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A Paleographical Study of the Manuscripts of the Mūlamadhyamakakārikā and Buddhapālita's Commentary

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A Paleographical Study of the Manuscripts of the *Mūlamadhyamakakārikā* and Buddhapālita's Commentary*

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In the last issue I have provided a brief introduction and partial transcriptions of two newly identified manuscripts from Tibet, the *Mūlamadhyamakakārikā* and Buddhapālita's Commentary (Ye 2007). In this article I will deal with their script from a paleographical perspective. The script used in the two manuscripts resembles that of a manuscript of the *Daśabhūmikasūtra* from Nepal (Matsuda 1996: manuscript A, *Daśabhūmikasūtra* manuscript hereinafter), which, unfortunately, does not bear a date while its paleographical date has been suggested by L. Sander as the early 7th century (*op. cit.*, xvii). The following paleographical analysis will show that the script of our manuscript, which could be called an eastern variety of the post-Gupta script[1], exhibits various features that can be attested in the inscriptions from Nepal from the second half of the 6th century to the first half of the 7th.

By way of a brief review of the studies on the Nepalese inscriptions, I will mention several articles and books here. Fifteen inscriptions were first published by Bh. Indraji and G. Bühler in *Indian Antiquary* (Indraji 1880). Eighty years later, R. Gnoli brought out an enlarged and well-illustrated monograph on this subject (1956). By far the largest collection of Nepalese inscriptions with texts, English translations and plates appeared in D. R. Regmi's book *Inscriptions of Ancient Nepal* (1983; sometimes Regmi's photos are of better quality when compared with other publications). These three works are my main source for the photos and transliterations[2]. As far as the dating system of the Nepalese inscriptions is concerned, although many scholars have proposed solutions[3], there is no final conclusion. Here I follow the latest proposal by Petech (1988), i.e., the Śaka era for the first group of inscriptions, and the Aṃśuvarman era starting from 576 CE for the second group. In the following discussion this uncertainty regarding the dates is tolerable since, as pointed out by L. Sander (2002: 243, note 28), the paleographical analysis can only work in a broader time

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[1] Here the term "Siddhamātṛkā" is avoided intentionally, although, generally speaking, our script should belong to this category. What kind of script does this term refer to exactly, whether it covers Nepal or not is still an open question. For a latest discussion see Sander 2007: 127ff., especially 131, n. 69.

[2] For a detailed review of publications of the Nepalese inscriptions see Regmi 1983: vol. 1, preface.

[3] For a brief summary see Petech 1988: 149ff.

scale and does not require exact dates. As to the paleographical study of the Nepalese inscriptions, A. H. Dani has included a brief discussion in his book *Indian Paleography* (1963: 136–140, pl. XI). Hemarāja Śākya published a book *Nepāla-lipi-prakāśa* (1973), which is useful as a handbook but not always reliable. Sander contributed an article in BMSC II, dealing with a similar script used in a copper plate of the *ye dharmā* formula (2002). Beside the above mentioned works, no detailed paleographical study on the Nepalese inscriptions has yet been written.

Here I will make a comparison between the writing of our manuscripts and the numerous characters which appear in the Nepalese inscriptions from the 5th to the 8th centuries. As is shown in the following discussion, a gradual evolution of the script can be traced in the Nepalese inscriptions. Therefore I hope to provide a time scale which will help to suggest a paleographical date for our manuscripts, and probably, in the future, for other sources as well. It is not my intention to date the manuscripts precisely inasmuch as there is no dated manuscript from this period and region accessible to me, and it is usually considered unsafe to date a manuscript based on a comparison with inscriptional styles. Moreover, I agree with K. V. Ramesh when he stressed (1984: 62) "where paleography is the lone consideration … the suggested date must always be taken to present the date so suggested + or −100 years."

1. General features

1.1 The handwriting of our manuscripts is neat and elegant, and care has been taken to start and end strokes in calligraphic style. The alternation between thick and thin strokes suggests the use of a pen with a broad tip. The angle of the thin lines and the diagonal beginning and end of some strokes indicate that the tip was cut slightly oblique. Despite the basic shapes of the *akṣara*s being eastern, this slightly knotty style was most likely influenced by "Gilgit/Bamiyan-Type I", an ornate local script of "Greater Gandhāra" which flourished in the 6th century (Sander 1968: 123ff.).[4]

1.2 All characters have a line as the head-mark. Dani maintained that "in all the inscriptions in Nepal the head-mark is a well-formed solid triangle" (1963: 137). However, though comparatively rare, I do find some cases of a line mark in them. It seems to me that the lined head-mark does not differ very much from the triangular one, especially when the line is short. Taking into account the difference between manuscripts and inscriptions, there is no substantial disagreement on this point between our manuscripts and the Nepalese inscriptions; as also pointed out by Dani (*op. cit*., 120), the triangular head-mark could be reduced to a simple horizontal line to meet the needs of writing at speed.

