

Etymological notes on borrowed vocabulary in the Tibetan dialects of Baltistan and Kargil

The results of recent studies have suggested that a major part of loanwords in the Tibetan dialects spoken in Kargil and Baltistan was adopted from an early form of Burushaski. This conclusion is, however, preliminary and needs to be refined. An attempt at such refinement is made in the present article. The author demonstrates that although Burushaski words really predominate in borrowed vocabulary of Balti and Purik, both dialects contain a considerable number of loans from certain Indo-Iranian sources. Based on historical-phonological data, as well as on analysis of lexical isoglosses, it is argued that these sources are likely to include Dardic Shina and Brokskat.

Keywords: Tibetan dialects; Balti language; Purik language; Burushaski language; Dardic languages; language contact; loanwords.

Introduction

The Tibetan dialects that will be dealt with in the present study are spoken mainly in a part of the Upper Indus Basin, nowadays divided between the Pakistani-controlled area of Gilgit-Baltistan and the Indian union territory of Ladakh. Their speakers differ from the rest of the Tibetans in religion (they are mostly Shia Muslims), as well as physical-anthropologically and, as recent studies have shown, genetically.¹ This fact suggests the existence of pre-Tibetan ethnic substratum, or substrata, in the region and naturally raises the question of possible substrate vocabulary in local Tibetan spoken varieties.

In my earlier publications (Kogan 2019; 2020) I have considered this question for both “Muslim” and “Buddhist” Tibetan dialects of the Upper Indus region. Etymological study of borrowed lexicon led me to conclude that in the varieties spoken in the greater part of Ladakh, possible substrate loans were adopted chiefly from an otherwise unknown Indo-Iranian lect possessing certain historical-phonological features of the Dardic group,² whereas for the dialects of Baltistan and Kargil some early form of Burushaski must have been the substrate language. These conclusions are, however, of the most general nature and in some points need further clarification. Among the unclear points is, e.g. the origin of Indo-Iranian loanwords peculiar to Balti and Purik. Such lexical items have been found in a fairly significant number in the course of my research (Kogan 2019). Furthermore, it must be noted that the predominance of Burushaski words in the loan vocabulary of the aforementioned spoken varieties, stated in (Kogan 2019), has been established preliminarily rather than conclusively, and should still be considered a hypothesis that needs testing.

¹ According to the latest genetic research, the genomes of Tibetan-speaking Balti people of Gilgit-Baltistan comprise only 22.6–26% Tibetan ancestry, which suggests that the influence of Tibet on the region involved only minor demic diffusion (Yang et al. 2020).

² Many of these loanwords are apparently common for Ladakhi, Purik and Balti dialects, which can be attributed to the fact that the route of Tibetan migration to what is now Kargil and Baltistan must have passed through the present-day Ladakh (Kogan 2019).

The present article attempts to clarify the two aforesaid issues. For this purpose, I have conducted an etymological study of Burushaski and Aryan borrowed vocabulary in several Northwestern Tibetan dialects. As the main data source I used Richard Keith Sprigg's "Balti-English English-Balti dictionary" (Sprigg 2002).³ It contains chiefly the material of Skardu and Khapalu dialects, spoken in Gilgit-Baltistan and often grouped together under the umbrella term "Balti". Some lexical evidence from the Purik dialect spoken in the Indian district of Kargil has also been analyzed. In the absence of dictionaries, such evidence was often drawn from grammatical descriptions (Bailey 1920; Zemp 2018). In the following section the results of the study are listed in alphabetical order. Balti and Purik words are cited in their original notation.

A list of probable Indo-Iranian and Burushaski loanwords in Balti⁴ and Purik

1. Balti *adiid*, Purik *ādit* 'Sunday' (Sprigg 2002: 20; Bailey 1920: 43). Cf. Burushaski, Shina *adīt*, Brokskat *aditi* id. (Berger 1998b: 12; Sharma 1998: 130), OIA *āditya*- 'sun', *ādityavāra*- 'Sunday'. Like all the names of the days of the week in Balti, Burushaski and adjoining languages, this word is probably an early loan from Indo-Aryan (Kogan 2024).

2. Balti *akaash* 'perforce, unavoidably, obliged to' (Sprigg 2002: 20). Cf. Burushaski *akāṣ* 'Unglück, Pech, was man notgedrungen, wohl oder übel, machen muß' (Berger 1998b: 14).

3. Balti *angaaru*, Purik *āṅgāri* 'Tuesday' (Sprigg 2002: 21; Bailey 1920: 43). Cf. Burushaski *aṅáro*, Shina *aṅáaro*, Brokskat *angāro* id.,⁵ OIA *aṅāraka*- 'the planet Mars'. See also 1.

4. Balti *anggon* 'courtyard (central square of a Baltistan house, open to the sky)' (Sprigg 2002: 21). Cf. Burushaski *agón* "'Hof" um den Mond; Kreis (von Menschen); oberer Raum, Veranda, Empfangsraum', Shina *hagón* id. (Berger 1998b: 13), OIA *aṅgana*- 'act of walking, courtyard', Pali *aṅgaṇa*- 'open space before palace', Hindi-Urdu *āgan* '(court)yard'.

5. Balti *araṭap* 'complete stranger, from another part', *araṭap-la* 'suddenly' (Sprigg 2002: 22). Cf. Burushaski *araṭap* 'plötzlich, unerwartet (vom Erscheinen einer Person), zufällig', Shina *araṭáp* id. (Berger 1998b: 20).

6. Balti *ashi* 'responsibility, someone responsible', *ashipa* 'owner, master, husband, Lord' (Sprigg 2002: 22), Purik *aṣi* 'ownership', *aṣi-pa* 'owner' (Zemp 2018: 111). Cf. Burushaski (Nagir) *di-aṣi* 'überlegen sein, überwältigen' (Berger 1998b: 23). See also Kogan 2019.

7. Balti *baan* 'man or men who sing religious songs and foretell the future' (Sprigg 2002: 24). Cf. Kashmiri *wan-*, Indus Kohistani *ban-* 'to say', Kalasha *bandek* 'to teach; to announce so as to inaugurate, to order or command' (Trail & Cooper 1999: 27), OIA *vandate* 'praises, worships', Av. *vaṇd-* 'to praise, honor, worship'. See also Kogan 2019.

8. Balti *ban* 'fence' (Sprigg 2002: 25). Cf. OIA *bandha*- 'border, framework, damming', Shina *bāná* 'boundary' (Bailey 1924: 131), Indus Kohistani *banà* 'a boundary stone' (Zoller 2005: 301). See also the next word.

9. Balti *bar-ban* 'window (in a wall), glass-pane window' (Sprigg 2002: 26), Purik *barban* 'window' (Zemp 2018: 945). Cf. Brokskat *barban* id. For the element *bar-* cf. OIA *dvār-* 'door,

³ In my previous works (Kogan 2019; 2020), I occasionally referred to Sprigg's dictionary but abstained from scrutinizing it in full, my main source of lexical data being Rebecca Norman's dictionary of Ladakhi (Norman 2010). In the present article, I analyze only those loanwords noted by Sprigg that are likely to be peculiar to Balti and Purik, i.e. are, except in certain special cases, not attested in other Tibetan spoken varieties.

⁴ Lexical data labeled as Balti belong to the dialect of Skardu, unless otherwise indicated.

