

Gandhāran Birchbark Scrolls



Stefan Baums
Ludwig-Maximilians-Universität München
baums@lmu.de

[Presentation at the Centre for the Study of Manuscript Cultures,
Universität Hamburg, 17 May 2021]

The Gandhāran Scroll Tradition



Gandhāra straddles Northern Pakistan and Eastern Afghanistan, where in antiquity Indian and Iranian cultures met with Hellenistic influence.

Key Events in Gandhāran Manuscript Culture

- 4th c. BCE Use of Aramaic language, script, and manuscripts under Achaemenid administration (Nearchus, archives from Bactra)
Development of Kharoṣṭhī and transition to Gāndhārī as administrative language; production of short-format administrative documents using birch bark
- 3rd c. BCE Application of Kharoṣṭhī and Gāndhārī to Buddhist material in Aśokan edicts (Shahbazgarhi and Mansehra)
Production of short-format Buddhist manuscripts; development of Gandhāran long format
- 1st c. CE Short- and long-format Gāndhārī Buddhist manuscripts; transition to palm-leaf manuscripts
- 4th c. CE Brāhmī and Sanskrit
- 2nd c. CE Establishment of Chinese translation procedures for Indian Buddhist texts



Gandhāran birch-bark scrolls have survived from antiquity due to their interment in clay pots in arid climate.

