

Towards the reconstruction of language contact in the pre-Tibetan Upper Indus region

The present article attempts to partially restore the overall picture of language contact in the historical region of Zhangzhung (northwestern Tibet) prior to its conquest by the Tibetans in the late 1st millennium A.D. The pre-Tibetan language of Zhangzhung, known chiefly from a number of fragments in medieval Tibetan texts, belongs to the West Himalayan group of the Tibeto-Burman branch of the Sino-Tibetan language family. However, the vocabulary of this language contains a significant Indo-Iranian etymological stratum. The author shows that certain words belonging to this stratum have exact cognates in Tibetan dialects of Ladakh and Baltistan. Based on the analysis of Indo-Iranian elements in the Zhangzhung language, it is concluded that the pre-Tibetan population of Zhangzhung was likely to have been in a fairly close contact with Aryan, probably Dardic-speaking inhabitants of areas further down the Indus.

Keywords: language contact; lexical borrowing; Indo-Iranian languages; Dardic languages; Sino-Tibetan languages; Zhangzhung language.

Introduction

The uppermost part of the Indus basin, nowadays populated mainly by speakers of Tibetan dialects, in the past was, no doubt, a multiethnic and multilingual region. As I have tried to show in my previous publications (Kogan 2019; 2020), the inhabitants of certain areas within this region (primarily, of the present-day Ladakh) must have spoken an Indo-Iranian language, most probably belonging to the Dardic group. It has also been hypothesized that this language was the substratum of Tibetan varieties spoken in Ladakh today. This assumption, however, was made largely by process of elimination. Based on certain historical-phonological features of Indo-Iranian loanwords in Ladakhi, Purik and Balti, as well as on some historical facts, it was demonstrated that the substrate influence on these dialects is much more likely than the adstrate or superstrate one (Kogan 2020). In this kind of situation, it is highly desirable to find some additional positive evidence corroborating the substratum hypothesis.

Technically, search for such evidence can be successful only when the ethnic and linguistic composition of the area in question prior to the Tibetan conquest (i.e. before the 8th century A.D.) is reconstructed in sufficient detail. In our case, valuable material for the reconstruction can be provided not only by borrowed vocabulary but also by foreign fragments available in some medieval Tibetan texts. The language of these fragments is usually considered to be spoken before as well as some time after the Tibetan invasion, in an area to the immediate south-east of Ladakh, up the Indus. This area, nowadays forming a part of the Ngari prefecture of China's Tibet Autonomous Region, in the past was known as Zhangzhung.¹ It is traditionally believed that Zhangzhung was an independent kingdom until it was conquered by the Tibetans in the mid-7th century A.D., although its language of the same name persisted for several centuries after the conquest. Almost all the extant specimens of this language are

¹ Alternative spellings are Zhang-Zhung and Shangshung.

Zhangzhung-Tibetan bilinguals, mostly bilingual titles, occurring in sacred texts of the Bon religion.²

Today it is generally accepted among scholars that Zhangzhung belongs to the Sino-Tibetan language family, where it is classified with the West Himalayish branch of Tibeto-Burman languages (Haarh 1968; Matisoff 2001; van Driem 2001; Widmer 2014),³ its closest relatives being modern dialects spoken in Indian Himalaya: Darmiya, Byangsi, Chaudangsi, Bunan, Pattani (Manchad) and Kinnauri.⁴ That said, however, it has long been noted that Zhangzhung vocabulary contains an Indo-Iranian etymological stratum. The author of the first substantial and systematic description of the Zhangzhung language, the Danish Tibetologist Erik Haarh pointed out that a number of Zhangzhung words are “related to Sanskrit or some North-Indian languages” (Haarh 1968: 13). Sanskrit loanwords are relatively numerous in Zhangzhung fragments, almost all of them being religious and philosophical terms. Their borrowing dates back to the period after the 11th century A.D., when due to the growing influence of Buddhism the Bon religion was actively absorbing Buddhist concepts and terminology.⁵ Such words are, for the most part, easily identifiable and etymologizable. This, however, is not the case with loans from other Indo-Iranian source(s), termed by Haarh “words related to... some North-Indian languages”. On the one hand, in every hitherto published specimen of Zhangzhung lexicon, starting with Haarh’s rather short glossary,⁶ one can find obvious examples of lexical items for which Indo-Iranian origin seems most likely, but which for historical-phonological and/or semantic reasons can hardly be derived from Sanskrit. On the other hand, apart from a few isolated etymological suggestions, that will be discussed below, no systematic research on such items has been thus far conducted with the view to detecting and etymologizing all of them. Meanwhile, recent progress in Zhangzhung linguistic studies, notably the publication of several substantial dictionaries, has made this kind of research feasible.

This article presents an attempt at preliminary etymological analysis of possible non-Sanskrit Indo-Iranian loanwords in Zhangzhung. The obtained results are listed in the following section. My main data source was Dan Martin’s “Zhangzhung dictionary” (Martin 2010). To date, it is the newest and one of the most extensive dictionaries of the Zhangzhung lan-

² Bon is a religious tradition of obscure and still disputed origin, considered to predominate in Tibet before the spread of Buddhism, and to be greatly transformed subsequently under the latter’s influence. It is also believed that the Bon religion was brought to Tibet from Zhangzhung. For this reason, the Zhangzhung language was regarded as sacred by adherents of Bon. A large number of Bon cultic texts are traditionally deemed to be translated from Zhangzhung into Tibetan. Titles of such texts are always given in both languages. The only extant Zhangzhung written document of significant length is the religious scripture named “The innermost treasury of existence” (Tib. *Srid-pa’i mdzod-phug*). It dates back to the 11th century A.D. and is almost entirely bilingual. For more on this text and its importance as a source of Zhangzhung vocabulary see, e.g. Martin 2000; Mitruiev 2016.

³ According to an alternative hypothesis, the population of Zhangzhung originated, at least partly, from Eastern or Northeastern Tibet, and the Zhangzhung language should be classified with the Qiangic branch of Tibeto-Burman (see, e.g. Hummel 1986). This view, however, was found to be ill-founded (Jacques 2008).

⁴ Nowadays the speaking-areas of these dialects are parts of Himachal Pradesh and Uttarakhand states of India.

⁵ Contrary to literary Tibetan, where calquing was the preferred way of adopting Buddhist vocabulary, Zhangzhung seems to have tended to borrow Buddhist terms phonetically from Sanskrit. It is not unlikely that most of such terms appeared in the language after it had ceased to be spoken as a mother tongue. A remarkable fact in this connection is that in the above-mentioned early (11th century) Bon text “The innermost treasury of existence” no undoubted Sanskritisms seem to be present.