⁵ Unless otherwise indicated, Brokskat lexical data have been drawn from Sharma 1998.

gate', Av. *duuar-* 'gate', Kalasha *durík*, Palula *darúri*, Indus Kohistani *darī*, Shina *darií*, Kashmiri *dār* 'window'.⁶ For the element *-ban* see the previous word. See also Kogan 2019.

10. Balti *basanda* 'dandelion' (Sprigg 2002: 27). Cf. OIA *vāsanta-* 'vernal, pertaining to spring', *vasanta-* 'spring' See also Kogan 2019.

11. Balti *bat* 'boiled mixture of germinated grain flour and ordinary flour (made during Ramzan)' (Sprigg 2002: 27), Purik *bato* 'rice' (Zemp 2018: 469). Cf. OIA *bhakta-* 'food; boiled rice', Khowar *bot* 'evening meal', Kalasha *batay* 'flour taken to be eaten in high pastures' (Trail & Cooper 1999), Shina *bat*, Bashkarik *batt*, Torwali *bāt*, Kashmiri *batī* 'boiled rice', Wakhi *bat* 'wheat flour gruel', Ishkashimi *bat*, Shughni *bāt*, Munji *bātāk* 'ritual food made of wheat flour and butter, cooked in water or milk' (Steblin-Kamenskiy 1999: 95).⁷ See also Kogan 2019.

12. Balti (Khapalu dialect) *boṣoq* 'calf' (Norman 2010: 604). Cf. Burushaski *buṣooṣo* (Hunza, Nagir), *bóṣo* (Yasin) id. (Berger 1998b: 65). See also Kogan 2019.

13. Balti *botu*, Purik *bōdū* 'Wednesday' (Sprigg 2002: 30; Bailey 1920: 44). Cf. Burushaski *bódo* (Hunza), *búdu* (Yasin), Shina *bódo*, Brokskat *bodu* id., OIA *budha-* 'the planet Mercury', *baudha-*, *budhavāra-* 'Wednesday'. See also 1.

14. Balti *brespat*, Purik *brēspāt* 'Thursday' (Sprigg 2002: 32; Bailey 1920: 43). Cf. Burushaski *biréspat*, Shina *bréspat*, Brokskat *brasput* id., OIA *br̥haspati-* 'name of a deity, the planet Jupiter', *br̥haspativāra-* 'Thursday'. See also 1.

15. Balti *bwaar* 'watermelon' (Sprigg 2002: 35). Cf. Shina *buār* (Bailey 1924), Burushaski (Hunza, Nagir, Yasin) *buar* id. (Berger 1998b: 60). See also Kogan 2019.

16. Balti *caka* 'cheese' (Sprigg 2002: 39). Cf. Burushaski *caká* 'Quark, den man in einer Tasche hat abtropfen lassen' (Berger 1998b: 82).

17. Balti, Purik *cancan* 'naked' (Sprigg 2002: 40; Zemp 2018: 926; Norman 2010: 288). Cf. Khowar, Kalasha *čan* id. See also Kogan 2019.

18. Balti *chaoni* 'shade among garden trees, courtyard (of large buildings)' (Sprigg 2002: 42). The source of this word must have been a compound with the first part inseparable from Indo-Iranian words for 'shade, shadow': OIA *chāyā-*, Pali *chāyā-*, Sogdian *sy'kh*, Classical Persian *sāya*, Yidgha *sāyo*, Kalasha *čhak*, Khowar *čhay*, Shina *čhāi*, Kashmiri *chāy* < Proto-Aryan **scāiā-* < PIE **sk'āi-*. Cf. also Av. *asaya-* 'without shadow'.

19. Balti *chaḍu* 'vile, unclean, unholy, abominable, filthy, foul, impure, lewd' (Sprigg 2002: 42). Cf. Brokskat *č(h)uṭu* 'bad, dirty, rotten'. Probably, together with Kashmiri *chēṭun* 'to become impure, to become unclean, to become refuse and untouchable' < PII **ścṛtta-*, the perfect participle of the verb **ścard-* 'to leave, eject, vomit'⁸ (> OIA *chr̥ṇatti* 'leaves, vomits', *chardayati* 'vomits', *chardis-* 'sickness, nausea, vomiting'; Parthian *wsrd* 'poured?', Khotanese *e-saly-* 'to besmear'). The cognates of this word with the dentalization of the initial affricate are found in Ladakhi, Purik and Burushaski: Ladakhi *tshiṭu*, *tshitu* 'unclean, contaminated, disgusting; the Ladakhi Shia concept of contamination of food or water by a non-Muslim; contamination or violation of a spirit, sacred place or holy person, esp. if it is believed to cause illness or spiritual pollution' (Norman 2019: 323), Purik *tshe(r)ṭu* 'dirty' (Zemp 2018: 932), Burushaski *zuṭú* (Hunza-Nager), *zeṭú* (Yasin) 'unrein durch Pollution, Menstruation, oder wenn man nach dem Koi-tus nicht gebadet hat' (Berger 1998b: 486). For more details, see Kogan 2025.

20. Balti *chum* 'bunch; muscle of thigh' (Norman 2010: 318). Cf. Burushaski *čhu* 'ear (of corn), bunch (of grapes)' (Lorimer 1938: 101), Indus Kohistani *cui* 'a bunch of grapes or other fruits' (Zoller 2005: 166). See also Kogan 2019.

⁶ Burushaski *dari* 'window' (Lorimer 1938: 114) must have been borrowed from a Dardic source.

⁷ The Wakhi, Ishkashimi, Shughni and Munji words, as well as Burushaski *bat* in *brase bat* 'plain, boiled rice', *alue bat* 'mashed potatoes' (Lorimer 1938: 73) must have been borrowed from a Dardic source.

⁸ From PIE **sk'er-d-* (Pokorny 1959: 947–948).

21. Balti *cuḍuk, culuk* ‘small twigs, etc.; broken sticks for firewood’ (Sprigg 2002: 47). Cf. Burushaski *ćuuyo* ‘*kleines Stückchen (von Holz, Stein, Fleisch usw.)*’ (Berger 1998b: 94). In Burushaski intervocalic *y* regularly reflects earlier *ḍ* in loanwords (Berger 1998a; Kogan 2019).

22. Balti *ḍanda* ‘torch, stick on the top of which are fitted resinous spikes of wood for burning as a torch’ (Sprigg 2002: 183). Sprigg’s comparison with Hindi-Urdu *ḍaṇḍā* ‘staff’, ‘pole’ seems to be correct. Cf. also OIA *daṇḍa-* ‘stick, club, handle’, Shina *ḍoṇṇ* ‘handle (of axe etc.)’, Brokskat *ḍun*, Indus Kohistani *ḍāṇḍ* ‘stick’ (Zoller 2005: 222), Kashmiri *dan* ‘hilt, handle (of hammer)’.

23. Balti *das* ‘stony unfertile plot of land’ (Sprigg 2002: 49). Cf. Burushaski *das* ‘*unbebautes Land, Steppe, Wüste, Ödland*’ (Berger 1998b: 116), Brokskat *dus* ‘ground, plain, land, field’, Shina *dās* ‘uncultivated tableland’ (Bailey 1924: 138), Khowar *das* ‘waste land never cultivated, desert, wilderness’. Sprigg’s etymology of the Balti lexeme (< Urdu *dašt* ‘desert, arid plain’) seems to be doubtful for phonological reasons. Turner’s comparison of the Khowar word with OIA *dhāśas-* ‘mountain’ (Turner 1966: 389) is highly questionable because of the semantic difference.