1.3 Except for the independent vowels[5] *ā* and *i* and the diacritic vowel *ī*, the script of our manuscripts is exactly the same as that of the aforementioned *Daśabhūmikasūtra* manuscript, which shows that they should belong to the same period and region.

[4] Suggested to me by Dr. L. Sander.

[5] I use the terminology "independent vowel sign", as suggested to me by Dr. Andrew Glass, in place of the more traditional terms "initial vowel sign". This has been done because, while an independent vowel sign is normally initial in writing Sanskrit, the sign itself does not need to be initial; independent vowel signs can and do occur in medial position occasionally in Sanskrit, and especially in Prakrit and other languages using *akṣara*-based scripts.

2. Comparison of *akṣara*s

In the following comparison, the heading *akṣara* of every paragraph is from our manuscripts and the *akṣara*s displayed in the table are cut from the Nepalese inscriptions. Their references are as follows. The readings of dates follow Regmi 1983.

No.	Date	Indraji 1880	No. of Gnoli 1956	No. of Regmi 1983
The 5th century:				
1	saṃvat 386 (= 464 CE)	163–166, No.1	Ins. I, pls. I–III	I
2	saṃvat 413 (= 491 CE)	166–167, No. 2	Ins. VIII, pl. IX	XI
The 6th century:				
3	saṃvat 428 (= 506 CE)		Ins. XII, pl. XIII	XX
4	saṃvat 435 (= 513 CE)		Ins. XIII, pl. XIV	XXIII
5	saṃvat 462 (= 540 CE)		Ins. XVI, pl. XVII	XXXIII
6	saṃvat 467 (= 545 CE)		Ins. XVII, pl. XVIII	XXXIV
7	saṃvat 482 (= 560 CE)		Ins. XIX, pls. XX–XXIII	XXXVIII–XLIII
8	saṃvat 487 (= 565 CE)		Ins. XX, pl. XXIV	XLV
9	saṃvat 515 (= 593 CE)		Ins. XXII, pl. XXVI	LI
10	saṃvat 516–517 (= 594–595 CE)		Inss. XXIII–XXVII, pls. XXVII–XXXI	LIV, LVI–LIX[6]
11	saṃvat 519 (= 597 CE)		Inss. XXVIII, XXVIX, pls. XXXII, XXXIII	LX, LXI
12	saṃvat 520 (= 598 CE)		Ins. XXXI	LXIII
The 7th century:				
13	saṃvat 30 (= 606 CE)		Ins. XXXV, pl. XXXVII	LXIX
14	saṃvat 31 (= 607 CE)			LXXIII
15	saṃvat 32 (= 608 CE)		Ins. XXXVI, pl. XXXVIII	LXXIV
16	saṃvat 34 (= 610 CE)		Ins. XXXVIII, pl. XL	LXXVI
17	saṃvat 48 (= 624 CE)	171–172, No.9	Ins. L, pl.XLIX	XCVII
18	saṃvat 55 (= 631 CE)		Ins. LV, pl. LIV	CII
19	Jiṣṇugupta regime (= 624–635 CE)	174, No. 11	Ins. LIX, pl. LVIII	CIV
20	saṃvat 64 (= 640 CE)		Ins. LXI, pl. LX	CVIII
21	saṃvat 65 (= 641 CE)		Ins.LXII, pl. LXI	CIX
22	saṃvat 67 (= 643 CE)		Ins.LXVI, pl. LXV	CXVII
23	saṃvat 67 (= 643 CE)		Ins. LXVII, pl. LXVI	CXVI
24	saṃvat 78 (= 654 CE)		Ins. LXIX, pl. LXVIII	CXX
25	saṃvat 82 (= 658 CE)		Ins. LXX, pl. LXIX	CXXI
26	saṃvat 90 (= 666 CE)			CXXV
27	saṃvat 95 (671 CE)		Ins. LXXII, pl. LXXI	CXXVI
28	saṃvat 103 (= 679 CE)		Ins. LXXIII, pl. LXXII	CXXVIII
29	saṃvat 119 (= 695 CE)	174–176, No. 12	Ins. LXXVII	CXXXII
The 8th century:				
30	saṃvat 148 (= 724 CE)	177–178, No. 14	Ins. LXXX, pl. LXXVII	CXL
31	saṃvat 157 (= 733 CE)	178–183, No. 15	Ins. LXXXI, pl. LXXVIII	CXLII

[6] Regmi said (1983: vol. 1, p. xiv), "There has been a mistake in the numbering of the inscriptions from 54 to 58. The readers should correct 58 to 54, and then 54 to 55 followed by 56, 57, 58 (original 54)". However, even this correction is neither clear nor correct, as he did not point out which numbering is to be corrected. If we trust the order and numbering of his transliterations, translations and introductory notes, then the number 58 of the plates should be corrected to 55, and then 55 to 56, 56 to 57, 57 to 58. Here in my chart, I use the corrected numbers.

