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Kharosthī and Brāhmī Inscriptions from Ladakh

1. Previously published Indian inscriptions from Ladakh

1a. Inscriptions discovered by A.H. Francke in the early twentieth century

In view of its location between Tibet and the extreme north of the Indian subcontinent, it is not surprising that historical inscriptions in a wide variety of languages and scripts have been found in Ladakh (figs. 1-2). There are in Ladakh well over five hundred rock inscriptions in Kharoṣṭhī, Brāhmī, Śāradā, Chinese, Sogdian, Tocharian, Tibetan, and Arabic scripts. The present article focuses on the earliest stratum of Indian-language and -script inscriptions, namely those in Kharoṣṭhī and Brāhmī. All of these but one are found in western ("lower") Ladakh (i.e. west of the confluence of the Indus and Zanskar Rivers), and some of them may date back as far as the first century of the Common Era. Only one is found outside of the Indus valley, located along the Siachen river in Nubra, the northern region of Ladakh. We will both review the previously published specimens in this section, and present in the second section some newly discovered ones.

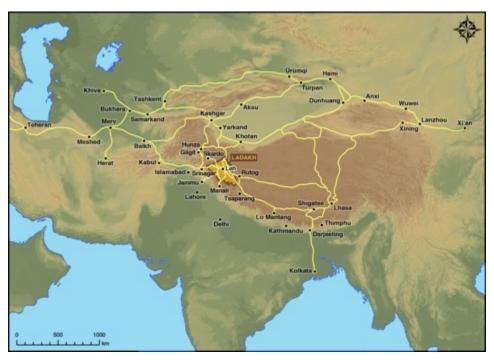


Fig. 1. Ladakh within the network of the so-called Silk Routes

¹ R. Salomon read and commented on the insciptions, while Q. Devers and T. Ldawa documented the inscriptions and provided with the overall contexts of the sites. We are very grateful for the help, advice, suggestions and comments from Samara Broglia de Moura, Nils Martin, Viraf Mehta, Tashi Ldawa (Yurthung, Leh), Kacho Mumtaz Khan (Yogma Kharbu), and for the help in the field of Jigmet Namgial (Pharkapa, Teya), Kacho Sikundar Khan (Yogma Kharbu), Hassan Khan (Yogma Kharbu), Martin Vernier, and Laurianne Bruneau.

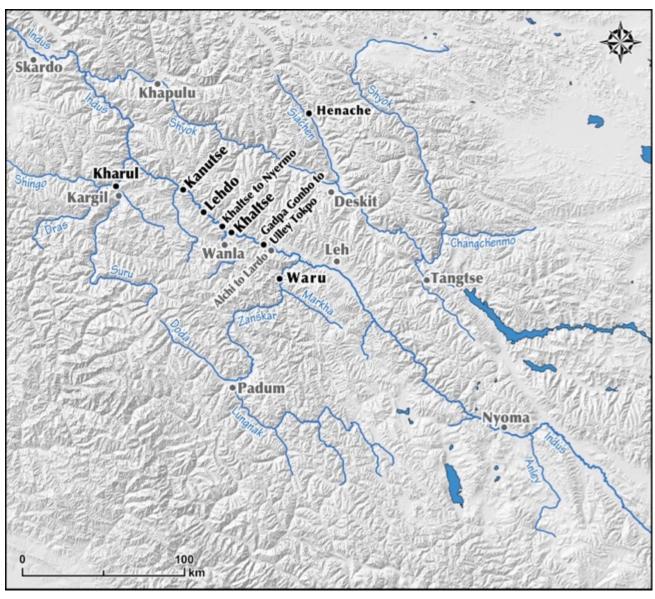


Fig. 2. Sites with Kharosthī and Brāhmī inscriptions (black) in Ladakh, and some of the main places of Ladakh and Baltistan (grey)

A few of the Kharoṣṭhī and Brāhmī inscriptions of Ladakh have been known since the early years of the twentieth century, thanks to the explorations of the Moravian missionary and pioneer scholar of Tibetan and Ladakhi culture, A.H. Francke. It was Francke who in 1905² discovered a rock at Khalatse or Khaltse (34.3233°N, 76.8597°E), forty-two miles as the crow flies down the Indus River from Leh (fig. 2), which bore a Kharoṣṭhī inscription (CKI no. 62) recording a date³ during the reign of the Kuṣāṇa emperor Vima Kadphises. This inscription was engraved alongside a figure that is consistent with the iconography of Kuṣāṇa

² A.H. Francke reports (1907: 592) that he discovered this inscription in the autumn of 1905.

³ The date was read by Konow (1929: 81) as 187 (or 184). We have elsewhere (Salomon 2005: 376) tentatively accepted Joe Cribb's proposal that the hundreds figure be read as 200 rather than 100, which, if attributed to the Indo-Greek era of 186/85 BCE would yield a date around 100 CE, or, following Falk and Bennett's (2009) revised epoch of 175/74 BCE for that era, around 110 CE. See also the further discussion and references in Bruneau 2011: 180-81.

rulers as seen on coins and sculptures since Vima Kadphises' reign.⁴ The rock bearing these carvings was unfortunately destroyed in recent times.

