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ESSAYS

ON

INDIAN ANTIQUITIES,

HISTORIC, NUMISMATIC, AND PALÆOGRAPHIC,

OF THE LATE

JAMES PRINSEP, F.R.S.,

SECRETARY TO THE ASIATIC SOCIETY OF BENGAL;

TO WHICH ARE ADDED HIS

USEFUL TABLES,

ILLUSTRATIVE OF INDIAN HISTORY, CHRONOLOGY, MODERN COINAGES, WEIGHTS,
MEASURES, ETC.

EDITED, WITH NOTES, AND ADDITIONAL MATTER,

BY

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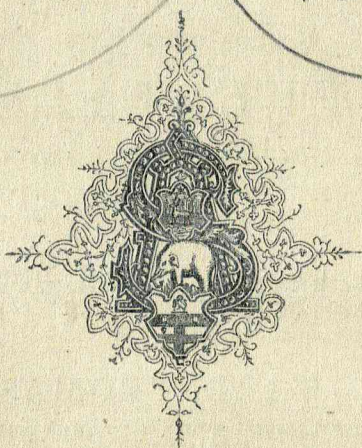
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NUMISMATIC ESSAYS.

ERRATA IN VOL. II.

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Contents, line 4, for "collection" read "collation."

Page 41, line 9, for "Plates xxxvii. and xxxviii.," read "Plates xxxviii. and xxxix."

" 80, " 10 from the bottom, for "explanation of Plate xii.," read "explanation of "Plate xxxvii."

" 109, " 11 from the bottom, for "Ardeslín Bálbek," read "Ardeslír Bábek."

" 126, " 6 from the bottom, cancel "Fig. 2" (omitted in the new Plate).

" " 3 from the bottom, for "Fig. 1," read "Fig. 4."

" 151, " 14, for "deduced," read "educed."

" 178, " 8 from the bottom, for "ΔΙΟΔΟΤΟΥ," read "ΔΙΟΔΟΤΟΥ."

" *Useful Tables*," page 84.—Table of Imports and Exports of Gold and Bullion.—In heading of *third* column, for "total amount of goods imported into," read "total amount of goods exported from."

" page 110, note 2, for "Marakkál," read "Marakkál."

Foremost among these was the series of coins conjecturally—and, as it now turns out, correctly—designated as the Buddhist series; and of these, the beautiful coin discovered by Lieut. Conolly, at Kanauj, attracted the earliest notice from the very perfect execution and preservation of the legend; [see pl. vii., fig. 1, vol. i., p. 115]. The reading of this coin was now evident at first sight, as विप्रादेवा Vippa-devasa; which, converted into its Sanskrit equivalent, will be विप्रदेवस्य Vipra-devasya, '(the coin) of Vipra-deva.' On reference to the chronological tables, we find a Vipra in the Magadha line, the tenth in descent from Jarasandha, allotted to

NUMISMATIC ESSAYS.

XVII.—APPLICATION OF THE EARLY BHILSA ALPHABET TO THE BUDDHIST GROUP OF COINS.

[7TH JUNE, 1837.]

Having once become possessed of the master-key of this ancient alphabet, I naturally hastened to apply it to all the doors of knowledge hitherto closed to our access. Foremost among these was the series of coins conjecturally—and, as it now turns out, correctly—designated as the Buddhist series; and of these, the beautiful coin discovered by Lieut. Conolly, at Kanauj, attracted the earliest notice from the very perfect execution and preservation of the legend; [see pl. vii., fig. 1, vol. i., p. 115]. The reading of this coin was now evident at first sight, as *ṣṭṛḍḍ Vipra-devasa*; which, converted into its Sanskrit equivalent, will be *विप्रदेवस्य Vipra-devasya*, '(the coin) of Vipra-deva.' On reference to the chronological tables, we find a Vipra in the Magadha line, the tenth in descent from Jarasandha, allotted to



On the bronze Behat coin (figs. 11, 12, of pl. [iv.]

xviii., vol. iii., and 3, 6, 9, of pl. [xix.] xxxiv., vol. iv.), though we have ten examples to compare, the context is not much improved by the acquisition of our new key : the letters are $\square\Delta D L + L \Delta D \Delta$ *basa dhana kanaya dhaya* ; (the second letter is more like π *bhu*.)

Stacy's supposed Greek legends (figs. 2, 3, of pl. [vii.] xxv., vol. iii.), may be read (as I anticipated), [vol. i., p. 114], invertedly $\Delta \Lambda \Pi \epsilon \Delta \chi \lambda$ *Yagá bijana puta (sa?)*

The larger copper coin, having a standing figure holding a trident (fig. 4, pl. [vii.] xxv., vol. iii.) has, very distinctly, the name of $\pi \Lambda \delta \lambda \delta$ *Bhagavata cha* (or *sa*). A *rāja* of the name of *Bhagavata* appears in the Magadha list, about the year 80 B.C.

On some of the circular copper coins, we have fragments of a legend $\pi \epsilon \pi \dots \delta \Lambda \delta \Delta$ *Bhāmada* *vatapasa*, quasi *Bhīmadeva tāpasya*—but the last word is the only one that can be confided in.

On a similar coin, of which Stacy has a dozen specimens (fig. 47, pl. [xx.] xxxv., vol. iv.) the name of $\pi \epsilon \pi \delta \Delta$ *Rāmadatasa*, 'of Rāmadatta,' is bounded by the 'lizard' emblem of Behat.

These are the only two in the precise form of the *Lát* character—the others are more or less modified.

Another distinct group (that made known first by Mr. Spiers) from Allahábád (pl. [viii.] xxvi., figs. 12-15, vol. iii., p. 436, See Art. vi.), can be partially deciphered by the *Lát* alphabet. Capt. Cunningham has a fine specimen with the letters $\pi \epsilon D L \pi \delta \Delta$ *Rāja Dhana-devasya*, 'of Rāja Dhana-deva,' a name not discoverable in the catalogue, though purely Sanskrit. On three more of the same family, we find $\pi \delta \Delta$ *Navasa*. On one it seems

rather 𑀮𑀸𑀓 *Narasa*, both Nava and Nara being known names. On another 𑀮𑀸𑀓𑀲 *Kunamasa*; and on another, probably, 𑀮𑀸𑀓𑀲𑀸𑀓 *mahāpati*, 'the great lord.'

The 'bull' coins of this last group are connected in type, and style of legend, with the 'cock and bull' series; on which we have lately read *Satya-mitasa*, *Saya-mitasa*, and *Bijaya-mitasa*; so that we have now a tolerably numerous descending series of coins to be classed together from the circumstance of their symbols, of their genitive termination, and their Pālī dialect and character, as a Buddhist series, when we come again to review what has been done within the last few years in the numismatology of India.

But the most interesting and striking application of the alphabets to coins is certainly that which has been already made (in anticipation, as it were, of my discovery, by Lassen, to the very curious Bactrian coins of Agathocles.

The first announcement of Lassen's reading of this legend was given [vol. i. p. 401]. He had adopted it on the analogies of the Tibetan and Pālī alphabets, both of which are connected with, or immediately derived from, the more ancient character of the Láts. The word read by him, '*rājā*,' on some specimens seems to be spelt 𑀲𑀸𑀓𑀲 *yāja*, rather than 𑀲𑀸𑀓𑀲 *lāja*, a corruption equally probable, and accordant with the Pālī dialect, in which the *r* is frequently changed into *y*,* or omitted altogether. I am, however, inclined to adopt another reading, by supposing the Greek genitive case to have been rendered as literally as possible into the Pālī character; thus 𑀮𑀸𑀓𑀲𑀸𑀓 *Agathuklayej* for *Αγαθοκλεως*: this has the ad-

at Petersburg, published in the 'Journal des Savans,' 1834, p. 335 :

'In the imperfect accounts transmitted to us of the troubles occasioned to the Seleucidan kingdom from the invasion of Ptolemy Philadelphus, and of the loss of entire provinces after the reverses of Antiochus II. Theos ; the foundation of the Arsacidan kingdom by the defection of the brothers Arsaces and Tiridates is an established point, fixed to the year 256 B.C. But the details of this event, borrowed from Arrian's 'Parthics,' have not yet been determined with sufficient care, as to one important fact in the Bactrian history. From the extracts of various works preserved in Photius, the defection of the Parthians arose from an insult offered to the person of one of these brothers by the Macedonian chief placed by Antiochus II. in charge of the regions of High Asia, and named Phérécclés. The two princes, indignant at such an outrage, are supposed to have revenged themselves with the blood of the satrap, and, supported by the people, to have succeeded in shaking off the Macedonian yoke.

'This short notice from Photius has been corrupted by transcribers in the name of the chief Phérécclés, which modern critics have failed to correct by a passage in the 'Chronographia' of Syncellus, who had equally under his eyes the original of Arrian, and who declares expressly that 'Arsaces and Tiridates (brothers, issue of the ancient king of Persia, Artaxerxes), exercised the authority of satraps in Bactria at the time when Agathocles, the Macedonian, was governor of Persia ; the which Agathocles, having attempted to commit on the person of the young Tiridates the assault before alluded to, fell a victim to the vengeance of the brothers, whence resulted the defection of the country of the Parthians, and the birth of the Arsacidan kingdom.' Agathocles is called by Syncellus, *Ἐπαρχος τῆς Περσικῆς*, while Photius calls him (under an erroneous name) *Σατράπην αὐτῆς τῆς χώρας καταστάντα*, appointed by Antiochus Theos ; so that no doubt whatever could exist as to their identity, although, until the discovery of the coins, there was no third evidence whence the learned could decide between the two names. The presumption might have been in favor of Agathocles, because among the body-guard of Alexander was found an Antylocus, son of Agathocles, who, by the prevailing custom of his country, would have named his son Agathocles, after his own father.'

M. Raoul Rochette proceeds to identify the Eparch of Persia with Diodotus, or Theodotus, the founder of the

Bactrian independency ;—supposing him to have seized the opportunity of striking the blow during the confusion of Antiochus' war with Ptolemy, and while he was on deputation to the distant provinces of the Oxus,—that he was at first chary of placing his own head on his coin, contenting himself with a portrait of Bacchus, and his panther on the reverse, but afterwards emboldened to adopt the full insignia of royalty. Thus, according to our author, a singular shift of authorities took place : Arsaces, the satrap of Parthia, quits that place and sets up for himself in Persia, in consequence of the aggression of Diodotus (or Agathocles), king of Bactria, who had originally been Eparch of Persia,—both satraps becoming kings by this curious *bouleversement*. The non-discovery of Theodotus' medals is certainly in favor of M. Raoul Rochette's argument, but the present fact of a Hindí legend on his coin militates strongly against his kingdom being thrown exclusively to the northward. By allowing it to include Parthia proper, or Seistan, and the provinces of the Indus, this difficulty would be got rid of; but still there will remain the anomaly of these Indian legends being found only on Agathocles, and Pantaleon's coins, while those of Menander, who is known to have possessed more of India proper, have only the Pehlvi reverse. Agathocles' rule must have included a sect of Buddhists somewhere, for, besides the letters, we find their peculiar symbol present on many of the 'panther' coins. At any rate, we have certainty of the existence of our alphabet in the third century before Christ, exactly as it exists on our Indian monuments, which is all that on the present occasion it is relevant to insist upon. . . .

[Prinsep then goes on to test the application of this alphabet to other classes of inscriptions, and terminates his remarks with—]

A few words in conclusion regarding the alphabet, of which I have had a fount prepared while this article was setting up for press.

There is a primitive simplicity in the form of every letter, which stamps it at once as the original type whereon the more complicated structure of the Sanskrit has been founded. If carefully analyzed, each member of the alphabet will be found to contain the element of the corresponding member, not only of the Devanāgarī, but of the Kanauj, the Pālī, the Tibetan, the Hala Kanara, and of all the derivatives from the Sanskrit stock.

But this is not all: simplification may be carried much farther by due attention to the structure of the alphabet, as it existed even at this early stage, and the genius of its construction, *ab initio*, may in some measure be recognized and appreciated.

First, the aspirated letters appear to have been formed in most cases by doubling the simple characters; thus, ॠ *chh* is the double of ॠ *ch*; ॡ *th* is the double of ॠ *t*; ॢ *dh* is the half of this; and ॣ *th* is the same character with a dot as a distinguishing mark: (this may account for the constant interchange of the ॠ, ॡ, ॢ, and ॣ, in the inscriptions). Again: । *dh* is only the letter ॠ produced from below—if doubled, it would have been confounded with another letter, the ॢ. The aspirated ॥ *p* is merely the ॠ *p* with a slight mark, sometimes put on the outside, either right or left,¹ but I cannot yet affirm

¹ [I have allowed Prinsep's original speculations on the structure of this alphabet to stand uncommented upon; and have reserved for rectification, under his own hand, in the succeeding article, whatever was left imperfect or incomplete in this.]

that this mark may not merely denote a duplication of the letter rather than an aspiration—if, indeed, the terms were not originally equivalent; for we have just seen the doubling of the letter made to denote its aspiration.

The *kh* seems formed from the *g* rather than the *k*: the *gh* and *jh* are missing as in Tibetan, and appear to be supplied by *g* and *chh* respectively: *bh* is anomalous, or it has been formed from the *q* by adding a downward stroke.

Again, there is a remarkable analogy of form in the semi-vowels *r*, *ṛ*, *l*, *y*, *ī*, *ṡ*, *ṣ*, *ṣ*, which tends to prove their having been framed on a consistent principle: the first *r* hardly ever occurs in the Dihlī inscription, but it is common in that from Gīrnār. The *h* *ṛ* is but the *ṡ* reversed: the *ri*, so peculiar to the Sanskrit alphabet, is formed by adding the vowel *i* to the *r*, thus, *ṛ*.

As far as is yet known, there is only one *n*,¹ and one *s*: the nasals and sibilants had not therefore been yet separated into classes; for the written Pālī of 200 years later possesses at least the various *n*'s, though it has but one *s*.

The four vowels, initials, have been discovered, *ṛ*, *ṛ*, *ṛ*, *ṛ*; *a*, *i*, *e*, *u*. The second seems to be the skeleton of the third, as if denoting the smallest possible vocal sound. Of the medial vowels it is needless to speak, as their agreement in system with the old Nāgarī was long since pointed out. The two long vowels *ī* and *ū*, are produced by doubling the short symbols. The *visarga* is of doubtful occurrence, but the *anuswāra* is constantly employed;

¹ I think the Gīrnār and Ceylon inscriptions will be found to have the other nasals made by the modification of the primary *ṛ*. There are other letters in these texts not found in the Lāts of this side of India.



¹ It is worth observation that the dental *d* of the inscriptions corresponds in form to the modern cerebral, and *vice versa*.

the α β being merely the α ρ closed at the top; and in square Pálí \sqcup and \sqcap .

Thus, when we come to examine the matter critically, we are insensibly led to the reduction of the written characters to a comparatively small number of elements, as +, d, c, p, \perp , u, s, l, o and Δ ; besides the vowels α , β , γ . Or, perhaps, in lieu of this arrangement, it may be preferable to adopt one element as representative of each of the seven classes of letters. We shall thus come to the very position long ago advanced by Iambulus the traveller.

Iambulus was antecedent, says Dr. Vincent, to Diodorus; and Diodorus was contemporary with Augustus. He made, or pretended to have made, a voyage to Ceylon, and to have lived there seven years. Nine facts mentioned by him as characteristic of the people of that country, though doubted much in former days, have been confirmed by later experience: a tenth fact the learned author of the 'Periplus' was obliged to leave to future inquiry,—namely, "whether the particulars of the alphabet of Ceylon may not have some allusion to truth: for, he says, 'the characters are originally only seven, but by four varying forms or combinations they become twenty-eight.'"¹

It would be difficult to describe the conditions of the Indian alphabetical system more accurately than Iambulus has done in his short summary, which proves to be not only true in the general sense of the classification of the letters, but exact as to the origin and formation of the symbols. As regards the discussion of the edict of

¹ Vincent's 'Periplus of the Erythrean Sea.'

Devánampiyatissa, the testimony of Iambulus is invaluable, because it proves that written characters—our written characters—were then in use (notwithstanding the Buddhist books were not made up till two centuries later :) and it establishes the credit of a much vituperated individual, who has been so lightly spoken of, that Wilford endeavours to identify him with Sindbad the Sailor, and other equally marvellous travellers !

[Though not strictly susceptible of classification with numismatic developments, I am anxious to associate with James Prinsep's other contributions to the historical antiquities of India, his most interesting discovery of the names of the early successors of Alexander the Great, on the lapidary monuments of Asoka, the grandson of Chandragupta.]

DISCOVERY OF THE NAME OF ANTIOCHUS THE GREAT, IN TWO OF THE EDICTS OF ASOKA, KING OF INDIA.

(Read at the Meeting of the Asiatic Society of Bengal, on the 7th March, 1838.)

As long as the study of Indian antiquities confines itself to the illustration of Indian history, it must be confessed that it possesses little attraction for the general student, who is apt to regard the labor expended on the disentanglement of perplexing and contradictory mazes of fiction, as leading only to the substitution of vague and dry probabilities for poetical, albeit extravagant, fable. But the moment any name or event turns up in the course of such speculations, offering a plausible point of connection between the legends of India and the rational histories of Greece or Rome,—a collision between the fortunes of an eastern and a western hero,—forthwith a speedy and spreading interest is excited, which cannot be satisfied until the subject is thoroughly sifted by the examination of all the ancient works, western and eastern, that can throw concurrent light on the matter at issue. Such was the engrossing interest which attended the identification of Sandracottus with Chandragupta, in the days of Sir Wm. Jones: such the ardour with which the Sanskrit was studied, and is still studied, by philologists at home, after it was discovered to bear an intimate relation to the classical languages of ancient Europe. Such, more recently, has

been the curiosity excited, on Turnour's throwing open the hitherto sealed page of the Buddhist historians to the development of Indian monuments and Paurānic records.

The discovery I was myself so fortunate as to make, last year, of the alphabet of the Dīhlī Pillar Inscription, led immediately to results of hardly less consideration to the learned world. Dr. Mill regarded these inscriptions as all but certainly demonstrated relics of the classical periods of Indian literature. This slight remainder of doubt has been since removed by the identification of Piyadasi as Asoka, which we also owe to Turnour's successful researches; and, dating from an epoch thus happily achieved, we have since succeeded in tracing the name of the grandson of the same king, Dasaratha, at Gaya, in the same old character; and the names of Nanda and Ailas, and perhaps Vijaya, in the Kalinga caves: while on Bactrian coins we have been rewarded with finding the purely Greek names of Agathocles and Pantaléon, faithfully rendered in the same ancient alphabet of the Hindús.

I have now to bring to the notice of the Society another link of the same chain of discovery, which will, if I do not deceive myself, create a yet stronger degree of general interest in the labours, and of confidence in the deductions, of our antiquarian members than any that has preceded it. I feel it so impossible to keep this highly singular discovery to myself that I risk the imputation (which has been not unjustly cast upon me in the course of my late undigested disclosures), of bringing it forward in a very immature shape, and, perhaps, of hereafter being obliged to retract a portion of what I advance. Yet neither in this, nor in any former communication to the Society, have I to fear any material alteration in their general bearing, though improvements in reading and translation must of course be expected as I become more familiar with characters and dialects unknown for ages past even to the natives themselves, and entirely new to my own study.

A year ago, as the Society will remember, Mr. Wathen kindly sent me a reduced copy of the facsimiles of the inscriptions on a rock at Girnár (Giri-nagara) near Junágarh, in Gujarát, which had been taken on cloth by the Rev. Dr. Wilson, President of the Bombay Literary Society. He also sent a copy to M. Jacquet of Paris, which I dare say before this has been turned to good account.

After completing the reading of the Pillar Inscriptions, my attention was naturally turned to these in the same character from the west of India, but I soon found that the copy sent was not sufficiently well done to be thoroughly made out; and I accordingly requested Mr. Wilson to favour me with the facsimile itself, which, with the most liberal frankness, he immediately sent round under a careful hand by

sea. Meanwhile Lieut. Kittoe had, as you are also aware, made the important discovery of a long series of inscriptions in the same character at a place called Dhaulī, in Katak. These were in so mutilated a state that I almost despaired of being able to sift their contents; and they were put aside, at any rate until a more promising portion of my labour should be accomplished.

I had just groped my way through the Girnār text, which proved to be, like that of the pillars, a series of edicts promulgated by Asoka, but essentially different both in language and in purport. When I took up the Katak inscriptions, of which Lieut. Kittoe had been engaged in making a lithographic copy for my journal, to my surprise and joy I discovered that the greater part of these inscriptions (all, indeed, save the first and last paragraphs, which were enclosed in distinguishing frames), was identical with the inscription at Girnār. And thus, as I had had five copies of the Pillar Inscription to collate together for a correct text, a most extraordinary chance had now thrown before me two copies of the rock edicts to aid me in a similar task! There was, however, one great variance in the parallel; for, while the pillars were almost identical letter for letter, the Girnār and Katak texts turned out to be only so in substance, the language and alphabet having both very notable and characteristic differences.

Having premised thus much in explanation of the manner of my discovery, I must now quit the general subject for a time, to single out the particular passage in the inscriptions which is to form the theme of my present communication.

The second tablet at Girnār is in very good preservation; every letter is legible, and but two or three are in any way dubious. The paragraph at Aswastuma, which I found to correspond therewith, is far from being in so good a state; nevertheless, when the extant letters are interlined with the more perfect Girnār text, they will be seen to confirm the most important passage, while they throw a corroborative evidence upon the remainder, and give a great deal of instruction on the respective idioms in which the two are couched.

The edict relates to the establishment of a system of medical administration throughout the dominions of the supreme sovereign of India, at one of which we may smile in the present day, for it includes both man and beast; but this we know to be in accordance with the fastidious humanity of the Buddhist creed, and we must therefore make due allowance for a state of society and of opinions altogether different from our own. . . .

TRANSLATION.

"Everywhere within the conquered provinces of Rāja Piyadasi, the beloved of the gods, as well as in the parts occupied by the faithful, such as Chola, Piḍa, Satiyaputra,

and Ketalaputra, even as far as Tambapanni (Ceylon)—and moreover, within the dominions of Antiochus the Greek (of which Antiochus' generals are the rulers)—everywhere the heaven-beloved Rāja Piyadasi's double system of medical aid is established, both medical aid for men, and medical aid for animals: together with medicaments of all sorts, which are suitable for men, and suitable for animals. And wherever there is not (such provision), in all such places they are to be prepared, and to be planted: both root-drugs and herbs, wheresoever there is not (a provision of them) in all such places shall they be deposited and planted.

“And in the public highways wells are to be dug, and trees to be planted, for the accommodation of men and animals.”

Many things are deserving of comment in this short edict. . . . But the principal fact which arrests attention in this very curious proclamation, is its allusion to Antiochus the Yona (Sanskrit, *Yavana*) or ‘Greek’ king. The name occurs four times over, with only one variation in the spelling, where, in lieu of *Antiyako* we have *Antiyoko*, a still nearer approach to the Greek. The final *o* is the regular Pāli conversion of the Sanskrit nominative masculine termination *as*, or the Greek *os*. In the Pillar dialect the visarga of the Sanskrit is replaced by the vowel *e*, as we see in the interlined reading, *Antiyake*. Again, the interposition of the semivowel *y* between the two Greek vowels *i* and *o* is exactly what I had occasion to observe in the writing of the words *Agathuklayoj* and *Pantalaravanta* for *Αγαθοκλεως* and *Πανταλεοντος* on the coins. All this evidence would of itself bias my choice towards the reading adopted, even were it possible to propose any other; but although I have placed the sentence, exactly transcribed in the Devanāgarī character, in the pandit's hand, he could not, without the alteration of very many letters, convert it to any other meaning, however strained. And were there still any doubt at all in my mind, it would be removed by the testimony of the Katak version, which introduces between *Antiyake* and *Yona* the word *nāma*,—making the precise sense ‘the Yona rāja, by name Antiochus.’

[I transcribe so much of the duplicate version of the original, since illustrated and confirmed by the decipherment of the Arian inscription at Kapur di Giri, as in any way affects the historical value of the document, together with Professor Wilson's commentary and revision of Prinsep's translation. The Professor's opening remarks explain the derivation and arrangement of the parallel texts, inserted *in extenso* in the Journal of the Royal Asiatic Society.]

In order to exhibit with as much distinctness as possible the

language of the inscriptions I have placed the several inscriptions in parallel lines, in order to bring the words of each in juxta-position as far as was practicable. They accordingly form four lines. The upper line represents Mr. Prinsep's original readings, as published in the Journal of the Asiatic Society of Bengal, vol. vi., p. 228, and above the line, in a smaller character, are inserted his subsequent corrections, as given in a copy of the Journal, corrected by himself, and placed at Mr. Norris's disposal, by his brother, Mr. H. T. Prinsep. Small numerals refer to the lines of our own lithographed copy. This line I have designated G *a*. The second line is the representation of the copy lithographed (in the 'Jour. Roy. As. Soc.', vol. xii., p. 153), and which I have generally referred to as Mr. Westergaard's copy, as he has the larger share in it. This is marked G *b*. The third line marked D repeats the Dhauli inscription, as given by Mr. Prinsep. We have not yet been fortunate enough to have had a second and revised transcript, although it is very desirable. The lower line is marked K, as being rendered into Roman letters from the lithographed copy of the Kapur di Giri inscription. The small figures here also refer to the lines of the original. Where blanks occur in either of the inscriptions they are denoted by asterisks (dots are used in this work); where words are wanting for the collation, although there is no blank in the inscription, a line (of dots) supplies their place.

TABLET II.

G <i>a</i>	¹ Savata	vijitem ⁿ hi	devānam	piyasa	Piyadasino	raño
G <i>b</i>	Savata	vijitamhi	devānam	piyasa	Piyadasino	raño
D	. avata	vimitamsi	devānam	piyasa	Piyadasine	.
K	Savatam	vijite	devanam	priyasa	Priyadaśisa	raja
G <i>a</i>	² evamapāpavantesu	yathā	Choḍa	Piḍa	Satiyaputo ^e	
G <i>b</i>	evamapipāvantesu	yathā	Choḍa	Pāḍa	Satiyaputo	
D	.	.	.	.	.	.
K	.	.	.	yi	⁴ Palaya Satiya putra	
G <i>a</i>	ⁿ Ketaleputo, a	Tamba ⁿ panni	Antiyako	yonā rāja ye		
G <i>b</i>	Ketalaputā, a	Tambapani	Antiyako	yonā rāja ye		
D	.	.	tiyoke nāma	yonā lāja yā		
K	cha Keralamputra	Tambapani	Antiyoka ne	yonā raja ye		
G <i>a</i>	vā pi	— tasa	Antiyakasa	samino ^{asan} rājāno		
G <i>b</i>	vā pi	— tasa	Antiyakasā	sāmīpam rājāno		
D	va ..	— . sa	Antiyokasa	sāmāntā lajāne		
K	cha	arāṇa tasa	Antiyokasa	samata rajaya		

The portion of the Kapur di Giri inscription, which corresponds with the second Tablet of Girnār and Dhauli, is less imperfect than that which answers to the first

Tablet, and in the few blanks which occur, it admits of being conjecturally completed without any great violence.

There are, however, several omissions as compared with the Girnár sculpture, which are apparently intentional, constituting a variety in the language, though not in the general purport of the inscriptions. The inscriptions correspond also in the chief point of interest, the mention of Antiochus, the Yona Rāja.

The inscription commences with the phrase, *Savata vijite*, followed by a short blank, which may be filled up, without much risk of error, by the syllable *mhi*, of the Girnár Tablet—'everywhere in the conquered countries;'—which is followed by the usual designation 'of the beloved of the gods' Piyadasi, the genitive being as before, *Priyadaśisa*: the word 'countries,' it may be presumed, is understood in all the inscriptions.

We have no equivalent for what follows, which is read by Mr. Prinsep, *evama-papavantesu*. In Westergaard's copy it might be read, *mahi pāchantesu*, but it is, perhaps, only *evam api pāchantesu* (for *pratyānteshu*) 'also even in the bordering countries,' not as Prinsep proposes, 'as well as in the parts occupied by the faithful.' Nor have we any equivalent for *Choda*, conjectured by Prinsep to be that portion of the south of India which is known as Chola, or Cholamandala, whence our Coromandel.