⁶ Haarh’s description of the Zhangzhung language, comprising grammatical notes and Zhangzhung-English glossary, is based on data from “Tibetan-Zhangzhung dictionary” (Bon-po Association 1965), a collection of Zhangzhung phrases with Tibetan translations published by Tibetan immigrants in India.

guage with the total number of entries exceeding 3500.⁷ In addition, “A lexicon of Zhangzhung and Bonpo terms” compiled by Pasar Tsultrim Tenzin, Changru Tritsuk Namdak Nyima and Gatsa Lodro Rabal (Tenzin et al. 2008) was sometimes consulted because it contains some words, absent from Martin’s dictionary. A particular word was selected for analysis if it defies etymologizing in Sino-Tibetan,⁸ meeting at the same time at least one of the two criteria: (i) presence of a plausible Indo-Iranian etymology without being derivable directly from Sanskrit; (ii) presence of possible cognates in Indo-Iranian lects spoken, nowadays or in the past, in areas contiguous to historical Zhangzhung. These lects include primarily Dardic languages, as well as Indo-Aryan forms of speech current in Western and Central Himalaya.⁹ One should bear in mind that either of the above criteria can be met without satisfying the other one. A lexical item borrowed into Zhangzhung from a certain Indo-Iranian source can ultimately have a non-Indo-Iranian (and non-Indo-European) origin, being, e.g., a Dravidian loan in Indo-Aryan or a Burushaski loan in Dardic. And vice versa: a Zhangzhung word may have doubtless cognates in ancient Indo-Iranian languages and in other branches of Indo-European, but be absent from neighboring Dardic and Indo-Aryan dialects, which will make its immediate source unidentifiable. In both cases, however, we are quite justified in postulating the borrowing of a particular lexeme from a particular Indo-Iranian lect into the Zhangzhung language.

Etymologies on the list are numbered consecutively and arranged in alphabetical order. Following Martin 2010, I usually specify Tibetan equivalents of Zhangzhung lexical items. They are given in brackets after entry words.

A list of probable Indo-Iranian loanwords in Zhangzhung

1. *a da ra* (*lhad med pa’am dag pa*) ‘uncontaminated or pure’ (Martin 2010: 244). It is tempting to compare the first syllable with the Indo-Iranian privative particle (cf. OIA, Av. *a-*, *an-* ‘not, un-, non-’). In case this etymology is correct, the initial *a* of the Zhangzhung word should be considered an equivalent of *med pa* in the Tibetan gloss, whereas its remaining part (*da ra*) must have been semantically similar or identical to Tibetan *lhad* ‘a baser substance mixed with a finer one, an alloy’ (Jäschke 1881: 600). Zhangzhung *da ra* may have been an Aryan loanword reflecting some derivative, e.g. a thematic verbal noun, of PIE **dher-/dhrei-d-* ‘dirt, feces; to defecate’.¹⁰ The reflexes of this root are well attested in East Iranian, where they mostly mean ‘dung, manure’,¹¹ the meaning ‘dirt’, however, also existing in certain languages (cf. Sogdian

⁷ One of the major advantages of this dictionary is that it uses numerous sources of lexical data, including “The innermost treasury of existence”, the earliest as well as the longest Zhangzhung text, composed when the language was probably still alive.

⁸ For Sino-Tibetan etymologies I consulted two online databases: “Sino-Tibetan etymology” compiled by Sergei Starostin (Starostin 2005), and “The Sino-Tibetan Etymological Dictionary and Thesaurus” compiled by a group of scholars led by James A. Matisoff (Matisoff et al. 2015). The above-cited works (van Driem 2001, Matisoff 2001 and Widmer 2014), as well as Martin’s dictionary, were also used as important sources of comparative data.

⁹ Traditionally they are classified with West and Central Pahari subgroups of Indo-Aryan. It should be noted that along with Indo-Iranian and Dardic, Iranian influence on Zhangzhung cannot be ruled out either. This influence may have come, e.g. from some Saka dialects spoken in what is now East Turkestan.

¹⁰ In Pokorny’s dictionary this root is given with the meaning ‘*Unrat, cacāre*’, and its possible etymological connection with PIE **dher-* ‘*trüber Bodensatz einer Flüssigkeit*’ is postulated (Pokorny 1959: 251, 256).

¹¹ Cf., e.g. Shughni *ḍīd* ‘(pressed) dung’, Sariqoli *ḍig* ‘cow dung’, Yazghulami *ḍāg*, Wakhi *ḍart* ‘cow dung, manure’. The prototype for these words is usually reconstructed as **darta-*, **darti-* or **dṛti-*. For details, see Rastorgueva, Edelman 2003: 356-357.

ḍrt'yč(h) ‘dirt, dung’). The root in question seems to have been preserved also in Dardic, cf. Kalasha *darāli gaṇ* ‘anus’¹² (Trail, Cooper 1999: 73).

2. *ag* (*sha za, srin*) ‘rākṣasa’ (Martin 2010: 245-246). Cf. OIA, Av. *aka-* ‘evil; pain, suffering’, Persian *āk* ‘disaster, adversity; fault’. For semantic development cf. OIA *rākṣasa-* ‘demon, ogre, fiend’ being a vṛddhi-derivative of *rakṣas-* ‘injury, harm; malignant demon’.

3. *'bar sha* ‘a sharp weapon’ (Tenzin et al. 2008: 122). Cf. Hindi, Punjabi *barchā*, Nepali *barcho*, Sindhi, Gujarati *barchī*, Marathi *barcī, barsī*, Bengali *barchi* ‘spear’, West Pahari *borcho* (poet.) ‘long stick with an iron tip, spear’, Persian *barča* ‘a kind of spear’. Turner compares the West Pahari form with OIA *baḍīśa-* ‘hook, fish-hook’ (Turner 1966: 514) but phonological correspondences are irregular. Apparently, a Wanderwort of unclear origin.

4. *be ling* (*rlung*) ‘wind, air’ (Martin 2010: 151). The word seems to be a hybrid compound consisting of two synonymous components. The second component is, no doubt, the basic Zhangzhung word for wind.¹³ The first element may be compared either with OIA *vāyu-* ‘wind, air, god of wind’, Av. *vaiiu-* ‘air, atmosphere, name of a god’, Kashmiri *wāw*, Sindhi *vāu*, Lahnda, Gujarati *vā*, Bengali *bāo*, Marathi *vāv* ‘wind’, or with OIA, Av. *vāta-*, Assamese *bā*, Bengali *bā, bāy*, Kumauni *bai*, Persian *bād*, Ossetic *wad* ‘wind’.

