) → *oḍita* (see p. 130, fn. 162)
- CKD 788 uo7: *eda ṣā* (Wu 2020: 151; 154) → *edaṣa* (Lin 1990: 284; see my notes p. 139, fn. 188)
- CKD 788 cr5: *garahaṃna ya* and *uthavaṃna ya* (Wu 2020: 152; 157) → *garahaṃnaya* (inf.) and *uthavaṃnaya* (inf.)
- CKD 788 cr5: *siyati* (Wu 2020: 152) → *siyaṃti* (Lin 1990: 285; see my notes p. 139, fn. 188)
- CKD 795 co1f., uo1, uo3f., uo6: *Suḡeta* / *Suḡetaṣa* (Lin 1999: 229f.) → *Suḡuta* / *Suḡutaṣa* (Hasuike 1996: 294f.)
- CKD 795 uo3, uo5: *uṭiyaṣa* (Lin 1999: 230) → *rajiyaṣa* (see p. 207, fn. 382)
- CKD 795 uo3, uo6: *takṣana* (Lin 1999: 230) → *takṣana*
- CKD 795 uo5: *abhiṣakala* (Lin 1999: 230) → *abhiṣakala* (cf. Hasuike 1996: 294 who has *abhi ṣakala*; *abhiṣa-* means 'constant' < Skt. *abhiṣṇa-* 'idem')
- CKD 795 uo5: *uṭi* (Lin 1999: 230) → *raji* (see p. 207, fn. 381)
- CKD 795 uo6: *bhuma* (Lin 1999: 230) → *uthita bhuma* (Hasuike 1996: 294)
- CKD 796 uo6: *namata* (Hasuike 1996: 301; Lin 1999: 229) → *naṃmata* (see p. 185, fn. 311)
- CKD 796 uo7: *poḡoña* (Baums & Glass 2002b– ad locum) → *potḡoña* (see p. 255, fn. 525)
- CKD 796 cr3, cr4: *varṣa* (Lin 1999: 229) → *darṣa* (Hasuike 1996: 301; see my notes p. 226, fn. 441)
- CKD 797 uo5: *t(*e)na yapgana lamcaga kareṣi* (Lin 1999: 230) → *tuo Vapga na lamcaga kareṣi* (Hasuike 1996: 307; see my notes p. 153, fn. 218)

CKD 797 cr1: *ayanaṃ ca* (Lin 1999: 231) → *aṭa naṃdha* (Hasuikē 1996: 307; see my notes p. 440, fn. 41)

CKD 814 2f.: *iḍhiyaṃti* (Lin 1997: 265) → *ichiyaṃti* vel sim.

CKD 817 uo3: *nice* (Hasuikē 1999: 164) → *niṭe*

CKD 817 uo4: *anidae* (Hasuikē 1999: 164) → *uṇadae*

CKD 817 cr2: *p[un]o śpara na* (Hasuikē 1999: 164) → *parosparana* (see p. 352, fn. 29)

(?) CKD 821 o1: *ṣoṭhaga* (Hasuikē 1999: 170) → *ṣoṭhaṃga* (see p. 167, fn. 258)

CKD 839–842 (Duan 2013c; Pi 2013; Zhang 2013): change every intervocalic *-ḍ-* into *-ḍ̣-*.

CKD 839 uo2, uo3: *Pgita* (Duan 2013c: 226) → *Pgita*

CKD 839 uo3: *uṭaṇa* (Duan 2013c: 226) → *uṭa 1*

CKD 839 uo4: *kṣuna upātaya* (Duan 2013c: 226) → *kṣuna upatāya*

CKD 839 uo4: *buma* (Duan 2013c: 226) → *bhuma*

CKD 839 uo5: *kriṣaṃne* (Duan 2013c: 226) → *kriṣaṃnae*

CKD 839 uo6: *karaṇae* (Duan 2013c: 226) → *karaṃnae*

CKD 839 uo7: *aśpaṇa* (Duan 2013c: 226) → *aśpa 1*

CKD 839 uo7: *sarva* (Duan 2013c: 226) → *ṣarva*

CKD 839 uo8: *purāthimade* (Duan 2013c: 226) → *purastimade* (Schoubben 2025a: 112 fn. 65)

CKD 839 uo9: *adra* (Duan 2013c: 226) → *atra*

CKD 840 (Pi 2013: 220f.): the text is given in the wrong order; it should be (i) cover-tablet obverse (*priyadarśanaṣa ... viyalidavo*), (ii) under-tablet obverse (*priyadarśanaṣa ... manuśa*), and (iii) cover-tablet reverse (*Tsugiyena ... timidavo*).