24. Balti *daxon* ‘sheet, scarf (Baltistan)’ (Sprigg 2002: 49). Cf. Ladakhi *daon, dahon, dagon* ‘head-scarf, a shawl or large scarf covering a woman’s hair according to Islam, *chador, hijab*’ (Norman 2019: 185), Burushaski *doón* ‘*Frauenkopftuch*’, Shina *doón* id. (Berger 1998b: 122). Since the Shina word has no Aryan etymology, it is reasonable to assume that it is a Burushaski loan. The Ladakhi word denotes one of the cultural realia peculiar to neighboring Muslim areas rather to Ladakh itself, and therefore may well have been borrowed from Balti.

25. Balti *ḍen* ‘sulphur’ (Sprigg 2002: 183). Cf. Burushaski *dāncil* ‘*Schwefel, findet sich in Schwefelquellen, die als heilkräftig gelten*’, Shina *dañcāl* id. (Berger 1998b: 114). The Shina word may be a loan from Burushaski. The final element *-cil* in Burushaski is probably etymologically identical to *chil* ‘water’. The original meaning of the Burushaski word may thus have been ‘water of a sulphur spring’. See also Kogan 2019.

26. Balti *ḍiangs* ‘hard (of soft things that have become hard, bricks, food, etc.)’ (Sprigg 2002: 183). Cf. Burushaski *ḍaṇ* ‘*hart (auch Strafe); tapfer, ausdauernd*’ (Berger 1998b: 130), Khowar *dang* ‘hard, stiff’ (Bashir 2022: 42). Balti *ḍuang, ḍaang* ‘high-flown; ostentatious (of speech); very tall (of small children)’ (Sprigg 2002: 183) may also belong here. See also Kogan 2019.

27. Balti *dom-ba* ‘trouble, want, necessity’ (Sprigg 2002: 51), *dom* ‘sadness, trouble, difficulty, adversity’ (Norman 2010: 493). Cf. Shina *dāmizhār* ‘adversity, trouble’ (Bailey 1924), Burushaski *dam(i)jar* ‘trouble, inconvenience, worry’ (Lorimer 1938). The Shina word is most probably the source for the Burushaski one, and may be related to OIA *damayati* ‘tames, subdues’, Ossetic *domyn* ‘to tame; exhaust; demand’. Purik *domba* ‘bad coincidence’, *dom* ‘coincide unfortunately’ (Zemp 2018: 437, 931) may also belong here. Semantically, the Purik words may have been influenced by the reflex of Old Tibetan *’dom pa* ‘to come together’. See also Kogan 2019.

28. Balti *ḍuhum, ḍuhung* ‘large hole in a field, old tree, among rocks’ (Sprigg 2002: 183). Cf. Bashkarik *ḍoṇ* ‘hole’ (Morgenstierne 1940), Indus Kohistani *ḍuṇḡ* ‘a pit, hole (in the earth), depression, hollow’ (Zoller 2005: 223). See also Kogan 2019.

29. Balti *gam-pa* ‘lower, step’, *gam-pa-ing* ‘downstairs’, *gam-pa-po-ri* ‘by the lower way’ (Sprigg 2002: 57). Cf. Burushaski *gamún* ‘*Unterteil; (am Baum) Wurzel, Stumpf*’ (Berger 1998b: 145), Shina *gabūn* ‘foot of mountain, bottom, tree-trunk’ (Morgenstierne 1945: 92), Brokskat *gamuni* ‘down, below’, OIA *gambhan-* ‘depth’. Sprigg’s comparison with Tib. *gan* ‘nearness’ seems to be less plausible. The meaning ‘step’ in Balti may have developed due the influence of Tib. *gom pa* id. Balti *gap* ‘down’ (Sprigg 2002: 58), must belong to the same etymon. The Indo-Iranian sources of the Balti words with and without nasal, most probably, reflect a full and a zero grade derivative respectively.

30. Balti *ganduru* ‘windpipe’ (Sprigg 2002: 57). Cf. Brokskat *ganduru* ‘throat’. Possibly, related to Kashmiri *gaḍur*, Khowar *gurūli*, OIA *gaṇḍa-* ‘goitre’.

31. Balti *ghaash*⁹ ‘epilepsy, phlegm, sputum’ (Sprigg 2002: 61). Cf. Burushaski *gaṣ* ‘Schaum’ (Berger 1998b: 173). Sprigg’s comparison with Urdu *yaś* ‘a swoon, stupor, insensibility, fainting’ is questionable. However, the meaning ‘epilepsy’ in Balti may have developed due to some semantic influence of the Urdu word.

32. Balti *ghanḍel* ‘cross-eyed’ (Sprigg 2002: 61). Cf. Burushaski *ḡandēr* ‘krumm’, *-lćine ḡandēr* ‘schielend’ (Berger 1998b: 169).

33. Purik *ḡondil* ‘dove’ (Zemp 2018: 87). Cf. Burushaski *ḡōḡundil* (Hunza-Nagir), *ḡundīl* ‘Taube’ (Berger 1998b: 177).

34. Balti *ghonii* ‘wickedness, evil’ (Sprigg 2002: 61), Purik *ḡoni* ‘evil, wickedness’ (Zemp 2018: 87). Cf. Burushaski *ḡunīqış*, *ḡunīkiş* ‘schlecht (Menschen, Sachen, Reden), hässlich’ (Berger 1998b: 179-180). The element *-qış/-kiş* in Burushaski is a suffix forming adjectives (Berger 1998a: 204). The connection between the Balti and Northwestern Tibetan words was admitted by Berger and Zemp.

35. Balti *ghul* ‘rotting wood, tinder’ (Sprigg 2002: 62). Cf. Burushaski *ḡul* ‘das, was nach dem Worfeln des Getreides als Abfall bleibt, Spreu; verfaultes Holz’, *ḡulpo* ‘verfaultes Holz’ (Berger 1998b: 177-178).

36. Balti *ghuṭing* ‘wood pigeon’ (Sprigg 2002: 62). Cf. Burushaski *kúuṭi* ‘wilde Taube’, Shina *kúuṭi* id. (Berger 1998b: 249). The initial voiced uvular in Balti may have developed by analogy with the cognate of Purik *ḡondil* ‘dove’ (see 33). The final nasal of the Balti word needs explanation.

37. Balti *gra-a*, Purik *gra*, ‘goitre’ (Sprigg 2002: 68; Zemp 2018: 935). Cf. Shina *gaáro*, Burushaski *ḡáaro* id. (Berger 1998b: 164). See also Kogan 2019.

38. Balti *hal* ‘goal’ (Sprigg 2002: 74). Cf. Burushaski *hála* (Hunza, Nagir), *hal*, *hálu* (Yasin) ‘Tor (beim Polo)’, Shina *hal*, Khowar *haḷ* id. (Berger 1998b: 187). See also Kogan 2019.

39. Balti *hariṭham* ‘small centipede’ (Sprigg 2002: 75), Purik “*ha-ri-tsam*” ‘centipede’ (Jäschke 1881: 595). Probably, somehow connected with Burushaski *híriman* (Hunza, Nagir), *hírmen* (Yasin) ‘Insekt, dem Tausendfüßler ähnlich’ (Berger 1998b: 200). See also Kogan 2019.

40. Balti *haral* ‘open-air sheep-fold (in the high mountains)’ (Sprigg 2002: 75). Cf. Burushaski *haráay* ‘Einzäunung, Hürde, Pferch; eingezäunter Lagerplatz für Vieh und Hirten auf der Hochweide’, Shina *haráai* id. (Berger 1998b: 192), Indus Kohistani *hárā* ‘an enclosed or fenced area for sheep and goats where their feet are bound with strings in such a way that they can move around only slowly’ (Zoller 2005: 409). The final *l* in Balti, as well as the final *y* in Burushaski may reflect an earlier cerebral.