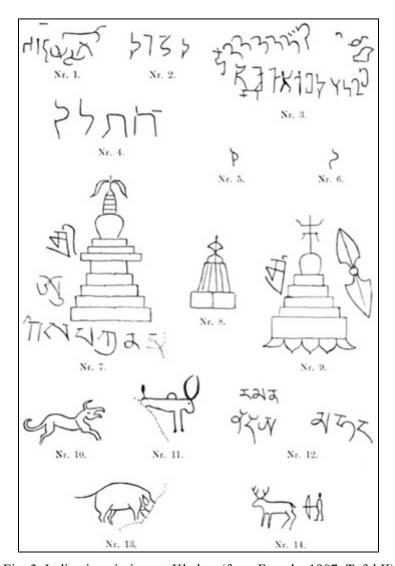


Fig. 3. Indian inscriptions at Khaltse (from Francke 1907: Tafel II)

Less well known are four other Indian script inscriptions (two each in Kharoṣṭhī and Brāhmī) that were found by Francke on other rocks nearby, which have never been published in definitive editions or included in epigraphic anthologies. As far as we have been able to determine, the only published reproductions of them are A.H. Francke's eye-copies⁵ (fig. 3), which seem to be less than reliable. Therefore Sten Konow, in his then-definitive corpus of Kharoṣṭhī inscriptions, declined to re-edit the shorter Khaltse inscriptions, citing only J.-P. Vogel's "tentative readings" (presented in Francke 1907: 592-93 on the basis of his correspondence with Vogel), and commenting that "It is useless to discuss the reading and interpretation as

⁴ See the discussions in Francke 1929: 110, Konow 1929: 80, Tucci 1958: 295, Orofino 1990: 181, Bruneau 2010: 1.36, and Bruneau 2011: 182.

⁵ Francke 1907: Tafel II (between pp. 592-23); Francke 1906: pl. XVI.5. These inscriptions are also briefly referred to in Francke 1909-10: 103, where he reports that "We took photographs of the Brāhmī and the longer Kharōṣḥṭhi inscription," but as far as we have been able to determine these photographs have not been published.

long as no better materials are available" – which unfortunately seems to still be the case. So for now, Vogel's readings of the two shorter Khaltse Kharoṣṭhī inscriptions (CKI 1122, 1123) must be provisionally retained: sakhavasa and śaśakhasa or śaśatasa.

An apparently early Brāhmī inscription from Khaltse was read by Vogel (1906: 31-32) as *bharad[v]āyasa* and equated with Sanskrit *bharadvāja*-. Its script is described as "Brāhmī characters of the Maurya period." The forms of the letters, particularly *bha* and *ra*, do appear in the eye-copies to be quite archaic but as Vogel justly cautions, any conclusions based on those eye-copies cannot be considered conclusive.⁷ Such an early inscription in Ladakh would be unexpected, but not impossible.

Another, somewhat later Brāhmī inscription from Khaltse was described by Francke (1906: 418-19 + pl. XVI.5; 1907: 594) and read by Vogel (1906: 32) as $(\acute{S}r\bar{\imath}?)$ Sacamatiṣya, which he took as the equivalent of Sanskrit Satyamati-. Vogel (ibid.) dated the script as "Brāhmī of the Kuṣaṇa [sic] period." Francke (1906: 419) speculated that this was "the name of one of the ancient kings of the castle on the river." But this is unlikely, for it is now evident that the Khaltse inscriptions record the names of passers-by, or perhaps of military personnel, and in this they resemble the new inscriptions which are the main topic of this article as well as the thousands of inscriptions⁸ of similar types which have been discovered in recent decades farther down the Indus River and in other river valleys in the Gilgit-Baltistan territory (formerly Northern Areas) and the Khyber Pakhtunkhwa Province of Pakistan. In fact, the Ladakh inscriptions now clearly testify to another branch, or rather a continuation, of the trade routes between India and Central Asia which are reflected in the materials from northern Pakistan.

Francke (1906: 416) reported another two inscriptions, one half way between Khaltse and Nyermo and another between Gadpa sngonpo (Gadpa Gonbo) and Ullu drogpo (Ulley Tokpo), in what he calls "this half-Tibetan type." By this he referred to the script of the inscription discussed in the previous paragraph, which he characterized as written "in characters which approach the Tibetan." Since this one was subsequently identified by Vogel as being in Kuṣāṇa Brāhmī, presumably these two inscriptions were also in Brāhmī, and they are so listed by Bruneau (2010: 1. 38; 2011: 183). But this cannot be confirmed since "no copy or photography are known" (ibid.) for these inscriptions, and they have not been located by recent investigators.