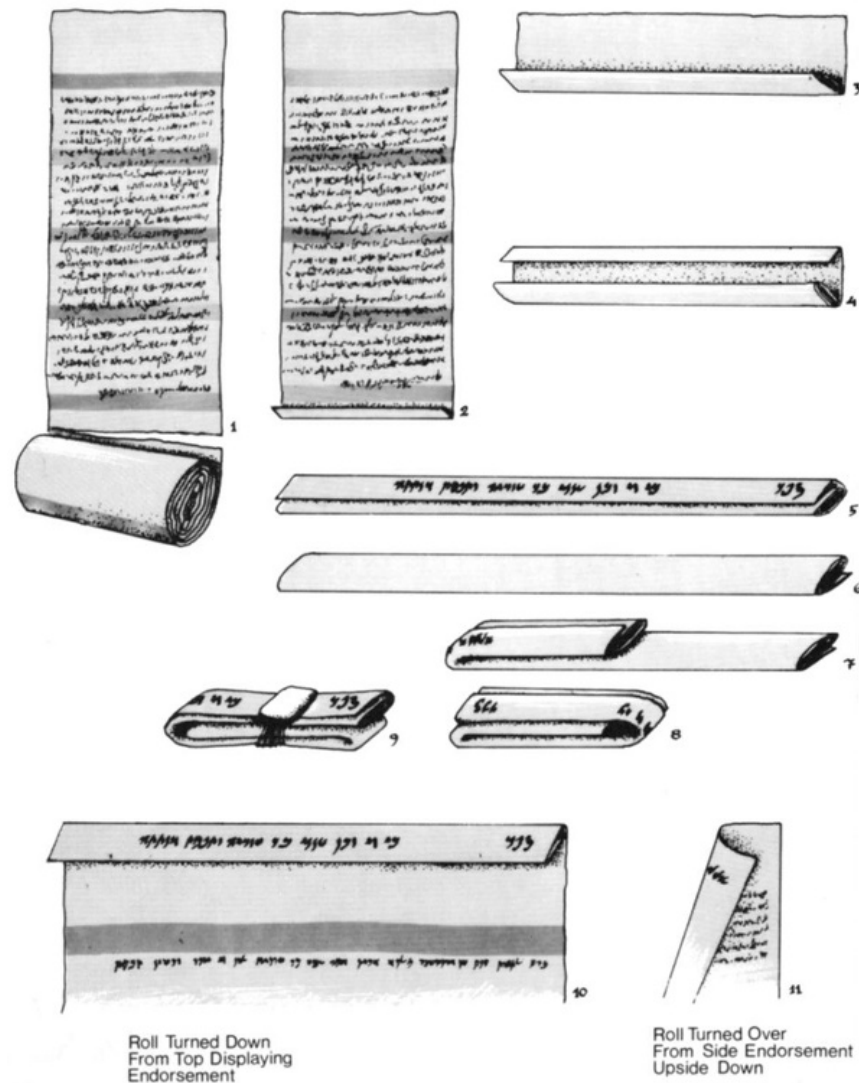
North-semitic > Aramaic
890 BC 380 BC

Aśokan Aramaic
250 BC

Kharoṣṭhī
250 BC

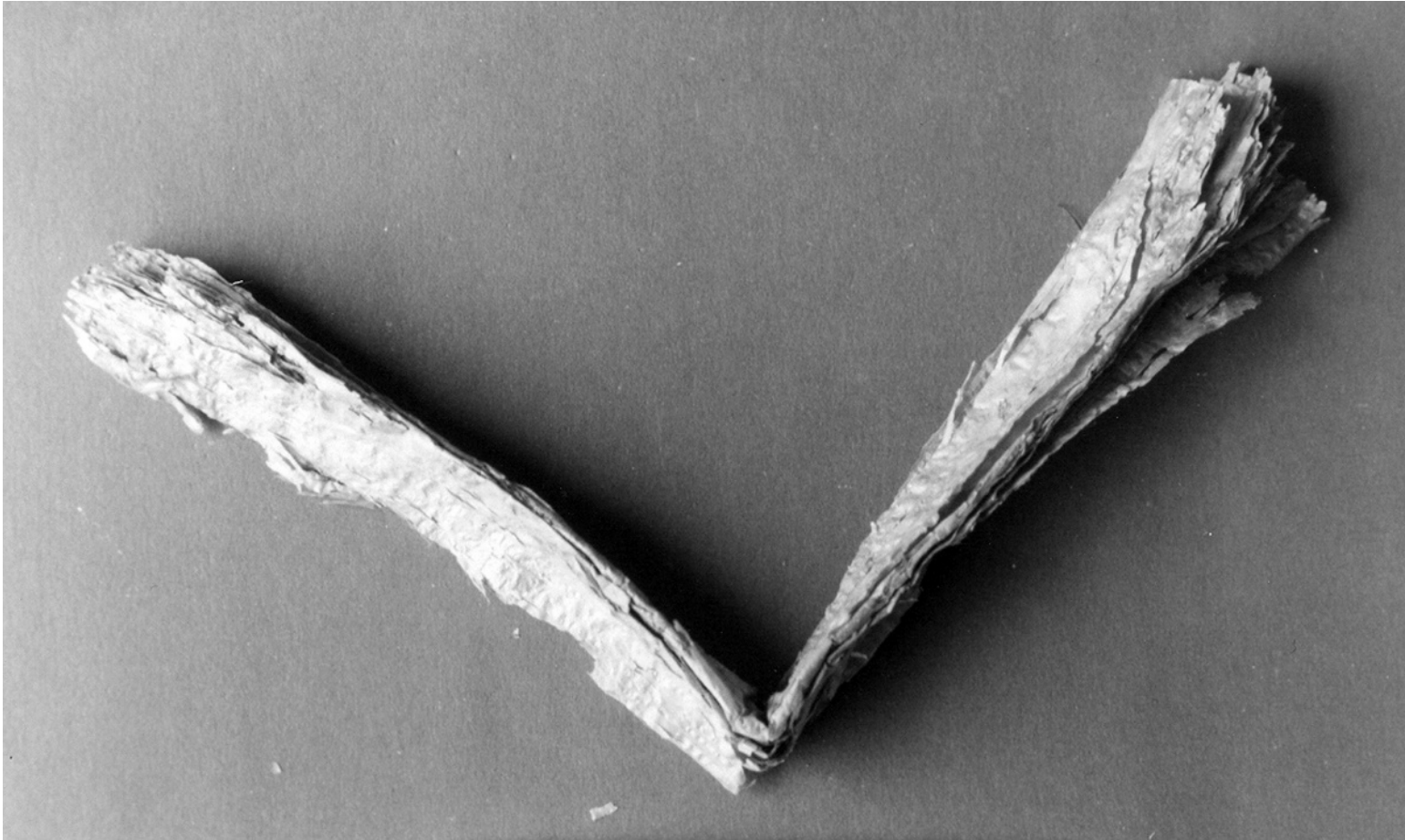
yōd	𐤎 𐤏	𐤍 𐤎 𐤏	𐤍 𐤎 𐤏 𐤍 𐤎 𐤏 𐤍 𐤎 𐤏	𑀘 𑀙 𑀚 𑀛 𑀜	𑀘	ya