41. Balti *hasiri* ‘kitchen work’, *hasiri-khang* ‘kitchen’, *hasiri-pa* ‘cook’ (Sprigg 2002: 75). Cf. Shina *hasīriyě* ‘cook’ (Bailey 1924: 142). Probably, somehow connected with Burushaski *ási* (Hunza), *hási* (Nagir, Yasin) ‘Frühstück (in vornehmen Haushalten)’ (Berger 1998b: 21).

42. Balti *hudia bya* ‘vaccinate’ (Sprigg 2002: 76). Cf. Burushaski *(h)udá* --t- ‘impfen’ (Berger 1998b: 203), Shina *hūdā* ‘inoculation’ (Bailey 1924: 143), Khowar *hudá* ‘vaccination’ (Sloan 1981: 86). If the primary meaning of the word is ‘grafting’, it may reflect some derivative of PII **ud-dāya-* ‘binding, fastening’ (cf. OIA *dā-* ‘to bind’, *uddāna-* ‘act of binding or fastening together’, *saṃdāya-* ‘rein, leash’).

43. Balti *jabal* ‘crow-bar’ (Sprigg 2002: 78). Cf. Burushaski, Shina, Khowar *jabál* ‘Steinbohrer, Brechstange’ (Berger 1998b: 220), Torwali *jabal* ‘pickaxe’, Pashto, Dari *jabal*, Nepali *jhampal* ‘crow bar’. Perhaps, a local Wanderwort.

⁹ In Sprigg’s notation, *gh* stands for the voiced uvular fricative.

44. Balti *kaari* ‘basket’ (Sprigg 2002: 80). Cf. Shina *karē* (Bailey 1924: 146), Brokskat *kari* id., Indus Kohistani *karēṭh* ‘a flat fruit basket’ (Zoller 2005: 103), Khowar *khareṭi* ‘flat basket’. The Dardic words probably reflect PII **skāra-* (> OIA *khāra-* ‘a particular measure’ (a Prakritism?), OIA, Pali *khārī-* ‘a measure of capacity’, Lahnda, Punjabi *khārā* ‘large basket made of reeds’, Proto-Iranian **skāra-* > Pashto *škōr*, *škəray* ‘wicker basket’¹⁰). Burushaski *kharēṭi* ‘kleiner Weidenkorb’ (Berger 1998b: 252) may be a Dardic borrowing.

45. Balti *karaṇṭi* ‘mason’s trowel’ (Sprigg 2002: 82). Cf. Indus Kohistani *karandī* ‘a spatula’ (Zoller 2005: 102), Pashto *karanday*, Hindi-Urdu, Punjabi *karnī*, Marathi *karṇī* ‘mason’s trowel’. According to Turner (1966: 140), the Indo-Aryan words reflect OIA *karaṇa-* ‘act, deed’, Prakrit *karaṇa-* ‘instrument’.

46. Balti *kasna* ‘brass horn (musical)’ (Sprigg 2002: 82). Sprigg reasonably compares this word with Hindi-Urdu *kāsā* ‘bell-metal, brass’. Cf. also OIA *kaṃsa-* ‘metal cup, bell-metal’, *kāṃsya-* ‘made of bell-metal’, Prakrit *kaṃsa-* ‘bell-metal, drinking vessel, cymbal’, *kaṃsiā-* ‘a kind of musical instrument’, Woṭapuri *kasōṭ* ‘metal pot’, Kashmiri *kenz* ‘a kind of cup made of clay or copper’.

47. Balti *kelak*, *kyalak* ‘twisted’ (Sprigg 2002: 82). Cf. Khowar *koli*, Palula *kūulo*, Shina *kōlu* ‘curved, crooked’ < PII **kaula-* (> Proto-Iranian **kaura-* > Khotanese *kūra-* ‘crooked’ (Bailey 1979: 62)). Brokskat *kolo* ‘lame’ may also belong here. The prototype of the Balti word in the donor language probably reflected an old formation with the *-k-* suffix. The vowel of the first syllable in Balti seems to have developed due to the influence of some derivative of Tibetan **khyil-ba* ‘to wind, to twist’. See also Kogan 2019.

48. Balti *khaaḍi* (Skardu), *khaaṭii* (Khapalu) ‘basket’ (Sprigg 2002: 85). Probably, a Burushaski loanword (cf. Burushaski *kharēṭi* ‘kleiner Weidenkorb’ (Berger 1998b: 252)) and an etymological doublet of Balti *kaari* ‘basket’ (see 44).

49. Balti *khaṭ* ‘get fixed, be forced to stop’ (Sprigg 2002: 86), Purik *χaṭ* ‘get stuck’ (Zemp 2018: 43). Cf. Burushaski *du-khāṭ-* ‘gehindert werden, eingequetscht werden, gehemmt werden, sich verfangen, gefangen werden’ (Berger 1998b: 253). The contamination of the Burushaski loan with the reflex of Old Tibetan *khad* ‘to stick fast, to be seized, stopped, impeded’ (Jäschke 1881: 38) must have taken place in Balti and Purik. Balti *khaṭ* ‘pole with a catch’ (Sprigg 2002: 86) may also belong here.

50. Balti *khuṭ* ‘short (speech, etc.); small (area)’, *kot ci*, *koṭ ci* ‘a short while’ (Sprigg 2002: 91, 93). Cf. Burushaski *khuṭ*, Shina *khuṭo*, Brokskat *χoṭo*, Indus Kohistani *khaṭṭh* (Zoller 2005: 120), Khowar *iskurdi* ‘short’. See also Kogan 2019.

51. Balti *kóḍos* ‘rounded stone, cobble-stone’ (Sprigg 2002: 93). Cf. Burushaski *guyos* ‘grinding-stone’ (Lorimer 1938: 176). See also Kogan 2019.

52. Balti *lalu*, *laḍu*, *laṭu* ‘cucumber’ (Sprigg 2002: 97, 98). Cf. Burushaski *láay* (*y* < *ḍ*), Shina *lā*, Kashmiri *lār* id., Palula *laṛu* ‘pumpkin’, Kalasha *laṛu* ‘kind of melon or cantaloupe’ (Trail & Cooper 1999: 182), Khowar *laṭu* ‘species of melon’ (Bashir 2022: 78), Dameli *larū* ‘a kind of melon’ (Morgenstierne 1942: 177).

53. Balti *lashi* ‘a resinous wood used as a candle or torch because it burns slowly’ (Sprigg 2002: 98). Cf. Kashmiri *lāshi* ‘a torch’ (Grierson 1915-1932: 533), Shina (Gilgit dialect) *lāi* ‘torch (unlit)’ (Bailey 1924: 150). In the Gilgit dialect of Shina the change **ś* > *i* is regular in the intervocalic position. The Dardic forms seem to have developed due to contamination of the two Indo-Iranian roots: **ruś-/luś-* ‘to shine’ (> OIA *ruśant-* ‘bright’, Khotanese *rrus-* ‘to shine’, Pa-

¹⁰ For Pashto *šk* < Proto-Iranian **sk*, cf. also, e.g. *škāral* ‘to incite against’ < Proto-Iranian **skar-* ‘to pursue’ (cf. Av. *skār-* id.), *škaṭal* ‘to tear, break, rip off; rob’ < Proto-Iranian **skap-/skaf-* ‘to split, make a crack’ (< PIE *(s)kep- ‘hacken, hauen’ (LIV: 555), cf. Greek σκάπτω ‘I dig’). Pashto *ō* in *škōr* regularly reflects Proto-(Indo)-Iranian **ā*.

shai *luš* ‘bright’, Shina *lūšṭāiki* ‘morning’) and **las-* (> OIA *lasati* ‘flashes, shines; sports’). See also Kogan 2019.