5. *bha gi* (*mngon par*) ‘visibly’ (Martin 2010: 154). Cf. OIA *bhāti*, Av. *fra-uuāiti* ‘shines’, OIA *bhāsati* ‘is bright’, *bhāsa-* ‘light’, Kashmiri *bāsun* ‘to seem, appear, become visible’, Punjabi *bhāh* ‘fire, splendor’, Hindi *bhāsnā* ‘to shine’. The exact prototype and phonological development remains unclear.

6. *chal* (*yal*) ‘decrease, lower, cause diminution, fade away’ (Martin 2010: 77). Cf. OIA *kṣarati, kṣalati* ‘flows, trickles; wastes away, wanes, perishes’, Proto-Iranian **xšar-* ‘to flow’ (> Persian *šārīdan* ‘to trickle’, Ossetic *äxsärdzän* ‘waterfall’). The reflex of the same Aryan root with the meaning ‘overflow, spill over’ has been borrowed into Northwestern Tibetan dialects (Balti, Purik, Ladakhi *chal-*).¹⁴

7. *da ra* (*rnam pa*) ‘piece, part, section’ (Martin 2010: 111). Cf. OIA *dala-* ‘fragment, piece, part; party, band’, *dr̥ṇāti, dalati* ‘bursts, cracks’,¹⁵ Av. *dərəṇti* ‘tears, splits’, Shina *dalo* ‘party, group’, Khowar *ḍal* ‘party, section, herd of horses’, Bengali *dal* ‘fragment’, Marathi *daḷ* ‘half’, Singhalese *dalaya* ‘division, part’, Persian *darrīdan* ‘to tear’, Kurdish *dīrīn* ‘to be torn’, Pashto *daṛa* ‘split, crack; splinter, piece of wood; slice’ (< **han-dr̥ta-*, see Morgenstierne 1927: 22; Rastorgueva, Edelman 2003: 342).

8. *dh(r)i lu* (*le lo*) ‘laziness’ (Martin 2010: 127, 128). Cf. West Pahari (Pangwali) *ḍhillā* ‘lazy’, Kumauni *ḍhīlo* ‘loose, slow, lazy’ < **ḍhīla-* ‘loose, slack’ (Turner 1966: 316). Martin, however, notes that Zhangzhung *dhri lu* and *dhi lu* can well be alternative spellings of *lhe lus* ‘lazy’ (Martin 2010: 243).

9. *dī ro, de ro* (*'gyur med*) ‘unchangeable’ (Martin 2010: 113-114, 120). The word is probably etymologically identical to Ladakhi *darak*, Purik *deraḡ* ‘stiff, hard’, all the three being borrowed from an Aryan source. Cf. OIA *dhārayati, dharati* ‘holds, keeps’, Av. *dāraiiehi* ‘(you) hold’, Kashmiri *dor* ‘firm, hard, strong, compact, durable, solid’, *darun* ‘to become steady (of something in motion), to become firm, to stand steady’, Pashai *d(h)ar-*, ‘to remain, stay’, Khowar *dorik* ‘hold back, wait, keep’. For more etymological parallels, see Kogan 2019.

¹² Cf. Kalasha *gaṇ* ‘hole which goes through an object’ (Trail, Cooper 1999: 103).

¹³ This word has an alternative spelling *li* (Martin 2010: 211, 214).

¹⁴ For details, see Kogan 2019. The semantic difference between the Zhangzhung and the Northwestern Tibetan words does not seem a major obstacle to our etymology. As the Old Indo-Aryan cognate clearly demonstrates, the verbal root in question could have been polysemic and combined the meanings ‘to flow’ and ‘to wane, decrease’.

¹⁵ On OIA *dr̥ṇāti* and *dalati* as etymologically identical verbs, see Mayrhofer 2001: 262.

10. *du ti* (*dmyal ba*) ‘hell’, (*sdug bsngal*) ‘suffering’ (Martin 2010: 115). Erik Haarh (1968) derives this word from OIA *duḥstha-* ‘bad off, faring ill, wretched’. However, semantically as well as phonologically closer seems to be OIA *duḥsthiti-* ‘bad plight’.

11. *dul pang* (*khu rlang*s) ‘mist and fog’ (Martin 2010: 120). This word has the variant form *du phang*,¹⁶ and its second component can hardly be separated from Zhangzhung *phang* ‘rainy mist, drizzle’ (Martin 2010: 145). The element *dul* may be compared with OIA *dhūli-* ‘dust, mist’, Torwali *dur* ‘mist’, Punjabi (Kangri) *dhūr* ‘thick mist or cloud’. It probably has nothing to do with Proto-Sino-Tibetan **tʃt* ‘dust’.¹⁷ The latter root seems to have reflected in Zhangzhung as *dur* in *slas dur* ‘earth dust’ (Martin 2010: 233).

12. *dus khri* (*gnod sems*) ‘thoughts of harming, malevolence’ (Martin 2010: 120). The element *khri* is nothing but the Zhangzhung word for ‘thought’.¹⁸ For *dus* (evidently, the equivalent of Tib. *gnod* ‘harm, damage’) cf. OIA *dūṣayati* ‘corrupts’, *dōṣayati* ‘spoils’, *dūṣya-* ‘corruptible, wicked’, *dōṣa-* ‘fault, sin’, Khowar *diš* ‘evil, bad, distasteful’, Shina *dišoiki* ‘to speak ill of, harm’, Kashmiri *dišērun* ‘to blame, malign’, Hindi *dūsnā* ‘to censure’.

13. *dzan* (*rims*) ‘contagion, epidemic’ (Martin 2010: 186). Cf. OIA *hanti* ‘kills, strikes’, *han-tar-* ‘killer’, *hana-* ‘killing, slaying’, Av. *ḵaiṇti* ‘kills, strikes’, *ḵaṇtar-* ‘killer’ < PII **ḵhan-* ‘to kill, strike’. For semantic development cf. OIA *māraka-*, *mārī-* ‘plague, epidemic (lit.: “killer, murderer”)’. The prototype of the Zhangzhung word in the donor language seems to have reflected an old lengthened-grade derivative of the cited root (PII **ḵhāna-*),¹⁹ the regular reflex of the formation with the short *a* (PII **ḵhana-*) would probably have been **dzun* (see 16).

14. *dzi ra* (*rig ’dzin*) ‘comprehension, clever’ (Martin 2010: 187). Cf. OIA *ḵīra-* ‘swift, lively, active’, Av. *ḵīra-* ‘swift, active, quick-witted’, Persian *zīrak* ‘clever, understanding’.