wāw	𐤐 𐤑	𐤒 𐤓 𐤔	𐤒 𐤓 𐤔 𐤒 𐤓 𐤔 𐤒 𐤓 𐤔	𑀞 𑀟 𑀠 𑀡 𑀢	𑀞	va
nūn	𐤕 𐤖	𐤗 𐤘	𐤗 𐤘 𐤙 𐤗 𐤘 𐤙 𐤗 𐤘 𐤙	𑀣 𑀤 𑀥 𑀦 𑀧 𑀨 𑀩 𑀪 𑀫 𑀬 𑀭 𑀮	𑀣 𑀤	na
rēs	𐤛	𐤜 𐤝	𐤜 𐤝 𐤞 𐤜 𐤝 𐤞 𐤜 𐤝 𐤞	𑀯 𑀰 𑀱 𑀲 𑀳 𑀴 𑀵	𑀯	ra
bēt	𐤞 𐤟	𐤠 𐤡 𐤢	𐤠 𐤡 𐤢 𐤠 𐤡 𐤢 𐤠 𐤡 𐤢	𑀶 𑀷 𑀸 𑀹 𑀺 𑀻 𑀼 𑀽	𑀶 𑀷 𑀸	ba
dālet	𐤠 𐤡	𐤢 𐤣	𐤢 𐤣 𐤤 𐤢 𐤣 𐤤	𑀾 𑀿 𑁀 𑁁 𑁂 𑁃	𑀾	da