54. Balti *lish byar* ‘stick tightly to’ (Sprigg 2002: 103). Cf. OIA *ślīṣyati* ‘adheres to’, *ślēṣayati* ‘connects’, *ślēṣa-* ‘adhering to’, Av. *ham.srišāiti* ‘puts together’, Classical Persian *sirišt*, Ossetic *sasm* ‘glue’, Shina *liš thoiki* ‘to join’, *liš boiki* ‘to cling’ (Bailey 1924: 150), Brokskat *leziš* ‘to close’ (Ramaswami 1989: 117), “*lisit*” ‘to stick’ (Sharma 1998: 151), Palula *lišoo* ‘to close, put together’ (Liljegren, Haider 2011: 94), Indus Kohistani *liš kar-iṭh* ‘to close tightly; to seal’ (Zoller 2005: 366), Kalasha *lišék* ‘to close something tightly’ (Trail & Cooper 1999: 183). Burushaski *liš* ‘*verschlossen, zugemacht*’ (Berger 1998b: 266) is, most probably, a Dardic borrowing.

55. Balti *mal* ‘plot of ground that one works oneself, place’ (Sprigg 2002: 109), Purik *mal* ‘land’ (Zemp 2018: 684). Cf. Burushaski *mal* ‘*Feld*’ (Berger 1998b: 275). Cf., however, also Tib. *mal* ‘the place where a thing is, its site, situation’ (Jäschke 1881: 412). Perhaps, in Balti and Purik we are dealing with two homonyms, the one with the meaning ‘place’ being inherited from Old Tibetan, whereas the other one with the meaning ‘plot of ground, land’ being a Burushaski loan.

56. Balti *moncholak* ‘bark cut off for firewood’ (Sprigg 2002: 118). Probably, a two-part compound. For the element *mon-*, cf. Burushaski *mon* (Hunza-Nager) ‘*Artemisie, Pflanze der Hochweide, stark riechend, als Brennmaterial verwendet*’, *mun* (Yasin) ‘*Reisig*’ (Berger 1998b: 290). For the second component (*-cholak*), cf. OIA *challi-*, Pashai *čalak* ‘bark’.

57. Balti *monṭhok* ‘clod of earth’ (Sprigg 2002: 118). With dissimilation of middle consonants < **maṭ-ṭhok*? Cf. OIA *mṛttikā-* ‘earth, clay’, Shina *māṭi* ‘clay’, Brokskat *moṭi* ‘mud’; Purik *ṭoṭṭoq* ‘lump’ (Zemp 2018: 926), Burushaski *ṭhoko* ‘*Klumpen, Ballen (von Zucker, Salz, Butter)*’ (Berger 1998b: 452), Indus Kohistani *ṭhokh* ‘a clod (earth, salt)’ (Zoller 2005: 220). For the second part of this compound see 85. See also Kogan 2019.

58. Balti *morok* ‘carving’ (Sprigg 2002: 118). Possibly, connected with Burushaski *maráq* ‘*Krümmung, Biegung, Kurve*’, Shina *marák* id. (Berger 1998b: 281).

59. Balti *moṭo* ‘beans’ (Sprigg 2002: 118). Cf. OIA *mukuṣṭ(h)a-* ‘a kind of bean’, Hindi-Urdu *moṭh* ‘a kind of pulse or vetch’, Shina “*muṭhù*.” ‘beans’ (Rajapurohit 2012: 103), Indus Kohistani *mōṭā* ‘a type of dark red and kidney-shaped beans’ (Zoller 2005: 345), Kashmiri *muṭh* ‘the vetch *Phaseolus aconitifolius*’.

60. Balti *mulak*, *mulu*, Purik *mulaq* ‘turnip’ (Sprigg 2002: 118; Zemp 2018: 944). Cf. Burushaski *múlo*, Shina *muúlo*, Brokskat *mulo* id., OIA *mūla-* ‘root’, *mūlaka-* ‘radish’, Shina *mūli*, Khowar *mūl* ‘root’, Pashai *mūluk*, Hindi-Urdu *mūli* ‘radish’. See also Kogan 2019.

61. Balti *mun* ‘short stubby dry branch, cut off; large thorn; blunt-nosed’ (Sprigg 2002: 118). Cf. OIA *muṇḍa-* ‘shaved, bald, lopped, hornless; blunt; trunk of lopped tree’, Khowar *mun* ‘stump of tree’, *kər-mvən* ‘crop-eared’, Shina *mūn* ‘stump or bole of tree, stump of amputated leg or arm, maize stubble’, Palula *mūṇḍo* ‘blunt’, Indus Kohistani *mūṇḍar*, *mūṇḍur*, *mūṇḍra* ‘the stump of a tree, a piece of a wooden log, a club, mallet’, *mūṇḍ*, *mūṇḍ* ‘a stump of tree’ (Zoller 2005: 340, 344). Burushaski *mun* ‘*Stumpf, Pflanze, deren Blätter oder Oberteil abgeschnitten sind*’ (Berger 1998b: 294) must be a Dardic loanword.

62. Balti *mush* ‘squeegee type of rake’ (Sprigg 2002: 119). Cf. Burushaski *máuṣ* (Nagir), *máuṣk* (Yasin) ‘*zahnloser Rechen für Erde und Dung*’ (Berger 1998b: 284), Khowar *máuṣ* ‘wooden hoe’ (Strand 2006). See also Kogan 2019.

63. Balti *múyu*, *myo* ‘mouse’, *munzhur* ‘small mole-like mouse’ (Sprigg 2002: 119). Cf. OIA *mūṣ-*, *mūṣā-*, *mūṣika-* ‘mouse, rat’, Persian *mūš*, Palula *mūṣo* ‘mouse’, Shina (Guresi dialect) *mūṣu* ‘rat’, *mūṣai* ‘mouse’, Brokskat *mūṣi* ‘mouse’. The variant *myo* in Balti may have developed due to the influence of *byo ba* ‘mouse, rat’. See also Kogan 2019.

64. Balti *paghon*, *phraghon*, Purik *phoGon* ‘spoon’ (Sprigg 2002: 127, 130; Norman 2010: 602). Cf. Burushaski *khapun*, Khowar *kipini*, Shina *khapai*, Brokskat *khapi*, Indus Kohistani

khapn̄y ‘spoon, ladle’ (Lorimer 1938: 228; Zoller 2005: 123). In Balti and Purik a metathesis of stops must have taken place. See also Kogan 2019.

65. Balti, Purik *payu* ‘salt’ (Sprigg 2002: 127; Norman 2010: 558). Cf. Burushaski (Hunza, Nagir, Yasin) *bayú*, Brokskat *payu*, Shina *pažúu* id. The intervocalic *ž* in Shina probably appeared due to the influence of the verb *paáz-* ‘to cook, bake’ (Berger 1998b: 45). See also Kogan 2019.

