## From Indian Paleography by A. H. Dani

(Passages relating to Piprahwa are in bold)

Eastern India

In this region there are five odd inscriptions which, being isolated in far-flung areas, have proved difficult for palaeographical study. The first is a series of three inscriptions from the Nagarjuni caves in Bihar, found not far from the Barabar caves where Asokan inscriptions are engraved. These have been securely dated as they refer to Devnampiya Dasaratha, the grandson of Asoka. Palaeographically the inscriptions of Asoka and Dasaratha are closely comparable. Both of them have short verticals. Some words, such as *kubha* and (a)bhisitena, are virtually identical in the two series of inscriptions, but there are also some differences, e.g. in the forms of *a*, *ya*, and *va*. The Dasaratha inscriptions show a more cursive hand than the Asokan. In the reading of the Dasaratha inscriptions there has been one blatant mistake. The dental *sa* has been taken for cerebral sha, but the error is proved by the addition of the medial *u* to the main curve of *sa*.

The next four inscriptions are markedly individualistic. The Piprahwa vase, found in the Basti district, U.P., has an inscription scratched on the steatite stone in a careless manner. As the inscription refers to the remains of the Buddha, it was originally dated to the pre-Mauryan period, but it has been brought down to the third century B.C. on a comparison with Asokan Brahmi. The style of writing is very poor, and there is nothing in it that speaks of the hand of the Asokan scribes. We should not overlook the crude form of *ha* and *ta*, in which the vertical is unnecessarily lengthened. But here we do not find the later form of *dha* (i.e. the reverse of the Roman capital letter 'D'), and the medial vowels are applied asin Asokan Brahmi. We should mark also the angular form of *pa*,the long oval of *va*, and the reduction of the vertical in *la* and *na*, when the medial *i* is added, as we shall see also in the Barli inscription. On these grounds the inscription may be confidently dated to the earlier half of the second century B.C.

In contrast to the above inscription the Sohgaura (Gorakhpur district) copper plate shows an advanced technique of casting, in which the letters are in high relief. Quite naturally the writing is very stylized and some of the lettershave marked angular features. The form of *ma* is very exceptional, recalling that of the optional form at Bodhgaya and of the Mysore inscriptions of Asoka (Pl. IVb), but this is unique. It can be safely assigned to the earlier half of the second century B.C.

We will take up the next two inscriptions together: one is from Mahasthan in the Bogra district, East Pakistan, and the other from Ramgarh in Chhattisgarh, M.P. In the latter place there are actually two inscriptions, chiseled on the rock surface, the first using ra and dental sa, and the second replacing ra by la, and dental sa by palatal sa.

Except for this linguistic difference there is close similarity in the style of writing. The letter va in the Ramgarh inscriptions is wedge-shaped (Fig. 5, Va), an angular development from the crescentic va of Asokan Brahmi. Angularity is also marked in pa, la, sa, and ha, but this is of a different type, produced by the shorter vertical which is drawn at an angle. Ra has two forms, the straight vertical and the serpentine vertical; the last resembles the form seen in the Besnagar inscription of Heliodorus (Pl. Vb). But bha, with notched vertical and the two separate horizontal lines for medial o, suggest a date not later than that of the Besnagar inscription, possibly the middle of the second century B.C. The Mahasthan inscription bears a close resemblance to the second epigraph from Ramgarh, except for the palatal sa, which is replaced here by dental sa. The form of this sa is very similar to that in the Dasaratha record. Both at Ramgarh (only in the second epigraph) and at Mahasthan the straight vertical (danda) is used as a punctuation mark. The main difference is in the forms of ya and kha. At Mahasthan alone dha keeps up the true shape of the Roman capital letter 'D', suggesting that its date is earlier than the time when the reverse variety became the common fashion. It may therefore be placed in the first half of the second century B.C.

