

**The extinct Achaemenid era Kharoshti Script & Language**  
**of the region of Ghandhara (Southern Afghanistan and adjacent regions).**

Apart from archaeological clay tablets and articles found in the diggings and (more than 1000 known) inscriptions, numismatists have also contributed significantly to a better understanding of ancient genealogy, to the correction of improper dating attributed to events gone past and to calculating the era. Birch-bark (called **bhojaa-patra**) was a primary writing material along with palm-leaf in India. Its use diminished in the Moghal period when paper replaced it as a writing material, but it still has a sacred status in India today. Birch bark was mentioned as a writing material by the Greek historian, Q. Curtius (c. 115 BCE), noting its wide use by the Hindus during Alexander's invasion. Early extant manuscripts date back to the 2nd and 3rd centuries, written in the Kharoshti script. Fragments survive from a range of time

**KHAROSHTHI ALPHABET**

a : 𑀓	am : 𑀅𑀢𑀓	i : 𑀢
im : 𑀢𑀓	u : 𑀓	e : 𑀢𑀢
o : 𑀢	ka : 𑀢𑀢	ki : 𑀢𑀢𑀢
ku : 𑀢𑀢	ke : 𑀢𑀢𑀢	kra : 𑀢𑀢𑀢
kri : 𑀢𑀢	kre : 𑀢𑀢	kha : 𑀢𑀢
khu : 𑀢𑀢	khe : 𑀢𑀢	ga : 𑀢𑀢
gam : 𑀢𑀢	gu : 𑀢𑀢	gi : 𑀢𑀢
go : 𑀢𑀢	gha : 𑀢𑀢	ca : 𑀢𑀢𑀢
ch'a : 𑀢𑀢	ch'o : 𑀢𑀢	ja : 𑀢𑀢𑀢𑀢𑀢𑀢
ji : 𑀢𑀢	ju : 𑀢𑀢	jha : 𑀢𑀢
jham : 𑀢𑀢𑀢	jho : 𑀢𑀢	ta : 𑀢𑀢
tha : 𑀢𑀢	di : 𑀢𑀢	na : 𑀢𑀢
ni : 𑀢𑀢	ta : 𑀢𑀢𑀢𑀢	ti : 𑀢𑀢𑀢𑀢
tu : 𑀢𑀢	te : 𑀢𑀢	to : 𑀢𑀢
tra : 𑀢𑀢	tha : 𑀢𑀢	thi : 𑀢𑀢
thu : 𑀢𑀢	the : 𑀢𑀢	da : 𑀢𑀢𑀢
di : 𑀢𑀢𑀢	du : 𑀢𑀢	de : 𑀢𑀢
dra : 𑀢𑀢𑀢	dha : 𑀢𑀢	dhra : 𑀢𑀢𑀢
na : 𑀢𑀢𑀢𑀢	ni : 𑀢𑀢	no : 𑀢𑀢
pa : 𑀢𑀢	pi : 𑀢𑀢	pu : 𑀢𑀢
pe : 𑀢𑀢	pra : 𑀢𑀢	pri : 𑀢𑀢
psa : 𑀢𑀢	pha : 𑀢𑀢	phi : 𑀢𑀢
phre : 𑀢𑀢	ba : 𑀢𑀢	bi : 𑀢𑀢
bu : 𑀢𑀢	bo : 𑀢𑀢	bha : 𑀢𑀢
bhi : 𑀢𑀢	bhra : 𑀢𑀢	ma : 𑀢𑀢𑀢
mam : 𑀢𑀢	mi : 𑀢𑀢	mu : 𑀢𑀢
me : 𑀢𑀢	mo : 𑀢𑀢	ya : 𑀢𑀢
yam : 𑀢𑀢	yi : 𑀢𑀢	yu : 𑀢𑀢
ye : 𑀢𑀢	ra : 𑀢𑀢	ram : 𑀢𑀢
ri : 𑀢𑀢	ru : 𑀢𑀢	rkhe : 𑀢𑀢
rte : 𑀢𑀢	rna : 𑀢𑀢	rma : 𑀢𑀢
rva : 𑀢𑀢	la : 𑀢𑀢𑀢	le : 𑀢𑀢
li : 𑀢𑀢	lu : 𑀢𑀢	lo : 𑀢𑀢
va : 𑀢𑀢	vi : 𑀢𑀢	vu : 𑀢𑀢
ve : 𑀢𑀢	vra : 𑀢𑀢	sq : 𑀢𑀢
sı : 𑀢𑀢	spa : 𑀢𑀢	şva : 𑀢𑀢
sha : 𑀢𑀢	shka : 𑀢𑀢	sa : 𑀢𑀢𑀢
sam : 𑀢𑀢	si : 𑀢𑀢	su : 𑀢𑀢
sta : 𑀢𑀢	sti : 𑀢𑀢	stra : 𑀢𑀢𑀢
sya : 𑀢𑀢	ssa : 𑀢𑀢	ha : 𑀢𑀢𑀢
ham : 𑀢𑀢	hi : 𑀢𑀢	he : 𑀢𑀢𑀢
ho : 𑀢𑀢		

periods, and the material is described throughout Indian literature.