66. Balti *phaḍa* ‘bald’ (Sprigg 2002: 128), Purik *phaṭa* ‘Glatze’ (Zemp 2006: 32). Cf. Brokskat *phaṭa*, Shina (Drasi dialect) *phaṛaro*, Burushaski (Hunza, Yasin) *baṭa* ‘bald’. According to H. Berger (Berger 1998b: 44), the word is connected with Burushaski *baṭ* ‘skin’. See also Kogan 2019.

67. Balti *phalu* ‘fruit, necklace, bead’ (Sprigg 2002: 128). OIA *phala-* ‘fruit, seed of a fruit, spot on dice’, Hindi-Urdu, Nepali *phal* ‘fruit’, Kalasha *phālak*, Khowar *pholok*, Palula *phalūrī*, Shina *phal*, Kashmiri *phol* ‘grain’. It cannot be ruled out that the coexistence of the meanings ‘fruit’ and ‘bead’ in Balti is the result of double borrowing, the word *phalu* with the former meaning being an Urdu loan, whereas with the latter one it may have been adopted from some Dardic language where its prototype originally meant ‘grain’. Burushaski *phal* ‘(Getreide-) Korn; ein kleines Stückchen (Fleisch)’ (Berger 1998b: 320) must also have been borrowed from a Dardic source.

68. Balti *-photo* in *mik-photo* ‘eye-socket, orbit’ (Sprigg 2002: 115), *go-photo* ‘skull, cranium’ (Sprigg 2002: 67)¹¹, Purik *-photo* in *mikphoto* ‘eye socket’ (Zemp 2018: 135). Cf. Shina *phot* ‘peel, rind’ (Bailey 1924: 157), *photo* ‘Maiskolben, Schale’ (Berger 1998b: 334), Kalasha *phot* ‘eggshells; skins or peels of fruit such as grapes, apples, peaches, figs, jujube, pea pods and nut meats’ (Trail & Cooper 1999: 242). Burushaski *photo* ‘Eichel (des Penis, wenn groß)’ (Berger 1998b: 334) may also belong here.

69. Balti *phuṭ* ‘chaff’ (Sprigg 2002: 131). Cf. Kalasha *phot* id. (Trail & Cooper 1999: 242), Shina *phot* ‘peel, rind’ (Bailey 1924: 157), *photo* ‘Maiskolben, Schale’ (Berger 1998b: 334). Perhaps, an etymological doublet of the previous word.

70. Balti *qaar* ‘blanket’ (Sprigg 2002: 133). Cf. Burushaski *qáar* ‘Schal, dünne Decke’, Shina *káar* id. (Berger 1998b: 340).

71. Balti *rat* ‘flat, level’ (Sprigg 2002: 135), Purik *rat* ‘level’ (Zemp 2018: 939). Cf. Burushaski (Hunza, Nagir, Yasin) *rat* ‘*flach, eben, glatt*’ (Berger 1998b: 364). See also Kogan 2019.

72. Balti *rkat* ‘to cut down with a sword’ (Sprigg 2002: 140). Cf. PII **kart-* ‘to cut’ > OIA *kṛntati*, *kartati* ‘cuts’, Av. *kərəntaiti* ‘cuts’, *karəta-* ‘knife’, Hindi-Urdu *kattā* ‘curved knife’, *kattī* ‘sword, knife, dagger’, Kalasha *katār*, Khowar *kuter* ‘knife, dagger’, Palula *kaṭōro* ‘dagger’, Shina *khāṭaru*, Brokskat *kaṭar*, *kuṭar* ‘knife’. See also Kogan 2019.

73. Balti *sang* ‘be light’ (Sprigg 2002: 147), Purik *saṅsaṅ* ‘bright; wide awake’ (Zemp 2018: 758). Cf. Burushaski *saṅ* ‘Helligkeit’, Shina *saṅ* id. (Berger 1998b: 374), Brokskat *saṅ* ‘light’. According to Berger, the Burushaski word is etymologically connected with *sa* ‘sun’. Tib. (*b*)*sang* ‘cleanse’ cited by Sprigg is semantically more distant.

74. Balti *shingsher*, Purik *shinšeṛ* ‘Saturday’ (Sprigg 2002: 152; Bailey 1920: 41). Cf. Burushaski, Shina *śimśér*, Brokskat *šinseru* id., OIA *śanaiścara-* ‘the planet Saturn’, *śanaiścara-vāra-* ‘Saturday’. See also 1.

75. Balti *shuguru*, Purik *shūkūr* ‘Friday’ (Sprigg 2002: 153; Bailey 1920: 38). Cf. Burushaski *śúkuro*, Shina *śúkur*, Brokskat *śúkuru* id., OIA *śukra-* ‘the planet Venus’, *śukravāra-* ‘Friday’. See also 1.

76. Purik *su* ‘nose’ (used as a synonym of *snamtshul* id. < Old Tibetan *sna-mtshul*) (Zemp 2018: 938). Cf. Burushaski *ṣū etas* ‘to smell (v.t.)’ (Lorimer 1938: 332), Shina *ṣū thoīkī*, Indus Kohistani *ṣū karāō* id. (Bailey 1924; Zoller 2005: 391). See also Kogan 2019.

¹¹ Cf. Balti *mik* ‘eye’, *go* ‘head’.

77. Balti *ṭangka, ḍangga* ‘shelter for the night, room boarded all round’ (Sprigg 2002: 183, 184), Purik *ṭangka* ‘partially roofed daytime pen for animals; open or partially roofed courtyard on the upstairs of a house’ (Norman 2010: 359). Cf. Burushaski *ḍanóo* ‘*oberirdischer Speicher, mit Tür zum Haus*’ (Berger 1998b: 131), Shina *ḍāñō* ‘native storehouse’ (Bailey 1924). But cf. Tibetan *dang-ra* ‘stable for cattle’ (Jäschke 1881: 249). See also Kogan 2019.

78. Balti *ṭek* ‘button’ (Sprigg 2002: 184). Cf. Burushaski *ṭak*, Shina *ṭāk*, Indus Kohistani *ṭikū*, Khowar, Kalasha *tak* id. See also Kogan 2019.

79. Balti *thalo* ‘dish’ (Sprigg 2002: 164), Purik *thali* ‘plate’ (Zemp 2018: 939). Cf. OIA *sthālī*, *sthāla* ‘earthen dish’, Hindi-Urdu *thālī* ‘dish’, Shina *tāl-* ‘iron tray’, Brokskat *thali* ‘metal plate’, Kashmiri *thāl* ‘metal platter’. Burushaski *tháal* ‘*Schüssel*’ (Berger 1998b: 435) is an Indo-Iranian borrowing.

80. Balti *thar rkyang* ‘lie down with arms and legs outstretched’ (Sprigg 2002: 164), Purik *thar* ‘wide (asunder)’ (Zemp 2018: 757). The second component of the Balti compound verb is identical to Balti *rkyang* ‘stretch (out)’ (Sprigg 2002: 141). For the 1st component, cf. Burushaski *thar* ‘*offen, weit, unbegrenzt*’, Shina *thar* id. (Berger 1998b: 438), *thūroiki* ‘to open’ (Bailey 1924: 166). According to Turner (1966: 789), the Shina words are etymologically related to OIA *starati* ‘strews, covers’, *stara-* ‘layer’. However, the change **st > th* in Shina is attested in intervocalic but not word-initial position. Therefore, it seems more reasonable to connect the Shina lexemes with OIA *āstarati* ‘spreads, covers’, *āstara-* ‘covering’, *āstāra-* ‘spreading’.