15. *gha ha* (*glang po*) ‘ox’ (Martin 2010: 65). The aspiration of the initial consonant in the Zhangzhung word is perhaps non-etymological. It may have appeared as a result of orthographical “Sanskritization”.²⁰ Cf. OIA *gō-* ‘ox, cow’, Pali *gāva-* ‘ox’, Av. *gau-* ‘bull, cow, cattle’, Gawar-Bati *gā*, Bashkarik *gā* ‘ox’, Indus Kohistani *gō-* ‘bull’, Shumashti, Torwali *gā*, Kalasha *gak*, Phalura *ghāu*, Kashmiri *gāw*, Lahnda *gā*, Punjabi *gāi*, Nepali, Assamese, Bengali *gāi*, Hindi *gāy*, Persian *gāv*, Pashto *ḡwā* ‘cow’.

16. *gu na* (*sgo nor*, *sgo phugs* [i.e., *sgo phyugs*]) ‘livestock, flocks’ (Martin 2010: 57). According to Martin, “this could be a Sanskritism, but it might need to be emended to correspond better with Skt. *gaṇa*, *kula* or the like” (Martin 2010: 57). The first of the two Sanskrit words just cited (i.e. OIA *gaṇa-* ‘troop flock’) seems to be the correct etymological parallel to the Zhangzhung lexeme. Cf. also Torwali *gan* ‘a herd’, Indus Kohistani *ghāṛ* ‘a crowd or group of people; group of trees or of houses’. The vowel *u* in the Zhangzhung form may have developed regularly from earlier **a*, cf. the change **a > o* before a nasal in the Aryan language of pre-Tibetan Ladakh (Kogan 2020).

17. *gu ra* ‘to turn (spontaneously, by itself)’ (Tenzin et al. 2008: 34). The Zhangzhung word may be either inherited and related to Tib. *’khor-ba* ‘to turn round’ or borrowed from some Aryan source (cf. OIA *ghūrṇati* ‘moves to and fro, rolls about, is agitated’, Hindi *ghūrṇā* ‘to roll round’, Indus Kohistani *ghuraṅ* ‘to turn, direct (water into a field)’).

¹⁶ The absence of final *l* in the first syllable may be due to a scribal error prompted by the existence of semantically similar expressions containing *du* ‘cloud’. Cf. *du pang spri zhi* ‘cloud and fog’, *du dang phang* id. (Martin 2010: 116).

¹⁷ Proto-Sino-Tibetan **tʃt* > Chinese **drən* ‘dust’, Tibetan *rdul* id., Lushai *dōl* ‘soil, refuse etc. banked up against a fence’ (Starostin 2005).

¹⁸ Cf. *khri* (*sems*) ‘mind, thought’ (Martin 2010: 51).

¹⁹ Cf. Buddhist Sogdian *’wz’n* (*ōžān*) ‘murder’ (Gharib 1995: 81) < Proto-Iranian **aua-jāna-* < PII **aua-jhāna-*.

²⁰ On this process see, e.g. Martin 2010: 12.

18. *ka ya bag* (*bkraḡ mdangs rgyas*) ‘wide and full brightness, lustre’ (Martin 2010: 33). The last component (*bag*) is attested as an independent word with the meaning ‘open’ (Martin 2010: 149). The meaning ‘brightness, lustre’ can thus be ascribed to the syllables *ka ya*. This Zhangzhung syllable sequence may reflect PII **kāśa-* ‘shine’. Cf. OIA *kāśate* ‘shines, is visible’, *kāśila-*, *kāśin-* ‘bright’, Av. *ākasaṭ* ‘(he) saw, beheld’, Khotanese *kas-* ‘to appear, to be seen’, Ashkun *kaširä*, Kati *kašera*, Waigali *kešerá*, Prasun *kašir* ‘white’ < Dardic (Turner 1966: 159). The intervocalic change **ś* > *y*, *i* is noted, e.g. in Pashai (Morgenstierne 1967: 33).

19. *kam* (*sog, sog pa*) ‘shoulder [blade], scapula’ (Martin 2010: 34). Cf. Gujarati *khām* ‘shoulder’, Sindhi *khambhurī* ‘wing’, Lahnda *khambh* ‘shoulder-blade, wing, feather’, Punjabi *khambh* ‘wing, feather’. R.L. Turner reconstructs for the Gujarati word the prototype **khavaka* ‘shoulder-blade’ which he compares with Latin *scapula* (Turner 1966: 203). It does not, however, seem reasonable to separate the Gujarati form from all the rest above-cited Indo-Aryan examples as well as from OIA *skambha-* ‘prop, pillar, fulcrum’. The semantic development was probably ‘fulcrum’ > ‘fulcrum of the arm’ > ‘shoulder(-blade)’ > ‘wing’.

20. *kun* (*rog rog*) ‘black, reddish brown’ (Martin 2010: 36). Cf. OIA *kr̥ṣṇa-*, Shina *kiñū*, Phalura *kišīnu*, Indus Kohistani *kišāṅ*, Bashkarik *kišin*, Torwali *kaṣan*, Kashmiri *kr̥hon*, *kruhun*, Tir. *kəḡən*, Kalasha *kriz̥ṇa* ‘black’. The etymological connection between the Zhangzhung, Old Indo-Aryan and Dardic forms was first postulated in Martin 2010. It should be added that Dardic seems to be the most probable source of borrowing, because in Indo-Aryan this word is no longer used as a color term.²¹

21. *ldem* (*shing*) ‘wood, tree’ (Martin 2010: 129-130). The word is hardly separable from Ladakhi (*l*)*ḍim*, Purik *ḍim* ‘trunk (of a tree), stem (of a plant)’, Balti *ḍim(s)* ‘trunk (of a tree)’ and shows etymological parallels in Burushaski, Dardic and Old Indian (cf. Burushaski *-ḍim* ‘*Körper, Person, Selbst, (Nagir) Halm (des Getreides)*’ (Berger 1998: 132), Shina *ḍim*, Khowar *ḍim* ‘body, tree-trunk’, OIA *ḍimba-* ‘body’). The Zhangzhung word could have been phonologically and/or orthographically influenced by Tib. *ldem-pa* ‘straight, upright, tall’.

22. *mu la* (*drod*) ‘warm’ (Martin 2010: 169). Probably, etymologically identical to Ladakhi *mala-mule* ‘lukewarm, tepid’, Balti *balbul* ‘tepid’. Cf. also Shina *būbūlū* ‘tepid’, Indus Kohistani *bubūl* ‘luke-warm (water)’, Burushaski *bulbulo* ‘lukewarm (of water)’. The word is not etymologizable in Dardic, and Burushaski seems to be the most likely ultimate source of borrowing.