They are inscribed in the local Gāndhārī language (related to Sanskrit) and the Kharoṣṭhī script (invented for Gāndhārī on the basis of the Aramaic script of the Achemenid empire).



Ada Yardeni

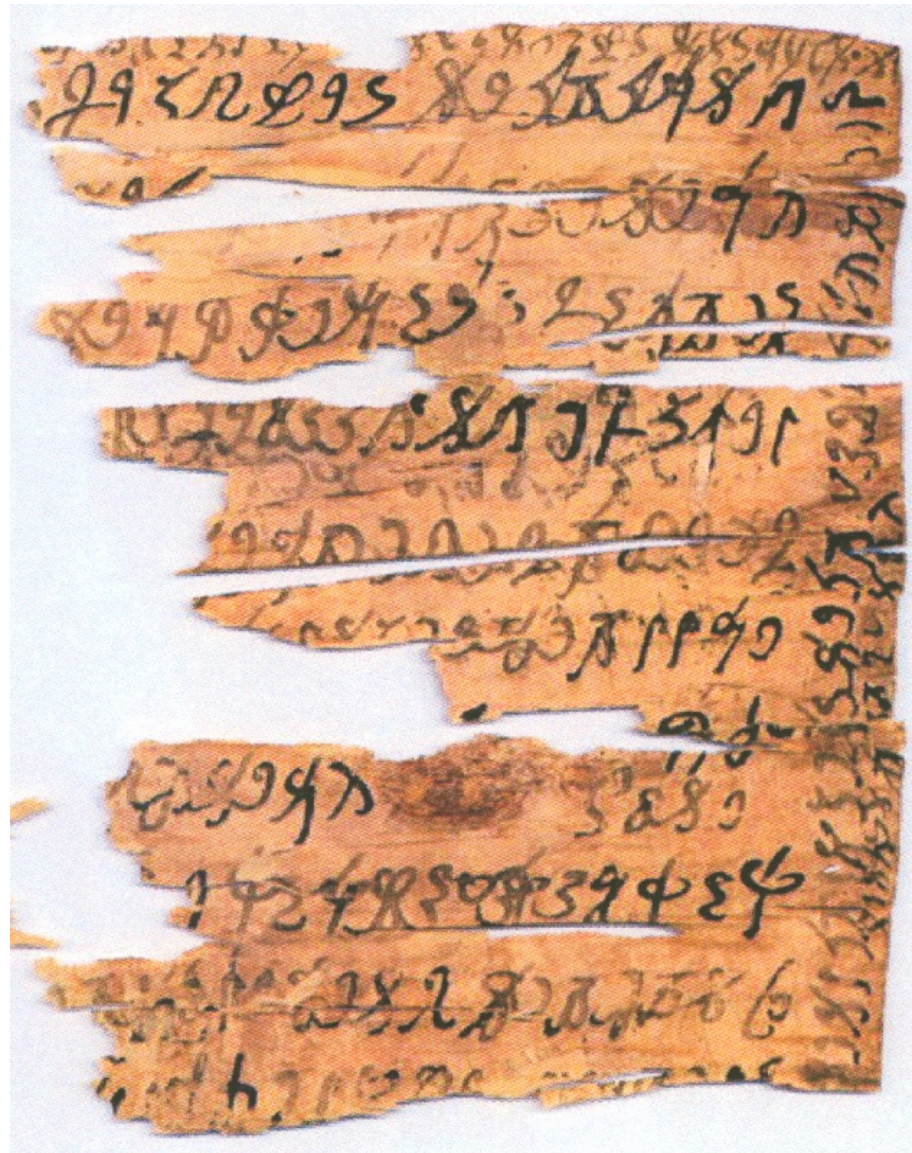
Like the script, the Gandhāran scroll format is inspired by that of Achaemenid Aramaic documents: folded up from bottom to top, with the primary side facing inwards, and sometimes subsequently folded horizontally into a smaller pack, as illustrated here for Aramaic scrolls (Porten 1979)...