81. Balti *ṭhing* ‘upright, straight up’ (Sprigg 2002: 184). Cf. Burushaski *ṭiṇ* ‘peak (of mountain), top (of hill); stretched up, erected’, Khowar *ṭhing* ‘high place; steep slope’ (Lorimer 1938: 352). See also Kogan 2019.

82. Balti *ṭhom-bos* ‘embankment, retaining wall (to prevent a sloping field from being washed away)’ (Sprigg 2002: 184). Cf. Burushaski *ḍom* ‘*Erdhaufen*’ (Berger 1998b: 133), *buśúṣ* ‘*Zaun aus Wacholderzweigen und Dornen um bebautes Land; Einzäunung zum Fangen von Wölfen*’ (Berger 1998b: 65). The element *ṭhom-* of the Balti word seems to reflect the Burushaski prototype without the initial sonorization, seen in the modern Burushaski form. The reflection of Burushaski *buśúṣ* as *bos* in Balti is probably due to the restrictions imposed by the rules of Tibetan phonotactics.

83. Balti *thup* ‘darkness’ (Sprigg 2002: 166), Purik *ṭhup* ‘dark(ness)’ (Zemp 2018: 61). Cf. Burushaski *thap* ‘night’, Shina (Chilasi dialect), Indus Kohistani *thaph* ‘dark; extinguished (light, fire)’ (Zoller 2005: 113). Balti *ṭhap-ṭhup* ‘dawn, dusk, twilight’ (Sprigg 2002: 184) may belong here too. See also Kogan 2019.

84. Balti *too* ‘iron plate (for making bread-cakes (chapaties))’ (Sprigg 2002: 167), Purik *to* ‘cooking plate’ (Zemp 2018: 443). Cf. OIA *tāpaka-* ‘cooking-stove’, *tāpikā-* ‘frying pan’, Hindi-Urdu *tāvā* ‘frying pan’, Middle Persian *t’pk*, Classical Persian *tāba* ‘frying pan’, Shina, Khowar *tāo* ‘griddle’, Brokskat *to* ‘iron plate for baking bread’, Indus Kohistani *tāv* ‘metal plate for baking bread’ (Zoller 2005: 233), Kashmiri *tāv* ‘frying pan’. Burushaski *dau.o* ‘griddle’ (Lorimer 1938: 122) must be an old Indo-Iranian borrowing with the sonorization of the initial dental stop.

85. Balti *ṭok* ‘swelling, bump on the head, small hill’ (Sprigg 2002: 185), Purik *ṭoṭtoq* ‘lump’ (Zemp 2018: 926). Cf. Burushaski *ṭhóko* ‘*Klumpen, Ballen (von Zucker, Salz, Butter)*’ (Berger 1998b: 452), Shina *ṭhokū* ‘hill’ (Bailey 1924), Indus Kohistani *ṭhokh* ‘a clod (earth, salt)’ (Zoller 2005: 220). See also Kogan 2019.

86. Balti *tsandar*, Purik *tsāndrāl* ‘Monday’ (Sprigg 2002: 169; Bailey 1920: 40). Cf. Burushaski *čandúra*, Shina *čandúro*, Brokskat *candral*, OIA *candravāra-* id. See also 1.

87. Balti *tseenu* ‘pantaloons, trousers’ (Sprigg 2002: 169). Maybe somehow related to Shina *tsanalū* (Gilgit dialect) ‘native trousers’ (Bailey 1924: 166), *tsaléni* (Dras dialect) ‘trousers’ (Rajapurohit 2012: 99), Brokskat *canalu* ‘trousers (pāyjamā)’. Further etymological connections are not clear.

88. Balti *xapxap* ‘burning, smarting, peppery’ (Sprigg 2002: 175). Connection with Burushaski *qhap*, Shina *kháap* ‘Zunder’ (Berger 1998b: 351), Indus Kohistani *khâp* ‘tinder’ (Zoller 2005: 125) seems possible.

89. Balti *xar-a* ‘tree whose wood is hard’, *xar-xar* ‘rough, harsh’ (Sprigg 2002: 175), Purik *karbar* ‘rough’ (Zemp 2018: 87). Cf. OIA *khara-* ‘hard, sharp, pungent’, Pali *khara-* ‘hard, rough, cruel, sharp’, Indus Kohistani *khārō* ‘rough, hard’ (Zoller 2005: 124), Classical Persian *χārā* ‘a very hard stone, flint, rock’, *χār* ‘thorn’.

90. Balti *xor* ‘move, slide out of place (walls only)’ (Sprigg 2002: 176). Cf. Burushaski *gōōr man-* ‘(Mauer) langsam zusammenfallen’ (Berger 1998b: 170).

91. Balti *xuṭu* ‘deep (things only; rare)’ (Sprigg 2002: 177). Cf. Burushaski *gūṭum* ‘tief, eingebuchtet’ (Berger 1998b: 183), Shina *gūṭmū* ‘deep’ (Bailey 1924: 142).

92. Balti *zan-zos* ‘wife, housewife, female partner’, Purik *zanzos* ‘wife; family’ (Sprigg 2002: 180; Norman 2010: 842). Cf. OIA *jani-*, Av. *ḵaini-* ‘woman, wife’, Kashmiri *zən* ‘woman’, Palula *jeeni* ‘female person’ (Liljegren, Haider 2011: 76), Indus Kohistani *zhāl* ‘marriage’ (Zoller 2005: 202). See also Kogan 2019.

Discussion

The majority of the above-listed Balti and Purik words (74 out of 92) have obvious or probable etymological parallels in Burushaski. Some of these 74 words, however, have cognates in neighboring Indo-Iranian (primarily, Dardic) languages too, and are etymologizable in them. Such lexical items must be considered Aryan loanwords common for Burushaski and some Northwestern Tibetan dialects. With this fact in mind, I put forward the following two equally obligatory criteria for identification of Burushaski borrowings in the above list: (i) presence of a probable cognate in Burushaski; (ii) absence of Indo-Iranian etymology.¹² Words strictly meeting these criteria number in total 46. The remainder of the list includes 41 apparent Indo-Iranian loans, two compounds consisting of a Burushaski and an Aryan part (see 56 and 57), and three probable Wanderwörter (see 43, 52 and 87), whose ultimate source is yet to be established. Technically, the Burushaski-Aryan compounds may be classified as belonging both to Indo-Iranian and Burushaski etymological stratum.

Based on the above figures, one can state a certain predominance of Burushaski elements in the loan vocabulary peculiar to Balti and Purik, and it can thus be argued that the hypothesis put forward in (Kogan 2019) receives additional corroboration.

Regarding the Aryan loanwords on the list, it should be noted that they seem to have been borrowed from more than one source. As stated above, names of the days of the week (see 1, 3, 13, 14, 74, 75, 86) were probably adopted from some Indo-Aryan lect.¹³ Most of the remaining 34 Indo-Iranian loans remarkably have etymological parallels, inter alia, in at least one of the two closely related Dardic languages: Shina and Brokskat. As many as 14 of them

¹² The 2nd criterion needs some clarification. Aryan languages of the area under study were to a greater or lesser extent influenced by Burushaski, and this influence sometimes considerably affected their lexicon. Given this fact, Indo-Iranian etymology should not be understood as simply presence of parallels in any Indo-Iranian lects. Rather it means the existence of cognates in Old and Middle Indo-Iranian languages, and/or in modern Aryan languages other than those that were in close contact with Burushaski, i.e. Shina, Khowar, Indus Kohistani and Wakhi.