23. *nel* (*ljang*) ‘green’ (Martin 2010: 136). Cf. OIA *nīla-* ‘dark blue, dark green, black; blue substance, indigo’, Ashkun *nīlestā* ‘green, blue’, Waigali *nyīlā, nīrā*, Kati *nīlā, ninyīlē*, Prasun *nīl, nyīli* ‘blue’, Tirahi *nīlā*, Gawar-Bati *nīlā*, Kalasha *nīlā*, Bashkarik *nūl*, Torwali *nīlā*, Phalura *nīlō*, Sh. *nīly*, K. *nyūl* ‘green, blue’, Sindhi *nīro*, Lahnda, Punjabi, Hindi *nīlā*, Gujarati *nīlū*, Marathi *nīl*, Nepali *nīlo*, Bengali *nīla* ‘blue’, Singhalese *nīl* ‘green, blue’. In Martin’s opinion, the Zhangzhung word must be a Sanskritism (Martin 2010: 136). This hypothesis, however, fails to explain phonological differences between the Sanskrit and Zhangzhung forms. Most probably, the true Sanskritism would have sounded *nī la*. It is also remarkable that in Old Indian *nīla-* is not at all the basic color term for ‘green’. In later Indo-Aryan this latter meaning is relatively rare, whereas it is very widespread in Dardic.

24. *ra ga* (*dmar po*) ‘red’ (Martin 2010: 203). Haarh and Martin compare this word with OIA *rāga-* ‘color, hue, dye, redness’ and consider it a Sanskritism in Zhangzhung (Haarh 1968; Martin 2010). It is, however, worth noting that Zhangzhung *ra ga*, as its Tibetan gloss clearly

²¹ The original Old Indo-Aryan (and Proto-Indo-European) meaning ‘black’ has been retained only in Pali and literary Prakrits, but borrowing from these languages into Zhangzhung is unlikely. In most New Indo-Aryan lects, where the reflexes of OIA *kr̥ṣṇa-* have been preserved, they function as local forms of the theonym Krishna. For details see Turner 1966: 179.

shows, is an adjective, whereas in Sanskrit *rāga-* was hardly used adjectivally. For this reason, it seems more probable that the source of borrowing was not Sanskrit but some spoken Aryan language where adjectivization had taken place. The possible source-form for the word in question could be either **rāga-* or **ranga-* (cf. OIA *raṅga-*, Persian *rang* ‘color’). The drop of old nasal before voiced gutturals is characteristic, e.g. of the Aryan language of pre-Tibetan Ladakh (Kogan 2019; 2020).

25. *rka* (*mkhal ma*) ‘kidney’ (Martin 2010: 40). It is unclear if this word can be a regular reflex of Proto-Tibeto-Burman **m-kal* as was hypothesized by Helmut Hoffmann (Hoffmann 1972). James Matisoff argues that the absence of final *-l* in the Zhangzhung form makes this etymology problematic (Matisoff 2001). Cf., however, OIA *vṛkka-* ‘kidneys’, Av. *vərəṭka-*, Persian *gurda*, Pashai *ṛakaṭi* (*r* < **wr*), (Areti dialect) *waṭṭawik* (*ṭṭ* < **ṛtk*), Kalasha, Khowar *bruk*, Bashkarik *juk* (*j* < **br*), Phalura *b(h)ruk*, Shina *zūk* (*z* < **br*), Lahnda *bukkī*, West Pahari (Jaunsari) *būkū* ‘kidney’, Bengali *buk* ‘heart, courage, chest’, Marathi *bokā* ‘kidney, breast’.

26. *shan* (*rnam shes*) ‘consciousness’ (Martin 2010: 219). Cf. also *sha shan* ‘memory, one-pointedness, vigilance, concentration’ (Tenzin et al. 2008: 260). The word seems to have Northwestern Tibetan cognates (Balti *shang* ‘wisdom, sense’, Purik *šan* ‘consciousness’, Ladakhi *shang* ‘alertness, awareness, caution, prudence’), which are themselves Aryan loanwords (cf. Shina *šon* ‘care, anxiety; awake, alert’, Khowar *šan* ‘fear, suspicion’, OIA *śaṅkatē* ‘is afraid, distrusts’, *śaṅkā-* ‘fear, distrust’ < PIE **k’enk-*). The same Aryan word was borrowed into Burushaski (*šan* ‘awake, aware; care, heed, attention’). In the Zhangzhung lexeme the final dental *n* (instead of expected guttural *ng*) may have developed due to phonological influence of some semantically close but probably etymologically unrelated words (cf., e.g. *shin* ‘to know’, *she shen* ‘awareness, conscience, intellect, knowledge, idea’). Note, however, the change *ng* > *n* in Zhangzhung *thon* ‘the number one thousand’ (Tenzin et al. 2008: 104) < Proto-Tibeto-Burman **s-tong* ‘thousand’.

27. *ta pi* (*’od*) ‘light’ (Martin 2010: 85). Cf. OIA *tapati* ‘is hot’, *tāpayati* ‘burns’, Pali *tapati* ‘shines’ Av. *tāpaieiti* ‘makes hot’, Khotanese *pattav-/pattau-* ‘to burn up; illuminate’ (< **pati-tap-*), Sogdian *wyt’’p-* ‘to shine, radiate’ (< **ui-tap-*), Persian *tāftan* ‘to shine’, Kurdish *taw* ‘sun’.

28. *tan* (*ldan, nyid*) ‘having, oneself’ (Martin 2010: 87). Perhaps, we are dealing here with two homonyms. Zhangzhung *tan* ‘having’ may be somehow connected with its Tibetan equivalent *ldan* ‘having, being possessed of, provided with’, whereas the homophonous reflexive pronoun seems to be an Aryan loanword. Cf. OIA, Av. *tanū-* ‘body, person, self’, OIA *tānva-* ‘one’s own’, Pashai *tānuk*, Khowar *tan*, Phalura *tēni* ‘own, self’, Kalasha *tan* ‘self’ < **tānu-*.

29. *tsa mo* (*nya mo, nya*) ‘fish’ (Martin 2010: 179). This word has a monosyllabic variant *tsa*. Since in Zhangzhung, unlike in Tibetan, the element *mo*, apparently, did not exist as a productive derivative morpheme, the monosyllabic variant seems to be historically secondary.²² It may have come into being due to later misconstruction of *tsa mo* as containing the Tibetan feminine marker. Martin seems to be the first to reasonably point out the similarity of the lexeme in question to the word for fish in Shina dialects (Martin 2010: 22, 179). It should be noted in this connection that besides Shina possible cognates of the Zhangzhung word can be found also in Indus Kohistani and Burushaski (cf. Shina *čhīmū* (Gilgiti dialect), *čhumo* (Astori and Gurezi dialects), Indus Kohistani *chīm*, Burushaski *čhumo* ‘fish’). Given that the above-cited lexical items are not etymologizable in Indo-Iranian, Burushaski is likely to be their ultimate source.²³

²² James A. Matisoff (2001: 8) argued that Zhangzhung *tsa* may be either an Indo-Aryan loan or an inherited Sino-Tibetan word related to some Qiangic words for fish. He, however, seems to have discarded the latter alternative later on, since in his Sino-Tibetan database the Zhangzhung form is not cited as a cognate of Qiangic ones.