2b. Recently published inscriptions

Within the past two decades several other early Indic inscriptions have been discovered in western Ladakh, including three in Kharoṣṭhī at Kanutse and six in Brāhmī at Lehdo and Waru. The petroglyph site of

⁶ Konow refers here (1929: 81) to four short Kharoṣṭhī inscriptions, but it seems to us that here he has misunderstood Francke's presentation. For the single *akṣaras sa* labeled as nos. 5 and 6 in Francke's Tafel II are apparently not inscriptions on the rock, but rather only examples provided by Vogel to Francke for paleographic comparison: "äussert sich Dr. Vogel über die datierung der drei Karoṣṭhī[sic]-Inschriften in folgender Weise: In den Aśoka-Inschriften haben wir die geschlossene Form des *s*, wie auf Tafel II, Nr. 5 angegeben; in den Kuṣaṇa[sic]-Inschriften dagegen die offene Form, wie auf Tafel II. Nr. 6" (Francke 1907: 593). This is confirmed by Francke's "Verzeichnis der Abbildungen" (p. 597), in which he skips over II.5 and II.6.

⁷ "I am to point out, that, as only hand-copies are available to me, this and the following readings are not to be considered as final" (Vogel 1906: 31 n.1; cited in Francke 1907: 592 n.1 as "Es ist daselbst bemerkt worden, die Lesung dieser Inschriften beruhe nicht auf Abklatschen, sondern auf Kopien, und sei deshalb nicht als endgültig zu betrachten").

⁸ Some five thousand according to the estimate in Neelis 2011: 268.

⁹ These inscriptions as well as the many petroglyphs and elaborate rock carvings which accompany them have been scrupulously documented in the eleven volumes of the series *Materialien zur Archäologie der Nordgebiete Pakistans* (MANP), published between 1994 and 2013. The material as a whole is generally referred to as "Upper Indus inscriptions," although this name is not entirely accurate, since many of them are found in the Hunza and other valleys. Moreover, the label "upper Indus" is particularly inappropriate in the present context of Ladakh, where the Indus in Pakistan would be considered the "lower" Indus.

¹⁰ This topic will be further elaborated in the third part of this article.

Kanutse (34.5702°N, 76.5614°E) was discovered by Tashi Ldawa and Shiv Darshan Singh Jamwal in 2001, and further studied by Laurianne Bruneau in 2006. In that year she documented there two inscriptions in Kharoṣṭhī (fig. 4) along with two other isolated syllables, all carved on the same rock. A third inscription located on a nearby rock was documented in 2016 by Tashi Ldawa and Sonam Wangchuk (Khardong) (fig. 5).



Fig. 4. Inscriptions documented by Laurianne Bruneau at Kanutse

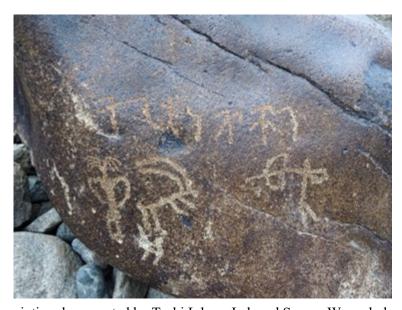


Fig. 5. Inscription documented by Tashi Ldawa Leh and Sonam Wangchuk at Kanutse

All three inscriptions consist of the same text with slight variations. Harry Falk described the first two examples as follows: 12

The correct version reads: varṣarturajahasta 'The hand of the king of the seasons of the year', or 'Hasta is the king of the seasons of the year'. The form of the preconsonantal r-hooks look rather archaic, and the text could have been written in the first century either BC or AD. The four-part compound is astounding, but easy to understand. The "king of the seasons" is spring, called this way in many instances in Sanskrit literature. The initial varṣa, "year", is redundant, but admissible. The first letter va could also be taken as an initial a-, but the arising arṣa,

¹² As quoted in Bruneau 2010: 1.207-208; see also Bruneau 2011: 182.

¹¹ Bruneau 2010, vol.1: 207-208; Bruneau 2011: 182.

Sanskrit ārṣa "relating to seers", makes little sense when compounded with "spring"... Most likely, the nakṣatra hasta is meant, our constellation Corvus, which at that time was seen in the West after sunset in spring ... The second version reads: ...ja-va-rşa-rta-ha and is obviously composed of the same letters, but some missing and some out of place.

Of the two translations proposed by Falk, the first one is surely preferable in taking -hasta as meaning "The hand of," that is, "The signature of," rather than as part of the name. The use of hasta in this sense is paralleled, for example, in the calligraphic signature of King Harsa of Kanauj on the Banskhera copper plate, reading in part svahasto 'yam mama, "This is my hand." Functionally, it is comparable to likhita "written (by)" at the end of the inscription discussed below.

Falk's estimate of an early date on the basis of the preconsonantal r in the syllable rsa seems reasonable, as it consists of a curved line across the stem of the r, rather than being written in continuous loop at the bottom of the stem as is done in later Kharoṣṭhī. Falk's analysis of the name, however, is speculative, and is cast into doubt by the discovery at a later date of the third inscription containing the same name in which, however, the third syllable seems to be ko rather than rv, and this reading is at least possible in the two other copies. Thus the actual intended reading in all three versions may have been varsako-raja-hasta, "The signature of King Varsaka" or "The signature of Varsakorāja." Here, as is so often the case with graffiti inscriptions, the personal name is obscure and perhaps best not subjected to etymological analysis.



Fig. 6. Inscriptions at Lehdo bridge

¹³ Salomon 1998: 69-70.