2.1 Independent vowel signs

 a is written with a wedge on the left limb. In Nepalese inscriptions, a new form came into being in the 8th century with the left limb extended and curved to the left (ins. 31).[7] This new form is already observed in other parts of northern India from as early as the 6th century (Dani 1963: pls. Xa.4, XIa.3, XIIa.7).

 *ā* is written in a special form with an ornamental s-shape at the bottom, which has not observed by me in any other manuscripts or inscriptions. In the *Daśabhūmikasūtra* manuscript it is written  (Matsuda 1996: xxviii).

5th c.	(1) a ā
6th c.	(5)  ā
7th c.	(13) a (15)  ā (17)  a (20) a (23)  ā (29)  ā
8th c.	(31)  a  ā

 i is a twin-columned structure and resembles, in general, the form with two dots on the left and a vertical on the right () which is typical of the eastern Indian scripts before the 7th century. The form with three dots arranged in a triangle () prevailed in Mathura and the northwest region from a very early time (Dani 1963: pl. XIIa). A variant of the three-dot form with its lower dot transformed into a spiral ( or ) was introduced from the western India to the eastern region in the 6th century. It occurred already in the inscriptions of middle Ganges valley in the early 6th century (*op. cit.*, pl. Xa.4) and in Bengal in the early 7th century (*op. cit.*, pl. XIa.4). In Nepal its first occurrance is in inscription 21 dated to 641 CE, while the old form did not fall out of use until the end of the 7th century (ins. 29).

It is worth noting that the right half of *i* in our manuscript is not a vertical but a hook with a head-mark. I have not yet found an equivalent to this peculiar shape in any other manuscripts or inscriptions. In the *Daśabhūmikasūtra* manuscript it is written  (Matsuda 1996: xxviii).

5th c.	(1) 
6th c.	(9) 
7th c.	(18)  (21)  (22)  (23)  (26)  (27)  (29) 
8th c.	(30)  (31) 

2.2 Diacritic vowel signs

The diacritic *ā* in our manuscripts is, in most cases, written in a standardized form which appears as a short vertical attached to the right of the preceding consonant ( *gā*  *thā* *dā* *dhā*  *pā* *yā*  *śā* *ṣā* *sā*). In the case of *ṇā* the short vertical of the diacritic *ā* joined at the base of the right outer arm of the consonant (*ṇā*,

[7] Although Dani recorded this new form in as early as the 7th century (1963: pl. XIa.10), I did not find it in the sources Dani had given (*op. cit.*, 207).

cf.  *ṇa*). In ligatures beginning with *r*, the vertical of *ā* becomes very short ( *rttā*  *rvvā*). In some ligatures like *smā*  , *syā*  , *khyā* , the vertical of *ā* becomes a hook, which resembles the ornamental style of "Gilgit/Bamiyan-Type I" (Sander 1968: 122, Tafel IV). In some cases the diacritic *ā* goes upwards ( *nā*). This seems to be conditioned by a lack of space, and thus probably indicates subsequent corrections to the text.

In the Nepalese inscriptions of the early period, the diacritic *ā* sign assumes different shapes when it combines with different consonant signs. There are three types of diacritic *ā* which were finally unified into the standard vertical type.

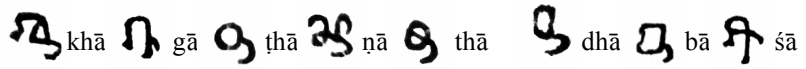
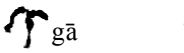
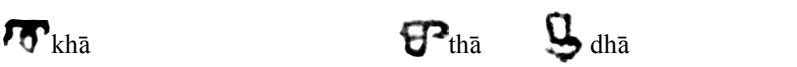
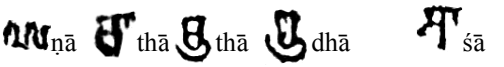
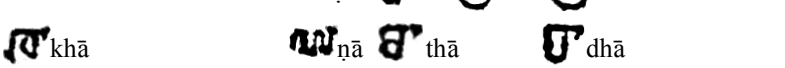
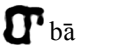
Type I: represented by the head-mark elongated to the right, and later with its right end bent downwards. It is seen in *dā*, *nā*, *rā* and *hā* in inscription 1 of 464 CE. The earliest attested substitution of a standard vertical for type I is observed in inscription 2 of 291 CE, whereas the old form can still be seen in inscription 8 of 565 CE.