¹³ Besides the seven words mentioned here, the Indo-Aryan loan vocabulary in Balti and Purik also includes recent borrowings from Urdu. Cf., e.g. *balo* ‘earring’ (Sprigg 2002: 25) < Urdu *bālā* ‘large earring’, *gan* ‘sledgehammer’ (Sprigg 2002: 57) < Urdu *ghan* id. However, such lexemes do not present any problems as regards etymology and historical phonology, and therefore are not discussed in the present work.

(see 9, 10, 22, 29, 44, 47, 48, 50, 54, 60, 63, 72, 79, 84) find cognates in both Brokskat and Shina, 11 (see 4, 8, 11, 18, 27, 42, 53, 59, 61, 67, 80) in Shina only, and 2 (see 19, 30) in Brokskat only. The Aryan part of one of the two Burushaski-Aryan compounds (see 57) has both a Shina and a Brokskat cognate. No other modern Indo-Iranian language shows a comparable number of parallels to the above listed words, and this fact can hardly be accidental. Given the fact that Shina and especially Brokskat are still poorly documented, it seems more than likely that the real figures are even higher than those cited here.

In historical phonology, some of the Aryan borrowings on the above list possess certain features clearly distinguishing them from Indo-Iranian lexical elements, common for Balti, Purik and Ladakhi. E.g., in 18 and 19 the PIE consonant cluster **sk'* (> Proto-Aryan **ść*) is reflected as *ch* (the voiceless aspirated palatal affricate), whereas in loanwords found in all Northwestern Tibetan varieties including Ladakhi, the regular reflex is the dental affricate *tsh* (Kogan 2020).¹⁴ The reflection of PIE **sk'* identical to the one attested for the words 18 and 19, is characteristic of Indo-Aryan and a number of Dardic languages including Shina and Brokskat. The same holds true for the change **st* > *th* in historically intervocalic position, assumed for 80. This phonological development is peculiar to Eastern Dardic, as well as Middle and New Indian. Thus, for 18, 19 and 80 both Indo-Aryan and Dardic origin is theoretically possible, but the fact that exact cognates of the latter two loans are found only in Brokskat and Shina respectively, points to Eastern Dardic as their most likely source.

All the above suggests that at least a part of Aryan loans in Balti and Purik definitely could not have been borrowed from the same donor-language as Indo-Iranian loan vocabulary in Ladakhi. The latter, as was demonstrated in Kogan 2019, 2020, was adopted from a lect which, although it belongs to the Dardic group, cannot be classified with its Eastern sub-branch.

The question of whether the above-listed Indo-Iranian loanwords were borrowed from Shina or Brokskat or both, is an interesting issue for future research. However, certain facts already known to us may offer some hints as to the probable answer. In Brokskat one can detect historical-phonological innovations that are unusual for Dardic languages but have parallels in Balti. An obvious example of such an innovation is the change **n* > *ŋ* in the palatalizing position: *ŋilo* 'blue', cf. OIA *nīla-* 'dark blue, dark green', Kati *nīlā*, Prasun *nīl* 'blue', Kalasha *nīla*, Palula *nīlo*, Shina *nīlu*, Kashmiri *nyūl* 'green, blue', Hindi-Urdu *nīlā* 'blue'; *ŋin-dis* 'to weed', cf. OIA *nirdātṛ-* 'weeder, reaper', Pali *niḍḍāyati* 'cuts out, weeds', Wakhi *neždun*, Shina *nīn*, Khowar *niḷāṅg*, Kalasha *nəhrún*, 'weeding', Kashmiri *nēnd* 'weeding a rice-field', Hindi-Urdu *nirānā* 'to weed'; *ŋilizis* 'to hide', cf. OIA *nīliyatē* 'hides oneself, disappears', Shina *niližōikī* 'to hide oneself'. In Balti the Old Tibetan palatalized nasal *ny* changes to the dorsal nasal *ng*:¹⁵ *ngespa* 'sin' < Old Tibetan *nyes pa*, *ngima* 'sun' < Old Tibetan *nyi ma*, *ngis* '2' < Old Tibetan *gnyis*, *ngishu* '20' < Old Tibetan *nyi shu*; *ngya* 'fish' < Old Tibetan *nya*, *ngyamngyam* 'of the same age' < Old Tibetan *mnyam pa* 'equal, same'.

The intervocalic change *m* > *ŋ* (*ng*), regular for Balti¹⁶ (cf. *bo-ngo* 'daughter, girl' < Old Tibetan *bu mo*, *bya-nga* 'sand' < Old Tibetan *bye ma*, *lo-nga* 'leaf' < Old Tibetan *lo ma*, *o-nga* 'milk' < Old Tibetan *o ma*) is also attested in Brokskat. There it is, however, found in one single word: *čingar* 'iron', cf. Shina *čimēr*, Palula *čimar*, Kashmiri *čimur*, Torwali *čimu*, Bashkarik *čimer*, Khowar *čumur*, Gawar-Bati *čimār*, Pashai *čimār*, Burushaski *čimar*, *čhumār* id.

¹⁴ Of particular interest in this connection is the etymology 19. The Indo-Iranian source word of Balti *chaḍu* 'vile, unclean, unholy, abominable, filthy, foul, impure, lewd' appears to have been borrowed into Ladakhi and Purik as well, where, however, the respective loanwords have initial dental *tsh*.

¹⁵ All the Balti examples are drawn from Sprigg 2002.

¹⁶ According to Backstrom (1994: 34), this change took place "intervocalically when the following vowel was word final and the consonant preceding the preceding vowel was not *ɲ* or *ŋ*".

It seems highly probable that the two aforementioned historical-phonological isoglosses, shared by Balti and Brokskat, are contact-induced. Remarkably, both sound changes took place in Balti but not in Ladakhi and Purik¹⁷ with which Brokskat is in contact nowadays. This fact suggests that in the past Brokskat-speakers (the Brokpas) must have lived somewhere in the present-day Baltistan or in closest proximity to it,¹⁸ and it is there that they encountered the speakers of Northwestern Tibetan. If this be the case, it is only natural that Balti vocabulary was to a certain extent influenced by Brokskat.

Abbreviations

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

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¹⁷ In Purik, however, there is an interesting phonetic phenomenon, which may well have existed earlier also in Balti and prepared the ground for the regular phonological change *ny* > *ng* there. The Purik palatal nasal has several pronounciational variants, one of which is the palatalized dorsal nasal (Zemp 2006: 37).

¹⁸ In this connection, it is worth remembering that according to the hypothesis put forward by August Hermann Francke, the Brokpas are the remnant of the pre-Tibetan population of Ladakh (Francke 1906). As I have shown in Kogan 2019, this viewpoint cannot be upheld.

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А. И. Коган. Этимологические заметки о заимствованной лексике в тибетских диалектах Балтистана и Каргила

Результаты недавних исследований дали основания полагать, что большая часть лексических заимствований в тибетских диалектах, распространённых в Каргиле и Балтистане, была усвоена из ранней формы языка бурушаски. Данный вывод, однако, является предварительным и нуждается в уточнении. Попытка уточнить его делается в настоящей статье. Автор демонстрирует, что хотя слова бурушаски действительно преобладают в иноязычной лексике балти и пурик, оба эти диалекта содержат значительное число заимствований из ряда индоиранских источников. Данные исторической фонетики, а также анализ лексических изоглосс позволяет утверждать, что в число этих источников входили дардские языки шина и брокскат.

Ключевые слова: тибетские диалекты; балти язык; пурик язык; бурушаски язык; дардские языки; языковые контакты; лексические заимствования.