¹⁴ Varşako- instead of the expected varşaka- can be understood as an example of pseudo-compounding, not infrequently seen in Kharosthī and other informal inscriptions.

The petroglyph site of Lehdo bridge (34.4578°N, 76.6796°E) was discovered by Tashi Ldawa and Shiv Darshan Singh Jamwal in 2001. Laurianne Bruneau, Martin Vernier, and Quentin Devers later documented there two inscriptions written in Brāhmī in 2007. Both contain essentially the same text (fig. 6), which was read by Harry Falk, who dated it to the first half of the first millennium CE and described it as follows:¹⁵

It can be read either a) satirthyor vasā / likhita or b) satirthyo vesā / likhita. The difference lies in the interpretation of the stroke above the letter va, which could be a preconsonantal r or an -e-vowel marker. The first reading seems to be preferable for palaeographical reasons, since the stroke above the va with its serif looks much more like an r than like an -e. In this case we have a feminine dual of satīrthī and a feminine personal name vasā. The construction is odd: instead of an instrumental ("was written by...") we see a nominative ("NN written"), not even by an apposition ("NN is the writer"). This oddity is present, no matter if we prefer reading a) or b). Possibility (a) suffers from the assumption that two female students are responsible for the text, which is unexpected and remarkable. A feminine form satīrthī is not attested, but possible ... Possibility (b) would have the advantage to provide first a wellknown term satīrthya, masc. nominative satīrthyo, but we then have the difficulty to explain a feminine ending coming with a masculine name, vesā. Contrasting the two possibilities, a name $vas\bar{a}$ is much superior to $ves\bar{a}$, since it is attested in its masculine form vasa several times ... So, despite the unexpected two girls present, everything speaks in favor of them and nothing, apart from the more usual general situation, speaks for the one student Vesa. The second inscription on the site is a complete blunder of the same text, where we first find sa, then *likhita* in barbarous letters, then *tirthyorvasā*. Preferring possibility a) we can say that the scribe wanted to write: satīrthyor vasā likhita, "Of the two girl co-students, Vasā (has this) written.

Although Falk's interpretation is less than entirely convincing, we have not been able to substantially improve on it, and would prefer to consider the inscription as undeciphered.

2. New Indian inscriptions from Ladakh

2a. Waru

The petroglyph site of Waru (or Yaru) bridge (34.0708°N, 77.2114°E) was discovered by Tashi Ldawa in 2004. Martin Vernier, Laurianne Bruneau, and Quentin Devers subsequently documented four Brāhmī inscriptions there in 2007 (figs. 8-12). The site is located along the Zanskar river half way between Sumda Do and Chilling, and appears to have been an important crossing, with the ruins of a bridge and a watch tower in the mountain above to protect it. Carvings include several dozen depictions of figures commonly seen in the region such as yaks, ibexes, snow leopards, anthropomorphs (including hunting scenes) as well as rarer motifs such as peacocks, *khyungs* (mythical horned eagles), elephants, and suns. The site suffered major damage in recent years when the road was widened and heavy debris of broken rocks were dumped and left covering a large part of the site. Several depictions of zoomorphs at this site (fig. 7) are reminiscent in style to those observed along with the Brāhmī inscriptions at Lehdo bridge (fig. 6). The dating

¹⁵ As guoted in Bruneau 2010: 1.206-07 and Bruneau 2011: 183-84.

¹⁶ See Devers 2014: 1.45-46, and the carefully executed copies of these inscriptions in Devers 2014: 2.42 (fig. 57d-g), which were helpful in establishing the readings. These inscriptions were previously studied by Jason Neelis, but have not been published.

of these inscriptions is rather difficult, and only a general range of about the third to seventh centuries CE can be suggested.¹⁷



Fig. 7. Some of the petroglyphs at Waru bridge

We propose, with due hesitation, the following readings for the Waru inscriptions:



Fig. 8. Waru inscription 1

¹⁷ Dating such informal inscriptions on the basis of their paleographic features is particularly difficult and imprecise, even more so than paleographic dating in general. If the readings proposed here are correct (and several of them are are considerably less than certain), the Waru inscriptions seem show a particularly wide range and combination of archaic and developed forms of certain characters. For example, the archaic form of the character tentatively read as *na* in Waru 3 contrasts with the much later form of the same consonant in Waru 1, and in Waru 1, the later shape of the vowel diacritic in *śo* contrasts with what seems to be the much older type in the following syllable *ko*.

Waru inscription 1 (fig. 8): The reading, $\dot{s}r\bar{t}rn\dot{e}\dot{s}oko$, is fairly clear but the meaning and derivation of the name is obscure, as is often the case with such graffiti inscriptions. Perhaps some connection with the name Aśoka is intended. The form of the honorific prefix as $\dot{s}r\bar{t}r$ - instead of the technically correct $\dot{s}r\bar{t}$ -sometimes seen in graffiti¹⁸ and occasionally even in more formal inscriptions.

The formula of this inscription, consisting of a name in the nominative (as here) or stem form, or in the genitive case (as in the next inscription) prefixed by the honorific $\dot{s}r\bar{\imath}(r)$ is characteristic of the corpus of graffiti inscriptions along the Indus, including sites in Pakistan and in Ladakh, and is seen in several other of the new examples presented here, in both Brāhmī and Kharoṣṭhī.