5th c.	(1)  dā  nā  rā  hā (2) dā nā
6th c.	(3) dā nā rā (8) nā rā (11) dā
7th c.	(15) dā
8th c.	(30)  nā (31) nā

Type II: represented by a horizontal with its left end joined to the left or middle part of the consonant, and later with its right end bent downwards. It occurs in *pā*, *yā*, *ṣā* and *sā* (consonant signs with a open top) in the early Nepalese inscriptions and never occurs again after inscription 8 of 565 CE.

5th c.	(1) pā yā ṣā sā (2)  sā
6th c.	(3)  pā yā ṣā sā (8)  pā  yā  sā (10)  pā  sā (11)  pā  yā  sā
7th c.	(15)  pā sā (23) pā yā sā
8th c.	(30) pā sā (31) pā yā sā

Type III: represented by a curve added in the middle or bottom-right part of the consonant. It occurs in *gā*, *khā*, *ṭhā*, *ṇā*, *thā*, *dhā*, *bā* and *śā* in the early Nepalese inscriptions. The earliest example of the substitution of a standard vertical for this type can be attested in inscription 6 of 545 CE. The old form can still be seen in *thā* and *dhā* in inscription 11 of 597 CE.

5th c.	(1)  khā gā ṭhā ṇā thā dhā bā śā
6th c.	(3)  grā ṇā thā dhā bā (5)  gā ṇā (6)  śā (7)  ṇā thā dhā (8)  khā thā dhā (10)  ṇā thā dhā śā (11)  ṇā thā thā dhā śā (12)  khā ṇā thā dhā
7th c.	(15)  ṇā dhā (23)  thā
8th c.	(30)  thā dhā (31)  bā

The form of diacritic *ī* is quite unique in our manuscript. It is formed by two lines as usual, but instead of the expected curve drawn above a shorter vertical, as seen in the Nepalese inscriptions from the 5th to 6th century, the curved line is extended into a loop of equal height (*tī*, *nī*, *rī*).[8] In the *Daśabhūmikasūtra* manuscript the common form of diacritic *ī* (e.g., Matsuda 1996: xxviii, *dī*) is the same as that of the Nepalese inscriptions, while side by side with it, the same form as in our manuscripts (*ibid.*, *rī*) is found infrequently. This shows that our form is a variant of the usual one and the two were once used in the same period. Both are formed with two strokes. In the Nepalese inscriptions of the 7th century, a development of the diacritic *ī* is attested with the left curve further extended, encompassing the right vertical (ins. 20), a form that eventually became a spiral stroke and detached from the head-mark (ins. 23). Later the spiral stretched further to the bottom of the *akṣara*. This later type is also used in modern Devanāgarī script.

5th c.	(1) gī nī
6th c.	(5) lī (9) hī (10) jī
7th c.	(15)  tī (20) sī (23) kī (24) bī (25) dī ṇī (28) lī (29) śrī mī
8th c.	(30) gī mī hī (31) kī ṇī lī

[8] A less similar example is found in a Bengali copper plate: *dī*, *nī* (Agrawala 1983, No.29, ll. 5, 11).

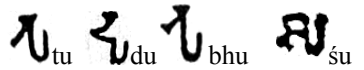
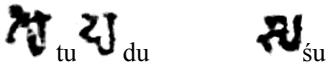
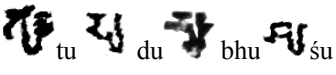
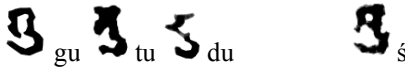
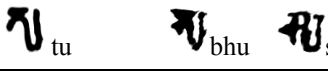
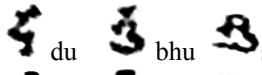
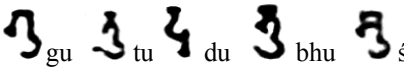
When diacritic *u* combines with different consonants, there are three ways to write it in our manuscripts.[9]

Type I:  ku  ru

Type II:  gu  tu  du  bhū  śu

Type III:  dhu  nu  pu  bu  mu  yu  lu  vu  ṣu  hu

As can be seen in the Nepalese inscriptions, from the beginning of the 7th century (ins. 19), the type I *u* became increasingly popular and began to be applied to consonants where type II would have been. The last occurrance of the type II *u* is in inscription 29 of 695 CE.