... and here for a Gandhāran scroll.

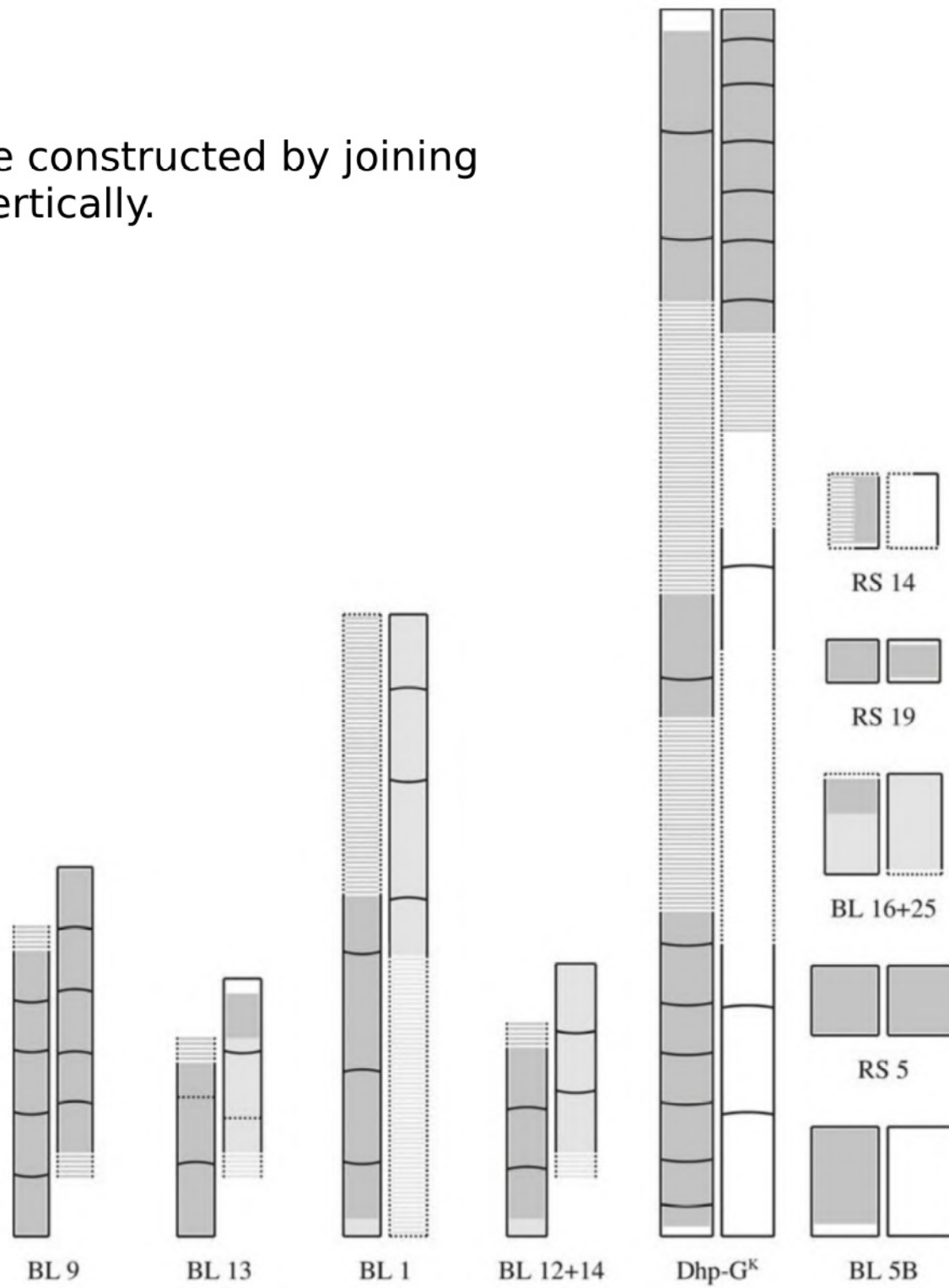


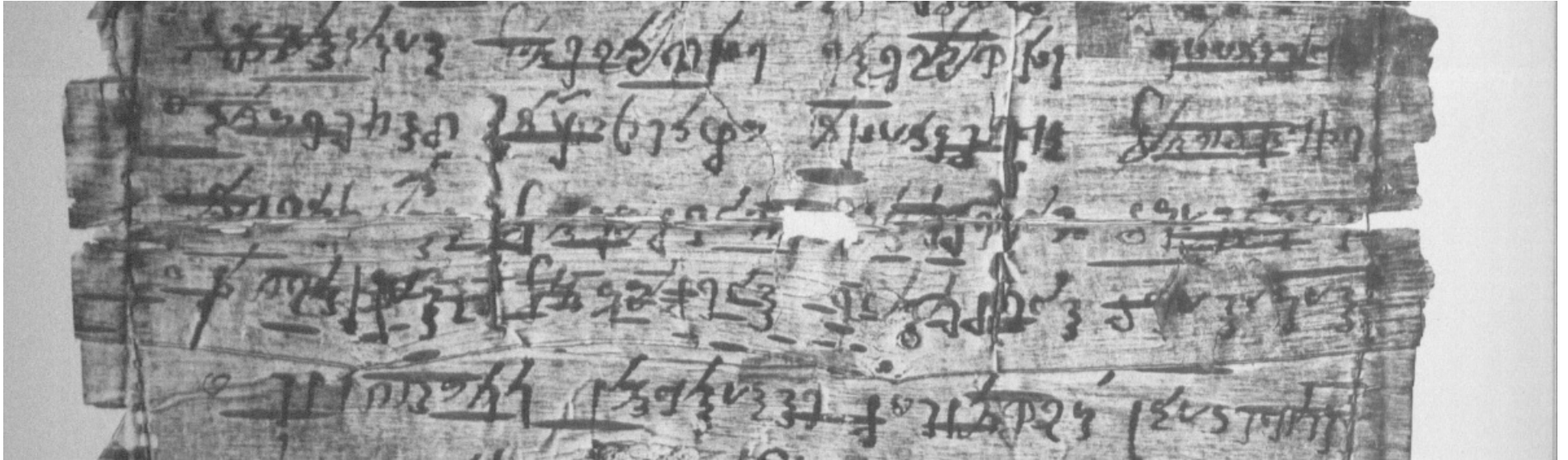
Scribal habits also carried over from the Aramaic to the Gandhāran scroll tradition, such as the adding of lines to a full writing surface in the right and then top margin, as illustrated here for an Aramaic...