Fig. 9. Waru inscription 2

Waru inscription 2 (fig. 9): The reading is fairly clearly *śrībhāṭasya*. In the photograph only the bottoms of the first two syllables are present, but in the copy on transparent sheets made by Bruneau, Vernier and Devers and reproduced in Devers 2014: 2.42, fig. 57e, they are apparently complete. Evidently the portion of the stone that contained the upper part of these syllables has since chipped off.

The name is of a common Indic type, probably reflecting abridged forms of *bhaṭṭāraka*, "lord, master, etc." (itself derived from *bharṭṛ*, "lord"), which is widely attested in Indian inscriptions and names generally in the forms *bhaṭṭa*, *bhaṭa*, etc. The genitive ending, implying "name of X" or "signature of X" (compare the use of *hasta* in the Kanutse inscription), is normal in graffiti inscriptions, as noted above.

¹⁸ For example in śrīr-viṣṇugupte in a graffito from Oshibat on the Indus in Pakistan (Bemmann and König 1994 [= MANP 1]: 84, no. 21:7).



Fig. 10. Waru inscription 3

Waru inscription 3 (fig. 10): $\dot{s}r\bar{\imath}-pu[nudra]sya$: The reading of the second and third syllables is very uncertain (hence in brackets). They seem to have been faultily written, and it is possible that they were intended to represent a single $ak\bar{\imath}ara$. One could imagine that the intended reading was something like $\dot{s}r\bar{\imath}punyasya$ or $\dot{s}r\bar{\imath}punyendrasya$, but the name as it stands cannot be convincingly interpreted.



Fig. 11. Waru inscription 4

Waru inscription 4 (figs. 11-12): śrīcaṃdroṭaka: Here the reading is relatively clear and the name can be readily connected etymologically with the common name element *candra*, "moon" and the

suffixal element -ot(t)a(ka), common in the far north and sub-Himalayan region. However, there remain some uncertainties and unusual features. The anusvāra is written to the right of the preceding ca rather than above it as is usually done. The syllable ta seems to have been squeezed in between dro and ka and is slightly misaligned, but it was presumably intended as part of the same name, rather than being an intrusive or stray element. The upper curve of the \bar{t} vowel in $\dot{s}r\bar{t}$ has been calligraphically extended upward to the right and then downward, forming an oblong curve ending above the head of the following syllable; this is clearer in the copy on transparent sheets made by Bruneau, Vernier and Devers and reproduced in Devers 2014: 2.42, fig. 57g.

This part of the extended curve is partly obscured by the meander-like design which is carved vertically above the inscription. The design could be the work of Candraka himself, to judge by the similar quality of its engraving. There are also several other stray marks above and below the name (see fig. 12), including a svastika and a peacock design below it.



Fig.12. Waru inscription 4, showing designs below the inscription

2b. Kharul (Kharool)

The petroglyph site of Kharul (34.5933°N, 76.1163°E) was discovered by Tashi Ldawa in 2007. Quentin Devers later photographed four Brāhmī and two Kharoṣṭhī inscriptions there in 2016, during surveys conducted in partnership with the Indian National Trust for Art and Cultural Heritage (INTACH) (fig. 13). The rock engraved with the inscriptions²⁰ is located below the hamlet of Kharul, at the confluence of the Shingo River with the Suru River (fig. 14), which in turns merges with the Indus about fourteen miles further north. This location is an important one, as it appears to have been the border between the three regions of Kashmir (which seems to have once controlled the valley of Dras all the way to Kharul²¹), Baltistan, and Purig

¹⁹ On the name suffix *-otal-ottal-ottaka-ottaka* etc., see von Hinüber 1989: 44.

²⁰ This rock was previously illustrated, along with a great number and variety of petroglyphs at Kharul, in Devers, Martin, Khan and Ldawa 2016: fig. 17, but without discussion of the inscriptions other than tentatively identifying them as Kharoṣṭhī ("Confirmation of their identity is now being sought"). See also the description of the Kharool (= Kharul) site in Devers 2018: 159, mentioning inscriptions "perhaps" in Kharosthī.

²¹ See Devers 2018: 9 and Martin forthcoming.

(the original name of the region of Kargil in Ladakh). Confluences and gorges in general were commonly taken as border features in these mountain regions, as opposed to passes which on the contrary were often considered as unifying features linking valleys together.