CKD 840 uo1: *yogya-* (Pi 2013: 221) → *yogya-*

CKD 840 uo3f.: *-śariraṃ-* (Pi 2013: 221) → *-śarira-*

CKD 840 uo6: *Tsugiyena* (Pi 2013: 221) → *eṣa Tsugiyena*

CKD 840 uo7: *ditaya ṅni mahi* (Pi 2013: 221) → *ditaya aṣi yahi*

CKD 840 uo8: *edra* (Pi 2013: 221) → *atra*

CKD 841 co1: *vaḍavi ca* (Pi 2013: 222) → *vaḍavi [pra]ce*

CKD 841 co2: *[tharidavo]* (Pi 2013: 222) → *[dharida]vo*

CKD 841 uo5: *uvataya* (Pi 2013: 223) → *uṇataya*

CKD 841 uo7: *Namsiṃta* (Pi 2013: 223) → *Namsiṃtaṣa*

- CKD 842 o1: *Cimnamavara* (Zhang 2013: 214) → *Cimnavhara*
- CKD 842 o2: *Ma[ṣḍhe]ga* (Zhang 2013: 214) → *Ma[re]ga*
- CKD 842 o2: *Syaptala* (Zhang 2013: 214) → *Vyarpala*
- CKD 842 o2: *Spapaya* (Zhang 2013: 214) → *Sṣapaya*
- CKD 842 o2: *Cimryaśaṣa* (Zhang 2013: 214) → *Cimnyāśaṣa*
- CKD 842 o3, o4, o9: *Caṭotade* and *Coṭotade* (Zhang 2013: 214f.) → *Caḍotade* and *Coḍotade* (Schoubben 2025a: 111 fn. 63)
- (?) CKD 842 o10: *darṣeyāti* (Zhang 2013: 215) → *darṣeyamti* (Schoubben 2022b: 346 fn. 5; see also p. 226, fn. 440)
- CKD 879–882 (Duan & Tshelothar 2016): change every intervocalic *-ḍ-* into *-ḍ̣-*.
- CKD 879 uo4: *rda vi* (Duan & Tshelothar 2016: 4) → *nevi* ‘neither’
- CKD 880 uo2f.: *adhamena* (Duan & Tshelothar 2016: 13) → *adhaf[r]mena*
- CKD 880 uo5: *praceya paḍichidaṃti* (Duan & Tshelothar 2016: 13) → *praceya śavatha paḍichidaṃti*
- CKD 880 uo6: *Bhimaya* (Duan & Tshelothar 2016: 13) → *Tsimaya*
- CKD 884–885 (Duan 2016b): change every intervocalic *-ḍ-* into *-ḍ̣-*.
- (?) CKD 884 co1f.: *Sagamovi [mae]* (Duan 2016b: 56) → *Sagamovi[yaṣa]*
- CKD 884 co4, uo2, uo3: *Cimnivara* and *Cinivara* (Duan 2016b: 56f.) → *Cimnavhara* and *Cinavhara*
- CKD 884 uo3: *Bhugta* (Duan 2016b: 57) → *Tsugta* (cf. CKD 709 uo3)
- CKD 884 uo3: *Arjuna* (Duan 2016b: 57) → *Arjuna*
- CKD 884 uo4: *Sarpuae* (Duan 2016b: 57) → *Sarpoae*
- CKD 884 uo4f.: *aṃ ? ayanammi* (Duan 2016b: 57) → *Aṃ(*tu)ayanammi* (or: *Vaṃ(*tu)-*) (see p. 179, fn. 295)
- CKD 884 uo6: *humaṃti* (Duan 2016b: 57) → *huvamti* (cf. uo11, uo12)
- CKD 884 uo7: *śaca* (Duan 2016b: 57) → *śadha* (Schoubben 2025a: 96 fn. 18)
- CKD 884 uo7: *Kuḥirajaṃmi* (Duan 2016b: 57) → *Kucirajaṃmi*
- CKD 884 uo8: *ari* (Duan 2016b: 57) → *avi*
- CKD 884 uo9: *achivaṃnae* (Duan 2016b: 57) → *achimṇamṇae*
- CKD 884 uo9: *puranaga* (Duan 2016b: 57) → *poranaga*
- CKD 884 uo9: *palanaga* (Duan 2016b: 57) → *pala(*ya)naga*
- CKD 885 uo3: *Caṭodaṃmi* (Duan 2016b: 62) → *Caḍodaṃmi*
- CKD 885 uo3: *Praūkeyaṣa* (Duan 2016b: 62) → *Praūkayaṣa*
- CKD 886 A2: *Bhimayaṣa* (Guan 2016: 91) → *Tsimayaṣa*

- CKD 887 1: *šoṭhaṃga* (Guan 2016: 92) → *šoṭhaṃga* (see p. 167, fn. 258)
- CKD 897–901 (Jiang 2020; Fan 2020): change every intervocalic *-ḍ-* into *-ḍ̣-*.
- CKD 897 o1: *pracakṣa devatana* (Jiang 2020: 135) → *pracakṣadevatana*
- CKD 897 o1: *šoṭhaṃgha* (Jiang 2020: 135) → *šoṭhaṃgha* (see p. 167, fn. 258)
- CKD 897 o1: *pulnaṃbhayae* (Jiang 2020: 135) → *Pulnaṃtsayae*
- CKD 897 o1: *piḍeṃti* (Jiang 2020: 135) → *poḍeṃti*
- CKD 897 o1: *namasaṃti* (Jiang 2020: 135) → *namasyaṃti*
- CKD 897 o1: *iṃdraṣa* (Jiang 2020: 135) → *Imtraṣa*
- CKD 897 o2 (2×), o4: *kulaśukra* (Jiang 2020: 135) → *kulaśulka* ‘bride-price’ (see p. 425, fn. 4)
- CKD 897 o2: *Jimtrapraṃna* (Jiang 2020: 135) → *Citrapraṃna*
- (?) CKD 897 o2: *uṭe 1* (Jiang 2020: 135) → *uṭena*
- CKD 897 o4: *achinita* (Jiang 2020: 135) → *achiṃnita*
- CKD 897 o5: *giṭaṃti* (Jiang 2020: 135) → *titaṃti* ‘they gave’
- CKD 900 *passim*: 1.5 (Fan 2020: 87) → ½ (see p. 105, fn. 101)
- CKD 900 A1: *krayaṣa* (Fan 2020: 87) → *Pl[e]yaṣa*
- CKD 900 B1, C3, D2: *vacarina* (Fan 2020: 87) → *vacari 1*
- CKD 900 C5: *vakimṭeṣa* (Fan 2020: 87) → *Vakimṭeṣa* (Schoubben 2021: 56 fn. 48)

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REFERENCES

Bibliographical 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>
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 Wissenschaften, 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</i>

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