Instead of *Pīda*, which requires to be corrected to *Pāda*, we have *Palaya*, and then *Satiya putra cha Keralamputra Tambapani*, in near approach to *Satiya puto Ketalaputa* and *Tambapani*, words which have been thought intended to designate places in the south of India, but of which the two first, *Palaya* and *Satiya-puto*, are new and unknown. *Kerala* is no doubt a name of Malabar, as *Chola* is of the opposite coast; but we also find both words, in combination with others, designating countries or people in the north-west, as *Kamboja*, *Yavana*, *Chola*, *Murala*, *Kerala*, *Śāka*. (*Gana-Pāthra*, referring to a *sūtra* of Pānini, 4. 1. 175.) *Tambapani* it has been proposed to identify with *Tāmrāparni*, or Ceylon, but further research may also remove that to the north. The same authority, giving the *Gana*, or list of words indicated in the *sūtra*, 5. 1. 116, explains them to signify tribes of fighting men, and specifies among them *Savitri-putra*, which offers some analogy to the *Satiya-putra* of the inscription. It is much more likely that countries in the north-west, than in the extreme south, of India are intended.

We next come to the important passage in which a Greek name and designation occur. Both the Girnár copies read *Antiyako yona rāja*: the Kapur di Giri has *Antiyokano yona rāja*; but the two last letters, *ne*, are rather doubtful. It should perhaps be *Antiyoke nama*, as at Dhaulī, where we have *tiyoke nama yona lāja*. The use of the nominative case, however, offers a syntactical perplexity, for there is not any verb through which to connect Antiochus with the rest of the sentence; and it seems unusual to associate the name of an individual with those of places. Prinsep supplies the defect with 'the dominions of Antiochus the Greek;' but we have no term for 'the dominions,' nor is the noun in the genitive case, as it is in what follows. In this the Kapur di Giri inscription nearly agrees with that of Girnár, and it may be read *ye cha a rāṇa tasa Antiyokasa samata rajaya sakato devanam priyasa*, etc., that of Girnár being *ye vā pi tasa Antiyakasa sāmipam rājano savata*. Either may be rendered 'and those princes who are near to Antiochus everywhere;' although *rajaya* is an unusual form of the plural of *rāja*, being neither Sanskrit nor Pāli. The object of prefixing *a* to *rājna* in the word *arāṇa*, being equivalent to 'no king,' is not very intelligible, and it can scarcely be doubted that *sukuto* should be *suwutu*, as found both at Girnár and Dhaulī. It seems likely that there may be some inaccuracies in this

part, either in the original or the copy. But admitting a concurrent reading, we still want a connecting word, and it is not specified what these neighbours or dependants of Antiochus are to do. We may presume that they are expected to attend to the object of the edict, or they may be comprehended in the list of the *savata vijite*, 'the conquered.'

PROPOSED TRANSLATION.

In all the subjugated (territories) of the King Priyadasi, the beloved of the gods, and also in the bordering countries, as (Choda), Palaya, (or Paraya), Satyaputra, Keralaputra, Tambapani (it is proclaimed), and Antiochus by name, the Yona (or Yavana) Raja, and those princes who are near to (or allied with) that monarch, universally (are apprised) that (two designs have been cherished by Priyadasi: one design) regarding men, and one relating to animals; and whatever herbs are useful to men or useful to animals.

PRINSEP'S TRANSLATION.

'Everywhere within the conquered province of rāja Piyadasi, the beloved of the gods, as well as in the parts occupied by the faithful, such as Chola, Pida, Satiyaputra, and Ketalaputra, even as far as Tambapanni (Ceylon); and moreover, within the dominions of Antiochus, the Greek (of which Antiochus' generals are the rulers)—everywhere the heaven-beloved rāja Piyadasi's double system of medical aid is established; both medical aid for men, and medical aid for animals; together with the medicaments of all sorts, which are suitable for men, and suitable for animals.'

CONTINUATION OF REMARKS ON THE EDICTS OF PIYADASI, OR ASOKA, THE BUDDHIST MONARCH OF INDIA, PRESERVED ON THE GIRNĀR ROCK IN THE GUJARAT PENINSULA, AND ON THE DHAULI ROCK IN KATAK; WITH THE DISCOVERY OF PTOLEMY'S NAME THEREIN.

(Read at the meeting of the Asiatic Society of Bengal, on the 4th April, 1838).

In continuation of the discovery I had the pleasure of bringing to the notice of the Society at its last meeting, I am now enabled to announce that the edicts in the ancient character from Gujarāt do not confine their mention of Greek sovereigns to Antiochus the ally of Asoka, but that they contain an allusion, equally authentic and distinct, to one of the Ptolemies of Egypt! The edict containing this highly curious passage is in a mutilated condition and at the very end of the inscription, which will account for its having hitherto escaped my attention. As I propose to lay before the Society a brief account of the whole of the Girnār inscription, I will do no more than mention the fact at present, reserving the particulars until I come to the actual position of the passage on the stone. . . .

I have already mentioned the fortunate discovery of a duplicate of the Gujarāt inscription, at Dhaulī, in Katak.

The divided sentences, or, as I shall for the present venture to call them, the edicts, which are common to Girnār and to Dhaulī, are eleven

in number. From the first to the tenth they keep pace together: the only difference being that while, at Girnár, each is surrounded by an engraved line as a frame; at Dhaulí, the beginning of each edict is marked by a short dash. The regular succession is then interrupted by three interpolations at Girnár; after which, the fourteenth edict of that series is found to correspond with the eleventh or concluding one of the same set at Dhaulí.

The three missing edicts are more than compensated at Dhaulí by the introduction of two others not found at Girnár, one at the end enclosed in a frame, and one on the left hand of the same rock on a larger scale of sculpture; but both of these being of a totally different purport, and being quite unconnected with the rest, I shall postpone for separate consideration.

That the edicts are of different dates is proved by the actual mention of the year of Piyadasi's reign, in which several of them were published. Two of them are dated in the tenth¹ and two in the twelfth year after his *abhišek* or consecration, which we learn from Turnour's Páli history did not take place until the fourth year of his succession to the throne of his father, Bindusaro. Only one of the pillar edicts is dated in the twelfth year; the remainder, generally, bearing the date of the twenty-seventh year; and one containing both, as if contradicting, at the later epoch, what had been published fifteen years before. From this evidence we must conclude that the Gujarát and Katak inscriptions have slightly the advantage in antiquity over the Láts of Dihlí and Allahábád: but, again, in the order of sequence, we find edicts of the twelfth year preceding those of the tenth; and we learn expressly from the fourteenth edict that the whole were engraven at one time. Their preservation on rocks and pillars therefore must be regarded as resulting from an after order, when some re-arrangement was probably made according to the relative importance of the subjects.

The copy that emanated from the palace must, however, have been modified according to the vernacular idiom of the opposite parts of India to which it was transmitted, for there is a marked and peculiar difference, both in the grammar and in the alphabet of the two texts, which demands a more lengthened examination than I can afford to introduce in this place. I shall, however, presently recur to this subject, and, at least, give the explanation of those new characters which I have been obliged to cut in order to print the Girnár text, and which, in fact, render the alphabet as complete as that of the modern Páli,

¹ I use these terms as more consonant to our idiom: the correct translation is 'having been consecrated ten and twelve years,' so that the actual period is one year later in our mode of reckoning.

The sight of my former friend, the *yona rāja* (whom, if he should not turn out to be Antiochus the ally, I shall shortly find another name for), drew my particular attention to what followed; and it was impossible, with this help, not to recognize the name of Ptolemy even in the disguise of Turamayo. The *r* is however doubtful; and I think, on second examination, it may turn out an *l*, which will make the orthography of the name complete. The word *rājāno*, and its adjective *chaptáro*, being both in the plural, made it necessary that other names should follow, which was confirmed by the recurrence of the conjunction *cha*. The next name was evidently imperfect; the syllabic letter, read as *gon*, if turned on one side would be rather *an*, and the next, too short for a *g*, might, by restoring the lost part above, be made into *ti*: I therefore inclined to read this name 𑀕𑀸𑀓𑀲𑀺𑀓 *Antikono* for *Antigonus*; and, assuming that *chaptáro* was a corruption of *chatváro*, 'four,' to understand the passage as alluding to a treaty with the four principal divisions of the Alexandrine monarchy, two of which in the time of Antiochus the Great were governed by princes of these names, viz.: Antigonus, in Macedonia, and Ptolemy Euergetes, in Egypt. The fourth name, however, thus remained inexplicable; while on the stone it was even more clear than the others, *Magá*. . . . It seems, therefore, more rational to refer the allusion in our edict to the former period [B.C. 260], and so far modify the theory I have lately adopted¹ on *prima facie* evidence of the treaty of Asoka with Antiochus the Great, as to transfer it to the original treaty with one of his predecessors, the first or second of the same name, Soter or Theos, of whom the former may have the preference, from his close family connexion with both Ptolemy and Magas. . . . I say nothing of the intermediate name, *Gongakena* or *Antigonus*, because I cannot be certain of its correct spelling. Antigonus Gonatus had much to do with the affairs of Egypt, but he could not well be set down among its kings.

[I again take advantage of Prof. Wilson's most elaborate revision of Prinsep's original translation of this Tablet, prefixing the Romanized variants of the different texts.]

K	sanyatam	Antiyoko	nama	yona	rāja	parancha	tena
G a	१ . . . . .	. . . . .	. . .	yona	rāja	parancha	tena
G b	१ . . . . .	. . . . .	. . .	yona	rāja	parancha	tena
K	Antiyokena	chaturō	||||	rajano	Turamara	nama	An-
G a	" "	chaptáro	" "	rājāno	Turamāyo	cha	An-
G b	" "	chattáro	" "	rājāno	Turamāyo	cha	An-

¹ [To the effect that Antiochus the Great was the monarch of the name referred to.]

K	tikona	nama	Mako	nama	Alikasunari	nama	likhichha
G a	^{igono} takana	cha	^o Magā	cha	.	.	.
G b	takana	cha	Magā	cha	.	.	.

The division of the Girnār inscriptions, numbered by Prinsep as thirteen, finds a counterpart at Kapur di Giri; but, unfortunately, it is not of a nature to supply the defects and imperfections of the Girnār tablet. As mentioned by Prinsep, the rock at Girnār is at this part so much mutilated, that it is difficult to put together the context of the entire tablet: portions of the inscription are wanting at either end of each line, especially at the beginning, but the middle portions are tolerably perfect. The rock at Kapur di Giri has not apparently suffered much mutilation, and the inscription is consequently more complete, supplying the words effaced from that at Girnār; but it is not only in this respect that it exceeds in length the Girnār inscription. There are evidently additional passages which the latter does not contain, and which intervene between what are apparently intended for the same passages in both places; on the other hand, there are several obliterations or deficiencies in the Kapur di Giri inscription where that at Girnār is entire. In collating the two, therefore, wide gaps occur without a parallel, partly owing to these respective mutilations,—partly to the additional matter at Kapur di Giri. From place to place, however, concurrent passages do occur, which leave no doubt of the general identity of the inscriptions, as will appear from the collateral copy.

It happens, however, still unfortunately, that neither the additional, nor those which are evidently identical, passages in the Kapur di Giri inscription, are for the major part to be satisfactorily deciphered. The circumstances under which the characters were transcribed sufficiently account for the disappointment. Masson has explained the impossibility of taking a fac-simile of this part of the inscription, and he was obliged after many fruitless efforts to effect his purpose, to be content with carrying off a copy only. But the position of the stone, which prevented a fac-simile from being made, was also obviously unfavourable to the making of a faithful copy; and it is not at all therefore to be wondered at, that the forms of the letters should have assumed deceptive appearances, differing consequently in different parts of the inscription, in words which there is reason to believe the same; and varying from one another in words which from one or two distinct characters are known to be identical, as for instance in *Devanam prya*, in which the latter term is generally legible, and we may therefore infer that *devanam* precedes it; but, without such a guide, it would be impossible to read *devanam*, as it presents itself in a number of different and unusual forms. Masson's copy, however, is more legible than one made by a native employed by M. Court, the use of which has been kindly allowed to the Society by Lassen. In this, very few words can be made out, even by conjecture, and with the assistance of Masson's transcript. It has not, however, been wholly unserviceable.

Prinsep has ventured to propose a continuous translation of the Thirteenth Tablet, although he admits that insulated phrases alone are intelligible. Such is the case in the Kapur di Giri inscription; and it were very unsafe to propose anything like a connected rendering, even of what is perfect, although a few words and phrases are decipherable, and may be compared with similar words and phrases in the Girnār tablet. In most of these passages, however, the reading of the original itself is conjectural only, for it will follow from the sources of imperfection described, that although a transcript has been attempted as above in Roman characters, yet no great reliance is to be placed on the greater part of it, particularly where parallel passages are not found in the Girnār inscription.

Deficiencies at the end of the seventh and beginning of the eighth line at Girnār, are rather more than adequately filled up at Kapur di Giri, and some of the additional matter is important. The name and designation, *Antiyoka nama yona Raja*, are given distinctly: why he is introduced does not very well appear, but we might venture to connect it with what precedes, and to interpret and fill up the passages thus: 'He who had obtained the alliance of men—he has been received as the friend of (me) Devanampriya: ' we have for this conjectural rendering, *Devanam priyasa*; then some unreadable letters, *sampapi* (for *samaprápi*) *yo janasa (su) sanyatam*. At Girnār we have only *yona Raja*, but no name, no Antiochus, nor any circumstance relating to him. Both inscriptions next read *parancha*, 'and afterwards;' the Girnār has then *tēna*, 'by him,' which, as no name was specified, Prinsep necessarily interpreted, 'by whom' (rather 'by him,' the Greek king). In the Kapur di Giri tablet, *tēna* refers of course to Antiochus; but, not to leave any doubt on this score, the inscription repeats the name, and gives us *tēna Antiyokēna*, 'by that Antiochus;' thus furnishing a very important illustration of the Girnār tablet. What then was done by him? by that Antiochus? this is not to be made out very distinctly; but, connected with what follows, it may be conjectured to imply that four other Greek princes were brought under subjection by him. There can be no doubt that the numeral which Prinsep read *chaptāro* is, properly, *chattāro*. There is no *p* in the Kapur di Giri inscription; it is, clearly, *chataro*, with the usual disregard of correct orthography and identification of long and short vowels. In the Girnār inscription the form is like *pt*, no doubt; but this combination, as already observed, treating of Tablet XII., is so utterly repugnant to the most characteristic feature of Pāli, that it cannot be allowed; and in this case, if the original word intended to be the Sanskrit numeral *chatvāra*, the *p* would be gratuitously inserted. The only admissible reading is *chattāro*, the regular Pāli form of the Sanskrit *chatvāra*: four indistinct marks follow the numeral in each inscription, being probably intended for figures equivalent to four. We then have the several names of the four princes remarkably distinct, and it luckily happens that M. Cour's copy is also very legible in this passage, and entirely confirms Masson's readings. The passage runs thus: *Turamara nama, Antikona nama, Mako nama, Alikasunari nama*. At Girnār the last name is wanting, there being some letters obliterated. We have also some variation in the reading, but not material, the names being there, *Turamdyo cha, Antakana cha, Magd cha*. The two inscriptions give us, no doubt, the names of four Greek princes, of whom Ptolemy, Antigonus, and Magas may be readily recognised, although, how they come into juxta-position with Antiochus on the one hand, or Alexander on the other, is only to be explained by the supposition that, although these names had from their celebrity reached the west of India, the history of the persons so named was vaguely and incorrectly known.

We shall, however, recur to the subject: at present we are only concerned with the purport of the inscription, which is unfortunately by no means distinct. We have the order, by that Antiochus four Yavana kings, were:—what? neither inscription enables us to answer: the Girnār inscription being in fact here mutilated. Prinsep, in his introductory remarks, supplying the connection conjecturally, fills up the blank by reading, 'And the Greek king besides, by whom the four kings have been induced to permit;' but there is nothing to warrant such a translation; and in the actual rendering of the passage the latter clause is omitted: we there have, 'and the Greek king, besides, by whom the kings of Egypt, Ptolemaios, Antigonus (?), and Magas, etc.', and then follows a blank. The Kapur di Giri inscription, although entire, presents characters of undetermined value, and probable inaccuracies. The

first term, *likhichha thana*, is very doubtful; the next appears to be *jayavata*, which might be rendered 'victorious,' in the instrumental case, agreeing with *Antiyokena*: *anansa* is doubtful, both as to reading and sense; *ye asa miti puna rajanti* might be rendered 'they who (the kings) become his friends, again shine (or enjoy dominion).' We may also render *eva hi yona kati yasha*, 'such, indeed, is the Yavaná become, of whom;' there then follow some indistinct characters, and the phrase seems to terminate with *miti hi kite*, 'friendship or alliance has been made.' This I admit is very conjectural, and a corrected copy or a better founded interpretation of the original may shew it to be wholly erroneous; but, in the present state of the inscriptions we may hazard the conjecture that the purport of the whole passage may be, that the four princes, after being overthrown by Antiochus, had been reconciled to him, and that an alliance had then been formed between him and the Indian prince Devapriya. There is nothing whatever to justify the supposition that Devapriya had attempted to make converts of the Greek princes, or to disseminate the doctrines and practices of Buddhism in their dominions.

The state of this transcript of the Kapur di Giri inscription is very far from satisfactory, while, from the names it records, it appears to be of great historical value. It would be very desirable to have a fac-simile carefully taken; and, as the part of the country in which it is situated is now within the reach of British influence, it might be possible, perhaps, without much difficulty, to have such a copy. In the 'Jour. As. Soc. Beng.', Feb. 1848, Capt. Cunningham mentions, in his Diary, his having visited the spot, and taken a copy of the most legible portion of the inscription;¹ he adds, however, that a proper copy could only be made by levelling the ground and building up platforms, and by white-washing the surface of the rock to bring out the sunken letters, a work of time, but which would well repay the labour.

[Prof. Wilson, it will be seen, promised to recur to the subject of the identities of the kings named in the inscription; he does so—while contesting the identity of Piyadasi and Asoka—to the following effect]:—

So that neither of these epithets (*Priyadarsana*, or *Su-darsana*), is exclusively restricted to Asoka, even if they were ever applied to him.

That they were so applied is rendered doubtful by chronological difficulties, of which it is not easy to dispose: Piyadasi appears to have lived, either at the same time with, or subsequent to, Antiochus. Could this have been the case if he was Asoka? For the determination of this question, we must investigate the date at which the two princes flourished, as far as the materials which are available will permit.

The first point to be adjusted is, which Antiochus is referred to. There are several of the name amongst the kings of the Seleucid dynasty, whose sway, commencing in Syria, extended at various times, in the early periods of their history, through Persia to the confines of India. Of these, the two first, Antiochus Soter and Antiochus Theos, were too much taken up with occurrences in Greece and in the

¹ [A lithograph, by T. Black, of Calcutta is now before me, which purports to give, under Mr. J. W. Laidlay's authority, the 'Inscription at Sháh-baz-garhi, copied by Captain A. Cunningham.' The facsimile is defective and erroneous to a marked degree. As it does not include the thirteenth tablet, it affords no aid in determining the probable orthography of the doubtful names. Major Cunningham's own version of the fifth name is quoted at the foot of p. 26.]

west of Asia, to maintain any intimate connexion with India, and it is not until the time of Antiochus the Great, the fifth Seleucid monarch, that we have any positive indication of an intercourse between India and Syria. It is recorded of this prince that he invaded India, and formed an alliance with its sovereign, named by the Greek writers, Sophagasenas, in the first member of which it requires the etymological courage of a Wilford to discover Asoka. The late Augustus Schlegel conjectured the Greek name to represent the Sanskrit, Saubhāgya sena, he whose army is attended by prosperity; but we have no such prince in Hindū tradition, and it could scarcely have been a synonyme of *Asoka*, the literal sense of which is, he who has no sorrow. Neither is Sophagasenas more like Piyadasi, and so far therefore we derive no assistance as to the identification of Antiochus. Still, with reference to the facts, and to the allusion to his victorious progress, which Tablet XIII. seems to contain, we can scarcely doubt that he was the person intended, and that the Antiochus of the inscription is Antiochus the Great, who ascended the throne, B.C. 223, and was killed, B.C. 187. The date of his eastern expedition is from B.C. 212 to B.C. 205.

There is, however, an obvious difficulty in the way of the identification from the names of the princes which are found in connexion with that of Antiochus, and which the thirteenth Tablet appears to recapitulate as those of contemporary princes, —subjugated, if the conjectural interpretation be correct, by Antiochus. With respect to one of them, Ptolemy, this is allowable, for Antiochus the Great engaged in war with Ptolemy Philopator, the fourth king of Egypt, with various success, and concluded peace with him before he undertook his expedition to Bactria and India. He therefore was contemporary with Antiochus the Great. It is, however, to be recollected that Ptolemy Philopator was preceded by three other princes of the same name, Ptolemy Soter, Ptolemy Philadelphus, and Ptolemy Euergetes,—extending through a period of rather more than a century, or from B.C. 323 to B.C. 221. These princes were frequently engaged in hostilities with the Seleucid kings of Syria, and we cannot therefore positively determine which of them is referred to in the inscription. The long continuance of the same name, however, among the kings of Egypt, as it was retained until the Roman conquest, no doubt made it familiar throughout the East, and we need not be surprised to find it at Kapur di Giri or Girnar.

The same circumstance will not account for the insertion of the name of Mako, probably Magas, for although there was such a prince, he was far removed from India, and of no particular celebrity. Magas was made ruler of Cyrene by his father-in-law, Ptolemy Soter, the first Greek king of Egypt, about B.C. 308. He had a long reign of fifty years, to B.C. 258. He was not, therefore, contemporary with Antiochus the Great, dying thirty-five years before that prince's accession. He was connected with Antiochus Soter, having married his daughter, and entered into an alliance with him against Ptolemy Philadelphus,—and this association with the names of Antiochus and Ptolemy, generally but not accurately known, may have led to his being enumerated with the two other princes of the same designation, Ptolemy Philopator, and Antiochus the Great. There was a Magas also, the brother of Philopator, but he is of no historical note, and was put to death by his brother in the beginning of his reign. The allusion is, therefore, no doubt to the Magas of Cyrene.

It is impossible to explain the juxta-position of the other two names, Antigonus and Alexander, upon any principle of chronological computation, although we can easily comprehend how the names were familiarly known. That of Alexander the Great must of course have left a durable impression, but he is antecedent to any of his generals who made themselves kings after his death. It is very unlikely that his

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son Alexander, who was not born till after his death, and from the age of three years was brought up in Macedonia, where he was murdered when only twelve years old, should be the person intended, and a greater probability would attach to an Alexander who was Satrap of Persia in the beginning of the reign of Antiochus the Great, and rebelled against him. He was defeated and killed, B.C. 223. So far therefore we have an Alexander contemporary with Antiochus, if that be thought essential; but it seems more likely that here, as in the case of Magas, the concurrence of names is no evidence of synchronism, and arises from the name being familiarly known without any exact knowledge of the persons by whom they were borne.

Such seems to be the case also with respect to Antigonus. The most celebrated of the name, Alexander's general who succeeded to the sovereignty of Phrygia and Lycia, extended his authority to the East by the defeat and death of Eumenes, and his name may thus have become known in India, although the scene of his victories over his rival was somewhat remote from the frontier, or in Persia and Media. The latter portions of his career were confined to Asia Minor and Greece, and he was killed B.C. 301. He was contemporary with the first Ptolemy, but not with Antiochus, having been killed twenty years before the accession of Antiochus Soter. We have another Antigonus, the grandson of the preceding, who was contemporary with Antiochus Soter, but his life was spent in Macedonia and Greece, and it is not likely therefore that any thing should have been known of him in India. It can only be the first Antigonus whose designation reached an Indian prince, and the mention of him in conjunction with Ptolemy, Antiochus, Magas, and Alexander, shows clearly that the chronology of the inscription was utterly at fault, if it intended to assign a contemporary existence to princes who were scattered through, at least, an interval of a century. We must look, therefore, not to dates, but to the notoriety of the names, and the probability of their having become known in India, for the identification of the persons intended. Under this view, I should refer Alexander to Alexander the Great, Antigonus to his successor, Magas to the son-in-law of Ptolemy Philadelphus, Ptolemy to either or all of the four first princes of Egypt, and Antiochus to the only one of the number who we know from classical record did visit India, and who, from the purport of the inscriptions, we may infer was known there personally,—Antiochus the Great.¹ In this case we obtain for

¹ [I append Major Cunningham's criticism on these arguments.] 'The minor difficulties of chronology, which form Prof. Wilson's last objection (*Jour. Roy. As. Soc.*, vol. xii., p. 244), are easily disposed of, for they seem to me to have arisen solely from the erroneous assumption that Priyadarsi must have been a contemporary of Antiochus the Great. In the Girnār and Kapur di Giri rock inscriptions, King Priyadarsi mentions the names of five Greek princes who were contemporary with himself. Of these four have been read with certainty—Antiochus, Ptolemy, Antigonus, and Magas; and the fifth has been conjectured to be Alexander. James Prinsep, who first read these names, assigned them to the following princes:—Antiochus II., Theos of Syria, B.C. 265—247; Ptolemy II., Philadelphus of Egypt, B.C. 285—246; Antigonus, Gonatus of Macedon, B.C. 276—243; Magas of Cyrene, B.C. 258; and with these identifications the learned of Europe have generally agreed. 'The fifth name has been read by Mr. Norris as Alexander; and if this reading is correct, we may identify this Prince with Alexander II. of Epeiros, who reigned from B.C. 272—254; but the two copies of this name, published by Mr. Norris, from facsimiles by Masson and Court, appear to me to read Ali bha Sunari, which may be intended for Ariobarzanes III., King of Pontus, who reigned from B.C. 266—240. But in either case the date of Priyadarsi inscription will be about B.C. 260—258, shortly preceding the death of Magas.'—*Bhilsa Topes*, p. 111. 'To some it may seem difficult to understand how any relations should exist between the Indian Asoka and the Greek princes of Europe and Africa; but to me it appears natural

the date of the inscription some period subsequent to B.C. 205, at which it seems very unlikely that Asoka was living.

To obviate the chronological difficulty it has been suggested that the Antiochus alluded to is not Antiochus Magnus, but Antiochus Theos, who reigned from B.C. 261 to B.C. 246, and who would therefore be contemporary with Asoka. This is no doubt true, but as intimated above, historical events are opposed to the maintenance of any friendly connexion between the princes of India and Syria during the reign of Antiochus Theos. At its very commencement he was involved in hostilities with the King of Egypt; the war continued during the greater portion of his reign, and amongst its results, were the neglect and loss of the Eastern provinces. Media and Bactria became independent principalities; and their geographical, as well as political position must have completely intercepted all communication between India and Western Asia. It is very unlikely that an Indian sovereign would have promulgated any alliance with the enemy of his immediate neighbours, and we should rather look for the names of Arsaces or Theodotus in his edicts, than that of Antiochus Theos. We cannot, therefore, upon historical grounds admit the identity of the Antiochus of the inscriptions with Antiochus Theos, any more than we can recognise an alliance between Asoka and Antiochus Magnus, as chronologically probable upon such premises as we derive from classical Pauranic, and partly Buddhist data.