The remaining inscriptions from this region (i.e. from Bharhut, Bodhgaya, Hathigumpha, Pabhosa, and Ayodhya) will be taken together (Pl. VI a, b). The Bharhut inscriptions fall into two groups: Bharhut I representing those from the railings, and Bharhut II from the gateway inscription mentioning the Sungas. All these inscriptions have certain common characteristics, the small difference being mainly due to different hands and to the varied knowledge of the use of the new technique. In all these examples

the left-hand curves of *a* and *cl* meet the verticals separately (as in Fig. 4. I), though optionally in Bharhut I, Pabhosa, and Ayodhya they meet at the same point. In all these cases the vertical of *ha* is lengthened. *Kha* has below its vertical a dot, a circle, or a triangle. *Ga* is round-topped; only exceptionally an angular form is seen in Bharhut I and at Bodhgaya. *Gha* has assumed a perfect angular form.

The semicircle of *cha* here makes a rough quadrangle. *Chha* shows two distinct circles on either side of the low end of the vertical, though in Bharhut I we have optionally a simple oval. *Ia* in the majority of cases is three-armed, but it also has the double curved variety, especially in Bharhut I. Ta has both flattened and round forms. Da has its top vertical shortened, while the lower is lengthened and makes a slight curve with the horizontal. Sometimes na has its lower horizontal bent. Ta usually has the curved form, but the angular form is seen optionally in Bharhut I and at Bodhgaya. Da is developing the rounded form but it still opens to the left. The angular da is also occasionally met. Dha has the reverse form of the Roman capital letter 'D'. The letters pa, sa, and ha have their lower curve changed into an angular form. La has a peculiar round cursive form, but at Pabhosa, Ayodhya, and Hathigumpha it shows a new angular form known elsewhere only from the Saka Kshatrapa inscriptions of Mathura. Bha has a straight vertical with its additional hook slightly broadened. Ma has its lower circle turned into a rough triangle, though the circle is retained in Bharhut I and optionally at Bodhgaya and Hathigumpha. Ya has both the crescentic and the double-curved varieties, both sometimes giving place to angular forms. The vertical of ra is generally straight, but occasionally serpentine. Va has its lower circle changed into a definite triangle, which is occasionally very rough.

There is also some change in the application of the medial vowels. In Bharhut I the medial a in ja is optionally attached separately to the top. Except in Bharhut I, the medial i shows a tall flourish, developing into a beautiful curve in the Pabhosa and Ayodhya inscriptions. This form is derived from Saka Kshatrapa records, The medial u in pu, bu, su, and hu is a downward stroke drawn in line with the right vertical; only in Bharhut I does the older practice persist. The medial o is a single horizontal line drawn on the top of the letters.

These common features are new developments. But Bharhut I shows a number of

differences from Bharhut II and other records. Only here do older forms optionally persist, suggesting that it is somewhat earlier than the other inscriptions. The date of these latter inscriptions is fixed with more or less certainty by Pabhosa and Ayodhya examples, where we find the full use of the new pen and equalization of the verticals as in the Saka Kshatrapa inscription of Mathura. In Hathigumpha, Bodhgaya and Bharhut II these forms are copied. It does not seem that the writers knew the use of the new pen. This is also the reason why there is great variance in the length of the verticals in the same inscription. It must also be pointed out that if one analyses these inscriptions from the morphological point of view, he will find the disparity in the forms very confusing; for example the inscriptions other than the Hathigumpha found in the Khandagiri and Udaigiri caves, which are all contemporary, show marked differences in the forms. These other inscriptions show a preference for archaic forms which are optionally met with in the Hathigumpha inscription. This is bound to be the case in such a remote region as Orissa, where the new technical tradition could not get a foothold for a long time. It is only by incidental letter forms that the paleography of this region is related to those of other areas. This is an important point, but it is usually forgotten by Indian paleographers, who are bewildered to find archaic forms surviving side by side with the newer types. All these inscriptions date from the same time as that when the Pabhosa and Ayodhya records derived the new technique from the Saka Kshatrapa inscriptions of Mathura, i.e. in the first half of the first century A.D. Hence Bharhut I may be dated in the later half of the first century B.C.