5th c.	(1)  tu du bhu śu
6th c.	(3)  gu bhu śu (8)  gu tu bhu śu
7th c.	(13)  tu du śu (18)  tu du bhu śu (19)  gu tu śu (20)  gu tu śu (25)  tu śu (28)  gu tu du śu (29)  tu bhu śu
8th c.	(30)  du bhu śu (31)  gu tu du bhu śu

As far as the third type of the diacritic *u* is concerned, it remains comparatively stable except in the case of *nu*, where it underwent a similar evolution over the same time scale as the second type, i.e., in inscription 19 it is substituted by the first type, and the last occurrance of the type III *u* is in inscription 29.

[9] In our manuscripts, the diacritic *ū* sign is always formed either by an additional stroke subjoined to the short one ( *u*,  *ū*,  *gu*,  *gū*,  *tu*  *tū*) or by a curved elongation of it ( *pu*,  *pū*,  *mu*,  *mū*). Due to the lack of examples, it is difficult to say whether the diacritic *ū* shares the same time scale with the short one in the Nepalese inscriptions. Therefore I only discuss the diacritic *u* here. In the case of the consonant *bh* where only *bhū* is found in our manuscripts, the shape of *bhu* can be deduced from *bhū*, showing that it belong to the third type.

nu:

5th c.	(1) 
6th c.	(8) 
7th c.	(13)  (18)  (19)  (20)  (28)  (29) 
8th c.	(30)  (31) 

2.3 Consonant and semivowel signs

 *ka* has both ends of its cross bar bent downward. There is a hook turned upward at the foot of the middle vertical, yet it does not yet reach the cross bar to form a loop. The looped *ka* is first seen in Nepal in inscription 21 dated 641 CE, and the last occurrance of the old form is in 695 CE (ins. 29).

5th c.	(1) 
6th c.	(4)  (11) 
7th c.	(17)  (20)  (21)  (22) (23) (25) kā (26) (28) (29)
8th c.	(30) kā (31)

 , *ca* has a beaked shape and sometimes the right bottom shows an angle. A process can be observed in the Nepalese inscriptions of the 6th and 7th centuries, such that the right part of *ca* gradually straightened up and, by the middle of the 7th century, eventually became a vertical with an acute angle at the bottom (ins. 25).

5th c.	(1) 
6th c.	(5) ñca (8) ci (11)
7th c.	(17) cā (18) cā (20) (22) cā (23) (25) cā (26) (28) cā (29)
8th c.	(30) cā (31) ci

 ṇa has its right outer arm extended to the bottom of the character and the left one is a wedge. In the inscriptions of eastern India and Nepal of the 4th and 5th centuries, *ṇa* has a loop at the bottom (Dani 1963: pls. Xa.1, XIa.1, 2), which is no longer seen in the 6th century. In Nepalese inscriptions the length of the left and right arm did not reach the bottom until the 6th century. The wedged left arm is not found in inscriptions, while it does occur side by side with the vertical-armed type in the *Daśabhūmikasūtra* manuscript and may indicate that the former was a variant of the latter (, , Matsuda 1996: xxviii).

5th c.	(1)  (2) 
6th c.	(3) (5)  ṇā (8)  (11) (12)
7th c.	(15)  ṇi (25)  (29)
8th c.	(31) 

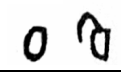
 tha has a flat top and an acute angle at the bottom. In northern India this *akṣara* underwent a gradual change from oval to oblong and eventually to a shape with an acute angle (cf. Sander 2002: 344). The oval form occurred in the Nepalese inscriptions in the 5th century and became an oblong with a flat top at the close of this century. The earliest example with an acute angle and straightened right part is found in Nepal in 506 CE (ins. 3). The last occurrance of the oblong shape is found in inscription 12 of 565 CE. The oblong form had a variant with its left part concaved in the 6th century.

5th c.	(1)  the (2) thi
6th c.	(3) (6)  the (8) thā (12)  thā thā
7th c.	(15)  rtho (17) thā (23)  thā (25)  rthā (28)
8th c.	(31) 

 da has the tip of the lower curve slightly turned up. In the Nepalese inscriptions of the 7th century, beside this form there is another variant with the lower curve being an angle. This could be a transitional form which finally evolved into the tailed form. The tailed *da* first occurred in Nepal in inscription 24 of 654 CE and the last occurrence of the old form is in inscription 26 of 666 CE.