If, indeed, we are guided solely by the latter, we shall render the synchronism of the two princes still more impossible. According to the Dipawanso and Maháwanso, Dharmasoka was inaugurated two hundred and eighteen years after the death of Buddha; his inauguration took place four years after his accession, and we place the latter therefore two hundred and thirteen years after the Nirván of Gautama. The date of this event was B.C. 543, and $543 - 214 = \text{B.C. } 329$; and Asoka, therefore, ascended the throne, according to the Buddhists, before the invasion, not of Antiochus, but of Alexander the Great. This, however, must be wrong, and Mr. Turnour acknowledges that the chronology of the Buddhist chronicles is here at fault; he makes the error amount to about sixty years, and conceives that it was an intentional vitiation of the chronology: with what purpose he has not explained. It is enough for us to determine that Asoka cannot have been the cotemporary of Antiochus the Great, according to the chronology either of Brahman or Buddhist. That Piyadasi was the cotemporary of Antiochus, or even posterior to him, is evident from the inscription, and therefore Piyadasi and Asoka are not one and the same person. That Asoka became a convert to Buddhism after commencing his reign as a sanguinary tyrant, may or may not be true: we have only the assertions of the Buddhists for the fact. But allowing it to be true, if Asoka was not the author of the edicts in question, no inference of their Buddhist character can be drawn from his conversion to the faith of Buddha, and the uncertain evidence afforded by their language is not rendered less equivocal by any positive proof of their having been promulgated by a prince who was a zealous patron of the doctrines of Sákyaśinha.

But who then was Piyadasi, the beloved of the gods? This is a question not easily answered. The term is evidently an epithet applied to more than one individual, and not the proper designation of any one person exclusively. We have

and obvious. Asoka's kingdom on the west was bounded by that of Antiochus; his father, Bindusára, had received missions from Antiochus, Soter, and Ptolemy Philadelphus; and as Asoka was 45 years of age when he was inaugurated, in B.C. 259, he might have conversed with both of the Greek ambassadors, Daimachos and Dionysios.—112.

no such name in any of the Brahmanical traditions, and find it in the Buddhist, as indicating a sovereign prince, to whom it could not have been applied consistently with chronological data, upon the authority of a work of the fourth century of our era. That any uncertainty with regard to its appropriation should exist, seems very incompatible with the extent of the dominions ruled over by the prince of the inscriptions, as far as we are to infer, from the sites in which they are found, as Gujarât, Katak, Behar, Dihli, and the Panjab. A monarch, to whom all India, except the extreme south, was subject, must surely have left some more positive trace of his existence than a mere epithet, complimentary to his good looks, and shared with many others of equally pleasing appearance. That such almost universal sovereignty in India was ever exercised by a single prince is extremely improbable, and it is undeniable, from the evidence of the inscriptions themselves, that they have not been sculptured, in the situations in which they occur, coterminously with the year of any individual reign. Thus, in all the rock inscriptions, the third and fourth edicts are said to be issued in the twelfth year of Piyadasi's inauguration; the fifth and eighth, in the tenth year: the two later edicts, in point of time, taking precedence of the two earlier, in the order of inscription—an utter impossibility. We can only infer, therefore, that they were simultaneously inscribed. Mr. Prinsep states, that it is so specified in the Fourteenth Tablet, but I am unable to understand the passage in that sense. That it was the case, however, is obvious, from the inverted order of the dates, and from the uniform appearance of the inscriptions. The whole must have been cut, therefore, at some subsequent period to the latest of the dates. How long subsequent, is another question of impossible solution; but it is very improbable that the rocks of Gujarât, Dhauli, and Kapur di Giri, were all engraved at the same time. The operation must have been spread over some years, and it is not likely that it was subsequent to the date of their reputed author, if he ever had a real existence. It seems, however, not improbable, that the rulers of the several countries, or influential religious persons, adopted the shadow of a name, to give authority to the promulgation of edicts intended to reform the immoral practices of the people, and for that purpose repeated documents which had acquired popular celebrity in some particular locality not yet ascertained.

From these [and other] considerations, I have been compelled to withhold my unqualified assent to the confident opinions that have been entertained respecting the object and origin of the inscriptions. Without denying the possibility of their being intended to disseminate Buddhism, and their emanating from the Maurya prince Asoka, there are difficulties in the way of both conclusions, which, to say the least, render such an attribution extremely uncertain.

[I have allowed Prof. Wilson to state his doubts and difficulties at greater length than I should have conceded to him, had I not been prepared to contest his leading inferences.

I do not, however, design to enter upon any critical examination of the minor evidences and coincidences the Professor has sought to reconcile; as, with a doubtful text, an avowedly imperfect interpretation, with one of the historical names only partially legible and dates conflicting *inter se*, the most elaborate solution could not but fail to prove unsatisfactory. And further,

I am disposed to accept, with added force, all that portion of the Professor's deductions which implies crass ignorance of Syrian and Grecian events on the part of the compilers of Piyadasi's Edicts. Still, there are some obvious facts upon which we may fairly speculate. It is clear that Antiochus, as spoken of in these inscriptions, was, at the moment of their composition, the most prominent personage of the western world within the ken of the Indian court. That Antiochus *εὐδός* is the sovereign alluded to many miscellaneous items of evidence, now available, tend to show. These points being admitted, it would seem to follow, from the expressions made use of in the second tablet, that the defection of the Bactrians under Diodotus—assigned to 250, B.C.—had not, up to this time, developed itself. The allusion to the four kings it is less easy to explain, nor is it obvious why that particular number should have been selected. As the text does not enable us to say what position these kings held in reference to the more influential Antiochus, speculations on this head must, of course, be next to futile. Certainly the satisfactory explanation of the coincidences of the given names, with any combination of the then-existing monarchical distributions, remains to be accomplished: whether the record aimed at a mere vague selection of the more generally known Greek names to complete the list, or whether, as is just possible, there was some indefinite remembrance of the quadruple alliance (311, B.C.), of which Seleucus was the subordinate confederate and local representative during his Indian expedition, and of the eastern rights and titles of which Antiochus became the apparent heritor, it would be rash to assert; but it is clear that the designations of two of the parties to this league open the list, and whether MAGAS represents the Cyrenian, or some other of the name, or stands as the curtailed corruption of that of Lysimachus, while *Ali Kasunari*¹ may

¹ Masson's eye-copy of the Kapur di Giri inscription may be variously read, *Ali Kasanari*, *Ali Kasadari*, or, doubtfully, *Ali Kshasanari*. The initial letter is very uncertain, and might almost be read as a *G*. The third letter differs materially from the ordinary *Bh's*, and must either be the simple *K* of Court's copy or some compound of *Sh*, under Masson's representation.

chance to do duty for Alexander, Cassander, or some living potentate whose cognomen had but lately reached Indian ears, we need scarcely stop to inquire.

In his first paper¹ on the Girnâr, Dhaulî, and Kapur di Giri edicts, Prof. Wilson expressed an opinion that, 'although the tenor of the inscriptions was not incompatible with a leaning to the religion of Buddha, yet the total absence of any reference to the peculiarities of the Buddhist system, left some uncertainty with regard to the actual creed of the râja, and his intimate connection with the followers of Buddha.'

In a subsequent article on the Bhabra inscription² the Professor frankly admits that, 'although the text is not without its difficulties, yet there is enough sufficiently indisputable to establish the fact, that Priyadasi, whoever he may have been, was a follower of Buddha.'³ Our leading Orientalist, it will be seen, still hesitates, therefore, to admit the identity of Priyadasi and Asoka. With all possible deference to so high an authority, I am bound to avow that I see no difficulty whatever in the concession. We may stop

¹ 'Jour. Roy. As. Soc.', vol. xii. (1849), cited nearly in extenso above.

² 'Jour. Roy. As. Soc.', vol. xvii. (1856), p. 357. *Supra cit.*

³ The inscription opens thus: 'Priyadasi, the king, to the venerable assembly of Mâgadha, commands the infliction of little pain, and indulgence to animals. It is verily known, I proclaim, to what extent my respect and favor (are placed) in Buddha, in the law, and in the assembly. Whatsoever (words) have been spoken by the divine Buddha, they have been well said,' etc.—See also 'Jour. As. Soc. Beng.' 1840.—Lassen 'Indische Alt.' ii. 221. [I annex to these notes on the Bhabra inscriptions some interesting speculations of Bournouf's, as to the nature of the monument itself, and the probable purpose for which it was shaped.] 'C'est, ainsi que l'a bien vu M. Kittoe, une missive adressée par le roi Priyadasi à l'Assemblée des Religieux réunis à Pâtaliputra, capitale du Magadha, pour la suppression des schismes qui s'élevaient élevés parmi les Religieux bouddhistes, assemblée qui, selon le Mahāvamsa, eut lieu la dix-septième année du règne d'Açôka. La forme est en elle-même très-remarquable. L'inscription, en effet, n'est pas gravée comme les autres monuments de ce genre qui portent le nom de Priyadasi, soit sur une colonne monolithe, soit sur la surface d'un rocher adhérent aux flancs d'une montagne. Elle est écrite, et très-soigneusement, sur un bloc détaché de granit qui n'est ni d'un volume ni d'un poids considérable, n'ayant que deux pieds Anglais sur deux de ses dimensions, et un pied et demi sur la troisième. Ce bloc, de forme irrégulière, peut être aisément transporté. . . . C'est une lettre que le roi a fait graver sur la pierre avec l'intention avouée d'assurer la durée de cette expression si claire de son orthodoxie, peut-être aussi avec celle de faire transporter facilement et sûrement cette singulière missive dans les diverses parties de l'Inde où se trouvaient des Religieux . . . L'inscription est écrite dans l'ancien dialecte Mâgadhi.'—'Le Lotus de la bonne Loi,' p. 727, 728.



short of absolute and definite proof, that Asoka enunciated his edicts under the designation of Priyadasi, 'the beloved of the gods;' but all legitimate induction tends to justify the association, which is contested by no other inquirer.¹ To assert that the edicts themselves do not accord in spirit with the exclusive intolerance attributed to Asoka by his Buddhist successors, is merely to show that they misrepresented his aims and desires in this respect, as they palpably misinterpreted and altered many of the original tenets of the religion itself.

As a fitting conclusion to these commentaries, I append Prof. Wilson's remarks on the language of the edicts:—]

The language itself is a kind of Pāli, offering for the greater portion of the words forms analogous to those which are modelled by the rules of the Pāli grammar still in use. There are, however, many differences, some of which arise from a closer adherence to Sanskrit, others from possible local peculiarities, indicating a yet unsettled state of the language. It is observed by Mr. Prinsep, when speaking of the Lāt inscriptions, "The language differs from every existing written idiom, and is as it were intermediate between the Sanskrit and the Pāli." The nouns and particles in general follow the Pāli structure; the verbs are more frequently nearer to the Sanskrit forms; but in neither, any more than in grammatical Pāli, is there any great dissimilarity from Sanskrit. It is curious that the Kapur di Giri inscription departs less from the Sanskrit than the others, retaining some compound consonants, as *pr* in *priya* instead of *Piya*; and having the representatives of the three sibilants of the Devanāgarī alphabet, while the others, as in Pāli, have but one sibilant: on the other hand, the Kapur di Giri inscription omits the vowels to a much greater extent, and rarely distinguishes between the long and short vowels, peculiarities perhaps not unconnected with the Semitic character of its alphabet.

The exact determination of the differences and agreements of the inscriptions with Pāli on the one hand, and Sanskrit on the other, would require a laborious analysis of the whole, and would be scarcely worth the pains, as the differences from either would, no doubt, prove to be comparatively few and unimportant, and we may be content to consider the language as Pāli, not yet perfected in its grammatical structure, and deviating in no important respect from Sanskrit. Pāli is the language of the writings of the Buddhists of Ava, Siam, and Ceylon; therefore it is concluded it was the language of the Buddhists of Upper India, when the inscriptions were engraved, and consequently they are of Buddhist origin. This, however, admits of question; for although the Buddhist authorities assert that Sakya Sinha and his successors taught in Pāli, and that a Pāli grammar was compiled in his day; yet, on

¹ Turnour, 'Jour. As. Soc. Beng.', vi. 1050, and vii. 930; Lassen, ii. 271; Burnouf, i. 633, ii. 778; Cunningham, 'Bhilsa Topes,' 108; Sykes, 'Jour. Roy. As. Soc.', vi. 460; Müller, 'Buddhism and Buddhist Pilgrims,' p. 23.

the other hand they affirm, that the doctrines of Buddha were long taught orally only, and were not committed to writing for four centuries after his death, or until B.C. 153, a date, no doubt, subsequent to that of the inscriptions. In fact, the principal authorities of the Cingalese Buddhists appear to have existed in Cingalese, and to have been translated into Pāli only in the fifth century after Christ.

According to M. Burnouf and Mr. Hodgson, the earliest Buddhist writings were not Pāli but Sanskrit, and they were translated by the Northern Buddhists into their own languages, Mongol and Tibetan. It does not appear that they have any Pāli books. The Chinese have obtained their writings from both quarters, and they probably have Pāli works brought from Ava or Ceylon. They have also, according to M. Burnouf, translations of the same Sanskrit works that are known in the North. It is by no means established, therefore, that Pāli was the sacred language of the Buddhists at the period of the inscriptions, and its use constitutes no conclusive proof of their Buddhist origin. It seems more likely that it was adopted as being the spoken language of that part of India where Piyadasi resided, and was selected for his edicts, that they might be intelligible to the people. Hence, also, the employment of different alphabets, that of Kapur di Giri being the alphabet current in Afghanistan and Bactria, as we know from the Græco-Bactrian coins. The use of the provincial or local alphabet was evidently designed for the convenience of those to whom it was familiar, while the ancient form of the Devanāgarī was that employed in Hindūstān as being there in general use. The popular currency of the language, admitting that it might have been the spoken dialect of the north-west of India, would be more likely to prevent, than to recommend its use as a 'sacred' language, and its being applied to such a purpose by the Southern Buddhists was in some degree probably owing to their being as a people ignorant of it, and it would then assume in their eyes a sanctity which as a spoken dialect it was not likely to possess. At the same time, we can scarcely suppose that the language of the inscriptions was understood in all the countries where they have been discovered, beyond the Indus, at Dihli, in Behar, in Orissa, and Gujarāt, where we know that very different dialects, however largely borrowing from a common source, at present prevail. Neither is it likely that edicts intended to regulate the moral conduct of the people at large should have been intelligible only to Buddhist priests, or should have been perpetuated on pillars and rocks solely for their edification. We may therefore recognise it as an actually existent form of speech in some part of India, and might admit the testimony of its origin given by the Buddhists themselves—by whom it is always identified with the language of Magadha or Behar,¹ the scene of Sakya Sinha's first teaching—but that there are several differences between it and the Māgadhi, as laid down in Prakrit grammars, and as it occurs in Jain writings. It is, as Messrs. Burnouf and Lassen remark, still nearer to Sanskrit,² and may have prevailed more to the north than Behar, or in the upper part of the Doab, and in the Panjāb, being more analogous to the Sauraseni dialect, the language of Mathura and Dihli, although not differing from the dialect of Behar to such an extent as not to be intelligible to those to whom Sakya and his successors addressed themselves. The language of the inscriptions, then, although necessarily that of their date, and probably that in which the first propagators of Buddhism expounded their doctrines, seems to have been rather the spoken language of the people in Upper India, than a form of speech peculiar to a

¹ Turnour's 'Introduction to the Mahawanso,' xxii., *Sā Māgadhi mula bhāsa*.

² *Essai sur le Pāli*, p. 187, 'La Palie était presque identique à l'idiome sacré des Brahmanes, parce qu'elle en dérivait immédiatement.'



class of religionists, or a sacred language, and its use in the edicts of Piyadasi, although not incompatible with their Buddhist origin, cannot be accepted as a conclusive proof that they originated from any peculiar form of religious belief.¹

[In a subsequent paper 'on Buddha and Buddhism' (J.R.A.S., xvi. 229), Professor Wilson enters more comprehensively into the linguistic question touched upon in the above note: the following extracts will put the reader in possession of that author's present view in regard to the comparative antiquity of the use of Sanskrit and Pāli¹ in the Buddhist Scriptures:—

The great body of the Buddhist writings consists avowedly of translations; the Tibetan, Mongolian, Chinese, Cingalese, Burman, and Siamese books, are all declaredly translations of works written in the language of India—that which is commonly called *Fan* or more correctly *Fan-lan-mo*, 'or the language of the Brahmins;' and then comes the question, to what language does that term apply? Does it mean Sanskrit, or does it mean Pāli, involving also the question of the priority and originality of the works written in those languages respectively; the Sanskrit works as they have come into our hands being found almost exclusively in Nepāl, those in Pāli being obtained chiefly from Ceylon and Ava. Until very lately, the language designated by the Chinese *Fan* was enveloped in some uncertainty. . . . The mystery, however, is now cleared up. In the life and travels of Hwan Tsang, written by two of his scholars and translated from the Chinese by M. Julien, the matter is placed beyond all dispute by the description and by the examples which the Chinese traveller gives of the construction of the *Fan* language, in which he was himself a proficient. . . . We learn from him. . . . All this is Sanskrit, and what is more to the point, it is not Māgadhi, the proper designation of the dialect termed in the south, Pāli. . . . Hwan Tsang also correctly adds that the grammar in use in India, in his time, was the work of a Brahman of the north, a native of Tula or Sālātula, named *Po-mi-ni*, or Pānini, the well-known Sanskrit grammarian. . . . The Buddhist authorities of India proper, then, were undeniably Sanskrit; those of Ceylon might have been Pāli or Māgadhi; were they synchronous with the Sanskrit books, or were they older, or were they younger, more ancient, or more modern? . . . We may be satisfied, therefore, that the principal Sanskrit authorities which we still possess were composed by the beginning of the Christian era at least; how much earlier is less easily determined. . . .

We may consider it, then, established upon the most probable evidence, that the chief Sanskrit authorities of the Buddhists still in our possession were written, at the latest, from a century and a half before, to as much after, the era of Christianity.

Now what is the case with the Pāli authorities of the south? . . . The principal Pāli works of the south, are, therefore, of a period considerably subsequent to the Sanskrit Buddhistical writings of India proper, and date only from the fifth century after Christ.

¹ Pāli, means—original text, regularity.—Maha. Introd. xxii.

Professor Max Müller seems to concur in these deductions, judging from his remark :—

‘After Buddhism had been introduced into China, the first care of its teachers was to translate the sacred works from the Sanskrit, in which they were originally written, into Chinese.’—‘Buddhism and Buddhist Pilgrims,’ p. 24. London, 1857.

Col. Sykes, however, I observe, still considers that he has evidence to show that ‘the books taken from India to China by the Chinese travellers between the fourth and seventh centuries were equally in Páli’ (*Times*, May 21, 1857), basing his argument to that end upon M. Gutzlaff’s catalogue of ‘Chinese Buddhistical Works,’ published in vol. ix. of the ‘*Jour. Roy. As. Soc.*’, p. 199 (1848).

XVIII.—RÉSUMÉ OF INDIAN PÁLÍ ALPHABETS.

[In continuation of the subject treated of in the supplement to Art. XVII., p. 8, I extract the substance of Prinsep's 'Completion of the Páli Alphabet,' which the decipherment of the Girnár text of the edicts of Asoka enabled him to verify.]

First, however, I must take a review of the Girnár alphabet, for it is evident that it contains many additions to the more simple elements of the pillars. These additions, to which only I have time to allude, will be found to complete the alphabet to the existing standard of the Páli of Ceylon.

The most remarkable change observable in the alphabet has already been noticed in my paper of last June, namely, the substitution of the letter *l* for *ṛ* in all words now written with an *r* in Sanskrit, but on the pillars spelt with an *l*, as *ṛṣṇ* *ṛṣṇ*, etc., now corrected to *ṛṣṇ* *ṛṣṇ* *rāja*, *dasaratha*, etc. Although there are many words in the Sanskrit in which the use of the *l* and *r* is indifferent, still the invariable employment of the former liquid, does not appear to have been ascribed to any of the numerous Prákrits or even the Apabhraṅsas, by the Sanskrit grammarians.

Of other letters made known by the Girnár tablets, we may notice first in order the *ṭ* or *gh*, which can no longer be denied a place, or be confounded with any other letter, because it now occurs in the well known word *gharistāni* (S. *grihastāni*), and in *megha*, *ghara*, *ghāta*, etc., of the Kalinga and Sainhadri inscriptions. These words, it must be observed, occur only in those tablets of the Katak inscription wherein the letter *ṭ* is used, and which so far resemble in dialect those of Girnár. The orthography of *grihastāni* on the pillars is *giriṭhāni*. It does not therefore follow necessarily, though there is every probability thereof, that the *g* is never used for *gh*; but when we find the aspirate

present in other words of the same monuments, such as *ghanti*, *sanghathasi*, etc., we are bound not unnecessarily to aspirate the simple *g*, where it can be read without doing so.




The nasal of the first class of consonants, or gutturals, has not been yet recovered, because its place is generally supplied by the *anuswara*; but in one or two places I think the ङ may be traced in its primitive form of ङ: at any rate it may be safely *constructed* so, from the analogy of the form in No. 2 alphabet ङ also found on the coins in the name *Simha vikrama* (written sometimes *singha*), and from the more modern form of the Tibetan ङ *ng*.







The letter *jh* झ, is of rare occurrence, even in the Sanskrit. It is not therefore to be wondered at, that we should be tardy of discovering it in the ancient alphabet. Yet in Pāli this letter takes the place of the Sanskrit झ in *madhya*, *madhyama*, 'middle,' and perhaps of *rj* in *nirjita* and of *rdy* and *ryy* and other similar compounds which in pronunciation assimilate to *jh*; and it is thus more likely to be found in a Pāli than a Sanskrit monument. On my first review of the pillar alphabet, I was inclined to look upon the letter ञ as *jh*, from its occurrence in the word ञमज्झिमा *majjhima*, coupled with *ukasa* and *gevaya*, domestics and ascetics, but it seemed better explained by *ri* in other places. A similar expression in one of the Gīrnār tablets again leads me to consider it as *jh*, viz.: 'sāṅkhitena, majjhamaṇa, viṭṭitena,' where the central word is written ञमज्झिमा both in the Gīrnār and in the Dhauḷi versions of the concluding paragraph. Again, in the pillars it is generally inflected with the *i* or the *ā* vowel mark, which could not be the case with *ri*; and lastly, it bears considerable affinity to the Bengali झ *jh* which also resembles the *ri* of the same alphabet; I therefore now pronounce ञ without hesitation to be a *jh*; and I must modify former readings accordingly.¹



The *n* of the second class, or palatials, is an acquisition upon which there is no room to doubt. It is a peculiarity in the Pāli language that this letter, which has the pronunciation of *ny*, both supplies the place of the Sanskrit compound letter *jn* in such words as *raṇṇa* राज्ञः




¹ This it is not difficult to accomplish: ex. gr. in the western tablet of the Feroz lāt, *ndsantan nijhipayitā dānandahanti*, may be Sanskritized as follows: नाशतंनिर्ध्या पायित्वा दानं दास्यन्ति, 'expelling the murderer (from the town or community) they shall give him an alms.' And in the edict regarding animals,—*ta se saṇḍe nejjāpayitaviye*—'such while life remains shall not be abandoned,' उज्झापयितव्यः and, in the last tablet, for *dhamma niyame nijhayitā bhuye*, read निर्जयभवेत् 'the rules of dharma shall be invincible.'

Of the *bh* I would merely take this opportunity of noticing that I have discovered the period and cause of the two very opposite forms of this letter which are found in later alphabets, as for instance the Mahratta *bh* and the Tibetan *bh* (which agrees with the Devanāgarī or Kutila of the 10th century) and have proved them both to descend from the original *ṛ*; the Mahratta may be said to follow naturally

from the Sainhadri form; the other I have traced on the Saurashtra coins of Skanda and Kumara Gupta, where sometimes the one and sometimes the other form is employed, the latter being the natural course followed by the pen in imitating the sculptured letter *n*, beginning at the top, viz. : , whence would gradually follow , and  with the headstroke, common to all the modern characters.

The Pālī contains but one *s*. We cannot, therefore, expect to find in our ancient alphabet the prototype of either the Sanskrit  or . Of these letters I only notice the early forms, because I have inserted them in the accompanying lithographed plate. The modern form of  would seem to be derived from the  of the Samudragupta, or No. 2 alphabet, where again it might be presumed that it was introduced as a trifling modification of the letter , or *s*,—in fact, by closing the outer stroke or doing the same thing to this as was done to the *p*, to have the effect of duplication or aspiration. Or, it may be more proper to consider it a *written* modification of the more ancient form  found on the copper-plate grants of the third century dug up in the Gujarāt peninsula, whence the transition is more evident and palpable to the various Pālī and Sinhalese forms, the Cashmere form and even the modern Nāgarī and Bengālī.

It is not so easy to trace the origin of the *tālība sha*, , in the old alphabet, but there is plausible reason to suppose that this was originally merely the *murdina* or cerebral *s* , turned in an opposite direction, invented to denote another modification of the sibilant required in the refinement of the Sanskrit alphabet. In the oldest Gujarātī plates, these are written with simple linear marks in the middle, and exactly the same structure is retained in the square Pālī alphabet or stone letter of Barma, except that the stroke in the centre is contracted into a dot; further, they are merely rounded in the modern Burmese for the facility of writing. In no other alphabets that I know of are the analogies to the original type so faithfully preserved as to shew that these two sibilants were originally the same letter reversed in position, a mode frequently adopted, as I have had occasion to notice before, in Indian alphabets, to represent slight modifications in sound (see vol. vi. p. 475-6.)

The most ancient Sanskrit form, however, of the *tālība śh* is one I have just discovered on a genuine inscription of the time of Chandragupta [Sāh Inscription]. This type is evidently the original of the form so common on early Hindu coins and inscriptions, whence are directly descended the Tibetan , the Bengālī , and the modern Nāgarī , which heretofore presented a kind of anomaly in the derivation of our alphabetical symbols.



Having thus recovered the complete, and, as I consider it, the primeval alphabet of the Indian languages, I have arranged in the accompanying plate the changes each letter has undergone in successive centuries, as deduced from absolute records on copper or stone. The table furnishes a curious species of palæographic chronometer, by which any ancient monument may be assigned with considerable accuracy to the period at which it was written, even though it possess no actual date.

I begin with the sixth century before the Christian era, because I suppose that the alphabet which we possess, as used by the Buddhists of a couple of centuries later, was that in which their sacred works had been written by the contemporaries of Buddha himself, who died in the year 543 B.C.

What in some measure confirms this hypothesis is, that the Sanskrit character of the third century before Christ (of which I have introduced a specimen in the plate from the genuine document above alluded to), differs only so much from the original form as the habits of a class of writers distinct in religion and more refined in language might naturally introduce;—just as we afterwards find an equal degree of modification from the type of Asoka's time, in the Sanskrit alphabet of five centuries later, on the pillars.

The Asoka alphabet (the Sanskrit one) agrees very closely with that of our Sauráshtra coins, which may thence be pronounced to be anterior to the Gupta series. The Gujarát plates, dated in the third century of the Samvat era, differ but little from the Allahábád pillar or

Samudragupta inscription, but that little is all in favour of their superior antiquity.

Of the more recent alphabets it is unnecessary to say anything. The Tibetan is acknowledged to be of the seventh century. The Kuṭila alphabet is taken from the inscription sent down in facsimile by Col. Stacy from Bareilī;—we learn thence that the artist was of Kanauj; and we see that the Bengālī, which was drawn from the same focus of learning nearly a century afterwards, does not differ more from it than the modifications it has undergone since it was domiciled in the lower provinces will explain;—indeed, all old Sanskrit inscriptions from Benáres to Katak differ only from the Kuṭila type in having the triangular loop ळ, instead of the round one ळ.

A hundred other modifications of the primitive character might be easily introduced were I to travel southward or to cross to Ava or Ceylon; but I purposely avoid swelling the table, and include only those epochas of the Indian alphabet which can now be proved from undeniable monuments. On a former occasion,¹ the Amara-vati, Hala Canara, and Talinga alphabets were traced to the Gupta as their prototype, and thus might others be deduced; but another opportunity must be sought of placing the whole in a comprehensive table.

In conclusion, I may again regret that our printers did not take for their standard the form that would have served to blend the Bengālī and the Hindī into a common system!

[Prinsep's observations introductory to his Chronological

¹ 'Jour. As. Soc., Beng.', vol. vi., p. 219 (March, 1837).



MODIFICATIONS OF THE SANSKRIT ALPHABET.

VOWELS.