... and here for a Gandhāran scroll.

Longer scrolls are constructed by joining several sheets vertically.



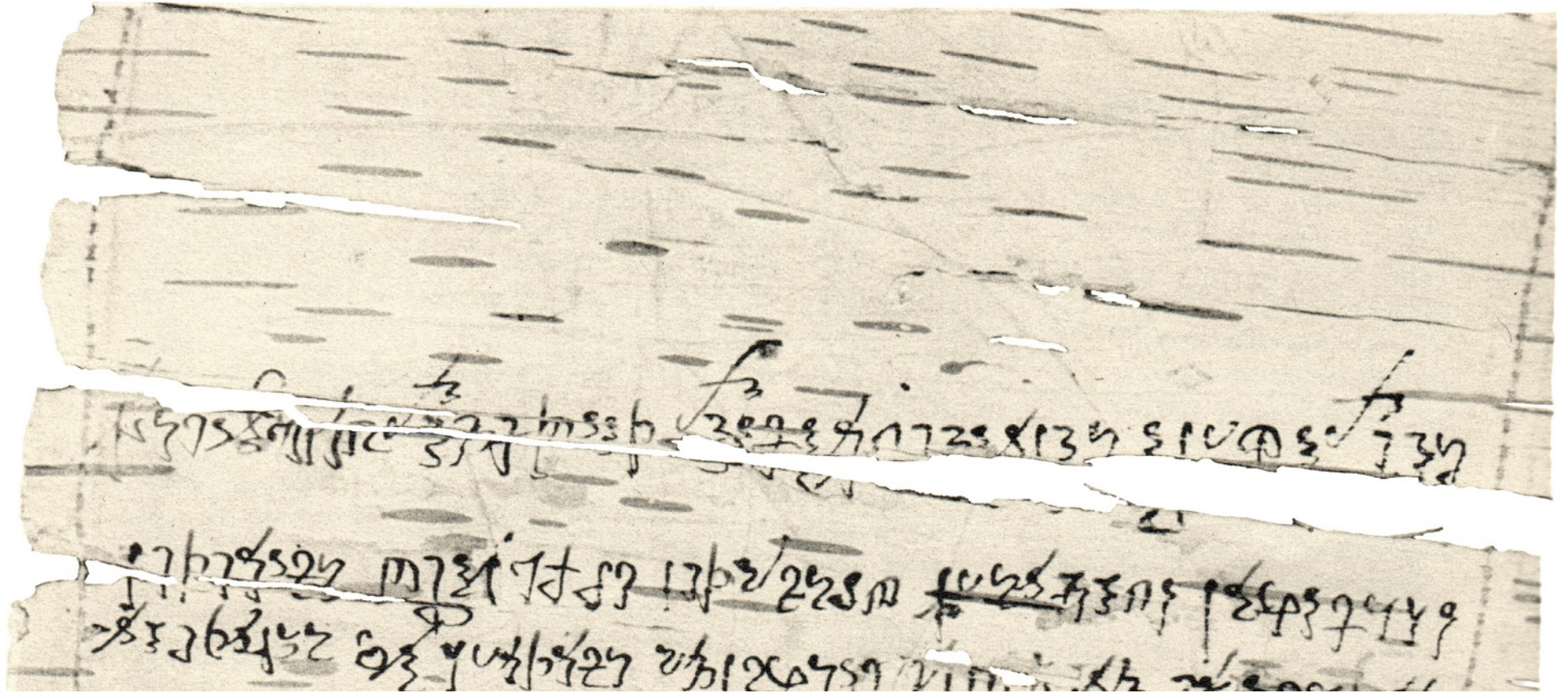


Joins are glued and typically reinforced with medial stitching, with margin stitching providing overall vertical cohesion.

	Width of sheets (cm)	Heights of sheets (cm)
BL 9	14	19.8, 25.2, 25.2, 25
BL 13	14	27, 29
BL 1	15.1	49, 36, 30
BL 12 + 14	ca. 15.5	23.5, 27
Dhp-G ^K	21	ca. 45, 46.9 ... 23.5, 20.4, 20, 23.1, 17.5, 13.1

The height of individual sheets in these composite scrolls can be standardized within a single scroll or scroll set (BL 9 and 13) or vary (Dhp-G^K), with a general width ranging from ca. 15 to ca. 20 cm.