5th c.	(1)
6th c.	(6) (12)
7th c.	(13)   dā (14)  (15)  de  de (17)  (20)  (22)  dā dā (23) di (24) de (25) (26) (28) de (29) dā
8th c.	(30) di (31)

 dha has an acute angle at the bottom. It underwent a similar evolution in the Nepalese inscriptions as *tha,* except the time scale was different. The oblong and acute-angled form already came into existence side by side with the oval one in the 5th century (ins. 1). In the early 7th century the oblong form had a variant with its left part concaved and a tail at the bottom. The oblong form is last seen in inscription 22 of 643 CE, afterwards it was replaced by the acute-angled form.

5th c.	(1)  dhi dhā
6th c.	(3) dhā (5) (7) dhi (8) dhi dhā (12) dhi
7th c.	(13) dhā (15) dhā (16) dhi (18) (21) (22) dhi (23) (26) dhā (29) dhi
8th c.	(30) (31)

na is written in the looped form. A new form of *na* without loop ( ) came into existence in the middle Ganges valley in the 6th century (Dani 1963: pl. Xa.6, 7) and in Bengal in the early 7th century (*op. cit.*, pl. XIa.4). Yet this form did not occur in Nepalese inscriptions until the 8th century.

5th c.	(1)
6th c.	(6)
7th c.	(25) nā (29) nā
8th c.	(30) (31) nā

pa has its base notched. This type is a variant seen in the Nepalese inscriptions of the 6th and 7th century.

5th c.	(1) (2)
6th c.	(3) (6) pi (8) (11) pā
7th c.	(13) (26)
8th c.	(30) (31)

ba is rectangular with a thick knot at the left bottom. Its shape is distinguishable from that of *va* in our manuscripts. The sound *ba* began to be represented by the shape for *va* (probably with an associated change of phonetic value) at the end of the 6th century in the middle Ganges valley (Dani 1963: pl. Xb.7) and in Bengal in the 7th century (*op. cid.*, pl. XIb.4). This trend reached Nepal at the end of the 7th century but the rectangular shape of *ba* did not fade out completely, as it occurs in inscriptions even of the 8th century.

5th c.	(1)
6th c.	(3) bā (6) bī (11)
7th c.	(17) (23) (24) bī (25) (28) (29)
8th c.	(31) bra

 *ya* is in an archaic tripartite form with a loop on the left arm. The bipartite *ya* () developed in the inscriptions of the middle Ganges valley and Bengal at the end of the 6th century (Dani 1963: pl. Xb.6; Sander 1968: 147, 2002: 345) and finally replaced the old form in the 7th century. In Nepal the first time that the bipartite *ya* exhibit itself is in inscription 19 of 624–635 CE. It coexisted with the old form until the end of the 7th century. As far as the left part of the tripartite form is concerned, Sander has rightly pointed out that whether the loop or curl turns inward or outward has no meaning for the date in eastern India (Sander 2002: 345).

5th c.	(1)
6th c.	(3) (8)
7th c.	(15) (17) (19) (20) (21) (22) (24) (25) (26) (27) (29)
8th c.	(30) (31)

 *la* is an archaic form without a base. A form with a round base has been seen in Nepal from the middle of the 6th century (Ins. 6, 8, 10) and eventually became the flat-based form in the early 7th century (ins. 17). The last usage I have observed of the old baseless form is in inscription 23 of 643 CE.

5th c.	(1)
6th c.	(4) le (6) (8) (10) lā
7th c.	(15) lā (17) (20) li (22) lī (23) lā lo (25) (28) lā (29)
8th c.	(30) (31)

 *va* is written in a triangular form with a head-mark. The round type occurred in Nepalese inscriptions at the end of the 6th century (ins. 12) and replaced the triangular form by the middle of the 7th century.

5th c.	(1)
6th c.	(6) (12)
7th c.	(15) vi (17) vā ve (20) vi (23) (25) (28) (29)
8th c.	(30) (31)

 ṣa is written in a looped form, which is typical for the eastern script from the 4th to the 6th century (cf. Sander 2002: 346). It resembles *sa* ( ) and the two *akṣara*s can easily be confused, especially in ligatures. The only difference to be found is that the left loop of *sa* is

triangular while that of *ṣa* is round. Under the influence of the western style, the rectangular *ṣa* ( ) came into existence in Bengali inscriptions from the 6th century (Dani 1963: pl. XIb.3). The earliest occurrance of the western shaped *ṣa* in Nepal is found in inscription 19 of 624–635 CE. The old form can still be found at the end of the 7th century (ins. 29).