INITIALS

MEDIALS

a ā ī ī u ū r̥ r̄ m̐ e ai o au am ah

ka k̄a gi gh̄i ch̄i ch̄h̄a kr̄i

de dh̄ai mo maṇ sya

SL
SRI

1. FIFTH CENT. B.C.

ॠ ॡ: ॢ ॣ । ॥

+ १ २ ३ ४

५ ६ ७ ८

2. CENT. B.C.?

ॠ ॡ: ॢ ॣ । ॥

+ १ २ ३ ४

५ ६ ७ ८

3. THIRD CENT. B.C.

ॠ ॡ: ॢ ॣ । ॥

+ १ २ ३ ४

५ ६ ७ ८

4. SECOND CENT. A.D.

ॠ ॡ: ॢ ॣ । ॥

+ १ २ ३ ४

५ ६ ७ ८

also

5. FIFTH CENT. A.D.

ॠ ॡ: ॢ ॣ । ॥

+ १ २ ३ ४

५ ६ ७ ८

6. SEVENTH CENT. A.D.

ॠ ॡ: ॢ ॣ । ॥

+ १ २ ३ ४

५ ६ ७ ८

7. NINTH CENT. A.D.

ॠ ॡ: ॢ ॣ । ॥

+ १ २ ३ ४

५ ६ ७ ८

8. TENTH CENT. A.D.

ॠ ॡ: ॢ ॣ । ॥

+ १ २ ३ ४

५ ६ ७ ८

9. MODERN

अ आ इ ई उ ऊ ऋ ॠ ए ऐ ओ औ

क का गि खी च छ ज

ट ठ ड ढ ण

SQUARE PALI

अ आ इ ई उ ऊ ऋ ॠ ए ऐ ओ औ

क का गि खी च छ ज

ट ठ ड ढ ण

after J. Prinsep.



Table of Alphabets appear to have been designedly brief, as the several series had already been freely examined and desecanted upon in the occasional Essays which had from time to time been devoted to the independent illustration of each. The definition of almost every letter was now an accepted fact, and under the treatment of Prinsep's practised eye and ready hand, each form might be compared in its multiple transitions and ramifications, by the veriest tyro in Indian Palæography. I have copied, *literatim*—in pl. xxxvii., xxxviii.—his original synopsis; but as his labours in elucidation of these, and other cognate alphabets, were detached and scattered over many volumes and numbers of the Journal he so long and efficiently edited, I have taken advantage of the facilities afforded by the imitative faculty of our German neighbours, who have reproduced, in movable types, these and some further varieties of the local characters first deciphered by my author,—to introduce into a printed table many of the older forms omitted in the lithograph; and I have further profited by the progress of type-founding, to add to the general series certain provincial alphabets, which illustrate the literal changes incident to independent naturalization, as well as those due to epochal departure from the parent stock.

It will be seen from this observation, that I have ventured to differ from my elsewhere usually accepted authority; but in this case, his unvarying frankness and candour have of themselves paved the way for my justification, and I doubt not that, had his intellect been spared to us, he would himself have been prompt to reduce to a more consistent and mature theory, the imperfect hypothesis somewhat hastily enunciated on the initiatory publication of these fac-similes.

The general subject of the rise and transitional development of Indian alphabets spreads itself over various sections of research, and requires to be considered from different points of view, the more prominent of which I will endeavour to recapitulate as concisely as possible.

I. Regarding the probable date of the earliest use of the type of character, of which Asoka's edicts present us with the first extant example, Prinsep hazarded an opinion that two centuries of anterior currency might fairly be assigned to that style of writing. This idea pre-supposed somewhat of an exclusively sacred character, as pertaining to the alphabet; but by no means implied that the literal series did not pre-exist in an earlier or less perfect form. A conjectural limit of this description may of course be indefinitely extended or contracted, but I myself should be disposed to enlarge considerably the period of the previous culture of so perfect and widely-spread a system of alphabetical expression.¹

II. As respects the derivation of the literal series, Prinsep had clearly a leaning towards associating it with the Greek, grounded upon the similarity and almost identity of some of the forms of each, the phonetic values even of which fell into appropriate accord. That these similitudes exist there can be no doubt, but not in sufficient numbers or degree to authorize an inference that the one system borrowed directly from the other. Prof. Weber, following out Prinsep's idea in another direction, has sought to establish a Phœnician origin for the Indian alphabets.² This theory I regard as altogether untenable, for we not only have to get rid of the inversion of the direction of the writing—sufficiently intelligible in the case of the Greek derivative from that stock—but we have to concede a much larger amount of faith to fanciful identities of form; and lastly, we have to place this excellently contrived alphabet in juxtaposition

¹ Huen Thsang gives the following account of the origin and spread of the Indian alphabet:—"Les caractères de l'écriture ont été inventés par le dieu Fan (Brahmā) et, depuis l'origine, leur forme s'est transmise de siècle en siècle. Elle se compose de quarante-sept signes, qui s'assemblent et se combinent suivant l'objet ou la chose qu'on veut exprimer. Elle s'est répandue et s'est divisée en diverses branches. Sa source, s'étant élargie par degrés, elle s'est accommodée aux usages des pays et aux besoins des hommes, et n'a éprouvé que de légères modifications. En général, elle ne s'est pas sensiblement écartée de son origine. C'est surtout dans l'Inde centrale qu'elle est nette et correcte."—"Mémoires, etc.," p. 72.

² Ueber den Semitischen Ursprung des indischen Alphabetes.—"Zeitschrift," 1856, p. 389.

and contrast with a system of writing manifestly claiming a quasi-Semitic parentage, but as imperfect and ill-adapted for the expression of Indian languages as it is possible to conceive, which we find in concurrent use in the contiguous provinces of Northern India. Certainly, to judge by internal evidence, the Pālī alphabet of Asoka's day bears every impress of indigenous organization and local maturation under the special needs and requirements of the speech it was designed to convey. Though, amid the marvels that are daily coming to light in regard to the march of languages and the varieties of the symbols employed to record the ancient tongues, it might be possible to concede so much of identity to the two sets of characters as a common but indefinitely remote starting point might be held to imply.¹

III. Was the Pālī alphabet sacred or profane? classic or vernacular? monumental or popular? The answer to these queries must, I think, be decidedly against its exclusive devotion to the former, in any case; it will be safer to say that, up to a certain period, it was employed both for one and the other, and stood as the sole medium of graphic communication. This primitive character may well have proved sufficient for all purposes of record, so long as the language it was called upon to embody remained as simple as that for expression of which we may suppose it to have been originally designed

¹ [M. Barthélemy St. Hilaire, in a review ('Journal des Savants,' January, 1857), of the valuable work of M. E. Renan, on the Semitic Languages (Paris, 1855), enters into an examination of the relative claims to priority of the Indian and Phœnician alphabets. His remarks on the remote antiquity and independent and spontaneous elaboration of the Indian alphabet are sound, but the general argument is marred by a want of due discrimination between the Pālī and Sanskrit influences, and is deficient in all reference to the co-existent Semitic system of writing of the northern provinces. Though I do not concur in any conclusion that one alphabet must necessarily have been derived from the other, I append M. St. Hilaire's opinion on the question as it stands between the two :—"Je ne vois pas qu'il repugne à la raison que le système le plus parfait de l'alphabet soit aussi le plus ancien. L'alphabet sémitique n'est pas précisément plus simple, quoique moitié plus court; il est, à vrai dire, moins complet. Pour ma part, je comprends mieux les Sémites recevant de troisième ou quatrième main l'alphabet indien, et l'adaptant à leur usage, en le réduisant de moitié et en le mutilant, que je ne comprends les Indiens recevant cet alphabet informe et confus et le portant à la perfection que nous savons."—p. 52.]

and adapted. On the introduction of the Sanskrit element, it was necessarily subjected to previously-needless combinations, and under this and other processes perhaps lost some of the stiffness of outline, which it may, nevertheless, have retained together with its original literal simplicity among the vulgar,¹ even in the presence of an improved style of writing, suited for more polished literature; as in the existing orthography of Hindī, contrasted with the elaboration of Sanskrit alphabetical definitions.² Prinsep

¹ Major Cunningham speaks of 'the extremely rare use of compound letters' in the Buddhist legends engraved on the Bhilsa Topes. He remarks, 'only three instances occur throughout all these inscriptions; and they are certainly exceptions to the common practice of Asoka's age, which adhered to the simplest Pāli forms.'—'Bhilsa Topes,' p. 268.

² [I have elsewhere noticed certain evidences bearing on this question, which I may append in further illustration of my present argument]: 'I imagine it must be conceded, whether on the indications afforded by inscriptions, coins, or Buddhist relics, that the ancient Pāli or Māgadhi alphabet had once a very extended currency, and likewise that for a lengthened period it retained its separate identity. It occurs in Asoka's edicts at Dihli,^a Allahābād, Matia, Bakra, Dhauli, and Gīrnār; its appearance in these several localities^b would, *prima facie*, imply, either that it was intelligible to the people at large throughout the circle embraced within these geographical boundaries, or that it was the recognized sacred alphabet of Buddhism: opposed entirely to the latter supposition is the departure from its use in the Kapur di Giri text of the edict itself, and the modification the language is seen to have been subjected to in some of the Pāli transcripts, to meet apparently the local dialects of each site.' [I do not imply from this that the edicts were ordinarily designed to be within reach of the vision of the people, as was the case with the Greek tables, even if it was expected that the literary cultivation of the population at large was sufficient to create many readers.] "On coins, the characters can scarcely be thought to hold any religious signification, but the available medallary testimony contributes largely to the inference that these characters formed the ordinary medium of record in the majority of the states included within the limits above adverted to. In this alphabet exclusively are expressed the legends of numerous series of coins of purely local type,^c its characters are found associated on the one part with the Greek of Agathocles and Pantaleon,^d and its phonetic signs are conjoined with counterpart Arian legends on certain classes of the Behat coins.^e The Bud-

^a Of the two stone pillars at Dihli, one was moved down from near Khizrābād, at the foot of the Himalayas—the other was taken from Mirat—'Jour. Arch. Soc. Delhi,' p. 70, 1850 [vol. i., p. 324.]

^b Other inscriptions in this character occur at—1. Sanchi—'Jour. As. Soc. Beng.', vol. vi., pl. xxvii., p. 461, and vol. vii. pl. lxxiii., p. 562; 2. Gya—Caves, 'Jour. As. Soc. Beng.', vol. vi., pl. xxxv., Nos. 2 and 3, p. 676; these are of the epoch of Dasaratha, who followed Suyasa, the immediate successor of Asoka! 3. Katak—Udayagiri Caves, 'Jour. As. Soc. Beng.', vol. vi., pl. liv., p. 1072; 4. Katak—Khandagiri Rock, 'Jour. As. Soc. Beng.', vol. vi., pl. lviii., p. 1080. And we may now add a but slightly modified form of writing as discovered in the Mehentélé inscription in Ceylon. 'Jour. Roy. As. Soc.', vol. xiii., p. 175.

^c 'Jour. As. Soc., Beng.', vol. iv., pl. x. and xxxv., and vol. vii., pl. lx. and lxi.

^d 'Jour. As. Soc., Beng.', vol. v., pl. xxxv., p. 8 and 9; 'Ariana Antiqua,' pl. vi., pp. 7, 8, 9, and 11.

^e 'Jour. As. Soc., Beng.', vol. vii., pl. xxxii. [i. 203.]



himself has originated the inquiry as to how much a change of alphabetical symbols might be incident to the use of a more perfect language as compared with the necessities of the local Pālī; and to this I am disposed to attach even more weight than he apparently contemplated; the leading conception was suggested to him by the advance displayed in this direction by the Sāh inscription at Gīrnār, which, because it contained the name of Asoka, he conceived should be attributed to the reign of that monarch. He was content, therefore, to accept this system of writing as absolutely contemporaneous with that employed in the public edicts of the early patron of Buddhism. However, we need not now claim so distinct a concession as this, as Asoka's name is only made use of in the subsequent monument, as a whilom benefactor in a similar cause, for which the Sāh king claims credit at a later day.

IV. Among other causes that are liable to have affected the march of alphabetical divergence from the one fixed model, may be noted the cursive departure from the older form, which though not exclusively monumental, was evidently better suited for lapidary purposes than for facility and rapidity of expression by the amanuensis;¹ and, under this aspect, there would arise

dhīst relics do little towards elucidating the expansive spread of this style of writing; but—if rightly interpreted—they illustrate in a striking manner the antiquity of its ordinary employment in its even then fixed form.' [This inference, however, does not necessarily militate against my conclusion that, at a subsequent period, and in exceptional localities, the Pālī language and the Pālī letters did not become the special sectarian vehicles of the Buddhist faith, as opposed to the Sanskrit tongue and its more copious alphabet, whose use was affected by the Brāhmins.] Dr. Stevenson remarks, in speaking of the Nasik cave inscriptions, 'On the whole, we find that Brāhmins and Buddhists, in these early days of our era, lived in peace with one another, and were both favoured and protected by the reigning sovereigns; and that, among the former, the Sanskrit language was used in writing, and the Prakrit by the latter; the two languages, probably, holding the same place to one another that the Sanskrit and the vernaculars do at present.'—'Jour. Bomb. Br. Roy. As. Soc.', July, 1853, p. 41.]

¹ [In my last paper on this subject I remarked, 'We have evidence, in sufficient abundance, to prove that the eastern nations often availed themselves of a cursive hand, in common with the more formal character reserved for inscriptions. These would each be naturally affected, in the ultimate determination of forms—by the material which had to receive the writing.

'Thus, the straight wedge-shaped elements of the cuneiform alphabet' were

^a 'Jour. Roy. As. Soc.', vol. xiii., p. 108; 'Bhilsa Topes,' p. 299, etc.

^b Layard, 'Discoveries,' etc., 346 and 601, etc., 'Jour. Bomb. As. Soc.', vol. xvi. p. 215.

a still more obvious reason for the rounding off of angularities as the complex orthography of the Sanskrit gained head upon the simple letters of the local Pālī.¹

singularly well fitted for easy expression on tablets of Babylonian clay, and equally suited to rock inscriptions, while the written hand, executed only on a smooth surface, presented no difficulties to any series of curves or complicated lines. In addition to leather^a and other materials, the ancient Persians, we also learn, wrote upon *Tūs*^b (Birch-bark). The Indians, we know, adapted this substance to the same uses,^c and possibly the Indian Vedas are indebted for their preservation to this very material; whether its employment was limited to the population whose dialects were expressed in the Arian character we have no means of saying, but in all probability, if the Northern Indian races knew of its use, the Māgadhīs would not have remained long deprived of it, or some suitable substitute; that they also wrote with ink is amply established by the discovery of letters so written on the relic caskets at Sanchi.^d

Since the above was written, I have met with a most apposite illustration of the justice of my opening remark, in the shape of a Babylonian clay-tablet—now in the British Museum—of about 600 B.C., which is impressed with cuneiform characters on the one face, and inscribed with Phœnician letters on the other. The Babylonian character is not very perfect, but the Phœnician has evidently been difficult to execute, in comparison to the simple lines of the associate inscription; the curves of the letters, and the depth it was necessary to give the lines, to ensure permanence, have clearly puzzled the stile of the artist, whose knowledge of, and aptitude in, the formation of the letters, are otherwise sufficiently apparent. While adverting to these subjects, I would further draw attention to the double system of writing in use in ancient times, as exhibited in the concurrent record of spoils, etc., almost uniformly depicted in the Konyunjik marbles, where the one scribe uses a broad stile with a clay cylinder or book-tablet; and the other appears to be *writing* with a more pointed instrument, on some pliable material.—See Layard, ii. 184, 'Monuments of Nineveh,' pl. 58; as well as Nos. 59 and 15* British Museum.

To revert, however, to the Indian question, I may remark, in conclusion, that the tradition in Huen Thsang's time, evidently went to the effect, that the early Buddhist scriptures of Kāsyapa's council were written 'sur des feuilles de *tāla* (palmier),' and that, in such form, (il) 'les répandit dans l'Inde entière.'—'Histoire,' p. 158. Albiruni, in speaking of his own experience in the eleventh century, notices the use of paper (پاپر), and the local employment, 'dans le midi de l'Inde,' of the leaves of the *Tāri* (تاری); to which he adds, 'mais dans les provinces du centre et du nord de l'Inde, on emploie l'écorce intérieure d'un arbre appelé *touz* (توز). C'est avec l'écorce d'un arbre du même genre qu'on recouvre les arcs : celle-ci se nomme *bhouj*' (بھوج).—'Reinaud Mémoire sur l'Inde,' p. 305. Further references are given to 'Arrian,' l. viii., c. ix.; 'Foe-koue-ki,' p. 392, etc.]

¹ [Dr. Weber has instituted certain philological comparisons, in the hope of

^a Assyria.—P. H. Gosse, London, 1832, p. 546.

^b Hamzæ Ispahānī کتاب تاریخ الأمم, p. 961, and xxv. 'Libri inventi sunt, in quibus depositæ erant variæ eorum disciplinæ, omnes lingua Persica antiqua scripti in cortice tûz.'—See also 'Ayin-i Akbari,' vol. ii., 125.

^c Masson in A. A. p. 60 and 84. See also fig. 11, pl. iii. *Ibid.* Masson continues his remarks on substances used to receive writing: 'In one or two instances I have met with inscriptions; one scratched with a styllet, or sharp-pointed implement around a steatite vase, extracted from a Tope at Darunta; another written in ink, around an earthen vessel, found in a Tope at Hidda; and a third dotted on a brass vessel.'—See also 'Reinaud Mémoire sur l'Inde,' p. 305.

^d 'Jour. Roy. As. Soc.', vol. xiii., p. 110; 'Bhilsa Topes,' 299; 'Jour. As. Soc. Beng.', vol. xxiv., p. 394.

This Sanskrit action upon the indigenous form need not be limited to the date at which we are now able to cite extant examples of the Pālī letters; and, as I have claimed for the latter an antiquity very inadequately represented by their use under Asoka, so I may assume an independent process of maturation under the influence of the former language, in written documents, which is not necessarily restricted in its point of departure to the date of the lapidary models of which that monarch has left us examples. Indeed, these very monuments, in their bearing upon each other, already exhibit the early phase of an irregular advance beyond the limitation of the normal letters, in the greater amount of compound consonants to be found in use in the Gīrnār edict, as contrasted with the Dhauḷī transcript, and the still more simple records of the Eastern pillars, which, in point of time, are absolutely subsequent to the two former inscriptions. And this alone is sufficient to form a justifiable basis for a line of argument I have elsewhere adopted in reply-

being able to determine the initial method of writing in India by the definition of the primary meaning of the words employed to describe the endorsement of the edicts of Asoka. Following out the Greek and Latin analogy of the derivation of the art of writing, implied in the *γράφω*, 'to grave,' and *scribo*, 'to scratch,' he contrasts the inflections from the roots लिप and लिख, which occur in the opening passage of these inscriptions; the one signifying 'to smear,' and also 'to write,' the other, he affirms, meaning primarily 'to scratch into,' and, secondarily, 'to write.' Any exclusive induction, however, from these materials is denied to us in the fact that the two words occur in absolute juxtaposition, and almost as if they were convertible terms; there can be no difficulty in admitting that the one root exists with almost a leading meaning for writing in the South (and in Bengal लिप); while in the north it has retained a nearly exclusive signification for smearing, plastering, etc. The लिख, on the other hand, whether its primary intention was to scratch into, or, more probably, to draw a line, holds its position to a much greater extent in the dialects of India as the special indication of writing. However, these comparisons, incomplete and unsatisfactory as they must needs be, are complicated by a doubt as to the original derivation of the word *lipi*. In the Pālī transcripts of Asoka's edicts the orthography is assured; but in the Kapur di Gīri text, in spite of Professor Wilson's most determined conversion of the initial letter, in the numerous instances in which it occurs, the word is palpably and uniformly *dipi* (*dipitam*, *dipikītam*, etc.), which, as Mr. Norris has shewn, finds a counterpart in position and meaning in the Persian Cuneiform Inscription ('*Jour. Roy. As. Soc.*', vol. x., p. 247, 250, lines 48, 55 of Tablet); and in the Scythic version it appears as *tīpi*, with the same signification (vol. xv., pp. 19, 24, 187). The legitimate Arian *likhita*, occurs in one passage as the correspondent of the Pālī *likhita* (Gīrnār, i. 10); but usually the *dip* of the northern alphabet answers to the *likh* of the south (iv. 11, v. 9).

ing to those who follow too implicitly Prinsep's first idea of the progress of writing, and who seem

Disposed to admit of but one single element, as liable to affect the march of alphabetical development—that of time. To show how fallacious any notion of a *necessarily* progressive change would be, I may call attention to the very slight modification that is seen to have taken place in the local alphabets of Gujarāt, etc., during several centuries; and I would inquire, if this argument is to hold good, how much of difference ought we to be able to detect between the alphabet of the Vallabhi copper-plates, which they would date in the sixth century A.D.,¹ and the style of writing in use in the Western Caves, which is almost identical with the characters in prevalent use among the Buddhists in the 3rd century B.C. And yet, a reference to the facsimiles in pl. xxxvii. will demonstrate how essentially limited the alterations effected by this lapse of ages really were! Prinsep, as we have seen, was prepared—with his usual fairness—to concede that there were other causes likely to influence these alphabetical mutations, though his original idea had clearly been to assign all impulse in this direction to the effect of time. Had he lived to perfect his theory, I doubt not that he would have accepted other agencies as playing an important part in the results to be accounted for: prominent among these would, I think, have to be placed, the advance or retardation due to nationality or other local influences; otherwise it would be difficult indeed to account for the various separate alphabets that we find in all their independent diversity at a later period of Indian progress.²

Prinsep's own impression, above reprinted, will display how little reliance could

¹ 'Bhilsa Topes,' p. 149.

² As my readers may be glad to learn what Albiruni says on the state of the distributive varieties of writing current in his day, I append M. Reinaud's version of the entire passage:—'On compte plusieurs écritures dans l'Inde. La plus répandue est celle qui porte le nom de *siddha-matraca* (سد ماترك), ou substance parfaite; elle est usitée dans le Cachemire et à Benarès, qui sont maintenant les deux principaux foyers scientifiques du pays. On se sert également de cette écriture dans le Madhya-Deça, appelé aussi du nom d'Aryavartta. Dans le Malva, on fait usage d'une écriture appelée *nagara* (ناگر): celle-ci est disposée de la même manière que la première; mais les formes en sont différentes. Une troisième écriture, nommée *ardha-nagary* (ارد ناگري), c'est-à-dire à moitié nagari, et qui participe des deux premières, est usitée dans le Bhatia (بهاتيه) et dans une partie du Sind. Parmi les autres écritures, on peut citer le malcāry (ملقاري), usité dans Malcascheva (ملقشوا) au midi du Sind, près de la côte; le besandiba (بسنديب), employé à Bahmanava, ville appelée aussi Mansoura; le karnāta (کرنات), usité dans le Karnate, pays qui donne naissance aux personnes appelées, dans les armées, du nom de Kannara (کنره); l'andri, employé dans l'Andra-Deça ou pays d'Andra (اندر ديش); le dravidi, usité dans le Dravida ou Dravira; le lari, dans le Lar-Deça ou pays de Lar; le gaura (گوري), dans le Purab-Deça (پورب ديش) ou région orientale (le Bengale); et le bikchaka (بيککشک) dans le Oudan-Pourahanāka (اودنپورھناک). La dernière écriture est celle dont se servent les bouddhists (البد).—M. Reinaud, 'Mémoire sur l'Inde,' p. 298.

be placed on a judgment which did not take this element into consideration, for he assigns, on the mere ground of forms of letters, a higher antiquity to the Gujarāt copper-plates, than he does to the Gupta inscriptions; whereas, we now know, that the Guptas preceded the Vallabhis!

Had he confined himself to tracing the alphabetical advances made by these different sections of Indian races, instead of comparing two series of literal signs that had been thus far matured by different hands, he would have worked upon surer ground. To support my assertion, I would direct attention to the varieties of types of letters to be found on the nearly contemporaneous inscriptions of the Gupta dynasty. If we examine the Allahābād writing,¹ and contrast it with that on the Bhitari Lāt,² we discover considerable difference between the general configurations of the majority of the characters in each—varying from scarcely perceptible modifications to an absolute difference of form in others; for instance, the ख, ग, घ, प, and श are virtually the same characters in both inscriptions, but their outlines are by no means identical, while the signs ण, म, ह, and स are, so to speak, different letters. To carry out the contrast, let us refer to the Bhilsa³ inscription. Here again we find a general change in the aspect of the letters and most distinct modification or absolute divergence from the Allahābād type in the following characters—ख, ड, ण, घ, प, भ, म, र, ह, श, ष, and स.

V. As to the possible influence of the Semitic character of Northern India on the collateral Pālī; I should reduce this to the very minimum under its direct Palæographic aspect,⁴ and should even prefer to advocate the converse proposition. There are here also some singular alphabetical coincidences which, however, had better be reserved for examination under the notes on the Arian character. A point which adds materially to the difficulty of instituting any useful comparisons in regard to this division of the subject is our ignorance of the date of the introduction of the Arian branch of the Semitic tree into the regions south of the Hindú Kush and its extension into the sub-Himalayan belt towards Hastinapūr. For, as in the case of the Southern alphabet, its

¹ 'Jour. As. Soc. Beng.,' vol. vi., p. 969.—See Translation, vol. i., p. 233.

² 'Jour. As. Soc. Beng.,' vol. vi., p. 1.—English Version, vol. i., p. 240.

³ 'Jour. As. Soc. Beng.,' vol. vi., p. 455.—Noticed at p. 245.

⁴ [I am not at all certain, however, that the Arian alphabet did not contribute the letter Φ , the equivalent of Ψ in its own series, to serve in the Sāh inscription as Ψ . The original character has, to my perception, more of mechanical coincidence with the general tendency of the Arian formation of letters, than of homogeneity with the alphabet of the South; and it is curious to observe how soon the perpendicular centre stroke of the original became horizontal under local treatment. The proper Indian \mathfrak{t} = Ψ , on the contrary, seems to have been of indigenous adaptation.]

earliest appearance, within our ken, is in the counterpart edict of Asoka at Kapur di Giri in the Peshāwur valley. Two items, however, suggest themselves as important in the general inquiry. (1) The greater amount of pure Sanskrit the Kapur di Giri inscription¹ carries in its text, as illustrating the descending course of that language²; and (2) the ultimate and not very long delayed extinction of all trace of the once extensively prevalent Arian character, and its supersession by the more exact and appropriate system of writing indigenous to the south!³

¹ [‘Jour. Roy. As. Soc.,’ vol. xii., p. 236.]

² [Prinsep had already noticed this fact in connexion with other data then at his command—‘The vernacular language of India at that period, then, varied in different provinces;—it approached more to the Sanskrit in the N.W.,’ etc.—vol. vii., p. 280. The possession of several letters requisite for the due definition of Sanskrit orthography, but unneeded in Pālī writing, is also important.]

³ [I have usually avoided complicating the simple Palæographic inquiry—on which alone my data entitle me to speak—with any reference to the important light philology must be expected to throw upon the general question. I depart from my rule in this instance, in citing the original and highly valuable remarks of the author of the ‘Drāvidian Grammar,’^a regarding the existing state and probable early course of certain Indian languages. Mr. Caldwell’s position may be stated in his own words:—‘That the Drāvidian languages are to be affiliated, not with the Indo-European, but with the Scythian group of tongues; and that the Scythian family to which they appear to be most closely allied is the Finnish or Ugrian.’^b [The scope of the term Drāvidian is defined by the author as follows:] ‘The idioms which are included in this work under the general term ‘Drāvidian’ constitute the vernacular speech of the great majority of the inhabitants of Southern India. With the exception of Orissa and those districts of Western India, and the Dekhan, in which the Gujarāthī and the Marāthī are spoken, the whole of the peninsular portion of India, from the Vindhya mountains and the river Nerbudda (Narmadā) to Cape Cormorin, is peopled, and from the earliest period appears to have been peopled, by different branches of one and the same race, speaking different dialects of one and the same language—the language to which the term ‘Drāvidian’ is here applied; and scattered offshoots from the same stem may be traced still further north as far as the Rajmahal hills, and even as far as the mountain fastnesses of Beluchistān. The Gujarāthī, the Marāthī (with its offshoot the Konkani), and the Uriya, or the language of Orissa, idioms which are derived in the main from the decomposition of the Sanskrit, form the vernacular speech of the Hindū population within their respective limits: besides which, and besides the Drāvidian languages, various idioms which cannot be termed indigenous or vernacular are spoken or occasionally used by particular classes resident in Peninsular India.’