²³ It is remarkable that Burushaski *čhumo* is attested in the dialect of Yasin. This dialect is not in close contact with Shina, and no apparent Shina loanwords have been detected in it so far.

30. *tsag kor* (*'khor lo*) 'wheel, circle' (Martin 2010: 179). Cf. OIA *cakra-*, *cakrī-*, Av. *čaxra-* 'wheel', Shina *čarkū* 'wheel, spinning wheel', Kashmiri *cakḥir* 'wheel', Sindhi *caku*, Punjabi *cakk*, Gujarati *cāk*, Assamese *sāk*, 'potter's wheel', West Pahari *cakkī* 'mill', Kumauni *cāk(h)o* 'hand-mill', Hindi *cāk* 'millstone', Bengali *cākā* 'wheel', Sinhalese *saka* 'wheel, circle', Persian *čarχ*, Balochi *čark*, Ossetic *calχ* 'wheel'. Zhangzhung *tsag kor* 'wheel, circle' is construed by some scholars as a compound containing clipped forms of OIA *cakra-* and Tib. *'khor lo* (Stein 1971; Matisoff 2001). This, however, does not seem to be the case. If the second component were really borrowed from Tibetan, the voiceless aspirate *kh* would have been preserved as such. Cf. Zhangzhung *ti khor* 'the world, transmigration' (Martin 2010: 179) functioning as an equivalent of Tib. *'khor ba* and, most probably, formed from the borrowed Tibetan root *'khor* 'to go round', i.e. from the same root that we find in Tib. *'khor lo* 'wheel'. However, nothing like **tsag khor* is attested in Zhangzhung. Therefore, it appears more plausible that the Zhangzhung word, borrowed from some Aryan source, where it sounded as **čakkVr*, was later phonologically influenced by the Tibetan one, and due to this influence the vowel *o* has developed in its second syllable. The word in question coexisted in Zhangzhung with two etymologically identical lexemes evidently borrowed directly from Sanskrit, i.e. *rtsa krad* 'wheel, circle'²⁴ (Martin 2010: 182) and *tsa kra* 'knife, dagger' (Martin 2010: 178), cf. OIA *cakra-* 'a sharp circular missile weapon, the discus of Vishnu'.

31. *yos se* (*bud med*) 'woman' (Martin 2010: 203). The element *se* is a widespread Zhangzhung suffix.²⁵ As Martin reasonably notes, the word is, no doubt, connected with OIA *yoṣit-* 'young woman'. However, historical-phonological facts (e.g., the loss of the old second syllable) suggest that we are hardly dealing with a direct borrowing from Sanskrit. Rather, the lexeme in question was adopted from some colloquial Aryan language.

In Martin's dictionary I have come across two words belonging, in all probability, to the inherited Sino-Tibetan stratum but wrongly classified as Aryan loans:

1. *ag sho* (*kha*) 'mouth' (Martin 2010: 247). The Zhangzhung lexeme is hardly separable from words for mouth in closely related West Himalayish languages: Bunan *ag*, Pattani (Manchad) *à(h)*, Byangsi *ā*, Chaudangsi *ak*. For the element *sho* cf. *ting sho* 'river, moisture', *ting* being the basic Zhangzhung word for water.²⁶ The cited West Himalayish forms are traditionally considered to be etymologically connected with Tib. *'ag tshom* 'beard of the chin', Burmese *āk* 'opening, gap', Lepcha *ók* 'open (as door, mouth)' and to descend from Proto-Tibeto-Burman **ak* 'crack open' (Benedict 1972: 36; Matisoff et al. 2015). Martin, however, believes that the Zhangzhung word in question, as well as its West Himalayish cognates, may be of Aryan origin and compares it with Shina *āi*, *āzu*, Brokskat *ūzu* 'mouth' (< PII **ās-*, cf. OIA *ās-*, *ās(i)ya-*, Av. *āh-* 'mouth'). In terms of historical phonology Martin's hypothesis seems to be much less plausible than the traditional view.

2. *yu ti* (*chang*) 'wine, barley beer' (Martin 2010: 200). The second syllable is, no doubt, identical to the word for water in many Tibeto-Burman languages including Zhangzhung. The first syllable Martin compared with Shina *yō* 'barley'. The Shina word, as well as the related lexemes in other Aryan languages, reflects PII **īaua-* (> OIA, Av. *yava-* 'cereal'). However, Zhangzhung *yu* can hardly be separated from Kinnauri (Thebor), Tsangla, Digaro *yu*, Lushai *zu* 'liquor, wine, beer', Chinese **lu* 'wine bottle, wine' < Proto-Sino-Tibetan **jū* (Starostin 2005).²⁷

²⁴ Phonologically probably *tsakra* or *tsakre*. The spelling of this word was Tibetanized.

²⁵ For more details on this suffix see Haarh 1968.

²⁶ In Zhangzhung the word for water is attested in two spelling variants: *ting* and *ti* (Martin 2010: 88, 95–96).

²⁷ For more Tibeto-Burman comparanda see, e.g. Benedict 1972: 32; Matisoff et al. 2015.

Conclusions and discussion

The above list contains 31 etymologies of different reliability. At first glance, this figure may seem to be small, but it should be kept in mind that we are dealing with a poorly attested language. Considering the fact that the sizable proportion of about 3500 entries in Martin's dictionary are cross-references (Martin 2010: 5), it's easy to conclude that the above-cited Indo-Iranian loans make up not less than 1% of the Zhangzhung words identified thus far. It is also worth noting that a significant part, if not the majority, of lexical items in all the extant Zhangzhung dictionaries, including the Martin's one, are religious and philosophical terms, whereas in our list such terms are relatively rare.²⁸ It means that outside religio-philosophical technical lexicon the percentage of Indo-Iranian borrowings must have been much higher than the average for the analyzed dictionary. The above-listed words mostly belong to non-terminological everyday vocabulary and even include several items of the Swadesh list (*kun* 'black', *ldem* 'tree', *mu la* 'warm', *nel* 'green', *ra ga* 'red', *tsa mo* 'fish', *yos se* 'woman'). The mere presence of such lexical items, even though some of them do not seem to be main synonyms,²⁹ clearly indicates that Aryan-Zhangzhung contact must have been fairly intensive.