Fig. 13. Inscribed stone at Kharul with inscriptions labeled

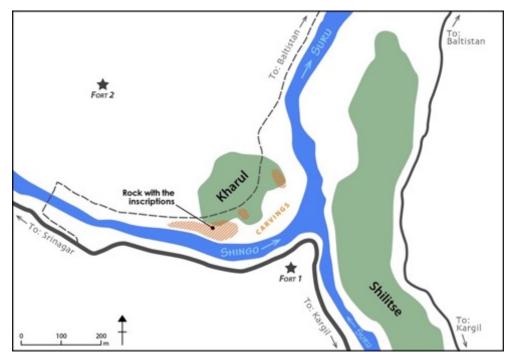


Fig. 14. Plan of the petroglyph site of Kharul

The Kharul site is about forty-seven miles as the crow flies from Khaltse. According to Devers, Martin, Khan and Ldawa 2016: 4, "It is quite possible that the petroglyphs date to a time when the confluence

of the Dras and Suru was a strategic crossing protected by a fort." They further point out (p. 17) with regard to similar sites in Ladakh that "All sites of this type have the same geographical context: they were crossing points over important rivers." This corresponds well with what has been noted regarding the similar inscription and petroglyph sites in the northern reaches of Pakistan, which have been interpreted as crossing points where travelers might pass time while waiting for a safe crossing by inscribing their names on rock along the river bank, sometimes adding pious messages which they no doubt hoped would protect them during the often-perilous crossings. A possible military or official identity for the makers of these inscriptions should also be kept in mind, as later Tibetan inscriptions found in these locations in Ladakh were explicitly left by soldiers, apparently stationed to guard these strategic crossings. Posted soldiers or tax collectors would inevitably end up spending far more time waiting in these locations than any type of traveler.

The Kharul inscriptions are loosely grouped together on the southwestern face of the rock, which is intact at the left side but broken off at the right. The boulder includes several dozen carvings of figures commonly seen in the region such as ibexes, horses, stags, anthropomorphs (including dancing-like figures with large open hands), stūpas, swastikas (both clockwise and counter clockwise), as well as rarer motifs such as lions and antelopes. Several periods of carvings seem to berepresented. The inscriptions are immediately below two ibexes, underneath which are additional indistinct marks that might be the remnant of writing, but if so it is illegible. To their right are two Brāhmī characters of about the second or third century CE (fig. 13.1), reading śriha. This is likely to be an incomplete name, as the rock is broken off after the second akşara. There are some names beginning with śrī-ha... among the northern Pakistan graffiti (for example śrī harimi in the index in Bandini-König and von Hinüber 2001: 373), but none of them are likely to have been the same one as here. 25

Below the row of indistinct characters is a Kharoṣṭhī inscription (fig. 13.2) reading clearly, except for the last syllable, śridharma[sa], "Of Śrīdharma." Above the first syllable and immediately to the left of the last one are two svastikas, as well as another farther to the left. The name śrīdharma occurs in two inscription from Gilgit-Baltistan, at Shatial ²⁶ and Hodur South, ²⁷ the latter reading śrī[dharma]sya bhavitavya[m] mara[nam], "[Signature] of Śrīdharma; memento mori." But since these two inscriptions are in Brāhmī script and are paleographically younger, they are not likely to be the work of the same person who recorded the Kharoṣṭhī inscription in question here.

Below this is another Kharoṣṭhī inscription (fig. 13.3) reading very clearly $sp\bar{a}lasa$. Here the shape of the consonant s, appearing twice, is of the "open" variety in which the vertical stem does not extend up to or towards the top stroke but is instead combined with it in a single cursive stroke (\mathcal{F}). This is generally considered to be characteristic of later stages of Kharoṣṭhī script, around or after the second century CE, and although such indices are highly approximate at best, my impression of the paleography of this and the other Kharosthī inscription on this rock is that they can reasonably be attributed to the second century or thereabout.

The name element $sp\bar{a}la$ and variants thereof are very widely attested among the inscriptions from northern Pakistan as well as in the Central Asian Kharoṣṭhī documents from Niya and various other documents such as inscriptions and coin legends from the early centuries of the Common Era. The form $sp\bar{a}la$

²² See Neelis 2011: 262 and further references provided there.

²³ See for instance Martin 2018 about the Tibetan inscriptions in Kharul, and Takeuchi 2012 for similar inscriptions in Alchi.

²⁴ The occurrence in Kharul inscription 3 of the name *spala*, meaning "army" in Bactrian, might be invoked in favor of this hypothesis.

²⁵ The index of inscriptions in Bandini-König 2009 (= MANP 9): 308 lists $\acute{sr\bar{\iota}}$ ha for inscription 18.2 from Ha[rban], but the edition under this number (p. 265) does not correspond to this reading. There seems to have been some editorial error here; perhaps the intended referent was Harwan 18.5 (ibid.; unillustrated), read by O. von Hinüber as $\acute{sr\bar{\iota}}$.

²⁶ No. 39.7; Fussman and König 1997 (= MANP 2): 224 + pl. 54 (reading by O. von Hinüber; "Die Lesung -rma ist unsicher").

²⁷ No. 21.1; Bandini-König 2009 (= MANP 9): 268 + pl. 78

²⁸ Or, as translated (by O. von Hinüber), ibid., "Des Śrī Dharma unausweichlicher Tod."

reflects a Bactrian dialect form of the word corresponding to Avestan $sp\bar{a}\delta a$ 'army.' As noted by von Hinüber (ibid.), it typically appears as the latter member of proper names, where it functions as the equivalent of Indic -sena. It occurs together with Indic elements such as $candrasp\bar{a}la$ and $dharmasp\bar{a}la$, and (less commonly) with Iranian ones as in $varjasp\bar{a}la$, $maghasp\bar{a}la$ and $gu\acute{s}urasp\bar{a}la$. Von Hinüber (1986: 150-51) lists twelve names ending in $-sp\bar{a}la$ from the northern Pakistan inscriptions, and adds four more in a subsequent publication. These are all in Brāhmī script, to which can be further added two examples in Kharoṣṭhī: $sama\acute{s}pala^{32}$ and $s\acute{u}dha\acute{s}pala$.