‘The idioms which I designate as ‘Drāvidian’ are nine in number, exclusive of the Rajmahal, the Uraon, and the Brahuī.’ They are as follows: 1, Tamil;

^a ‘A comparative Grammar of the Drāvidian or South Indian Family of Languages, by the Rev. R. Caldwell, B.A. London, Harrison, 1856.’

^b Cf. also Norris’ Scythian text of the inscriptions at Behistun.—‘Jour. Roy. As. Soc.,’ vol. xv.

‘The discovery of this Drāvidian element in a language spoken beyond the Indus proves that the Drāvidians, like the Aryans, the Græco-Scythians, and the Turco-Mongolians, entered India by the North-Western route.—p. 23.

In this indeterminate state, I am content, for the present, to leave the general question of the progressive development of the writing of India proper; being convinced, that no uniform or absolute law can be enunciated applicable to the varied circumstances of the whole circle of the palæography of the

2, Telugu; 3, Canarese; 4, Malayālam; 5, Tulu—[the remaining four are] entirely uncultivated, destitute of written characters, and comparatively little known—6, Toda or Tudara; 7, Kota; 8, Gond or Goand; 9, Khond or Kund, or, more properly, the Ku. The proportionable numbers of the several races by whom the languages and dialects mentioned above are spoken appear to be as follows:

1	10,000,000	} 32,150,000
2	14,000,000	
3	5,000,000	
4	2,500,000	
5	150,000	
6 to 9	500,000	

‘Whilst I regard the grammatical structure and prevailing characteristics of the Dravidian idioms as Scythian, I claim for them a position in the Scythian group which is independent of its other members, as a distinct family or genus, or, at least, as a distinct subgenus of tongues. They belong not to the Turkish family, or to the Ugrian, or to the Mongolian, or to the Tungusian, . . . but to the group or class in which all these families are comprised. On the whole, the Dravidian languages may be regarded as most nearly allied to the Finnish or Ugrian family, with special affinities, as it appears, to the Ostiak.’—p. 46.

The conclusions arrived at with regard to the Northern Indian languages are summed up thus—‘It is admitted that before the arrival of the Aryans, or Sanskrit speaking colony of Brāhmans, Kshatriyas, and Vaisyas, the greater part of Northern India was peopled by rude aboriginal tribes, called by Sanskrit writers Mlêchhas, Dasyus, Nishādas, etc.; and it is the received opinion that those aboriginal tribes were of Scythian, or, at least, of non-Aryan origin. On the irruption of the Aryans, it would naturally happen that the copious and expressive Sanskrit of the conquering race would almost overwhelm the vocabulary of the rude Scythian tongue which was spoken by the aboriginal tribes. Nevertheless, as the grammatical structure of the Scythian tongues possesses peculiar stability and persistency; and as the pre-Aryan tribes, who were probably more numerous than the Aryans, were not annihilated, but only reduced to a dependent position, and eventually, in most instances, incorporated in the Aryan community, the large Sanskrit addition which the Scythian vernaculars received would not necessarily alter their essential structure, or deprive them of the power of influencing and assimilating the speech of the conquering race. According to this theory, the grammatical structure of the spoken idioms of Northern India was from the first, and always continued to be, in the main, Scythian; and the change which took place when Sanskrit acquired the predominance, as the Aryans gradually extended their conquests and their colonies, was rather a change of vocabulary than of grammar,—a change not so much in the arrangement and vital spirit as in the *material* of the language. This hypothesis seems to have the merit of according better than any other with existing phenomena. Seeing that the Northern vernaculars possess, with the words of the Sanskrit, a grammatical structure which in the main appears to be Scythian, it seems more correct to represent those languages as having a Scythian basis, with a large and almost overwhelming Sanskrit addition, than as having a Sanskrit basis, with a small admixture of a Scythian element.’—p. 38. ‘The Scythian substratum of the North-Indian idioms presents a greater number of points of agreement with the Oriental Turkish, or with that Scythian tongue or family of tongues of which the new Persian has been modified, than with any of the Dravidian languages.’—p. 39.

multifarious languages and nationalities embraced amid the indigenous or intrusive races, who in succession may have peopled portions of that land.

I now insert the type Table of transitions of the Indian Alphabet referred to at page 41. This, like Prinsep's lithographed synopsis, requires but little introductory notice, as it should be sufficiently explanatory in itself, but it may be necessary to mention, that I have modified some of the headings of the earlier alphabets, which I have felt bound to retain unaltered in the artist's copy of Prinsep's original fac-similes.¹

The derivations of the six leading or epochal series of the general table may ordinarily be gathered from the notices and translations of the original texts of each, inserted in various parts of this publication.²

The so-entitled Nerbudda character is taken from a set of copper-plate grants, of uncertain date, found at Seoní in the Saugor and Nerbudda territories;³ and the Kistna alphabet,

¹ [As the accompanying Table of Alphabets has lately appeared, under a slightly varied form, in the work of another author, it is necessary for me to explain how it comes to be inserted in this place without the usual acknowledgment. My Publisher, in making his preparations for the present reprint, imported, at my request, from Germany, such of the Sanskrit types, based upon Prinsep's originals, as were deemed requisite for the illustration of the Palæographic history of Indian writing. As some difficulties presented themselves, on the arrival of this foreign type, in regard to its justification and assimilation with our own, it was determined to set up the entire table before it was required in the order of the consecutive articles. This was done, and the first rough proof had been submitted to me, when Mr. Austin's managing superintendent intimated that if I had no objection he intended to lend the table for publication in Mr. Monier Williams' Sanskrit Grammar. I of course assented willingly to this arrangement, merely stipulating, in the most distinct manner, for the due acknowledgment of the derivation. I heard nothing further on the subject till the work in question appeared, under the auspices of the Oxford University Press, when I naturally looked for the expected recognition of the use of my materials. However, to my surprise, I could discover no notice whatever of obligations to my publisher or myself. Upon making inquiries, I discovered that there had been some misapprehension as to the terms under which these materials had been permitted to be used; and Mr. Williams assures me that he was not in any way made aware of my interest or concern in the synopsis, and therefore necessarily failed to acknowledge the merely secondary title I claim in its reproduction.]

² [No. 1, vol. ii. p. 8, *et seq.* of this publication; No. 2, 'Jour. As. Soc. Beng.', vol. vi., p. 1042; see also Stevenson, 'Bombay Journal,' July, 1853, and January, 1854; No. 3, Art. xix. *infra*; No. 4, vol. i., p. 233; No. 5, vol. i., p. 252; No. 6, vol. i., p. 321.]

³ [See p. 726 'Jour. As. Soc. Beng.' vol. v. (1836), and also Prof. Wilson on 'Chattisgarh Inscriptions,' 'Asiatic Researches, vol. xv., p. 507.]



CSL

TRANSITIONS

OF THE

INDIAN ALPHABET,

FROM THE TIME OF AŞOKA;

WITH SOME OF THE MOST MARKED LOCAL VARIETIES

AT PRESENT IN USE.

	k	kh	g	gh	n	ch	chh	j	jh	ñ	t	th	ḍ	ḍh	ṇ
ASOKA'S EDICTS. 3rd Cent. B.C.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
WESTERN CAVES.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
SĀH INSCRIPTION. (Girnār.)	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
GUPTA INSCRIPTION. (Allahābād.)	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
VALABHI PLATES. (Gujarāt.)	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
KUTILA INSCRIPTION. 10th Cent. A.D. (Bareilly.)	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
NERBUDDA.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
KISTNA.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
TELINGA. (Modern)	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
TIBETAN. (Modern)	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
SQUARE PĀLĪ.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
GUJARĀTĪ.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
PUNJĀBĪ.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
KASHMĪRĪ.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
BENGĀLĪ.	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭
DEVANĀGARĪ	𑀓	𑀘	𑀕	𑀖	𑀡	𑀣	𑀤	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭



N. A. N. T. S.

t th d dh n p ph b bh m y r l v h s sh

人 0 7 D T U V W X Y Z

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ନ ଓ ଧୂଳି ପ୍ରଭୃତି ସମସ୍ତ ଦୁଷ୍ଟାବସ୍ଥାକୁ ନିର୍ମୂଳରେ ନଷ୍ଟ କରିବା ପାଇଁ ଏହି ମନ୍ତ୍ରର ବ୍ୟବହାର କରାଯାଏ ।

[illegible]

त थ द ञ ण फ ब रु ज य ण ल व ळ श ण ष

[illegible]

శ త ర న మ మ ప య శ య స వ ర త న త త

త ధ ద ధ న ప ప బి భ మ య ర ల వ హ స శ ష

५ ष ३ ९ ष ष ष ५ ष ३ ५ ष ३ ५ ष ३

[illegible]

न थ द ध न प य व म न य र ल व ह स श

ਭ ਥ ਦ ਪ ਨ ਪ ਫ ਬ ਤ ਮ ਯ ਰ ਲ ਹੁ ਰ ਸ

उ ष ऋ ए न प ढ र ऋ भ य र ल व द भ म ष

ତ ଥ ନ ଧ ନ ଫ ବ ଢ ଘ ଯ ର ଳ ବ ହ ଙ ଣ ଷ

त य द ध न प फ व भ म य र ल व ह स श ष



CSL

V O W E L S.

a á i í u ú ri rí e ai o au an ah

ASOKA'S
EDICTS.
3rd Cent. B.C.

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏

WESTERN
CAVES.

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏

SÁH
INSCRIPTION.
(Girnár.)

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓

GUPTA
INSCRIPTION.
(Allahábád.)

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓

VALABHI
PLATES.
(Gujarát.)

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓

KUTILA
INSCRIPTION.
10th Cent., A.D.
(Bareil.)

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓

NERBUDDA.

𑀅 𑀆 𑀇 𑀈

KISTNA.

𑀅 𑀆 𑀇

TELINGA.
(Modern.)

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓

TIBETAN.
(Modern.)

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓

SQUARE PÁLI.

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓

GUJARÁTI.

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓

PUNJÁBI.

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓 𑀔 𑀕

KASHMIRÍ.

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓 𑀔 𑀕

BENGÁLÍ.

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓 𑀔 𑀕

DEVANÁGARÍ.

𑀅 𑀆 𑀇 𑀈 𑀉 𑀊 𑀋 𑀌 𑀍 𑀎 𑀏 𑀐 𑀑 𑀒 𑀓 𑀔 𑀕

which follows, was obtained from inscriptions at Amarávati in Berár.¹

For the more modern alphabets, which are arranged irrespective of their relative antiquity, I have had to rely upon such

¹ [Prinsep explains the source from whence he derived the materials for this alphabet in the following remarks :—‘ In the library of the Asiatic Society are ten manuscript volumes of drawings of sculpture, images, architecture, and inscriptions, forming part of the celebrated collection of the late Colonel Mackenzie. The greater portion of these are as yet unknown and undescribed. None of the series, as far as we can ascertain, have been published, nor are we aware of any attempt having been made to decipher the inscriptions. It is greatly to be wished that the whole of these interesting documents could be digested in some convenient arrangement and made accessible to the learned world, especially now that the invention of lithography offers a cheap and expeditious means of effecting such an object. We were in hopes of combining their publication in the form of a volume or two of plates, with the digest of the Mackenzie manuscripts, which, at the recommendation of the Society, the Government has lately entrusted to the Rev. W. Taylor at Madras, the author of ‘Oriental Historical Manuscripts.’ As a specimen of the contents of these curious volumes, Captain Cunningham has kindly favored me with the two lithographs numbered as pls. x. and xi., vol. vi., ‘Jour. As. Soc. Beng.’ He has selected the two longest inscriptions from the volume, No. 18, entitled ‘Antiquities at Amarávati,’ a town in the Berár province, situated on the Kistna river to the west of Nágpur.

‘The majority of the sculptures of Amarávati seem to belong to a magnificent *dehgopa*, or Buddhist shrine; but there is an admixture towards the end of the volume of objects of the linga worship. An accurate map of the town is prefixed, whence it appears that the ruined *dehgopa*, whence the relics are taken, was on a mound of 150 feet diameter, now converted into a tank. It is called Dipaldinna (translated by Colonel Mackenzie ‘the mound of lights’), which so resembles the name of a similar place of Buddhist celebrity in Ceylon (Dambadinna), that we imagined, on seeing the inscription from the east side of the gateway, some mistake must have been committed; for on comparing the characters with pl. xxviii. of the ‘Jour. As. Soc. Beng.’, vol. v., p. 554, their perfect identity with the Ceylonese type of old Nágari was manifest: indeed the three initial letters appear to form the same word ‘*mujike*’ . . . and the same combination there recognized as ‘*Mahārāja*’ . . . drew Captain Cunningham’s attention while copying the penultimate line of the present inscription.

‘The second inscription, occupying the two sides of pl. xi., ‘Jour. As. Soc. Beng.’ vol. vi. [the Kistna alphabet], is altogether of a different class, although the book states it to have been procured from the same town, Amarávati.

‘The character has much resemblance to that of some of the cave inscriptions at Mahábalipur and other places to the westward; the essential portion of each letter also assimilates very closely to the alphabets of the Chattisgarh and Seonf inscriptions, and this has served as the key by which I have effected the transcription of the whole.

‘It is worthy of remark, that in this alphabet, which we may aptly denominate the Andhra character, from its locality, may be traced the gradual transition from the more simple Devanágari of Northern India (No. 2 of Allahábád, Gaya and Gujará) to the complicated or florid writing of the Southern Peninsula. On comparing it with the Hala Kanara, or ancient Karnatic, the letters *n*, *t*, *y*, *r*, *l*, *kh*, *th*, *dh*, *bh*, which may be regarded in some degree as test letters, because they have undergone more variation than others in the modern writing of different provinces, are nearly identical. There is also an incipient loop in the lower line of many of the letters which becomes afterwards more developed in the west and south. The Telinga or Telugu character is one step further removed, but it springs directly from the Hala Kanara, and retains many of the Andhra letters still unchanged, particularly the *dh*



type as chanced to be available, amid which may be found some isolated forms that might stand but indifferently the test of local criticism.—E.T.]

and *th*. In the accompanying plate ('Jour. As. Soc. Beng.,' vol. vi. pl. xii) we have thought it worth while to exhibit these resemblances, and point out the peculiarities noted, that no means may be neglected of facilitating the examination of other inscriptions that may link on naturally at either end of this fragment of the chain of our Indian paleography.'

XIX.—EXAMINATION OF THE SÁH INSCRIPTION FROM GIRNÁR IN GUJARÁT.

SANSKRIT INSCRIPTION, No. 1, FROM JUNAGARH.

[I insert Jas. Prinsep's translation of the Sáh inscription at Gírnár as it originally appeared in the 'Jour. As. Soc. Bengal'—notwithstanding that it has to a certain extent been superseded in the acquisition of more perfect copies of the monumental writing than he was constrained to rely upon—in order both to complete the record of his contributions to an important section of Indian Numismatics, and to serve as a needful introduction to his notes in illustration of the subject, which retain, with but limited exceptions, their pristine value!—E. T.]

After the announcement made in the proceedings of the Society, that the Governor-General has acceded to my request, for the deputation of an officer to take exact facsimiles of the several inscriptions in Gujarát, which have turned out to be of so important a nature, it may seem premature or superfluous to continue the publication of the analysis of the less perfect document now in my hands. But it is only in a few uncertain passages that the expected corrections are desired. The body of the matter is sufficiently intelligible, both in the Pálí edicts of Gírnár, lately published, and in the Sanskrit inscription from Junagarh, which I have chosen for the subject of my present notice.

I should, indeed, be doing an injustice to Capt. Laing, who executed the cloth facsimile for the President of the Bombay Literary Society, and to Dr. Wilson himself, who so graciously placed it at my disposal, when, doubtless, he might with little trouble have succeeded himself in interpreting it much better than I can do, from his well-known proficiency in the Sanskrit language; it would, I say, be an injustice to them were I to withhold the publication of what is already prepared for the press, which may be looked upon as their property and their discovery, and to mix it with what may hereafter be obtained by a more accurate survey of the spot.

Before, however, proceeding to the inscription itself, I insert Dr. Wilson's account of the site.

'The rock containing the inscriptions, it should be observed, is about a mile to the eastward of Junágad, and about four miles from the base of Girnár, which is in the same direction. It marks, I should think, the extremity of the Maryádá of the sacred mountain. The Jaiṇas, as the successors of the Baudddhas, greatly honour it.'

The rock or large stone above alluded to, appears to contain all three inscriptions. On the eastern side facing the Girnár hill are the edicts of Asoka in the old character; on the western side, the Sanskrit inscription which I have selected as my theme for the present occasion; and on the southern side a third inscription, longer even than either of the others, but somewhat more modern, and less distinct.

The western inscription, then, is near the top of the stone;—it covers a surface of ten feet and a half in breadth, by five feet in height. The stone is a good deal cut or worn away in two places, but it does not seem that anything has been lost on the outer edges, the



irregularities there visible proceeding from the contour of the stone. Capt. Laing's facsimile is lithographed on a very reduced scale in the 'Jour. As. Soc. Beng.,' vol. vii., pl. xv.

The character is only one remove from the Buddhist alphabet of Girnár. It has the same mode of applying the vowel marks *e*, *a*, and *o*, in particular to those excellent test letters, *n*, *ṇ*, and *m*. The vowel *i* is still formed of the three dots; but I need not more fully dilate upon its peculiarities, since I have already inserted the whole alphabet, as No. 3 of the comparative table [Pls. xxxviii., xxxix.] A few, also, of the principal passages are now subjoined on a larger scale in pl. xix., 'Jour. As. Soc. Beng.,' vol. vii., as upon them rests the value with which this inscription will, doubtless, be regarded in Europe as well as in India, on account of the historical information it is calculated to afford.

Once transcribed into modern Nágari a Sanskrit inscription becomes easily intelligible through the aid of a skilful pandit. In the present instance, it has only been necessary to change two or three dubious letters to enable Kamalákánta to explain to me the contents of all the continuous passages which still exist on the stone, and it is fortunately not very difficult to imagine from the context what must have occupied most of the spaces now eroded or mutilated.

TRANSLATION OF THE GIRNÁR BRIDGE INSCRIPTION (APRIL, 1838).

(Be it) accomplished!¹ This very impassable bank at the foot of the hill city (Girinagara²). (15 syllables) with wide expansion and with great

¹ The same invocation, *siddham*, is used in the Skandagupta inscription, pl. i.

² The vowels of the word Girinagar are wanting, but the name cannot be mistaken, being modern Girnár.

depth of strong masonry,¹ carried all along the bottom of the said hill, filling up the interstices or irregularities in even layers, up to the height of the bank (30) by a chosen (architect?) the foundations of the bridge being completed most substantially, by embanking off in various ways the water (50) by workmen cheered on by kindnesses, and with a vast abundance of materials, was in progress. Then the work continued under favor of the Rājā Mahākshatrapa (the great patron of the warrior class), who was named Swāmi Chastāna (and was completed) in the seventy-second year of his son, the Kshatrapa, mindful of the lessons of his instructors, the rājā named Aridāmā,² in the dark half of the month of Mārgaśīrṣa (afterwards) by an immense inundation, brought on by heavy rains, converting the whole surface of the earth into an ocean, and making a mass of mud of the hill of Urjayata (?)— by the tempestuous waves of the Paleśinī river, and its several tributaries, the bridge was carried away. Subsequently) in conformity with the original design, (it was) repaired with blocks of stone from the hill, remedying the difficulties of the passage way with numerous long beams and trees laid across,—and skilfully uniting them (A second time) by the force of the waves, in a fierce hurricane and flood, (it was) broken down and much damaged, (after which), with stones and trees and piles,³ and massive beams⁴ stretched across, it was again put into complete repair, with an indestructible embankment, having a length of 400 cubits, and in like manner having a breadth of 75 cubits, in a wonderful manner taking out all the water, and laying dry the bed of the river⁵ by Pūpya Gupta, the territorial treasurer of Rājā Chandragupta Maurya, (this) was caused to be done: and by the Yavana rājā of Asoka Maurya, (named) Tushaspa, it was ornamented with cornice and parapet, and with an artificial canal visible there, over which the bridge also extended, in a manner worthy of the approval of the rājā. (Afterwards) by him, who, being predestined from the womb to the unceasing and increasing possession of the fortunes of royalty, was invited by all classes waiting upon him for the security of their property—to be their king:—who, from clear intelligence, has not suffered the sacrifice of animal life;—who is faithful to his promises—who is courteous in speech—who in battle, opposed face to face with an equal antagonist, and threatening to discharge his weapons, compassionates his yielding foe who gives hope to those of their own accord repairing to him to beseech for succour preserving the ancient customs of the town unin-

¹ सन्धि बन्धि, the joining or cementation of masonry, is now called by a similar name *jordā*. I suppose the piers or foundations to be intended.

² नाम्नरदिदाम्न (sic)—if this is correctly traced, it contains a grammatical error, in the substitution of र् for : after न्. The name might be read *Atri*; or *Rudra*, were the preceding word *namno*. The date may be read either *varshe dwisaptatita* (me) followed by numerals,—or *Ari damni nashke dwisaptati vatsare*, in the 72nd year after the death of Aridāmā. As there is a space after *dwi*, *sata* may be also supplied, making the date 270.

³ अनुत्पद्द्वारशरण, the introduction of *Dudra* here is hardly intelligible, perhaps we should read *anutaipdī vāri sarana ucchraya vidhansindā*—the remover of the impediments to the flow of the current from the beams and materials that had fallen into the river.

⁴ गुल्लजता—the distinction of *golas* and *lattas* in the modern wood market is, that the former are unsquared, and the latter, squared timbers.

⁵ I have given to this obscure passage the best sense in which I think it explicable, as the breadth, 75 cubits, could hardly have been that of the bridge itself.

fringed by the proud and insolent;—who is lord of the countries¹ of Avanti, Anupa (?) Vrija, Anartta, Surashtra Savara, Kukāra, Kirāta, Tishat, and others, all conquered by his own might, and maintained in their former prosperity, and all their inhabitants, both high and low, converted into obedient subjects—all these countries, under his majesty (forming one empire), and furnishing every object of desire and gratification: who is the powerful leader of an army obeying him fondly as one born with the title of a renowned hero;—who, after more than one conquest of Sātkarni, the king of Dakshinapatha, by merely a threat (of attack), concluded a peace (with him) for the security and protection of his country and again set up his royal banner;—who has a natural taste for exercising and improving the strength of his hand, according to the rules²;—who is renowned for his skill in the practice of all the celebrated sciences, of grammar, of polity, of singing, of expedients (mechanics?) and the rest, the theory of which he has gone through, and tolerably retained;—who, powerful in horses, elephants, chariots, oxen, weapons, and armour exceedingly clever in breaking down the strongholds³ of his enemies;—who is every day happy in the bestowal of alms and mercy;—who is affable in manners;—whose treasury is abundantly filled with gold, silver, tin, and the lapis lazuli jewel, brought as tokens of his greatness, offered to him as his just and proper measure of tribute; who (understands) the precise etiquette of (courtly terms), their sense, measure, sweetness, rarity who is of correct bodily proportion, excellent in gait, color, vigour, and strength, &c.; in form and limb of most auspicious aspect;—who, of his own (merit?), has the title of 'patron of warriors and king of men';—who is crowned with the garland⁴ of flowers won in the Swayamvara ceremony (or tournament);—by this great patron of the warriors (or Satrap) Rudra Dāmā zealous for the increase of his religious fame, and in kindness and compassion for females, and the lame and sick: and with a most liberal expenditure from his own treasury (for the people?);—consenting at once to the petition of the chief citizens;—the construction of this bridge with threefold strength, after due inspection, was ordered to be done;—thus:

By the dignified in virtue, the chief minister of the great Satrap the road was also lined with trees, conferring pleasure (on the passers by).

Further, by him who, out of favor to the inhabitants of town and country, restored with substantial repairs the excellent condition (of the bridge) to the good subjects of this metropolis,—who made it impregnable to the torrents of water by the descendant of the Pahlavān tribe, Mavya, the contractor, who has finished his work precisely on the terms of his estimates and plans, so as to give

¹ Most of the countries enumerated here are to be found in the Purānas. Avanti is well known as Ōujein; Vrija is the country about Mathura; Anartta is mentioned with Comboja, Sindhu, and Yavana Mārgana ('As. Res.' viii. 339, 341), and is therefore probably in the Panjāb:—Kukura is enumerated in the same list with Benares; Savara is called a wild tribe in the south-east. There are three Kirātas named—two (Chandra and Rajya) in the north-east, and one in the south (pp. 339-41) Tishat may perhaps be read Toshali in Katak, of which more hereafter.

² By inadvertence, I have omitted the repetition of the word *arjita* अर्जितार्जित at the beginning of the 13th line in the lithograph.

³ Reading परवलालय, but the text may be read वललय making it 'destroying his enemy's force,' or again it may be परवललाचवसौष्टवक्रियेन, well skilled in diminishing the power of his enemies. (The Nāgarī transcript has been altered thus.)

⁴ In former times, Hindū maidens chose their favourite among a band of suitors by throwing a garland over his neck. A play on the name Dāmā is intended.

satisfaction,—the strong man and overcomer of difficulties, surrounded by his overseers (*pattis*),—by him, the establisher of religious fame, and the increaser of the glory of his master, was this work executed.”¹

OBSERVATIONS.

I have already remarked, that in this inscription, for the first time, we find the name of the great Chandra Gupta, the contemporary of Alexander, recorded on a genuine monument of antiquity. There can be no doubt of his identity, because his family name Maurya is added ; and further, the name of his grandson, the no less famous Asoka, immediately follows, designated also by the same family cognomen of Maurya.

On first discovering this important fact, and perusing the mutilated fragment with Kamalákánta pandit, as well as we could make it out, I thought myself in possession of a record of the time at least of Asoka, by whose deputy or viceroy the bridge seemed to have been completed. The long string of complimentary epithets which fill up the bulk of the inscription being in the instrumental case, and thus agreeing with the *Yavana rájēna* of the upper sentence.

This turns out not to be precisely the case. A considerable period is embraced in the history of the Girnár bridge, partly anterior and partly subsequent to the time of Chandra Gupta ;—thus it seems originally to have been erected by a Prince named Swámi Chashtána, a name rather Persian than Indian ;—it was then either repaired

¹ *Amushtitam* अनुष्ठितं, accomplished. The same word is used at the foot of the Allahábád inscription—(vol. vi. 978). But I know not how it there eluded the apprehension of the pandit who made me write in lieu of it अवस्थितं ‘remaining firm or fixed.’

or more probably completed by his son Aridámá or Atri-dámá in the month of *Mārgasirsha* or *Agrahayana*, in the year 72, but the letters which follow are unfortunately illegible, and we are left in the dark as to the era then in use for recording events.

The bridge was then totally destroyed by an inundation of the river Paleshini, a name I cannot discover in the map of Gujarāt. Thus temporarily repaired, perhaps by the inhabitants, it was again carried away; and a more thorough reparation was commenced under orders from Chandra Gupta Maurya, by his prefect of the province, Pupya Gupta, and completed in the reign of Asoka, his grandson, thirty or forty years afterwards, by his Greek officer, for so I think we may understand *Yavana rāja*. The brahmanical population of the distant province of Suráshtra probably had but little affection for the Buddhist monarch, who is not even honoured in the inscription with the title of *rāja*, being simply styled Asoka the Maurya! The name of his Greek employè is not very plain on the cloth; it may be read तुषसेन—‘by *Tushaspa*,’ a name evidently of Persian termination, like *Gushtasp*, *Lohrasp*, etc., from *asp*, ‘a horse’ (Sans. *asva*). Were the name written *Tushasva*, we might have supposed it a translation of the Greek name Philippos, having precisely the same meaning; and we might have argued that some adventurer having, from his military prowess, obtained service under Asoka, had added those new provinces to his empire, which we find noticed in his religious edicts, and had at length usurped a considerable share of power to himself; being, in fact, the very *Yona rāja* whom the Muhammadan historians state to have

dispossessed Sinsar Chand's grandson. But I am sensible that I have been frequently guilty of running ahead of prudence with my deductions, and I must consequently draw in a little; for it may be possible, after all, that the word *yavana* does not exist. It is preceded by the letter न, which I have rendered नु, 'further,' 'too;' but the expletive is somewhat out of place, and some may prefer the reading अशोकस्य तोयवनराजेन, 'by Asoka's rája (or lord) of the floods and forests.'