Recently, an ancient Buddhist settlement, belonging to second and third century CE, has been discovered in Badgam district of Central Kashmir<sup>2</sup>. The tiles unearthed from the site area are in various shapes. They bear swastika motifs and the Kharoshti script, which was popular in Kashmir in the early centuries of the Common Era and ceased its popularity in circa fourth century. The presence of the Kharoshti numerals and swastika motif revealed the date of the site to be between second and third century CE. Measuring

36 cm x 40 cm, the Kharoshti numerical on the tiles were clearly stamped to maintain the order of tiles in the layout.

### Brahmi Script

**Palm leaf manuscripts**<sup>1</sup> were probably in use as early as the 2nd century, but no extant leaves survive earlier than the 10th century. Because palm-leaf is still used today in India for certain religious writings, much is known about the manufacture and treatment of the material. In 1998 an early manuscript of about the 5th century written in the Kharoshti script was found in the Bhaamiyan cave region near the Afghanistan city of Hadda. Microscopic examination revealed the pages were, in fact, laminated layers of very thin Birch-bark.

**Birch-bark (*bhojaa-patra*)**<sup>1</sup> manuscripts were literally the ancient database of Buddhism in India. In the 1930's, the Musee Guimet in Paris had acquired bundles of birch-bark found at Baamiyan in Afghanistan. The inner bark of the birch tree was used for writing. After being peeled off the tree, the bark was dried. Oil was then applied over it and it was polished. Layers were joined together by a natural gum. Finally, it was cut to a suitable size and kept in between wooden covers. The ink used for writing on birch bark was 'Indian black', a carbon ink. It was prepared by burning almond shells to charcoal, which was then boiled with cow's urine. This ink had a special brilliance and was indelible.

#### CHAPTER XXXI - The Guptas

The Guptas produced silver and bronze coins; but it is for their wonderful gold coins that they are to be noted. These reach a very high artistic standard.

Unfortunately the Brahmi legends on them tend to be off the flan of the coin, and the letters are often so blurred as to be illegible - in this chapter they are "idealised", so that the reader can see what they ought to be like rather than - unfortunately - what they are.

The Brahmi script as it appears on the coins of this chapter is as follows.

<u>Vowels</u>	𑀓 𑀘				
<u>Consonants</u>	𑀧 K	𑀢 Kh	𑀦 G	𑀭 Gh	𑀮 N
	𑀣 Ch	𑀤 Chh	𑀥 J		
Cerebral					𑀲 N
Dental	𑀧 T	𑀢 Th	𑀦 D	𑀭 Dh	𑀮 N
	𑀣 P			𑀤 B	𑀥 Bh
	𑀭 Y	𑀮 R	𑀯 L	𑀰 V	
	𑀱 Sh	𑀲 Sh	𑀳 S		
	𑀴 H	𑀵 H (Visarg)	𑀶 M,N (anuswar)		

The vowel augmentations are much more regular:

Ā as in 𑀓 RA: 𑀘 as in 𑀢 VI or 𑀣 LI: 𑀙 as in 𑀮 VĪ:

E as in 𑀣 DE: AI as in 𑀥 TAI: O as in 𑀭 YO: Ri (the "r" vowel)

as either 𑀧 KRI or 𑀣 KRI, 𑀣 PRI.

U is variable: e.g. 𑀭 RU, 𑀥 MU, 𑀮 KU, 𑀣 PU, 𑀦 or 𑀭 GU, 𑀣 SU.

𑀣 ShU.

A preceding R consonant in a compound is the small 𑀮 above, as 𑀮 RD.

Examples of compound aksharas are: 𑀣 ChChh, 𑀣 SK, 𑀣 ShV, 𑀣 TV,

𑀣 VY, 𑀣 ND, 𑀣 NDR, 𑀣 NT, 𑀣 TT, 𑀣 TY, 𑀣 KSh, 𑀣 ChR, 𑀣 KR, 𑀣 PR,

𑀣 PT. The "honorific" ShRI is shaped 𑀣 or 𑀣.

### References:

1. ExpressIndia -Indian Express Newspapers (Bombay) Ltd., 1999
2. Mitchiner, Michael, The ancient and Classical World (600 BC-AD 650), Oriental Coins and their values, Hawkins Publications, London, 1978.
3. Plant, Richard J., Greek, Semitic, Asiatic coins and how to read them, Scorpion Publishers, Amherst, New York, 1979.
4. Sylloge Nummorum Graecorum, Graeco-Bactrian and Indo-Greek Coins, The collection of the American Numismatic Society, New York 1998.

-Sam Kerr