5th c.	(1) ṣā
6th c.	(8)
7th c.	(15) ṣā (17) ṣā (19) ṣā rṣa (21) (23) (24) ṣṇu (25) (26) kṣi (27) ṣā (29) ṣā
8th c.	(30) (31)

ha is written in an archaic hooked form. It takes another shape when the diacritic *u*/*ū* or subscribed *y* (these are the only such components in our manuscripts, though this change can occur with others) is added to it (*hu*, *hya*), a phenomenon already seen in Nepal in inscription 1 of the 5th century. Only in an exceptional case is the new form of *ha* seen in our manuscripts ( ). In inscription 1 a variant ( ) is seen which could be a prototype for the later s-shaped *h*. This new form is first seen in Nepal in inscription 5 of 540 CE. The last occurrence of the hooked form is in inscription 20 of 640 CE.

5th c.	(1) hi hū hu (2)
6th c.	(4) (5) hi (6) hā (7) (8) (9) hī (10) (11)
7th c.	(15) (20) hā (29) hā
8th c.	(30) (31)

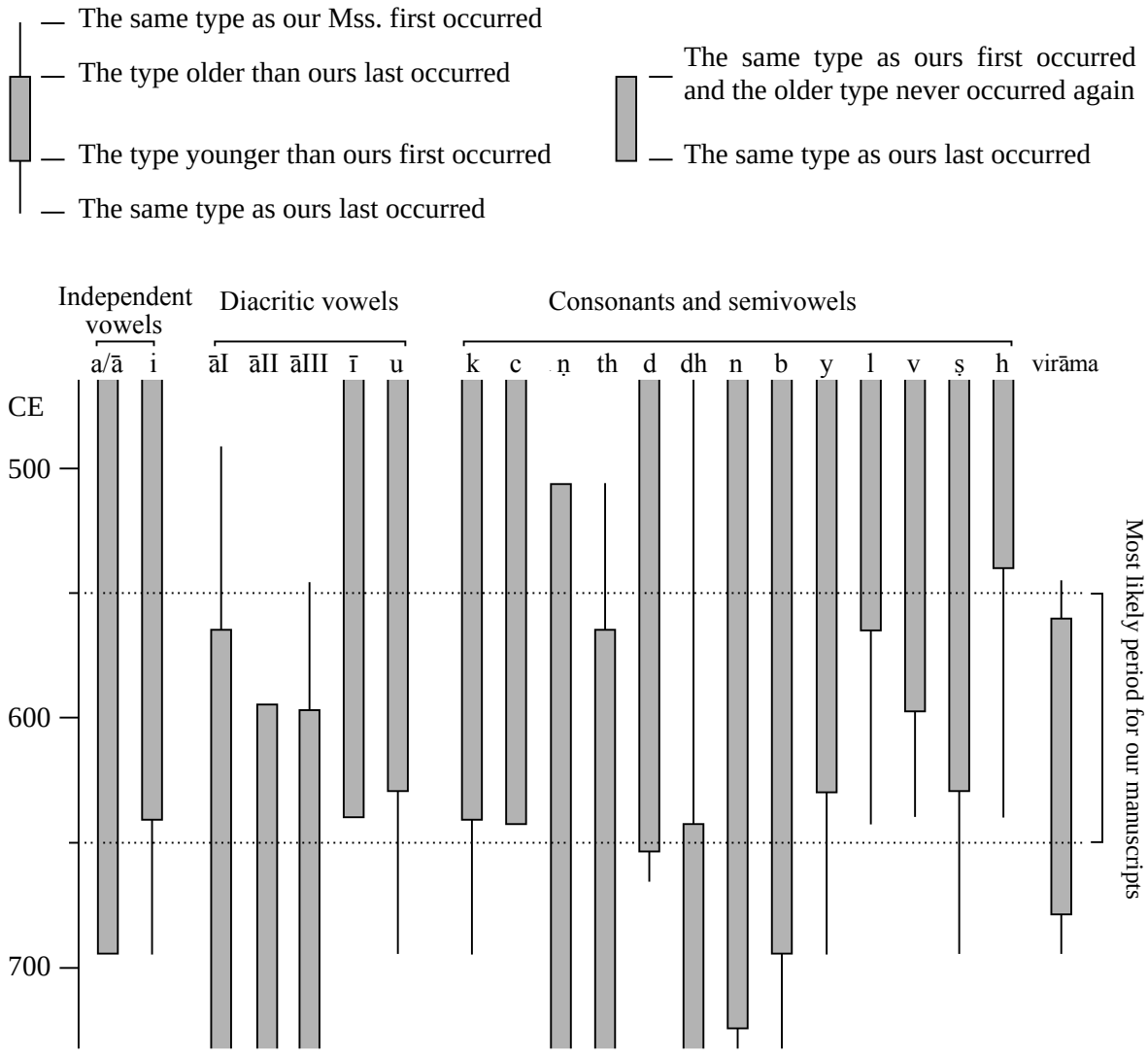
The *virāma* is written as a bar above the consonant with deleted vowel, and the same consonant is written with reduced size (*syāt*). In the Nepalese inscriptions of the 5th and the fist half of the 6th centuries, a consonant without a vowel is represented by the consonant written with reduced height and size only. The first occurrence of a superscribed *virāma* above a reduced-sized consonant is in inscription 6 of 545 CE. The subscribed *virāma* first occurs in inscription 28 of 679 CE, while the superscribed form still remains in inscription 29 of 695 CE.