To continue my history of the bridge:—after the last repairs, although no accident is mentioned, we must conclude that such had occurred, and that the bridge was rebuilt by the prince upon whom the largest share of the eulogistic inscription is lavished. The opening passage may perhaps be recoverable on a careful re-examination of the stone. Towards the close, it does indeed mention that on the petition of the inhabitants (backed by female influence?) he strengthened the structure three-fold at his own expense. Now the name of this prince is Rudradámá, destined, it says, from his cradle to be elected to the throne,—his title is Rája Mahá Kshatrapa, the same as that of Aridámá and Swámi Chashtán. We may therefore view him as a scion of the old dynasty, replaced on the throne after a temporary subjugation of the province by the Maurya sovereigns of India proper.

It is curious, and most interesting to those whose attention is engaged in the subject, to observe how different ancient monuments throw light upon one another, and help to their mutual development. The name of Rudradámá recalls to our memory the series of Surashtra coins

described in my journal hardly a year ago. Among the eleven names there distinguished, Rudradámá was conspicuous as following just such a break in the line as would be made by the cause above alluded to. Again, the title then read as Mahá Kritrima, the elected king, on second examination agrees precisely with the present more palpably developed Mahá Kshatrpa. On referring to the plate of Mr. Steuart's coins, sent to me by Capt. Harkness, I find that I so read the word at first, and noted it in pencil, but gave it up on the pandit's ignorance of such having ever been a title in use. Had I possessed at that time a comparative alphabet to consult, I should immediately have perceived that the right hand twist at the foot of the *k* did not *then* denote as it does now the vowel *rĩ*, which was formerly turned in the contrary sense; but that it was the cerebral *sh* subjoined to the *k* (forming *ksh*), exactly as it occurs on the Junagarh¹ inscription. The *p* also deceived me, being more pointed than the same letter in the word *putra*; but on examination of the coins in my possession, I find it generally rounded off as U, and never crossed below as the *m*.

The word क्षत्रपः *kshatrapas*, although wholly unknown as a sovereign title to modern Hindús, and not to be found in their books, is familiar to the reader of the Grecian history of ancient Persia, with merely a softening of the initial letter, as ΣΑΤΡΑΠΗΣ, *Satrapa*, the prefect of a province under the Persian system of government. I do not believe that the etymology of this name has ever

¹ I have before remarked that this town seems called after the Greek prince, Yavanagada.

been traced. It is called a Persian title, but the Persian dictionaries only contain *سترب* *Satrab*, as an obsolete term for the governor of a province, without explanation of its origin. In Sanskrit it signifies the ruler, feeder, or patron of the *kshatra* or military class; and now that we know the ancient language of Persia east of the Euphrates to have been a near dialect of the Sanskrit, we may conclude that Satrapa had the same signification in Ariana. It is not for me in this place to speculate on the purport of the term in the Persian polity, but it is a fact well known that the effeminate Persians at a very early period were in the habit of governing their numerous tributary provinces by mercenary troops. The same system, and the same denomination of Satrap, was adopted and retained by the Macedonian conqueror, both when Greek and native officers were employed: and instances are frequent enough of the Satraps assuming to themselves independence and a regal title.

The Satrapies of the ancient Persian monarchy are not supposed to have extended across the Indus. If, in Alexander's time, this limit was first transgressed, it was not long before the Bactrian Greeks, or the Parthians, made themselves masters of Sindh, Katch, and Gujarát.¹ The present inscription may incline the learned to conclude that Suráshtra was before then one of the Satrapies of the empire, from the name of Chastan, the Satrap, who is stated to have first erected the bridge, and who must have preceded Chandragupta. Rudra, Viswa, and others of the list are more Indian in sound. It is remarkable

¹ See 'Jour. As. Soc. Beng.,' vol. vi., p. 385, for Vincent's authority on this subject.

that in the long string of epithets applied even to Rudradámá, the chosen Satrap, there is none which bears the slightest allusion to Hindú mythology ; while, on the other hand, the coins of the whole dynasty bear an emblem which we have hitherto considered either of Mithraic or of Buddhist import. The name Jinadámá (wearing Buddha as a necklace) is decidedly Buddhistic; and the epithet applied in the inscription to Rudradámá, —‘who, from right persuasion, never put any living creature to death,’—proves that Rudra’s opinions were at any rate influenced by the proximity of the important Buddhist establishment at Girnár.

The style of prose eulogy employed by the composer of the inscription puts us much in mind of our old friend, the Allahábád column. It has its corresponding list of countries conquered and equitably ruled ; but few of the names are, as might be expected, the same in the two. Avanti or Ujjayani, and Vrija (if the latter name be correctly read) are of the most importance as implying that the elected kings of the Sáh family, or the Satraps of Suráshtra, as we may now more properly call them, had acquired dominion over all the central portion of India, driving back the Magadha sovereigns (who had previously spread their hands to the farthest west), into their own Gangetic limits. The other places, Anartta, Kukura, etc., are probably provinces to the northwest, out of India proper. One other name, however, deserves our particular attention, the king of the Dakhan (Dakshinapatha), who was twice threatened with an invasion, and brought to sue for peace. His name is Sátakarni, the same which occurs several times in the lists of the

Andhra kings extracted by Wilford from the Bhágavat and other Puránas. It is a patronymic, from शतकर्णि, 'the hundred eared,' which was, doubtless, the name of the founder of the family; and Satakarni was probably the surname of all the line, though not repeated everywhere in the versified enumeration of the Puránas.

The locality of the Andhra dominion has hitherto been as uncertain as the period of its sway. Wilford says in one place that the Andhra princes 'made a most conspicuous figure on the banks of the Ganges for above 800 years;'¹ again, that Andhra and Koshala (near Kalinga) are used synonymously by some Hindú authors: again, that Sri Carna-deva took the title of king of Tri-kalinga, or of the three shores, to the east and west and south of India.² From our inscription we perceive that the general term of Dakshinapatha agrees well with the latter definition, and we may rest content with denoting the Satakarnis as kings of the Peninsula.

Further, as to their age, we find one of the name contemporary with Rudradámá who followed Asoka (we cannot say at what precise distance). Wilford brings them much lower down, from the third to the sixth century after Christ, in order to square the last of their name, Pulomarchi, or Puliman, with the Pulomien³ of the Chinese.

He is forced to confess, however, that there were Andhras at the beginning of the Christian era, when, says Pliny, 'the Andaræ kings were very powerful in

¹ 'Asiatic Researches,' vol. ix. p. 101.

² Ibid, p. 104.

³ Quere. Is not Brahman written with this orthography in Chinese?

India, having no less than thirty fortified cities, an army of 100,000 men and 1000 elephants.¹

We must, therefore, consent to throw back the Andhras; and, instead of requiring them to fall into a general and single line of paramount Indian kings, as Wilford would insist, let them run in a parallel line, along with the lines of Suráshtra, Ujjain, Magadha, and others, individuals of each line in turn obtaining by their talent, prowess, or good fortune, a temporary ascendancy over their neighbours: thus at length we may hope to fulfil Capt. Tod's prophecy,—‘let us master the characters on the columns of Indrapreshta, Prayag, and Mewar, on the rocks of Junagarh, at Bijollie on the Aravulli, and in the Jain temples scattered over India, and then we shall be able to arrive at just and satisfactory conclusions (in regard to Indian history).’²

[Prof. H. H. Wilson has most obligingly favored me with the subjoined revised translation of the interesting monumental record which forms the subject of the preceding remarks. The text upon which the interpretation is based is derived from an independent Devanágari transcript of the original, I had prepared with much care from the improved fac-simile of Messrs. Westergaard and Jacob, published in the Journal of the Bombay Branch Roy. As. Soc. for April, 1842. Prof. Wilson has of course referred to the amended lithographed transcript of this

¹ The name Sáragan, given in the Periplus as of a sovereign that had formerly reigned at Kalliena (near Bombay), has some resemblance to Satakarni; but I will not build upon such uncertain ground.

² Tod's ‘Rájasthán,’ i. 45: he gives a curious derivation, by the way, of the name of Junagarh:—“The ‘ancient city,’ *par éminence*, is the only name this old capital, at the foot of, and guarding, the sacred mount Girnár, is known by. Abul Fazl says it had long remained desolate and unknown, and was discovered by mere accident. Tradition even being silent, they give it the emphatic name of *Juna*, ‘old,’ *gurh*, ‘fortress.’ I have little doubt that it is the Asildurga or Asilgurh of the Grahilote annals, where it is said that prince Asil raised a fortress, called after him, near to Girnár, by the consent of the Dabi prince, his uncle.”

writing, and verified my doubtful readings. His Sanskrit text and commentaries will be reserved for separate publication, in the 'Jour. Roy. As. Soc.' The matured result is all that I need desire to present to my readers.—E. T.]

REVISED TRANSLATION OF THE SĀH INSCRIPTION ON THE GIRNĀR ROCK.

(1). This perfect, delightful, beautiful (causeway ?) from Girinagar to the foot of (was constructed) of . . . stone (and in) breadth, length, and height, was firmly built as a public road along the skirt of the mountain Emulous¹ formed

(2). by that artificial causeway, and still renowned.

(3 and 4). remains in a great heap . . . then this . . . in the year two (and) seventy (?) of the royal Mahahshatrapa² Rudra Daman, whose name is repeated by the venerable, the son of the royal Mahahshatrapa, of well selected name, Swami Chandana.³

(5). In the dark half of Marga Sirsha, the earth was converted as it were into a sea, by heavily raining Panjanya, so that the golden sand of the mountain (was washed away ?).

(6). And by the exceeding violent currents of the Palesini, and other rivers, destroying, as if at the end of the world, all that sought an asylum, even on the highest parts of the hill, as well as along the skirt, and bringing down the trees from the peak, the causeway (was broken down ?).

(7). And this being accompanied by a terrible strong wind, the water rushed down like a cataract, sweeping away the stones, trees, shrubs, creepers, along the river, by (whose joint efforts) four hundred cubits (were thrown down).

(8). And seventy cubits (more) broken by the torrent was caused to be made by Pushpagupta, the chief artificer⁴ of the Maurya King Chandragupta, by Tushasyenu, the Yavana rāja of Asoka, the Maurya, through good fortune was adorned⁵ through that restoration, the rāja (announced) to all castes having come to see the causeway, for their security, that by him discontinuance was made of putting men to death, by expelling the breath of life.

(10). By observing this engagement, he (overcame all enemies, and extended his rule) over many well affected countries, conquered by his prowess.

(11). Both in the east and west, as avanti ānarta Surashtra . . . kukkura Aparāūtā, and all the nishadas.

(12). Having repeatedly overcome Sātakarni, the lord of the South, he concluded an alliance (with him?).

¹ Apparently alluding to the Selubandha of Rama, to which that of Girinagar is compared.

² Rājno Mahahshatrapa may also mean 'the great Satrap of the King.'

³ But there is room left, by defects in the inscription, for one or more names between Rudra Daman and Swami Chandana.

⁴ The words are Sashti Yagusyena, possibly for Sreshtiya Gusyena, or the last may be intended for Guptena, as if there was a Sashtigupta after Chandragupta.

⁵ The inscription records the repair of the causeway by Rudra Dama. Here, apparently, it relates its having been built by some officer, or by the successor of Chandragupta; and repaired or beautified by the Yavana rāja (?) in the time of Asoka.

As an atonement for leading my readers into this long digression, I now present them with an engraved plate of all the varieties of the Suráshtra group of coins yet found. There is one new name added through the diligence of Lieut. E. Conolly. The rest are already known; but I subjoin their corrected readings for the satisfaction of my numismatical friends. The fact of their having a Grecian legend and head on the obverse is now explained, and the date of their fabrication is determined so far that we may place some of the early reigns in the second and third centuries before Christ: to what later period they descend we may also hope to ascertain through the means of other coins which will come to be described along with the third inscription from Junagarh, as soon as we obtain a correct facsimile of it. I may here so far satisfy curiosity, as to state that this third inscription,—the longest, and in some respects the best preserved, though from the smallness and rudeness of the letters it is very difficult to decipher,—is in a more modern character, that allotted to the third century after Christ, or the Gupta alphabet; and that in the opening lines I find an allusion to Skanda Gupta, one of the Gupta family, whose name has also been found upon a new series of the Suráshtra coins. The words are ... कीर्त्ति विगुण नृपतिः
 स्कन्दगुप्तः पृथुश्रीः चतुर..... (Vide 'Jour. As. Soc. Beng.,' vol. vii., pl. xix., and vol. i. *ante*, p. 247).

We shall thus be able to string together by means of the inscriptions and coins of ancient Suráshtra a continued series of names and *dates* from the time of the Maurya dynasty to that of the Gupta dynasty of Kanauj, which terminates the catalogues of the Puránas.

Dates, too, did I say? Yes, I am in hopes of adding even actual dates to the series, for I have been fortunate enough to light upon a clue to the ancient forms of the Sanskrit numerals, and to discover their presence on the very series of Suráshtrian coins to which I have been just alluding. But here again I must solicit a little patience while I describe the grounds of this new assertion.

ON THE ANCIENT SANSKRIT NUMERALS.

The most ancient mode of denoting number in the Sanskrit languages, as in the Greek and Latin, was by the use of letters in alphabetical order. This system we find prevalent in all ancient Sanskrit works, as well as in the Páli, the Tibetan, and other derivate systems. There do not, indeed, appear to be any numerals peculiar to the Páli. In their sacred records the words are always written at length; they have also the symbolical words of the Sanskrit astronomical works, and what is called the *Varna sankhya*, or numeral classification of the alphabet. The numerals now employed in Ceylon, Ava, Cambodia, Siam, have hardly the slightest affinity to one another.

When this system was exchanged for that of the decimal or cipher notation does not appear to be known, or to have been investigated by the learned. Up to the ninth or tenth century of our era, the Nágari numerals extant on numerous monuments do not differ materially from those now in use.

In the Gupta class of inscriptions, as far as I know, no numerals had as yet been found until I noticed

some doubtful and unknown symbols on the Bhilsa monument. In the Buddhist pillar inscriptions the dates where they occurred were uniformly expressed at full length.

A few months ago I was engaged in transcribing and reading with my pandit some copper-plate grants supposed to be of the third century, found in Gujarât by Dr. Burn, whose beautiful copies of them I hope shortly to make public. In one of these, the date was entered at full in the words संवत्सरे शतत्रयेचतुर्नवत्यधिके 'in the *samvat* year three hundred and ninety-four.' A few lines below this the word ॥संवत्सर॥ again occurred, followed by three symbols,¹ *d*, *m*, *f*, which must, of course, be numerals: they are more exactly copied in pl. xl., and, according to the preceding statement, should be 394.

On a second plate in the same manner, the date in words was संवत्सर शतत्रयेशित्यधिके कार्तिके शुद्धपञ्चदश्या, 'in the 15th of Kartik, *samvat* 380,' and in figures सं, *d*, *l*, कार्तिक शु

On a third plate the date in words was शतत्रयपञ्चाशित्यधिके कार्तिके पौर्णमास्ये, 'Kartik full moon, *samvat* 385,' and in figures *d*, *l*, *i*, and *o*, *i*, as before: in both of which the same symbols occur for 1, 3, 8, and 5; and the latter figure, much resembling the ancient letter *na*, but slightly altered, was again observed on a fourth plate sent me by Dr. Burn, from Gujarât, which did not contain the date in words, thus, सं, *d*, *k*, *h*.

¹ [In the original text of the 'Jour. As. Soc. Beng.,' fac-similes of these numerals are inserted in each place; as these are repeated in full in Prinsep's own Plates No. xl. of the present series, and are re-copied and classified in my supplemental Lithograph, pl. xl. *a*, I have not thought it necessary to have these types re-cut, but have supplied their places by italic letters, whose several correspondents are duly defined in the new transcript of pl. xl. *a*.]

Much pleased with this new train of discovery, I turned to Mr. Wathen's paper in the fourth volume of the *Journal*, in which I remembered his interpretation of the date on a similar grant by Sri Dhara Sena, as being in the ninth year of the *Valabhi Samvat* of Tod, corresponding with A.D. 328. Here the translator had no written entry to guide him, nor had he any clue whereby to recognize the numerals which followed the abbreviated *Samvat*, thus, *d, c*, which we now perceive to be 300, + some unknown unit. I immediately wrote to Mr. Wathen and to Dr. Burn, requesting them to examine carefully the dates of all other plates in their possession, and from them in return I received all the examples which are inserted in plate xl. From the whole series combined, we may venture to assign a certain value to the 1, the 3, the 4, the 5, the 8, and the 9.

The last of these, I could not but remember as the symbol on one of the Bhilsa inscriptions, which led to so many conjectures a year ago. In the form of \oplus we have evidently our *m*, or the year 9, but the three strokes at the side would appear to modify its value, or to be themselves a numeral, perhaps the *o*. Then, as we find the preceding *k* has not a dot above it, we may use that also as a numeral, and understand the whole *k, m*, \equiv as 2 or 6, or 790 according to the value to be hereafter assigned to *k*.

Again, in the second Bhilsa inscription ('*Jour. As. Soc. Beng.*, vol. vi., p. 458, pl. xxvi.), the fig. 3, with another, is perceived following the word सप्त, and the last letter may possibly be a numeral also. In Mr. Ommanney's Multai inscription, two numerals of the



W West Lake



same class were observed ('Jour. As. Soc. Beng.,' vol. vi., p. 869.)

It may also be remembered that in my notice of the Suráshtra coins (vol. i, p. 433), I remarked behind the head on the obverse, besides a legend in corrupted Greek characters, a few strange marks, not at all like either Greek or Sanskrit alphabetical characters; to these I now re-directed my attention, and was happy to perceive that they too were in fact numerals of the same forms, and of equal variety with those on the copper-plate grants.

I have arranged at the foot of pl. xl. those specimens in my own cabinet, on which the figures are best developed.

Upon bringing the subject to the notice of Dr. Burn, at Kaira, he wrote me that he had already remarked these symbols on another very numerous class of old coins, found in the ruins of the Gujarát towns. They are made of lead or tin; and have on one side, in general, a bull, and, on the other, the triple pyramid which forms the central symbol of the silver hemi-drachmas of the Suráshtra satraps. I have not found space to introduce them into the present plate, but fig. 22, pl. xxxvii. will serve as a representative of the whole class. It is a finely preserved copper coin, most opportunely discovered and presented to me by Lieut. E. Conolly, from Ujein. It bears the numerical symbols d , k , very distinctly marked under the Chaitya symbol. Among the facsimiles of the leaden coins, I find d , l , $:$, and d , m , $:$, with barely room for a third figure, but in one the reading is d , j , g , so that we may venture to

place them all in the fourth century of some yet unknown era.

Among the silver coins the variety is greater : fig. 23, which I find by the reverses is a coin of Rudra Sáh, has the year *d, l, h*.

Another, fig. 26, also of Rudra Sáh, has the third figure well developed *d, l, a*.

Fig. 24, of the son of Rudra Dámá (the repairer of the Girnár bridge), has apparently the numbers, *d, m, :*, or 390.

Fig. 12, from Ujein, Rudra Sáh II. has *d, d, b*, the first three rather faint. In a coin of Viswa Sáh, given to me by Mr. Wathen, similar to fig. 9, of the plate, the date is *d, b, g*.

Fig. 25, is a well brought out date *d, j, :*, on a coin of Atri Dámá, son of Rudra Sáh, in my cabinet : the coins of the same prince in Mr. Steuart's plate, and one also of Aga Dámá shew traces of the same second figure.

Now, although the succession of the Satraps, or Sáh family, as given in volume i., p. 429, rests but on slender evidence in some points ; still, where the names of father and son are consecutive, we may rest with confidence on it in fixing the priority of such of our newly found numerals as occur on them respectively.

We must, for the sake of perspicuity, repeat the list, with the addition of the dates as far as we have traced them :

REGAL SATRAPS OF SURASHTRA.

- 1 K. Rudra Sáh, son of a private individual, Swámi Jina Dámá.
- 2 K. Aga Dámá, his son.
(Here the connection is broken.)
- 3 MK. Dámá Sáh (no coins.)

- 4 MK. Vijaya Sáh, son of Dámá Sáh.
- 5 K. Vira Dámá, son of Dámá Sáh.
- 6 MK. Rudra Sáh, son of Vira Dámá, *Samvat*, *b*, (?) *l*, *a*, and *d*, *a*, :.
- 7 K. Viswa Sáh, another son of Vira Dámá ditto *d*, *b*, *g*.
- 8 K. Rudra Sáh, son of M.K. Rudra Sáh, ditto *d*, *d*, *b*.
- 9 MK. Atri Dámá, son of M. K. Rudra Sáh ditto *d*, *j*, :.
- 10 MK. Viswa Sáh, son of Atri Dámá.
(Here the connection is broken.)
- 11 MK. Swámi Rudra Dámá (no coins.)
- 12 MK. Swámi Rudra Sáh, his son, *Samvat*, *d*, *l*, *h*, and *d*, *m*, : '.

The two last names being insulated from the rest, were on the former occasion placed by me before Dámá Sáh, because the form of the letter *j* seemed of the earlier type. Since, then, I have learnt that the turning up of the central stroke of the *j* constitutes a vowel inflection. I now, therefore, bring the two Swámis to the foot of the list, on the plea that all figures must have precedence of the 9 or *m*. In the same manner we may now argue that *b* precedes *d*, this figure *j*, and the latter again *l*.

To aid in prosecuting my inquiry, I begged Kamalákánta to point out any allusions to the forms of the ancient numerals he might have met with in grammars or other works; but he could produce but very few instances to the point. One of these is to be met with in the *Kātantra Vyākaraṇa*, a work of Belála Sena's time, where the conformation of the four is alluded to in these words,

स्वन युगाकृतिश्चतुरङ्गो विसर्गश्च

Like a woman's breast is the figure four, and like the visarga;

and the visarga is further explained by a passage in the *Tantrā-bhīḍhāna*, a more modern work still, dated in 1460 *Saka*.

द्विः खाहानलप्रिया ठकारिणवर्णसाम्यात् विसर्ग

The name of visarga is 'two *ths*,' 'Swahd,' *analapriya*,—because the visarga has the form of the letter *th* (o).

This merely alludes to the modern form of the 4, which exactly resembles the Bengálí visarga.

The oldest allusion he could furnish, was the following on the form of the 6, from Pingala's 'Prákrit Grammar.'

इगुरवङ्कदुमत्तो अलोलहोइ सुद्वएक्क अलो

"The *guru* mark¹ is like the figure 6, crooked, and of two strokes; it is called also *lahu* (*laghu*), it is also denoted by one stroke or one minute."

This passage evidently alludes to a form of 6 more resembling the Bengálí than the present Nágari type.

Another channel through which I was in hopes of tracing the ancient cyphers, was the numerical system of those Indian alphabets which bear most resemblance to the forms of the earlier centuries, such as those of Kashmír, etc. In the specimens of these, which I have introduced into the plate for the purpose of comparison, it will be seen that the three has certainly considerable affinity to our *d*; while the one and five approach nearly to our *a* and *h*. There is a faint resemblance in others of the group; but some again are totally changed.

The Tibetan numerals (of the seventh century) do not yield much more insight into the matter. They are, we may say, one remove backwards from the Bengálí numbers—the 1, 2, 3, and 5, only agreeing better with the Nágari forms. The 1, however, agrees exactly with one of the ancient figures on the coins, and this has been my inducement to consider the latter as 1.

¹ i. e. The mark used to denote a short quantity in prosody and in music, which is formed ॐ.

Upon regarding attentively the forms of many of the numerals, one cannot but be led to suppose that the initial letters of the written names were, many of them, adopted as their numerical symbols. Thus, in the Tibetan, 5 ँ, we see the ँ or *p* of the same alphabet, the initial of *pancha*. The same may be said of the Kashmírian, and the modern Hindí form ५, and indeed in some measure of the ancient forms *h* and *i*.

Again, the Tibetan 6 ང, resembles the *ch* ཅ of that alphabet: the Ceylonese form is exactly the *ch* of its alphabet, and there is an equally marked connection between the Nágari ङ and the 𑖑 *chha*, which is the common name of this numeral.

On the same principle, in the absence of other argument, we may set down the *k* of our new series as 7, being identical with ७, the initial of *sapta*.

The modern 3 ३, has no small likeness to the *tr* of the older Nágari alphabets; nor does the 2 differ much from *d*; but these resemblances may be more ideal than real; for, by an equally facile process of comparison, they might be both derived from the Arabic figures, as might other members of the series, as 7 and 8, in the Nágari of the Nepalese coins particularly.

The 9 of the Tibetan, Bengálí, Nepalese, and Burmese numerals is precisely the *l* of the ancient alphabets. Now, in the allotment of the vowels numerically, the *li* represents 9; but it would appear far-fetched to adopt one insulated example of derivation from such a source.

The 9, however, of the Suráshtra grants and coins is of a totally different order. It resembles the four-petalled flower of the *bél*, or Indian jasmine; and in the copper

plates we find it absolutely represented with a stalk (see No. 1, of pl. xl). Seeking the name of this flower in Sanskrit, *mallika*, the pandit reminded me that one of its synonymes was *nava mallika*, which the dictionaries derive from *nava*, 'praised, excellent,' but which may now receive a much more natural definition as the 'jasmine flower resembling the figure 9.'¹

It is further to be remarked that, in many of the ancient systems, separate symbols were used to denote ten, twenty, etc. in combination with the nine units severally. The curious compound figure seemingly used for the 1 of 15 in the two cases quoted above *o* may be of this sort: indeed it somewhat resembles the Ceylonese ten (see plate). On this point, however, I can offer no demonstration, nor any other argument, save that we have already more than nine symbols to find accommodation for as numerals.

With all these helps, and analogies, I have endeavoured to arrange the nine old numerical symbols in their proper order in the accompanying plate, so as also to meet the conditions of the succession of dates on the coins of the satraps of Suráshtra. In this I am far from being confident of having succeeded; but having once, as it were, broken the ice, we may soon hope for a more perfect solution of the curious problem, through the multitude of new, or rather old, monuments which seem to emerge from oblivion just at the time they are wanted, under the united efforts of the Society's associates in central India. Once having proved that it was customary to date the

¹ [Prinsep's usually quick perception seems to have failed him here, as the *Lantsa Numerals*, in vol. xvi., '*Asiatic Researches*,' p. 420, give almost the exact normal forms of 80 and 90, as found in the inscriptions and coin legends.]

coin of that early period, we must direct attention again to the monograms on the Bactrian, Indo-Scythic, and Kanauj coins, which may turn out to be also used numerically.