Colophons occur at the top of the recto of scrolls and were not visible when the scroll was rolled up, i.e., did not serve as labels.



Budhavarmasa śamaṇasa Budhaṇadisa[r]dhavayarisa ida Dharmapadasa postaka
Dharmaśraveṇa likhida araṇi

“This book of the Dharmapada of (= belonging to) the monk Buddhavarma, student of Buddhanandin has been written by Dharmaśrava in the monastery.”



The handling of scrolls is illustrated in Gandhāran art, in scenes of the Buddha's schooling...



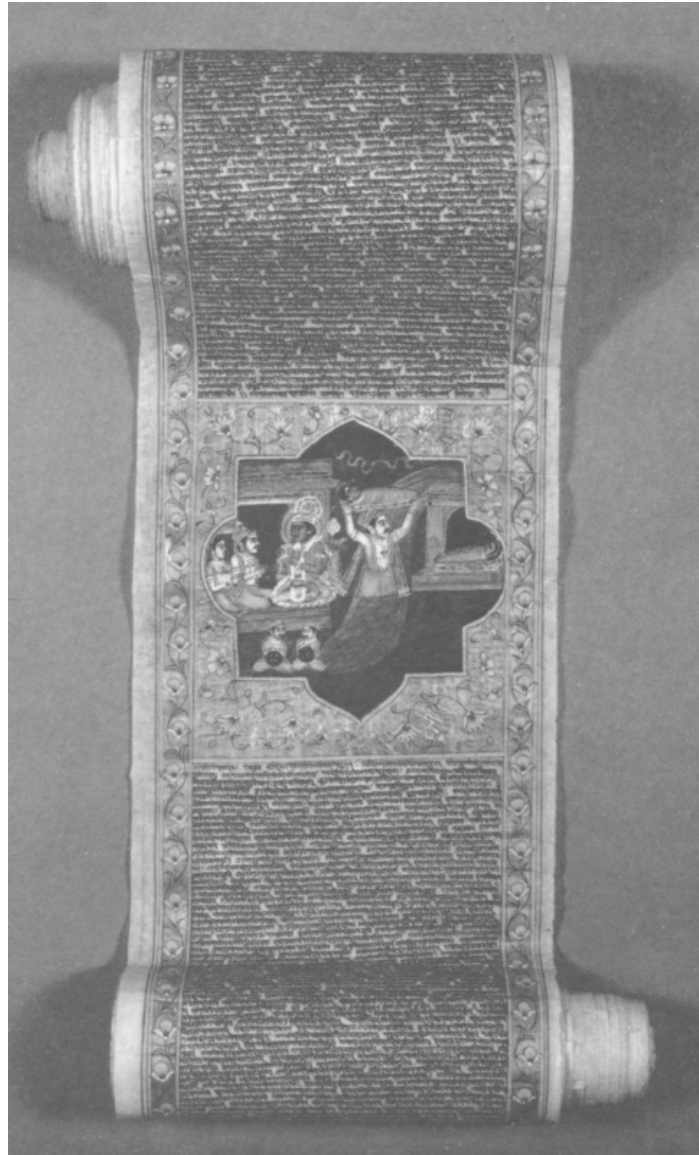
... monastic scenes ...



... and secular scenes.



The bottoms of scrolls were their most tightly folded part, sometimes leading to damage in use that necessitated repair.



In South Asia, the scroll died out as a general-use manuscript format with the advent of Sanskrit, Brāhmī and the pothi format, but lived on in special applications such as in amulets and for ceremonial use (above a scroll of the Bhāgavatapurāṇa).