t:

5th c.	(1) (2)
6th c.	(3) (4) (5) (6) (7) (9) (12)
7th c.	(13) (16) (17) (26) (28) (29)
8th c.	(30) (31)

3. Conclusion

Any one test letter is not a precise means to date a manuscript or inscription. However, by considering the evidence from all of the *akṣara*s which show clear developmental stages, we can get a much more accurate picture of the likely time-frame for our manuscripts. In order to clearly show the results of the comparison, I have adapted the candlestick chart from stock market reports. The chart shows in which period of the Nepalese inscriptions the type of each *akṣara* occurring in our manuscripts was used. In the chart below, the "body" (a rectangular box) shows the period during which the type attested in our manuscripts was dominant. The optional upper or lower "shadow" or "wick" (a vertical line segment) indicates the period that the same form was in use but not dominant.



If we trust the paleographical time scale established by the Nepalese inscriptions, our manuscripts should belong to the period which shows the best correlation with the inscriptional data. From the chart, this period is seen to be from the latter half of the 6th century to the first half of the 7th century. Differences between inscriptions and manuscripts have been taken into consideration, and consequently, this period is my best estimate for the paleographical date for our manuscripts based on the available evidence.

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Akṣara List

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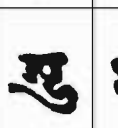
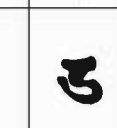
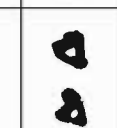
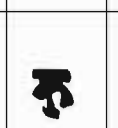
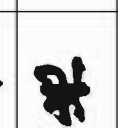
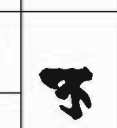
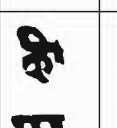
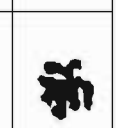
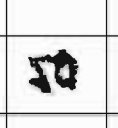
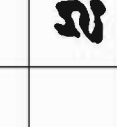
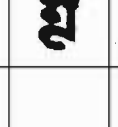
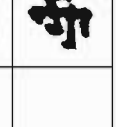
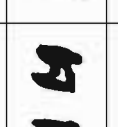
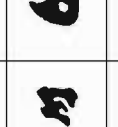
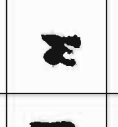
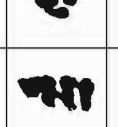
—											
k							 kḷ				
kh											
g											
gh											
c											
j											
ṭ											
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Symbols

visarga	(*kaḥ*)	virāma	(*t**, *m**)
anusvāra	(*daṃ*) ;	(*naṃ*)	
daṇḍa	; ;		

Ligatures

	a	ā	i	ī	u	ū	ṛ	e	ai	o	au
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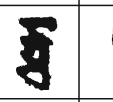
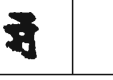
rvv											
rś											
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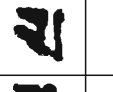
lp											
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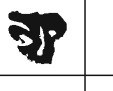
ly											
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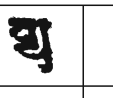
vy											
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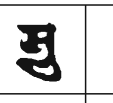
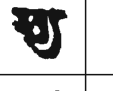
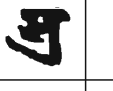
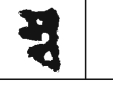
śc											
śy											
śr											
śv											
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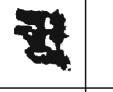
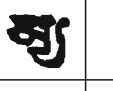
ṣṭh											
ṣy											
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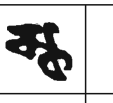
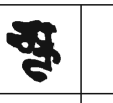
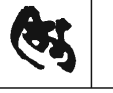
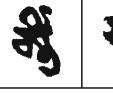
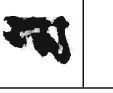
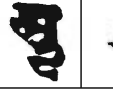
sk											
st											

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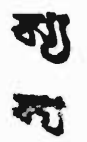
sy											
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Errata

p. 157, l. 11: 291 CE → 491 CE

p. 159, n. 9, l. 6: third → second