The numbers, then, which, from comparison with foreign and modern native series, as well as the other considerations above given, I have finally adopted, are as follows :—

1	2	3	4	5	6	7	8	9	10	0
<i>a</i>	<i>b</i>	<i>d</i>	<i>f</i>	<i>h</i>	<i>j</i>	<i>k</i>	<i>l</i>	<i>m</i>	<i>o</i>	:
Varieties ? <i>c</i>	<i>e</i>	<i>g</i>	<i>i</i>					<i>n</i>	<i>p</i>	

Before concluding this division of my theme, I may be expected to explain in what era the dates of the Suráshtra coins can be expressed, so as to place Swámi Rudra Dámá, whom we perceive in the inscription to have followed at some reasonable distance Asoka himself, at the end of the fourth century, or about the year 390. If the Vikramáditya or Samvat be here intended, he will fall after the close even of the Arsakian dynasty of Persia, when the Greek was disused, and the arts had greatly deteriorated ; when, moreover, the form of the Sanskrit character had undergone considerable change. If we take the Seleucidan epoch, which might have been introduced in the provinces tributary to Syria, Rudra will have reigned in A.D. 89. If, lastly, out of deference to Asoka's temporary supremacy in the Gujarát peninsula, we take the Buddhist era, then 543—390 will leave 153 B.C. about a century after Asoka, and in every respect the period I should like to adopt, were it possible to establish any more certain grounds for its preference. The most perplexing circumstance is that the grants of the



Balabhî dynasty are also dated in the third (or fourth) century, and that it is hardly possible to consider their dominion as contemporary with those of the satraps. For them, indeed, we must adopt the Vikramāditya era, whatever may be determined in regard to the one before us.

[Following out the view of the question suggested by Prinsep's remarks at p. 77, in 1848 I succeeded in demonstrating that these signs were uniformly independent symbolical numerals, each denoting in itself a given number, irrespective of any relative collocation;¹ and, therefore, that the *d* was equivalent to 300, wherever it might be found; and likewise, that the *l* and *m* stood for 80 and 90 respectively, whatever position they might chance to occupy. I then proceeded to distinguish those symbols of the Sâh coin dates that declared themselves severally units, tens, or hundreds, by their fixed place, in the order of value, which was always fitly maintained, notwithstanding that the figures themselves clearly could not change their signification by any relative re-arrangement. Beyond this, I cannot claim to have advanced the enquiry in any essential degree. The important aid that otherwise might have served me in the sequent classification of the numbers—the test of their recurrence on the coins of the Sâh kings—was altogether wanting, from the fact that the order of succession of those princes was in itself undetermined.

A re-examination of the entire subject was therefore sufficiently called for; and it is possible that the new data, which have lately become available, may contribute materially to solve the general problem of the system under which the ancient Indian scheme of notation was primarily conceived.²

¹ ['Jour. Roy. As. Soc.', vol. xii., p. 33.]

² [M. Reinaud's 'Mémoire sur l'Inde' was published after the appearance of my Essay in 1838. I therefore transcribe the information contributed by that work towards the general subject. 'Albyrouny a consacré un passage de son Traité sur l'Inde aux chiffres employés de son temps, chez les Indiens, avec une valeur de posi-

The most important elucidation that this subject has received since Jas. Prinsep's original discovery, consists in the 'Observations on the dates found in the cave inscriptions at Nasik,' by the Rev. J. Stevenson.¹ Among these records are to be found no less than twenty-eight figures, or combinations of figures, usually appended to the written exposition of the given value defined at length in the body of the text;² the lower numbers are suffi-

tion. Ces chiffres sont appelés par nous *chiffres Arabes*, et les Arabes les nomment *chiffres indiens*. Albyrouny s'exprime ainsi : Les Indiens, à la différence de nous, ne se servent pas des lettres de leur alphabet pour indiquer des nombres. Mais, de même que l'alphabet varie suivant les provinces, les chiffres changent aussi; les indigènes les nomment *anka* अंक. Les chiffres dont nous faisons usage sont empruntés à ce

que l'on a trouvé de plus convenable chez eux. Du reste, les formes sont indifférentes, pourvu qu'on s'entende de part et d'autre. Dans le Cachemire, on ne se sert pas de traits particuliers pour exprimer les nombres; on a adopté les signes employés par les Chinois. Mais un point sur lequel tous les Indiens sont d'accord, c'est de procéder d'après le système décimal.

M. Reinaud continue : 'Arrêtons nous un moment sur les paroles d'Albyrouny : Les Indiens, a-t-il dit, ne se servent pas des lettres de leur alphabet pour exprimer des nombres. Il existe un traité sanscrit, composé par Aryabhata, dans les premiers siècles de notre ère; et dans ce traité, comme cela se pratiquait chez les Grecs, les Juifs, et plus tard chez les Arabes, les nombres sont exprimés par les lettres de l'alphabet ayant une valeur numérale.' Apparemment, le procédé employé par Aryabhata était tombé en désuétude au temps d'Albyrouny. Néanmoins, les traités scientifiques composés par Brahma-Gupta, au vii. siècle de notre ère, et par les écrivains postérieurs, ne supposent pas, en général, l'usage des chiffres; les nombres sont exprimés par des mots susceptibles d'être rattachés à une quantité quelconque. Albyrouny ajoute qu'on ne pouvait se livrer à la lecture des traités consacrés à l'astronomie, si l'on ne s'était d'abord rendu un compte exacte de cette manière de compter.' . . . M. Reinaud sums up his inferences to the following effect, 'Il semblerait résulter de l'emploi des lettres, de l'alphabet par Aryabhata, pour exprimer les nombres, que dans les premiers siècles de notre ère, les Indiens mêmes, en employant ces lettres avec une valeur de position, n'avaient pas encore eu l'idée de recourir à des signes particuliers. A l'égard de la méthode mise en usage par Brahma-Gupta, elle s'explique suffisamment, d'un côté par l'habitude ou les indigènes ont été de tout temps de faire mystère de leur savoir; de l'autre, parce que des mots significatifs s'incorporent mieux dans un vers que des chiffres.'

¹ 'Jour. Bombay branch, Roy. As. Soc.', July, 1853, p. 35. 'Jour. As. Soc. Beng.' 1854, Note, p. 407.

² I could have desired that the facsimiles of these inscriptions should have been more calculated to command our faith in their exact rendering of the originals, but I observe that Dr. Stevenson himself does not place any great reliance upon the transcripts, as he remarks, 'I trust also to be able to compare all the published copies of the facsimiles with the inscriptions themselves, which, in respect to those at Nasik, I have been unable as yet to do, so as at least to get as perfect a copy of them as can be obtained in the present state of the rocks. As the facsimiles are the property of Government, and executed by another gentleman (Lieut. P. F. Brett), I have done nothing more than, to the best of my ability, see that the lithographer executed his task faithfully.'—Bombay Journal, 1853, p. 57. And again, p. 50, Dr. S. observes,

* Voy. un mémoire de feu M. Whish, intitulé, On the alphabetical notation of the Hindus ('Transactions of the Literary Society of Madras, London, 1827).

ciently simple and obvious, and are only perplexing in the multiplicity of forms some of their exponents are seen to take; the larger sums on the other hand, are expressed by a crude and uncertain method, under which the amount has often to be read backwards in the current line of writing; thus, the generic symbol for *thousands* is ordinarily entered first, that for *hundreds* second, while the specific decimal, or unit cipher, which has to determine the value of the whole, is placed last in the order of alignment, followed by the rest of the inscription. At times again, the mark for *hundreds* is indifferently inserted before or after the figure which indicates the total.¹ If, by any possibility, further argument were required to that end—this double system of arranging the ciphers would alone establish that they were incapable of having their value enhanced or diminished by change of place.

Dr. Stevenson's point of departure, like my own on a previous occasion, was from Jas. Prinsep's investigations of April, 1838 (here reprinted); he does not seem to have seen my paper of 1848, and therefore expresses no opinion either for or against my position, but continues to follow Prinsep in reading ॐ as *three*, in preference to *three hundred*; at the same time that he admits that the triple horizontal lines of the normal ३ fully suffice to express the lower number—for which indeed he has a second variant—and notwithstanding that his own materials contribute separate and independent signs for *ten*, *twenty*, *thirty*, and *one hundred*: the latter being specifically distinguished from the various generic signs for *hundreds*.

The next item I have to advert to, is the idea advanced that the Satrap numerals owe their forms to the Bactrian alphabet.² This supposition I can scarcely bring myself to entertain.

¹ 'It is difficult for me at present to say whether the frequent omissions of the point for ॐ and other anomalies, belong to the original, or are the faults of the facsimile.'

² Nasik Inscription, No. 2, plate 7.

³ Dr. Stevenson remarks, 'In the Satrap inscriptions, the numerals used to express the different sums of money there mentioned are peculiar. At first I could determine nothing about their origin, but on a careful examination I found a strik-

The assumption is chiefly based upon the similarity traced in certain forms of the figures to the original letters of the Arian writing; in order to carry out the comparison however, very great liberties have to be taken with the normal forms of the characters themselves—still very incompletely ascertained—and even these, rather forced identifications, are confined to a very limited proportion of the entire suite of the numbers; while on the other hand many of the figures are clearly and indubitably composed of letters of the identical alphabet in which the inscriptions at large are expressed. That these ciphers in their original constitution actually were indigenous letter symbols seems to be further established by other more recent inscriptions, where such forms are frequently seen to follow the progressive modification of the associate alphabet. I omit the dry details incident to the verification of each symbol, referring my readers to the 'Journal of the As. Soc. Beng.,' in which the original paper is to be found.¹

ing resemblance between the character denoting a thousand (*Sahasra*) and the Bactrian S reversed. This induced me to examine the rest of them, and I think it exceedingly probable that they are all derived from that source. The Bactrian Tz, pronounced in Sanskrit J or *Dsch*, will represent well the figure, which is first in 5 or 10 (*Dasha*). The sign for 5 (*Pancha*) is the P, or the old Indian $\overline{\text{P}}$ inverted. The Bactrian double T also approaches very nearly to the 8 of our inscriptions, as if to denote अठ. It would appear, then, that the Bactrian letters had been introduced into the Satrap Indian inscriptions as numerical ciphers. The system, also, is the ancient Roman and Greek one, that in which there are different signs for the 1 in tens, hundreds, and thousands; our present decimal notation being, as I have noticed elsewhere, a comparatively modern invention of the Scindian merchants of the middle ages ('Jour. Roy. As. Soc. Bombay,' vol. iv.) Further research will probably show, as Mr. Prinsep has done with a few of them already, that the old Indian numerals are also ancient letters.—Jour. Roy. As. Soc. Bombay, vol. v., p. 39.

¹ The Gupta units vary somewhat from the Sâh exemplars, and hence demand a passing notice. As yet I have only been able to discover three definite and complete forms,—the *one*, which is shaped as an ordinary hyphen, the $\overline{\text{P}}$ = *four*, and the curious figure that occurs on coin No. 57, pl. ii., 'Jour. Roy. As. Soc.' vol. xii., which in its outline follows the design of an alphabetical त. But, in treating of Gupta numbers, I must fairly warn my readers of a preliminary difficulty that I have experienced in regard to the correct point from whence their exponents should be viewed. The Nasik inscriptions display the symbol for *one hundred* written perpendicularly; and if that be the correct direction of the cipher in the general alignment, the Gupta dates running in front of the profile of the King ought to be read Mongol fashion, like the parallel names of the monarchs of the Gupta race, as usually expressed on the field of their gold currency. On the silver pieces of the Kumâra Gupta, however, whether the sign for 100 may be reversed or not, the arrangement of the tens and units clearly demonstrates that the whole must be read as consecutive rather than as superposed figures, while, strange to say, the dates on the Skanda Gupta

In conclusion, I sum up the results of the present state of the enquiry by the exhibition of the lithographed plate of figures [xl. a] regarding which I have merely to add, that the second compartment includes all such symbols, whether lapidary, numismatic or graven on metal, that I am generally prepared to recognise. The third column reproduces Prinsep's primary conjectural arrangement of the ciphers and their supposed variants. The remaining spaces are filled in with the products of Dr. Stevenson's investigations, but I must warn my readers, that I have taken a double liberty with that author's materials; on the one hand, I have copied my examples of each cipher from the transcripts of the original facsimiles of Lieut. Brett, which are lithographed at large in the *Bombay Journal*, in preference to following the outlines entered in the companion table of numbers given in that *Journal*, and supposed to be compiled from the same sources.

On the other hand I have ventured to insert, subject to correction, two signs for 2, which Dr. Stevenson does not definitively acknowledge in his list; but which I obtain from his rendering of inscription No. vi.¹ The third figure for *hundreds*, under the Satrap heading, is also of my introduction, under similar authority.—E.T.]

EXPLANATION OF PLATE XII.

Fig. 1, (from Steuart's plates), a silver hemidrachma.

Fig. 11, a coin belonging to Mulla Feroz of Bombay.

Fig. 13, a coin found by Capt. Prescott at Palhanpur in Gujarát, presented to me by Mr. Wathen.

These three coins have all the same legend, but No. 11 exhibits the application of the vowel *i* in two places, which the others want: the legend thus completed is,

Rājña Kshatrapasa Rudra Sāhasa, Svāmī Jina Dāmdiputrasa,
 'Of the Royal Satrap, Rudra Sāh, the son of the lord Jina Dāmā.

and Buddha Gupta coins seem to necessitate a supposition of a contrary mode of distribution. I have entered the outlines of the Gupta numerals, both tens and units, in accordance with this somewhat arbitrary arrangement, leaving the point fairly open to correction, when more numerous and more perfect specimens of this coinage may decisively instruct us on the general question.

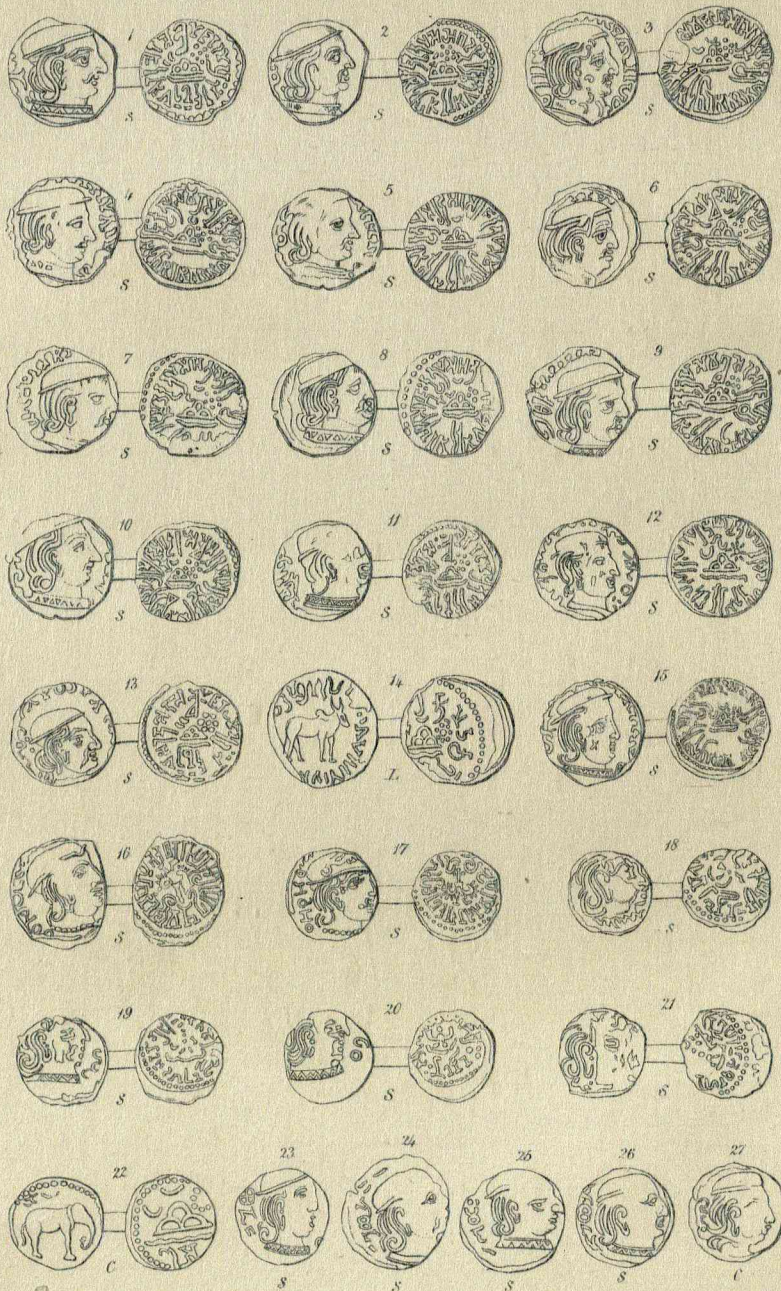
¹ 'Jour. Roy. As. Soc. of Bombay,' vol. v. p. 53.

Ancient Indian Numerals.

Nos	Numerals	Prinsep.	Stevenson.			
			Fractions	Old Indian	Satrap	
1	-	१ ^a	-		५५	1
2	=	० ^b ० ^c	=		५ ० ?	2
3	≡ =-	३ ^d ३ ^e	≡	३३	५	3
4	५ ५ ५ ५	५ ^f ५ ^g		५५५५	५	4
5	५ ५ ५ ५ ५	५ ^h ५ ⁱ	५	५	५	5
6	५	५ ^j ५ ^k	५	५	५	6
7	५ ५	५ ^l ५ ^m	५	५	५	7
8	५	५ ⁿ ५ ^o	५	५	५	8
9	५ ५	५ ^p ५ ^q	५	५	५	9
10	५ ५ ५ ५	५ ^r ५ ^s	५	५	५	10
20	० ०			० ०		20
30	५ १ ०			५		30
40	५					40
50	५					50
60	५					60
70	५					70
80	५ ५ ०					80
90	५ ५ ५					90
100	१ ~ Gupta	१ Nasik		० ०	० ० ०	100
300	१ १					300
1000	५ ५				५ ५	1000

Gupta Numerals	
Units	० १ २ ३ ४ ५ ६ ७ ८ ९
Tens	० १ २ ३ ४ ५ ६ ७ ८ ९
Hundreds	१

Saurashtra Coins.



The title of Jina Dámá, 'votary of Buddha,' is a better reading than Jina Dámá, 'subduer of that sect, formerly adopted. [My No. 11].

Fig. 2, (from Steuart's plates), a coin of Aga Dámá, son of Rudra Sáh. [No. 10].

Rājna Kshatrapasa Aga Dámna, rājna Kshatrapasa Rudra Sāha putrasa.

Fig 3, (ditto), a coin of Vijaya Sáh, son of Dámá Sáh. [No. 9].

Rājna Kshatrapasa Vijaya Sāhasa, rājno mahá Kshatrapasa Dámá Sāha putrasa.

Fig. 4, (ditto), a coin of Vira Dámá, son of Dámá Sáh. [No. 7].

Rājna Kshatrapasa Virádāna, rājno mahá Kshatrapasa Dámá Sāhas putrasa.

Fig. 5, (ditto), a coin of Rudra Sáh, son of Vira Dámá. [No. 13].

Rājno mahá Kshatrapasa Rudra Sāhasa, rājno Kshatrapasa Virádāna putrasa.

Another coin, apparently of this Rudra, in my possession, fig. 26, has a date which may be read 283; I find I have two coins of this prince (one given me by Mr. F. Stainforth). Colonel Stacy has also two of the same; they may be known by the epithet *mahá*.

Fig. 6, (ditto), a coin of Viswa Sáh, son of Rudra Sáh. [No. 4].

Rājna Kshatrapasa Visva Sāhasa, rājno mahá Kshatrapasa Rudra Sāha putrasa.

Fig. 7, (ditto), a coin of Atri Dámá, another son of Rudra Sáh; behind the head, but more distinctly in my own coin (fig. 25), is the date 360? [No. 2].

Rājno mahá Kshatrapasa Atri dāmna, rājno mahá Kshatrapasa Rudra Sāha putrasa.

This name is the nearest approach to the Ari Dámá of the inscription, who, however, was the son of Swámí Chastána. Colonel Stacy has also a coin of Atri Dámá.

Fig. 8, (ditto), of the same prince, introduced as shewing more clearly the name of his father.

Rājna Kshatrapasa Atri trapasa Rudra Sāha putrasa.

Fig. 9, a coin of Visva Sáh, son of Bhatri Dámá. [No. 3].

Rājno Kshatrapasa Visva Sāhasa, rājno mahá Kshatrapasa Atri Dámá putrasa.

This coin has a date, which may be read 323, in which case it must precede the last two: the father's name was before read as Atri Dámá, whence the misplacement.

Fig. 10, a coin of Swámí Rudra, son of Swámí Rudra Dámá, in the obverse, the figures 39 (perhaps 390). Another has 385. [No. 12].

Rājna mahá Kshatrapasa Swámí Rudra Sāhas, rājno mahá Kshatrapasa Swámí Rudra Dámá putrasa.

Fig. 12, a new name, or new as to the second title; Rudra Sáh, son of the great Satrap Rudra Dámá, was presented to me by Lieut. E. Conolly, from Ujein.

Rājna Kshatrapasa Rudra Sāhasa rājna mahá Kshatrapasa Rudra Dámá (?) Sāha putrasa.

This is the only coin which bears the name of the repairer of the bridge, and that rather dubiously, as the father of the prince who

coined the piece. It has a date on the obverse, which I have interpreted 390, like the preceding.

Fig. 15, a silver coin belonging to Mulla Feroz of Bombay, similar to Mr. Steuart's coin, fig. 3. [No. 9].

Rājna mahā Kshatrapasa Vijaya Sahasa, rājna mahā Kshatrapasa Dāmd Saha putrasa.

fig. 14, a copper coin, unique, discovered by Lieut. Conolly at Ujein, and placed in my cabinet through his kindness. Obverse, a bull, with a marginal legend, apparently Greek, some of the letters seeming to form the word *Basileus*, etc.

Rājna mahā Kshatra(pa) . . . the remainder of the legend lost.

The letters are larger and better formed on this than on the silver coins. Most copper coins of the series exactly resemble the silver ones with a head on the obverse. Col. Stacy has a good specimen, of which the obverse (fig. 27) has apparently a date.

[It is now time that I should advert to the epoch of the Sáh kings and the position in which the somewhat difficult question involved at present stands. Prinsep's opinions are reproduced above in their entirety. In continuation of these researches, I myself attempted, some years ago,¹ to determine more precisely the period to which the rule of this dynasty should properly be ascribed; and I selected on that occasion, as the era best calculated, in general coincidences, for the due explanation of the figured dates extant on the coins, the cycle of *Srí Harsha*; a system of computation at that time only recently made known to us under the authority of Albirúní, whose work has already been largely referred to in these pages. In arriving at this determination, I did not neglect to consider the claims of other eras whose initial dates promised in any way to accord with the requisitions of the various historical and numismatic evidences derivable from independent sources. Notwithstanding certain leading recommendations that offered themselves in favor of the Buddhist era, I saw cause to reject unconditionally all idea of its title to rule the recorded registers.² The Seleucidan era was also tested

¹ ['Jour. Roy. As. Soc.,' vol. xii., p. 1 (1848).]

² [My present conclusion is that the date of the death of Sákya was never generally used in ancient times either for civil or religious computations, otherwise it would be hard to account for the impossibility of fixing its correct epoch, even in the

in its more obvious applicability to the local or epochal demands; and though many arguments were seen to be suggested in support of its selection, which have since been even strengthened by fresh combinations,¹ I am constrained to declare—apart from the slightest desire to adhere to first impressions—that I still give the preference to the *Srī Harsha* era!

Albirúni's account of this cycle will be found quoted at large, p. 166, 'Useful Tables'; and though it will be seen that he himself confesses to doubts and difficulties in regard to its origin and true initial date, I am, for the moment, content to take the fact that some such scheme of chronological admeasurement, reckoning from an event proximate to 457 B.C. or 400 before Vikramaditya,² was actually once in use in India, and that the memory thereof, whether distinct and definite, or jumbled and perverted, remained current in the land till the 11th century A.D.

We are not yet in a condition to discuss exact annual or

days of Huen Tshang, who, in his own words, shows how important, and yet how difficult of determination, this point was held to be among the Buddhist communities of India when he sojourned amongst them.]

¹ [I allude prominently to the concession of Greek supremacy, which, it will be seen, I have admitted more definitely since I last wrote on the subject,—though the abnegation of the employment of dates on the Bactrian coins, from whose types the Sāh money was copied, detracts somewhat from the value of the inference. One of the previous obstacles to the admission of the dependence of the Sāh kings, was the doubt respecting the absolute import of the term **क्षत्रप**, suggested by Prof. Wilson, who remarked, 'Ariana Antiqua,' p. 205, 'Kshatrapa admits etymologically of its being explained chief or protector of the Kshatriya, or martial race, and may possibly be the origin of the Persian title Satrap, as Prinsep supposes, although there is some incompatibility in the assignment of the titles of Rāja and Satrap to the same individual.' On reconsideration, I do not quite admit the force of the latter reason, and the identification of the **क्षत्रप**, as the titular equivalent of the Greek **ΣΑΤΡΑΠΗΣ**, seems now to be set at rest by the recurrence of the term in the Bactrian Pāli as **𑀲𑀸𑀓𑀭𑀯𑀭𑀸** (Inscriptions, vol. i., pp. 99-146, Bactrian coins *infra*); and in Indian Pāli as **𑀲𑀸𑀓𑀭𑀯𑀭𑀸**, pl. xliv., fig. 14.

² [Major Cunningham has originated a speculative date of 477 B.C. as 'the era of the Nirvāna of Sakya Sinha, not as established in 543 B.C., but as generally believed in by the early Buddhists for a period of several centuries.' This scheme is based on the fact of Asoka's conversion to Buddhism falling 218 years after the *Nirvāna*, the former being fixed from other sources at 259 B.C.; hence the Nirvāna itself is assigned to B.C. 477 (259 + 218). A subordinate section of the argument is grounded upon Kanishkas having 'flourished' an even 400 years after the Nirvāna, and yet Major Cunningham, in the same page, while objecting to my inferences, naively remarks—'The difference of exactly 400 years between the dates of Srī Harsha and of Vikramaditya is, to say the least, very suspicious.'—'Jour. As. Soc. Beng.', vol. vii. of 1854, p. 704.]

monthly dates; an approach to the truth is all we need be concerned with for the time being; for, while the arguments *pro* and *con* extend to questions of centuries, we can afford to leave a very open margin for discretionary modifications among the units and tens. I do not propose to recapitulate at any length my original speculations in regard to the correct epochal position of the Sáh kings, but it is needful that I should notice any confirmation my opinions may since have received, as well as any flaws, real or imaginary, that may have been detected by others in my reasoning or inferences.

Amongst other questions that arose during the course of my examination of the materials then available for the illustration of the history of these administrators, was that of their partial or complete independence; and it will be seen that though the balance of evidence appeared to favor the latter supposition as regarded the later members of the dynasty, yet that I reserved a full option for the recognition of the subjection of the earlier rulers of the line to Greek supremacy.¹

In addition to this, in the detail of the coins themselves, while speaking of the obverse legend on a coin of Rudra Sáh, son of Jiwa Dámá, as 'a possible corruption of ΔΙΟΝΥΣΙΟΥ,' I added, 'there is a king of this name among the Bactrian Greeks, made known to us by his coins, which, in their types, seem to connect him with Apollodotus.'² This notion has been improved upon by Prof. Lassen to an extent that I am scarcely prepared to follow him in. His theory seems to be, that Íswara Datta was invested with the office of Satrap about the commencement of the 4th century of the era made use of on the coins (*i.e.* *circa* 157 B.C.), and that, about this time, Apollodotus must have been king; hence it is inferred that he was the Suzerain who raised Íswara to his local honours. It is further added, 'Dionysios, whose name appears sufficiently clear on

¹ ['Jour. Roy. As. Soc.,' vol. xii, pp. 29, 32, 45, 46.]

² ['Jour. Roy. As. Soc.,' vol. xii, p. 52. See also Catalogue *infra*; Dionysius Hemidrachma, No. 1.]



Rudra Sinha's money, reigned *circa* 113 B.C.'¹ And, finally, the Professor imagines he detects the imperfect orthography of the name of Hippostratus on the obverse of the coins of Rudra Sinha III.² Suffice it to say, that the author, so far from contesting my dates or their attribution, introduces us unintentionally to a new feature regarding them, in a purpose their originators could but little have contemplated—a rectification, by their means, of the epoch of the Greek Suzerains, under whose auspices the coins are supposed to have been issued.