In all of these examples $sp\bar{a}la$ is the latter element of the name, corresponding to Indic names in -sena. There are some cases in which $sp\bar{a}la$ appears as the prior member of compound names, as in coin legends of rulers such as Spalahora, Spalagadama, and Spalapatideva, or of titles, as in the Kamra stone inscription of the time of the Kuṣāṇa king Vajheṣka (ca. 251 CE; CKI 230, line 2), spalasakari[ta](*sa), tentatively rendered (Falk 2015: 129) as "honoured by the army," and in a bronze inscription of the Palola-ṣāhi dynasty, $sp\bar{a}lapati-Dholaka-$, "des Heerführers Dholaka" (von Hinüber 2004: 65-66). But the present case is the only example, as far as I have been able to determine, of $sp\bar{a}la$ appearing as a name by itself. Given the numerous parallels, we can suppose that it is a hypocoristic form for an underlying compound name ending in $sp\bar{a}la$.

Finally, loosely grouped together at the right edge of the rock are three Brāhmī akṣaras reading, from top to bottom, $s\bar{u}$, se, and so (fig. 13.4-6). The first and third of them are near the edge so that they could have been the beginning of longer words, but the second one is set well in from the edge so that it is clearly an independent graph. The sequence (if that is what it really is) $s\bar{u}$ -se-so resembles the traditional $dvadas\bar{a}kṣar\bar{\imath}$ or $siddham\bar{a}t_rk\bar{a}$ pedagogical order (... su $s\bar{u}$ s_r s_r se sai so sau ...), so that it might seem as if the scribe was idly practicing his writing skills, se or perhaps refining his calligraphic style.

2c. Henache

The petroglyphs of Henache (34.974081°N, 77.406766°E) were documented by Quentin Devers in 2020 during surveys conducted in partnership with INTACH. The contiguous villages of Henache and Tongsted are the last ones on the left bank of the Siachen river in Nubra (only a single house is located further north, at Washi), some 93 km as the crow flies north of Leh. The carvings are found along a ruined structure set on a low mound, known as Dza Chorgog. Interestingly, the name 'Chorgog' is also found in the area of Tangtse, where two ruined fortifications bear this name, in Pholongley and Yerad. ³⁷ There, their overall context is suggestive of a non-Tibetan phase of occupation of the area, with "five-headed" stūpas that are

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²⁹ von Hinüber 1986: 151.

 $^{^{30}}$ Given their frequency, Schmitt (2002: 159) opines that such mixed names need not be understood as hybrids, as von Hinüber characterizes them, but rather as purely Indo-Aryan, on the grounds that Iranian $sp\bar{a}la$ has in effect become a loan word into northwestern dialects such as Gāndhārī.

 $^{^{31}}$ In Bandini-König 2013 (= MANP 11): 239. Further comments on *spāla*-names are found in von Hinüber 2017: 137 and 2018: 13.

³² Bandini-König 2009 (= MANP 9): 165, no. 540.1. In spite of the editor's (G. Fussman) hesitation ("La lecture du la est douteuse"), the reading seems secure. However, Fussman transcribed the third syllable as spa, where I would read śpa, as in the following example. The alternation of sp and śp well attested in Gāndhārī.

³³ Bandini-König 2013 (= MANP 11): 256, no. 211.8. The inscription was read by the editor (Fussman) as *śudhakae*, but the correct reading *śudhaspāla* is clear in the accompanying illustration (pl. 92).

³⁴ Although the stone is broken off to the right of the inscription, enough of it remains that, if there had been any *akṣara*s before *spalasa* at least some trace of the immediately preceding one would have been visible.

³⁵ If so, the absence of $s_{\bar{r}}$, $s_{\bar{r}}$, and sai in the sequence may reflect a Prakrit or Prakritic version of the alphabetic sequence in which vocalic r/\bar{r} , and perhaps also the long diphthong vowels, were omitted; compare Salomon 2016: 10 and n. 5.

³⁶ The similarity between the sequence of Brāhmī *s*-s here and the two Kharosthī *sa*-s in Francke's eye copy of the Khaltse inscriptions is merely a coincidence since, as pointed out above (n. 7), the latter were not actually found on the rock itself but were merely supplied by the author for paleographic comparison.

³⁷ Devers 2019: 173, 181

reminiscent of Central Asian architecture. The carvings of Henache consist of zoomorphs, anthropomorphs, stūpas, and geometric images, including dancing figures similar to those typically found in western Ladakh.



Fig. 15. Inscription at Henache.