It would be of interest to try a tentative classification of the loans on the above list, based on their probable immediate sources. A noteworthy fact is the presence of several words possessing etymological parallels in Tibetan dialects of Ladakh and Baltistan (see 6, 9, 21, 22). These parallels, identified in our previous publications (Kogan 2019; 2020) as Indo-Iranian borrowings, show special similarity in phonological development, and in most cases also in semantics, to their Zhangzhung counterparts. This gives us reason to believe that the Indo-Iranian language of pre-Tibetan Ladakh, or some lect closely related to it,³⁰ was at least one of the sources of non-Sanskrit borrowed vocabulary in Zhangzhung.

It is also instructive that some of the above-listed lexical items, even though they lack cognates borrowed into Tibetan, display historical-phonological peculiarities pointing to their theoretical derivability from the same source-lect as Indo-Iranian loanwords in Ladakhi, Purik and Balti. E.g., as noted above (see 24), for Zhangzhung *ra ga* 'red', if we compare it with OIA *raṅga-* 'color', the drop of historical nasal before a voiced guttural may be hypothesized, which was attested in Aryan loan vocabulary of Northwestern Tibetan (Kogan 2019; 2020).

The change **a > u* in Zhangzhung *gu na* 'livestock, flocks' (cf. OIA *gaṇa-* 'troop, flock') may have passed through the stage of *o*, the development *o > u* before *n* being a typologically widespread phenomenon. If this conjecture is true, the Zhangzhung lexeme may well have been borrowed from the Indo-Iranian language of pre-Tibetan Ladakh, where *o* seems to be the regular reflex of earlier *a* before nasals (Kogan 2020).³¹

²⁸ Perhaps, the only two clear examples are *ag* 'rākṣasa' and *du ti* 'hell, suffering'.

²⁹ Zhanzhung *kun* 'black' is used for animals only (Martin 2010), the most common words for 'black' being *kh(w)a*, *mung* and their derivatives. For the two other above-mentioned color terms synonyms of non-Indo-Iranian origin are also attested, cf. *i, li ti* 'green', *pa ru, mang* 'red'. The latter word seems to be the most frequent and has apparent West Himalayish cognates: Bunan *maṅi*, Darmiya *mangnu*, Rongpo *məṅdə*, Byangsi *maṅde* 'red'. Zhangzhung *yos se* 'woman' has an inherited synonym *tsa med*, also possessing etymological parallels in modern West Himalayish languages (cf. Bunan *tsemet*, Kinnauri *chīme*, Byangsi *tsame* 'daughter, girl').

³⁰ Dialectal differences may account for certain phonological discrepancies between Northwestern Tibetan and Zhangzhung lexemes. Cf., e.g. Ladakhi *darak*, Purik *deraq* 'stiff, hard' vs Zhangzhung *di ro, de ro* 'unchangeable'. In this particular case, however, there seems to be an alternative plausible explanation. Absence of the final guttural stop in the Zhangzhung forms can be attributed to the fact that, unlike the Ladakhi and Purik words, they reflect not the old formation with the suffix *-k-*, but some other derivative of PII **dhar-* 'to hold'.

³¹ The change **a > o* did not take place if the nasal was followed by another consonant or the historical vowel **i* (Kogan 2020).

The intervocalic change $*ś > y$, attested in Zhangzhung *ka ya* ‘brightness, lustre’ (< PII $*kāśa-$ ‘shine’, see 18), may represent an intermediate phase of the historical-phonological process in the source-language, finally resulting in the complete drop of intervocalic $ś$, detected in Indo-Iranian loan vocabulary in Ladakhi.³² If this process really followed the scheme suggested here, i.e. $ś > y > 0$, borrowing into Zhangzhung must have taken place before the change had reached its final stage.

Naturally, all the three above scenarios of phonological development and loanword adoption are entirely hypothetical, and additional material is strongly needed for their verification.

Another historical-phonological feature, common for Indo-Iranian elements in Zhangzhung and in Northwestern Tibetan dialects, is the dentalization of earlier palatal affricates.³³ This feature, however, is also characteristic of Zhangzhung words borrowed from Sanskrit and, for this reason, can hardly be considered diagnostic.

As has been shown in Kogan 2020, the source-language of Indo-Iranian vocabulary in Ladakhi, in all likelihood, belonged to the Dardic group. In the light of this, it is noteworthy that at least for some Aryan loanwords in Zhangzhung Dardic origin seems probable. Such loanwords show historical-phonological isoglosses that affect Dardic languages too and even can, with a high degree of plausibility, be regarded “pan-Dardic”. For instance, in Zhangzhung *chal* ‘decrease, lower, cause diminution, fade away’ (see 6), whose prototype is likely to be related to OIA *kṣalati* ‘flows, trickles; wastes away, wanes, perishes’ and Proto-Iranian $*xšar-$ ‘to flow’, one can trace the phonological development PII $*kš > čh$ (= *ch* in Tibetological transcription). This process can hardly be reconstructed in detail, but what can be stated with certainty is that the voiceless palatal aspirate could not have evolved before the dentalization of historical palatal affricates. Otherwise, one should expect $*tshal$ with initial dental. A totally identical picture can be observed in the Indo-Iranian language of pre-Tibetan Ladakh for which I have suggested the affricate shift, similar to the one peculiar to Kashmiri and some other Dardic languages (Kogan 2019; 2020). Such a shift implies the development of palatal affricates from earlier cerebral ones. I see no reason to consider the same scenario impossible for the Aryan lect from which the Zhangzhung root in question had been borrowed. In other words, nothing prevents us from hypothesizing the change PII $*kš > čh$ in this lect. The latter change took place throughout the Dardic group, as well as in Nuristani. Nuristani influence on Zhangzhung, however, seems much less likely than the Dardic one. No examples of Nuristani diagnostic historical-phonological innovations were noted in the above list, while in some words the development is totally different from the Nuristani one (cf., e.g. *sh* (= $š$) < PIE $*k'$ in 26, the Nuristani development being $*k' > c$).

Another Dardic isogloss, found in certain Indo-Iranian loans in Zhangzhung is the deaspiration of the Proto-Indo-Iranian voiced aspirated affricate $*jh$ (< PIE $*gh, *g^wh$ in the palatalizing position). Cf. Zhangzhung *dzan* ‘contagion, epidemic’ < PII $*jhan-$ ‘to kill’.³⁴ This historical-phonological feature, however, is shared by Nuristani and Iranian too. The exact source of the cited loanword therefore remains, technically, an open question, although Iranian origin seems to be less probable for the same reason as the Nuristani one: no instance of typically Iranian phonological development was noted in our material, whereas in some cases historical phonology is definitely non-Iranian.³⁵

³² More on this process in Northwestern Tibetan varieties see Kogan 2020.