Sample Manuscript and Catalog Entry

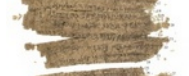
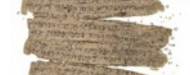
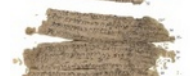


BL 3B

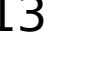
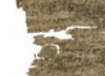
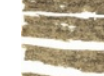
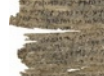
BL 9



BL 13



BL 18



BL 7



CKM 4 - British Library Verse Commentary Scrolls

Findspot:	unknown (probably Pakistan or Afghanistan)
Date:	ca. first century CE (based on paleography and find context)
Location:	British Library (shelf mark Or. 14195.7,17,19-21,26-27,35)
Support:	birch bark
Volumes:	four (BL 7, 9, 13, 18) and colophon fragment (BL 3B)
Preserved dimensions:	BL 7: 14 cm × 12.3 cm BL 9: 14 cm × 118.6 cm BL 13: 14 cm × 70.3 cm BL 18: 14 cm × 22.8 cm BL 3B: 10 cm × 4.5 cm
Weight:	unknown
Construction:	BL 7: one sheet fragment BL 9: four sheets (height 19.8, 25.2, 25.2 and 25 cm) and one sheet fragment BL 13: two sheets (height 27 and 29 cm) and one sheet fragment BL 18: one sheet fragment BL 3B: one fragment
Content:	British Library Verse Commentary 2 (BL 7, 18, 9 and 13; 39 sections in 413 lines) British Library Verse Commentary 3 (BL 13 verso. later addition; 6 sections in 40 lines) colophon (obverse of BL 3B; 3 lines) unknown (reverse of BL 3B; 4 lines)
Scribes:	British Library scribes 4 (Verse Commentary 2 and obverse of colophon fragment), 14 (Verse Commentary 3) and 3 (reverse of colophon fragment)
Associated name:	Samṅhaśrava (on colophon fragment; owner?)

Further Reading

Baums, Stefan. 2009. *A Gāndhārī Commentary on Early Buddhist Verses: British Library Kharoṣṭhī Fragments 7, 9, 13 and 18*. Ph.D. dissertation, University of Washington.

———. 2014. “Gandhāran Scrolls: Rediscovering an Ancient Manuscript Type.” In: Jörg B. Quenzer, Dmitry Bondarev and Jan-Ulrich Sobisch, eds., *Manuscript Cultures: Mapping the Field*. Studies in Manuscript Cultures, Volume 1, pp. 183–225. Berlin: De Gruyter.

———. 2021. “Inventing the Poṭhi: The Adoption and Spread of a New Manuscript Format in Indian Buddhism.” In: Toke Lindegaard Knudsen, Jacob Schmidt-Madsen and Sara Speyer, eds., *Body and Cosmos: Studies in Early Indian Medical and Astral Sciences in Honor of Kenneth G. Zysk*. Sir Henry Wellcome Asian Series, Volume 20, pp. 343–62. Leiden: Brill.

———. Forthcoming. The Earliest Colophons in the Buddhist Northwest. In: Giovanni Ciotti, Martin Delhey and Nalini Balbir, eds., *The Syntax of Colophons in Indic Poṭhi Manuscripts*.

Baums, Stefan, and Andrew Glass. 2002– . *Catalog of Gāndhārī Texts*.
<https://gandhari.org/catalog>

Salomon, Richard. 1999. *Ancient Buddhist Scrolls from Gandhāra: The British Library Kharoṣṭhī Fragments*. Seattle: University of Washington Press.

Image sources: Museum Fünf Kontinente (title), Luczanits 2008 (map), Salomon 1999 (scroll in pot and unrolled scroll), Falk 1996 (Aramaic script and Kharoṣṭhī), Porten 1979 (Aramaic scroll format), Khan & Khan 2004 (folded scroll), Porten 1979 (Aramaic margin writing), Khan 2008 (Kharoṣṭhī margin writing), Baums 2014 (format overview), Senart 1898 (sheet join), Stefan Baums (colophon), Taddei (monks with scrolls), Rahman 1993 (man under tree with scroll), Baums 2009 (repair), Gaur 1972 (Sanskrit scroll), Stefan Baums (CKM 4).

Gandhāran Birchbark Scrolls



Stefan Baums
Ludwig-Maximilians-Universität München
baums@lmu.de

[Presentation at the Centre for the Study of Manuscript Cultures,
Universität Hamburg, 17 May 2021]