The carvings include an inscription written on a small side rock in late Brāhmī characters of about the fifth century CE (fig. 15), which seems to read saṃvirabha? / da na (the last syllable on the first line is indistinct). The inscription apparently refers to a "Gift (dana [sic]) of Saṃvira..." If this interpretation is correct, the gift may refer to the images of stūpas carved on the main boulder, or, alternatively, to an actual stūpa that may have been within the ruins of the Chorgog. Tibetan Chorgog is supposed to be short for chorten gogpo, or ruined stūpa, implying that the Chorgog fortifications may have been fortified religious establishments, or that they may have once contained important stūpas. The Henache inscription is the northernmost Brāhmī inscription in Ladakh and the first ever found outside of the Indus valley, and thus the de facto oldest known inscription of the Nubra region.

3. Historical significance of the Ladakh inscriptions

Perhaps the most interesting point about the Indian-language inscriptions from western Ladakh is their evident kinship to the thousands of graffiti found along the Indus and other river valleys of northern Pakistan. The mixture of Brāhmī and Kharoṣṭhī scripts seen at the Ladakh sites is entirely typical of the earlier phase of this vast epigraphic corpus, as is the simple recording, in most cases, of personal names without further information. These graffīti have been convincingly interpreted as artifacts of the flourishing trade routes between India and Central Asia in the early centuries of the Common Era. While the majority of the sites at which they are found suggest that the main routes followed the Indus Valley to the Hunza River and then

turned northward toward the Khunjerab and other passes into the Tarim Basin, the new material indicates that an alternate route continued along the Indus as it turns eastward into Ladakh, whence travelers could head northward to cross over the Karakorum pass toward Khotan and Yarkhand. Such routes are attested well into the historical period, even as recently as the nineteenth century (Neelis 2011: 264). These routes also served to reach Ladakh itself as well as connecting to upper Tibet, where such high added- value commodities as gold, musk, pashmina, shahtoosh, salt, and sapphires were produced in large quantities.³⁸

This information also clarifies the presence of an inscription bearing the name of Vima Kadphises in a region which would have been, at best, on the fringe of his sphere of influence, a long and difficult journey from his capitals in Bactria and Gandhāra. Interestingly, carvings of tamgas (fig. 16) similar to those seen on coins of early Kusāna rulers were documented by Tashi Ldawa and Viraf Mehta at the Indus-Zanskar confluence in 2013 (34.1609°N, 77.3390°E; the rock on which it was engraved has unfortunately since been destroyed) and between Alchi and Lardo along the Indus (34.2329°N, 77.1372°E), reinforcing the plausibility of Kuṣāṇa influence in the western parts of Ladakh during the period in question. More generally, potteries that reflect the broad ware culture of Central Asia during the Kuṣāṇa and post-Kuṣāṇa periods in terms of typology, decoration, technique, etc. were identified by Samara Broglia de Moura at various sites in Western Ladakh (mainly in Dras), as far east as Wanla.³⁹ As recently noted by Skinner (2017: 63-64), the Kuṣāṇa rulers seemed to have located their inscriptions in areas along the fringes of their territories or spheres of influence (as had been done by Aśoka some three and a half centuries earlier). The position of Vima's Khaltse inscription and the tamga carvings suggest that the Ladakh routes to Central Asia and to the precious resources of both Ladakh and upper Tibet, distant and difficult as they may have been, were significant enough to be chosen for display of Kusāna power. 40 This in turn suggests that the routes were fairly well traveled during the heyday of the Kusānas in the later first century and the second century CE. The later inscriptions at Lehdo, Waru, and Henache, are clues that this influence was a durable one, lasting well into the post-Kushan period.

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³⁸ To understand the scale of this wealth, considering solely the production of gold, we can look at the accounts of Mirza Haidar, a Turco-Mongol general from Kashgar who led several expeditions in Ladakh and Tibet in the first half of the sixteenth century and described aspects of gold production in these regions that were reported to him by local informants. The soil of some of the mines was such that a sieve of soil could yield ten *mithqāls* of gold (about 42.5 grams): a single person could carry and wash up to twenty sieves of soil, bringing the production of gold up to 850 grams per person per day (Elias and Denison 2009: 356). In the province of Guge, the earth was said to be so rich that soil simply spread on a cloth would reveal gold nuggets varying from the size of a pea to that of a sheep's liver. While he was negotiating tribute from Guge during one of his campaigns, a man told him that somebody recently struck his spade in a rock at the center of which was a large chunk of gold, which after extraction proved to weigh 1500 Tibetan *mithqāls* (about 9.5 kg). Gold mines were so important in the landscape that they were actually taken as landmarks to delineate the northern and eastern borders of Ladakh during the Ngari Skorsum period (tenth to thirteenth centuries CE; Devers 2019: 12). Mining was considerable, and an integral part of the defining identity of both Ladakh and upper Tibet.

³⁹ Broglia de Moura forthcoming; Devers 2018: 9-10, 167-69.

⁴⁰ Although Vima's inscription itself consists merely of his name and the date, it is accompanied by an armed figure in typical Kuṣāṇa military pose, as if to mark the territory as belonging to the Kuṣāṇa ruler.



Fig. 16. Depictions of *tamgas* at the Zanskar-Indus confluence (left; photo courtesy Viraf Mehta), and between Alchi and Lardo (right).

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