³³ See 13, 14, 30. On dentalization in the Indo-Iranian language of pre-Tibetan Ladakh see Kogan 2020.

³⁴ For more details, see 13.

³⁵ Cf. the above-mentioned change of PIE word-initial prevocalic $*k' > š$. The expected reflex of the Proto-Indo-European voiceless palatal dorsal in this position in East Iranian, including Saka dialects that theoretically

To sum up, there are some reasons to assume the presence of the Dardic etymological stratum in Zhangzhung vocabulary, though at the current state of our knowledge this hypothesis cannot be conclusively proven because of the lack of data. What does already seem remarkable and suggestive is the above-mentioned set of lexical isoglosses, shared by the donor language of Aryan loanwords in Zhangzhung and the supposedly Dardic source-lect of Indo-Iranian borrowings in Ladakhi.³⁶ The existence of such isoglosses may be indicative of the fact that the two here mentioned Sino-Tibetan languages had adopted a number of Indo-Iranian words from the same Dardic dialect or dialect group.

As for Indo-Aryan lexical influence on Zhangzhung, it appears to be much more questionable than the Dardic one, if we exclude evident loans from Sanskrit. No instances of typical Indic historical-phonological development have been noted in the above material. The list contains as little as two lexical items, common for Zhangzhung and Indian but absent from other branches of Indo-Iranian, i.e. *dh(r)i lu* ‘laziness’ and *kam* ‘shoulder blade, scapula’ (see 8, 19). The former of these examples, as already noted, may well be a ghost word, while the latter, being fairly reliable in terms of etymology, is remarkably lacking in Indo-Aryan languages spoken adjacent to Zhangzhung in the Himalayan region.

The preliminary picture of historical-phonological and lexical isoglosses, resulting from the above analysis, yields us some hints as to the erstwhile language and ethnic contact in the area under study. The speakers of the Zhangzhung language in pre-Tibetan times seem to have communicated rather intensively with their Dardic neighbors down the Indus. This fact is very much in line with some local historical traditions. The present-day Ladakh, especially its southeastern (“upper”) areas, is sometimes believed to have formed a part of the Zhangzhung kingdom before the Tibetan conquest (Bellezza 2008; Zeissler 2010).³⁷ Regions further to the northwest were regarded by some Bon authors as one of the main components of the Zhangzhung empire and called *Zhang-Zhung bar-pa*, i.e. Middle Zhangzhung. The language of *Zhang-Zhung bar-pa* was deemed to be related to Sanskrit (Haarh 1968).³⁸ In this tradition the Zhangzhung language proper was known as *Zhang-Zhung smar* (lit. “good (or refined) Zhangzhung language”) and its speaking area as *Zhang-Zhung sgo-pa* (lit. “the Zhangzhung of the gate, gateway Zhangzhung”). It is only natural to assume that the lects spoken in the two Zhangzhungs (“middle” and “gateway”) could have been in close contact.

It should, however, be borne in mind that all the above is still a hypothesis. The issue of possible Zhangzhung-Indo-Iranian language contact, no doubt, needs further research for which additional material is required. Potential sources of such material are, first of all, hitherto unstudied Zhangzhung-Tibetan bilinguals, still numerous in Bon religious literature. The Zhangzhung text of these bilinguals may well contain so far unknown Aryan loan vocabulary.

may have once been in contact with Zhangzhung, is s. Borrowing into Zhangzhung from Proto-Iranian, where according to some reconstructions the reflex was *ś, is improbable.

³⁶ In Kogan 2020 it was demonstrated that this lect had probably been influenced by Burushaski. It is notable in this connection, that for some Zhangzhung words (see, e.g. 22, 29) Burushaski seems to be the likely ultimate source. It cannot be ruled out that they were borrowed into Zhangzhung via Dardic.

³⁷ Interestingly, archaeological excavations have shown that in the western areas of the present-day Ngari prefecture, adjoining the Indo-Chinese frontier, there existed a number of important settlements of the Zhangzhung period, some of which probably functioned as religious centers. One of such settlements was discovered near the historic town of Ru-thog (Rudok), situated right near the border with Indian-controlled Ladakh (Bellezza 2008).

³⁸ It cannot be ruled out that this traditional view rested upon linguistic observations. The genetic relationship between Dardic languages and Sanskrit is in certain cases self-evident and, for this reason, could have been noticed by educated Tibetans.

It also cannot be excluded that the Indo-Iranian source-language of this vocabulary is represented in some previously unexplored textual fragments. In this regard, of special interest is the existence of several bilingual titles, whose non-Tibetan parts are written in lects, undoubtedly different from Zhangzhung and as yet unidentified.³⁹ Their decipherment may turn out to be of great help in the reconstruction of the language situation in the pre-Tibetan Upper Indus region.

Abbreviations for language names

Av. — Avestan; OIA — Old Indo-Aryan; PIE — Proto-Indo-European; PII — Proto-Indo-Iranian; Tib. — Tibetan

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³⁹ The names of these lects are sometimes obscure and hard to interpret (cf., e.g. *ka-pi-ta gyung-drung lha'i skad* ‘the language of Ka-pi-ta swastika gods’).

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А. И. Коган. К реконструкции языковых контактов в регионе верховьев Инда в дотибетскую эпоху

В статье делается попытка частично восстановить картину языковых контактов в исторической области Шангшунг на северо-западе Тибета в эпоху, предшествовавшую завоеванию этой области тибетцами во 2-ой половине I тыс. н.э. Язык дотибетского населения Шангшунга, известный, главным образом, по ряду фрагментов в средневековых тибетских текстах, относится к западногималайской группе тибето-бирманской ветви сино-тибетской языковой семьи. При этом, однако, в лексике этого языка имеется значительный по объему индоиранский этимологический пласт. Автор показывает, что некоторые слова, относящиеся к данному пласту, обнаруживают точные соответствия в тибетских диалектах Ладакха и Балтистана. На основании анализа индоиранских элементов в шангшунгском языке делается вывод о том, что дотибетское население области Шангшунг, вероятно, находилось в достаточно тесном контакте с арийскими (возможно, дардскими) по языку жителями областей, расположенных ниже по течению Инда.

Ключевые слова: языковые контакты; лексические заимствования; индоиранские языки; дардские языки; сино-тибетские языки; шангшунгский язык.