I next pass to Major Cunningham's review of the Sáh period; and, as he contests my inferences, I permit him to state his case, in some detail, in his own way:—

'3rd. The independence of the native princes of Gujrat between 157 and 57 B.C. is completely at variance with the Greek accounts of Menander's conquest of Sarioustos or Suráshttra, between 160 and 130 B.C., which is further authenticated by the long protracted currency of his coins at Barygáza or Baroch.

'4th. The alphabetical characters of the Suráshttran coins are so widely different from those of the Pillar and Rock Inscriptions, and, at the same time, are so much similar to those of the Guptas, that it is impossible not to conclude that there must have been a long interval between Asoka and the independent Sáh kings, and an almost immediate succession of the Sáh kings by the Guptas. . . .

'5th. The author of the Periplus of the Erythrean sea, who lived between 117 and 180 A.D., states that *ancient* drachmas of Apollodotus and of Menander were then current at Barygáza (Hudson, 'Geog. Min.', i. 87); this prolonged currency of the Greek drachmas points directly to the period of the Indo-Scythian rule; for though we have some hundreds of their gold coins, and many thousands of their copper coins, yet only one solitary specimen of their silver coinage has yet been discovered. [A mistake: the coin is copperplated over; see *infra*, Catalogue, under Kadphises]. The Indo-Grecian silver probably continued current until after 222 A.D. when the Indo-Scythian power began to decline. From this period, about 250 A.D., I would date the independence of the Sáh kings, and the issue of their silver coinage, which was a direct copy in weight, and partly in type, from the Philopater drachmas of Apollodotus.'—'Bhilsa Topes,' p. 149.

In regard to the criticism in paragraph 3, I have only to observe that, had I exclusively argued for the absolute and continuous independence of the Sáh kings of Gujarát, the objections therein advanced might be held to be fairly stated. But even Major Cunningham's own date of 160-130 B.C., if admitted, need not interfere with the concession of a subsequent assertion

¹ ['Indische Alterthumskunde,' vol. ii., p. 794.]

² [Rudra Sáh, son of Rudra Sáh. (My No. 5, p. 91, *infra*.)]



of independence on the part of the local governors; and the concluding argument, though the author seems indisposed to allow it, has been refuted in anticipation by Vincent's observations,¹ to which I had given every prominence in my paper which formed the subject of Major Cunningham's comment: had the author printed or even noticed the gist of my argument on the opposite side, and then replied to it, I should have been anxious to have treated his reasoning with more respect than I am able to accord to a mere reiteration of a fact which bears, at the best, an alternative interpretation.

With reference to the ratiocination embodied in the fourth paragraph, I may remark that I have already replied to the chief points involved;² but as Major Cunningham and myself differ so completely in our fundamental tests of the progress of writing, and as I am therefore equally unprepared to accept his estimates of similitudes, it would be a sheer waste of time my arguing up from minor details, or attempting to reconcile them, when I have other and less fallacious means of arriving at a judgment.

In respect to the data and inferences embodied in the fifth paragraph, I would simply quote Major Cunningham's own words in regard to the general question between us—'We agree as to the facts, but differ in our deductions.'³

My original proposition for the emplacement of the Sâhs contemplated the inclusion of all their dated coins within the fourth century of the Sri Harsha era, and inferentially confined the thirteen kings, whose numismatic testimonies had thus supplied us with epochal records, between B.C. 157 and 57. Among other pure and avowed speculations, which the open nature of

¹ ['That the coins of these princes should pass current at Barugâza is no more uncommon than that the Venetian sequin and the imperial dollar should be at this day current in Arabia, or that the Spanish piastre should pass in every part of India and the East; that is, round the world, from Mexico to Manilla, and in some instances, perhaps, from Manilla to Mexico again.'—Vincent, 'Commerce, etc.' ii. 204.]

² ['Jour. As. Soc. Beng.,' vol. xxiv. (1855), p. 90; also 'Jour. Roy. As. Soc.,' vol. xii., p. 25.]

³ ['Bhilsa Topes,' p. 145.]

the question and the absence of positive information to a certain extent invited, I was led to remark, in referring to the well-ascertained average of the length of Indian reigns, that the thirteen accessions in question 'should, under ordinary circumstances, be represented by a sum of more than two centuries instead of being compressed into less than one ;' ¹ and I further added, 'the almost unvarying similitude that pervades the entire suite of the Sáh coins, in its simple mechanical indication, implies a comparatively speedy sequence of fabrication.' In endeavouring to account for the brief duration of the sway of these potentates, I conjectured a possible republican form of government under which 'two or more rájas were simultaneously invested with a share in the conduct of the state, or, if elected as sole rulers for the time being, the periods of retention of authority were limited directly and definitively by law, or terminable at the will of the majority.' ² However, these difficulties are certainly more simply and satisfactorily explained by the supposition of a nomination of another description originally emanating from some Suzerain authority to delegated Satraps or governors of provinces.

As regards the consecutive succession of these princes, we have hitherto been compelled to rely upon patronymics and other indeterminate vouchers; and, though it is a question whether our power of defining the values of the date ciphers is sufficiently advanced to authorise our following a serial arrangement based upon their interpretation, we may still profitably test the process with this reservation. The fairly deciphered and reasonably congruous dates determine the order of succession as follows :—

LIST OF SÁH KINGS.

DATES.

1. Yswara Datta, son of Varsha ³	None.
2. Atri Dámá, son of Rudra Sáh	311, 312.
3. Viswa Sáh, son of Atri Dámá	320, 335.
4. Viswa Sinha, son of Rudra Sáh.....	323, 328, 335.
5. Rudra Sáh, son of Rudra Sáh.....	330.

¹ ['Jour. Roy. As. Soc.,' vol. xii., p. 37.]

² ['Jour. Roy. As. Soc.,' vol. xii., p. 40.]

³ [A private individual.]



LIST OF SÁH KINGS.	DATES.
6. Dámá Jata Sriyah, son of Dámá Sáh.....	344.
7. Vira Dámá, son of Dámá Sáh.....(no date deciphered).	
8. Dámá Sáh, son of Rudra Sáh.....	345.
9. Vijaya Sáh, son of Dámá Sáh.....	353, 354, 355.
10. Aṣa Dámá, son of Rudra Sáh.....	370.
11. Rudra Sinha, son of Swámí Jíwa Dámá ¹	374, 375.
12. Swámí Rudra Sáh, son of Swámí Rudra Dámá	384, 390.
13. Rudra Sáh, son of Vira Dámá.....	387.

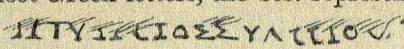
It results from these dates, however imperfect in their comprehensive series, that either there was a double appointment of simultaneous effect, or an indeterminate periodical supersession and interchange of office-bearers, obeying the fiat of the feudal lord, in the one case; or, following the constitutional order occasionally interrupted by the revolutionary convulsions of independent government, in the other. We are still unable to identify the Swámí Rudra Dámá, son of Swámí Chandana, of the Gírnár inscription, with any of those monarchs whose mints have supplied us with records of their rule; but looking to the delayed introduction of the extra title of Swámí—as now defined by the list adapted to the dates—we may, for the present, conjecture the individual to have been the father of Swámí Rudra Sáh; and may even, with but slight stretch of imagination, shadow forth an association of the dubious inscription date of *72, with his fitting place in the order of succession and the independence then achieved, to which he lays claim in his monumental writing.

I next proceed to notice such numismatic novelties of this series as have come to light since Prinsep wrote.

Foremost and most important among these are the coins of Íswara Datta, the son of Varsha, the first Rája of my list.

The obverse legends of the three specimens I have had an opportunity of inspecting are, like the rest, couched in imper-

¹ [A private individual.]

fect Greek letters, the best representation of which is as follows :
 The exergue is, however, remarkable in its contrast with the subsequent series, in having no cipher date, which would seem to indicate that the system of marking the year of issue was not as yet introduced.

The reverse bears the subjoined legend :

रज्ञो मह चक्रपस ईश्वर दत्तस वर्ष पुष—¹

Rājno mahā Kshatrapasa Iśvara Dattasa Varsha putha—

The coins of Dámá Jata Sriyah are also among our later discoveries. Dr. Stevenson first published a notice of a coin of this prince from the Junir hoard (August, 1846). I have since met with two or three further specimens of these rare coins.

The reverse legend runs—

रज्ञो मह चक्रपस दमजट श्रीयः रज्ञो मह चक्रपस दम सह पुचस

Rājno mahā Kshatrapasa Dāmājata Sriyah Rājno mahā Kshatrapasa Dāmā Sāha putrasa.

The following readings of the coin legends of Dámá Sáh, the son of Rudra Sáh, are given on the authority of Dr. Bird, who transcribed them for me from the originals in his own possession in 1848.

रज्ञो मह चक्रपस दम सहस रज्ञो मह चक्रपस रुद्र सहस पुचस

Rājno mahā Kshatrapasa Dāmā Sāhasa Rājno mahā Kshatrapasa Rudra Sāhasa putrasa.

Finally, I have to advert to the unpublished coins of another Swámí Rudra Sáh, whose patronymic is only imperfectly retained on the surfaces of the limited number of specimens that have come within my cognisance.²

रज्ञ मह चक्रपस श्वम रुद्र सहस रज्ञ मह चक्रपस श्वम सत्य सह पुचस

Rājno mahā Kshatrapasa Śwamī Rudra Sāhasa Rājno mahā Kshatrapasa Śwamī Satya Sāha putrasa.

These coins are chiefly remarkable in their accordance, in the style and fashion of their Sanskrit legends, with the approximate specimens from the mint of Swámí Rudra Sáh, No. 12; and the more extensive debasement of the Greek exergue on the obverse.—E.T.]

¹ [The concluding letter is defective in all the three specimens, the lower portion only being visible in each. What remains seems to form a portion of an ordinary *śa*, with a second line below the ordinary subjunctive sign of that letter.]

² [Lieut.-Colonel Bush, Bengal Army—one silver piece. G. H. Freeling, Esq., Bengal Civil Service—one silver and one plated coin.]

Fig..16. In this silver coin found in Katch in 1837, and presented to me by Mr. Wathen, the central emblem of the reverse is changed to a kind of trident; the legend is also altered from that of a Satrap to one of a paramount sovereign :

परम भानुवीर राजाधिराज श्री कुमारगुप्त महेंद्रस्य

Parama Bhānuvīra Rājādhirāja Śrī Kumara Gupta Mahendrasya.

‘Of the paramount sovereign the heroic king of kings Śrī Kumara Gupta Mahendra.’

Fig. 17, another of the same kind, having the same Sanskrit legend, but, behind the head, the Greek letters may be read ONONOT, or RAO NANO? it was presented to me with the last by Mr. Wathen.

Figs. 18, 19, 20, and 21, have the same symbol, but the workmanship is very much deteriorated. The legend on them all has at length been deciphered by the collation of several specimens presented to me by Mr. Wathen, and found in various parts of Katch, Kattywār, and Gujarāt, by Capt Prescott, Capt. Burnes, Dr. Burn; as well as the few inserted in the plates of Mr. Steuart’s coins.¹

परम भगदत्तम राजश्रीस्कन्दगुप्त क्रमादित्य

Parama Bhagadatta ma (ha) Rāja Śrī Skanda Gupta (vi) kramaditya.

But as I have a larger assortment of the coins of the same king to introduce into a future plate, I will postpone further mention of this series for the present.

[I append to this essay my latest classification of such silver coins of the Guptas as are associated with the types last adverted to by Prinsep.

SRI GUPTA.

CLASS A: Silver, weight 31 grains. Mr. G. H. Freeling, Bengal Civil Service. Unique.

OVERSE:—Device, the original type of the Śāh head, apparently unchanged in outline or details.

LEGEND, as usual, in imperfect Greek characters, the concluding six letters of which alone are visible, thus—**Λ C Ξ Ο Ι Ο**

REVERSE:—Device, a singular figure that may possibly represent the early design of the Gupta peacock as rendered by the local artists, beneath which is a linear scroll of three semi-circles similar to that

¹ By a letter from Prof. Wilson I learn that Mr. Steuart’s plate is to appear in the Royal Asiatic Society’s Journal; but that it had time to journey to India and back before the outcoming number went to press! I regret I am thus deprived of the power of adding to this note the observations of the learned in England on the Surāshtra coins.—J.P.

seen in continued use on certain silver coins of Skanda Gupta;¹ above the main device are retained the Sáh cluster of stars and a minute half-moon seemingly borrowed from the same source.

LEGEND—

श्रीनन्दगुप्तविक्रमद्रक्ष श्रीगुप्तकीलालेन्द्र

श्रीनन्दगुप्तविक्रमद्रक्ष श्रीगुप्तकीलालेन्द्र — — —

Prof. Fitz Edward Hall proposes to amend my transcript, thus—

श्रीनन्दगुप्त विक्रमद्रक्ष श्रीगुप्त कीलालेन्द्र — — —

To this he assigns the following translation: "The auspicious, Kílálendra Srí Gupta, son of the auspicious Nanda Gupta, an Indra in prowess."

If this should eventually prove to be a piece of the Srí Gupta, the founder of the dynasty known by his name, it will establish a claim on our attention, altogether apart from its novelty as the unique representative of the money of that king—in the evidence of the close and direct imitation of the technic art of the Sáh coinages, which it develops in so much more distinct a degree than the local issues of the Gupta family of a later date. Indeed, this association is so striking that I was, at first sight, almost inclined to modify my original impression of a deferred revival of the Sáh coinage by the Guptas, on their possessing themselves of the province of Sauráhstra, and to doubt whether it would not be necessary to approximate the two races more closely in point of time, in order to explain with any plausibility the mechanical coincidences of the coinage; but, though these will be seen to be strongly marked in the case of the obverse, or conventional portion of the die, the reverse, or dynastic stamp, is materially changed, both in the leading device and, more important still, in the shape of the letters—so that, in this respect, all my early arguments still hold good;²

¹ ['Jour. As. Soc. Beng.,' vol. iv., pl. xlix., figs. 4, 5; vol. vii., pl. xii., fig. 19; 'Jour. Roy. As. Soc.,' vol. xii., pl. ii., figs. 43, 44; 'Ariana Antiqua,' pl. xv., fig. 20. Prof. Wilson, in speaking of the reverse device of this particular coin, describes it as 'an ornament like a disintegrated Chaitya.'

² ['Jour. Roy. As. Soc.,' vol. xii., pp. 16, 17.]



and, in regard to the barbarized Greek, the inheritance of Sáh imperfections, there need be no difficulty in recognising thus much of the power of imitation of its letters, when we know that on other mintages the Gupta artists were able to achieve fully intelligible Greek adaptations of Eastern names.

KUMÁRA GUPTA.

CLASS B: Pl. xxxvii., figs. 16, 17; 'Jour. Roy. As. Soc.,' vol. xii., pl. ii, figs. 39, 40, 41, 42; 'Ariana Antiqua,' pl. xv., figs. 17, 18.

OBVERSE:—Head of the king in profile: the outline and design are nearly identical with the Suráshtan prototype—the mintage of the Sáh kings—at the back of the head is ordinarily to be seen a mutilated portion of the Scythian title PAO NANO. This important legend affords another link in the direct association of the Guptas with the Indo-Scythians, which is here the more marked, in that, while the device itself is servilely copied from the Sáh, their obverse Greek legends are superseded by this new title.

REVERSE:—It is difficult to determine satisfactorily what the emblem occupying the reverse field may be intended to typify, but the most plausible supposition seems to be that it displays an advance upon the conventional representation of the peacock under Western treatment, following out the artistic notion of that bird given in Sri Gupta's coin.

LEGEND:—

परम भगवत राजाधिराज श्रीकुमार गुप्त महेंद्रस्य

Parama Bhagavata Rájádhirāja Śrī Kumāra Gupta Mahendrasya.

The second word of this legend is the only portion of the whole that is at all open to question; it has been read *Bhānuvira* by Prinsep,¹ but this is not by any means a satisfactory interpretation. The first and third letters are fixed and constant in the various examples, and are properly rendered in each case as भ and व; the second and fourth letters vary considerably in outline on the different specimens; the second letter I have never yet met with in its perfect shape as ग when tried by the test of the ग in Gupta, indeed the majority of the coins display it more after the form of a न, as that consonant is found later in

¹ [Prof. Wilson ('Ariana Antiqua,') has suggested *Bhattaraka* (?) which the Udayagiri inscription ('Bhilsa Topes,' p. 151) rather recommends to our notice.]

the legend in Mahendrasya. The same remark also applies to the final न. I see that Prof. Mill has conjecturally supplied the word *Bhagavata* in the prefix to Kumára Gupta's titles on the Bhitári Lát ('Jour. As. Soc. Beng.,' vol. vi., p. 4), but Prinsep's facsimile of the inscription, though it accords the needful space for the exact number of letters, gives the final as a manifest न; in saying this, however, I must remind my readers, that in the alphabet in question, the slightest possible inflection and continuation of a line constitutes the essential difference between the two letters न and त, and on the other hand the local copper plates of the Valabhis render the न very much after the shape of the Eastern त, while the indigenous त is but little different from the न of the coins under reference. And finally as the words *Parama Bhagavata* appear in all their indubitable orthography on the succeeding coins of Skanda Gupta, we may fairly assume a mere imperfection in the expression of the individual letters and leave the word as it has been entered in the legend above.

The coins under notice are not always complete in the Sanskrit legends; for instance, an otherwise very perfect piece in the cabinet of the Royal Asiatic Society has the word राजाधिराज abbreviated into राजाध; and No. 39, pl. ii., 'Jour. Roy. As. Soc.,' vol. xii., has the same word contracted to राजाधिर.

SKANDA GUPTA.

CLASS C: Pl. xxxvii., figs. 18, 19; 'Jour. Roy. As. Soc.,' vol. xii., pl. ii., figs. 43, 44; 'Ariana Antiqua,' pl. xv., fig. 20.

OVERSE, as in class B, Kumára Gupta, but the execution has greatly deteriorated; on some specimens traces of the word NANO are still to be seen.

REVERSE:—The device in this class of money, appears to offer a more direct imitation of that of the Sri Gupta pieces, than did the intermediate Kumára reverse types, these latter are seen to reject the foot scrolls and to vary the details of the centre figure to a considerable extent.

LEGEND:—परम भगवत श्री स्कन्द गुप्त क्रमादित्य

Parama Bhagavata Sri Skanda Gupta Kramaditya.

Prinsep, in his collated reading of the legends on these coins adopted the letter म (for महा) as occurring after the word भगवत [or भगदत्त as he made it], which he found to be followed by the title of राज, which precedes the name of the monarch. This rendering, he would seem to have drawn from fig. 29, pl. ii., Stuart ('Jour. Roy. As. Soc.,' 1837); but as the like letters do not generally recur, I have marked this as the exception rather than the rule.

The weights of these coins vary from 23 to 29 grains.

CLASS D: 'Jour. Roy. As. Soc.,' vol. xii., pl. ii., figs. 45, 46; 'Ariana Antiqua,' pl. xv., fig. 19.

OBVERSE:—Crudely outlined head, with traces of the title NANO in front of the profile.

REVERSE:—Figure of Nandī identical in form and position with the emblem on the seal of the Valabhi family as found attached to their copper-plate grants. ('Jour. As. Soc. Beng.,' vol. iv., pl. xl., and p. 487).

LEGEND:—[Restored.]

परम भगवत श्री स्कन्द गुप्त क्रमादित्य

Parama Bhagavata Śrī Skanda Gupta Kramāditya.

These legends are frequently very incomplete, varying in the number of letters in each.

The standard of these coins is very uncertain, rising from a weight of 21 to 30 grains.

CLASSES E, F, G. [The references are prefixed to each variety.]

OBVERSE:—The usual head, generally ill-defined, but still identical in many respects with the original device on the obverse of the Sāh medals; it is occasionally also accompanied by distinct traces of the word NANO.

REVERSE:—Central symbol in the form of an altar, which is supposed to represent the common altar-shaped receptacle of the sacred Tūlsī tree of the Hindūs. Legends restored.

CLASS E: 'Jour. Roy. As. Soc.,' vol. xii., pl. ii., fig. 49.

परम भगवत श्री स्कन्द गुप्त क्रमादित्य

Parama Bhagavata Śrī Skanda Gupta Kramāditya.



CLASS F: 'Jour. Roy. As. Soc.,' vol. xii., pl. ii., fig. 50.

परम भगवत श्री स्कन्द गुप्त परमादित्य

Parama Bhagavata Sri Skanda Gupta Paramaditya.

CLASS G: 'Jour. Roy. As. Soc.,' vol. xii., pl. ii., fig. 51.

परम भगवत श्री विक्रमादित्य स्कन्द गुप्त

Parama Bhagavata Sri Vikramaditya Skanda Gupta.

The irregularity in the completion of the legend, noted as occurring on Skanda Gupta's coins with the bull reverse, appears in a still greater degree in those of the present class.

The weight of these coins is more than ordinarily unequal, rising from $22\frac{1}{2}$ to 33 grains.

Though not properly susceptible of classification with any Gupta series of coins, it is as well to take this opportunity of noticing in connexion therewith a species of money which seems to constitute an independent derivative from the same Sauráshtran type that served as a model for the local currency of the Guptas in certain western provinces of their empire.

I advert to the pieces figured as Nos. 6 to 8 and 9, pl. xxvii.¹ Prinsep, at the moment of their publication (December, 1835), scarcely attempted any decipherment of the certainly very unpromising legends, and was equally at fault in regard to the reverse device which he described as 'a symbol in the form of a trident;' when, subsequently, he came to take up the general subject of the Sáh and Gupta silver coinage in full detail, he still essayed no advance upon the attribution of this offshoot of their common prototype. In my paper on the Sáh kings,² I made some slight progress towards the determination of the purport of the legends; and, apart from the typical coincidences, I was able to demonstrate more precisely the Sáh association in the decipherment of the words राज्ञो महा चक्रपस on the margin of the best preserved specimen of the series.

¹ [Other examples of this currency will be found delineated in 'Jour. Roy. As. Soc.,' vol. iv., pl. ii., fig. 30; vol. xii., pl. ii., figs. 35 to 38.]

² ['Jour. Roy. As. Soc.,' vol. xii., p. 64, 15th April, 1848.]

A coin of Mr. Freeling's, of an early date in the serial issue, presenting a well defined and nearly complete legend, materially advances the inquiry, and furnishes a key to the strangely distorted letters stamped on the later emanations from the parent mint, though it leaves us still far from any conclusive assignment of the class of money to which it belongs. I proceed to describe the piece in the ordinary detail.

Silver, weight 27 grains.

OBVERSE :—The usual Sáh head, apparently but little modified. This surface of the coin is damaged, but fully one-half the marginal space, around the profile, remains uninjured, and in the total absence of any sign of a letter confirms my previous supposition,¹ that the use of the Greek legend was not extended to this class of coin.

REVERSE :—Device, a barbarized imitation of the Minerva Promachos of the Bactrian coinage.

I was once disposed to look upon the singular figure on the reverse of these coins as the Buddhist device of a man : I was led to this conclusion by the similarity of the form of the figure sketched by Jas. Prinsep, in fig. 21, pl. iv., to that occurring on the Behat type of coins;² but I now observe that Prinsep, in his second engraving of the same coin (fig. 9, pl. xxvii.), omits the left arm, in its downward position, which constituted the most essential point of Behat identity.

LEGEND :—ग्रह भुजङ्गरक्षरश्च महच्चपरमदेवकक्षभसदमन

OPTIONAL
READINGS

श्रीः न इ

ह कृ

The configuration of certain letters in these legends demands a passing notice. The character which Prinsep took for *pr*, etc., is now satisfactorily proved to be an मः the form is peculiar, but still it bears sufficient affinity to the general idea of the Gupta म. In the later specimens of the coinage, its upper section is distinguished from the ordinary प by the rounding off of the lower portion of the first down-stroke, while the प itself is

¹ ['One item seems safely deducible from the unoccupied margin, to be found around the bust in the broader coins, viz., that the use of Greek or its attempted representation was here discontinued.'—'Jour. Roy. As. Soc.,' vol. xii., p. 63.]

² [Pl. xix., fig. 16; pl. xx., figs. 45, 47, etc.]



squared at the base. The nearest approach to identity with this numismatic न is to be found in the outline of that character as expressed on the Udayagiri Inscription; but it must be remarked that this similitude affords but little aid towards determining geographical limitation, as the majority of the letters of the inscription itself are exceptional, and do not accord with the characters of the other writings of the same locality. The न of these coins takes the same shape as those on Kumára's silver coins, Class B, above adverted to. The remaining letters, as far as they have been definitively identified, seem to follow the ordinary Sáh style.—E.T.]



XX.—ON THE APPLICATION OF A NEW METHOD OF BLOCK-PRINTING, WITH NOTICES OF UNEDITED COINS.

MAY, 1838.

In all Muhammadan countries it is the well-known custom of those who move in the rank of gentlemen to apply their seals in lieu of their written signatures to letters, bonds, and other written documents—not as we are accustomed to do it, by an impression on wax, but by smearing the flat surface of the seal with ink, and printing in the manner of type, so as to leave on the paper a white cipher upon a black field. It may be in consequence of this custom, as much as from religious prejudice, that Muhammadan seals are almost invariably confined to letter mottos ; seldom ornamented, but, if so, merely with flowers, etc., done in outline ; because such only can be faithfully portrayed in a type impression, which, of course, cannot at all represent a head or other relieve design.

The money of the Musalmáns was in the same manner generally impressed only with the signet or the titles of the sovereign, well adapted to a flat surface of thin metal.

Seeking an easy and expeditious mode of making public the collection of Muhammadan coins in my own and my friends' cabinets, it thus occurred to me that by forming from them in sealing-wax, or in type metal, an exact counterpart of the die which had been used in striking these pieces, I should be able to use it, in the native fashion, for producing ink impressions along with the ordinary letter type ; while, as the coin itself would in every case furnish the mould, every chance of error in copying would be removed : and, though the elegance of a shaded engraving could not be attained, still this would be more than compensated by the scrupulous fidelity of the representation.

My first trial was so encouraging that I at once resolved on carrying



the plan into execution on an extensive scale, and I have now prepared for the press upwards of two hundred coins done in this novel and exceedingly simple manner.

As, however, it will be in every respect more convenient to present them in a continued series as an accompaniment to my tables of the value of Indian coins already published, I propose merely to introduce into the pages of the Journal a few examples of such coins as are new, rare, or, from other causes, worthy of particular description.

But first, in deference to the established custom in such cases, I must assign to this newly-invented art some Greek polysyllabic appellation; and (without intending the undignified lapsus of a pun) I cannot propose one more expressive of the process than *Rupography*—not from rupee, the common designation of our Indian money, nor yet from the Sanskrit word *rūpa*, 'form, likeness,' but in a genuine and orthodox manner from the Greek *ρῦμος*, *sigularis cera*, or sealing-wax, the substance upon which the impression of the coin is first received, and which will itself serve as the printing material, if it be not desired to preserve the block in the more durable material of type metal, by a second transfer from the sealing-wax to a clay or gypsum mould, into which the latter substance can be cast in the usual manner. Some sharpness of outline is lost by this triple operation; and where a great many copies are not required, the *rupographical* process may be safely confined to the first stage, or simple impression on sealing-wax.

As a first specimen,¹ then, of the capabilities of this art of *rupography*, I select a coin, or rather medal, purchased by myself some years ago at Benáres. It is of Husain Sháh, generally accounted the last Súfí monarch of Persia; for, after his abdication in A.H. 1135, his son Tamásp held but a nominal sovereignty, the real power being usurped by Mahmúd the Afghán.

Marsden would designate this as one of the medals of the Persian kings properly so called, intended to be hung and worn on the neck. It had, when I bought it, a hasp for suspension; but still I do not imagine it to have been struck for that express purpose, but rather as a crown piece for distribution to courtiers on a birth-day, as is still the custom at Dihlí, at Lucknow, and other native courts. It is of nearly pure silver, and weighs 844.3 grains, a little short of five rupees, and somewhat above as much in value.

Marsden gives the drawing of another medal of the same monarch, which has merely the usual coin inscription.

¹ [I have not thought it necessary to reproduce these facsimiles, in illustration of the mechanical process. I have, however, retained the letter-press, as forming a portion of Prinsep's numismatic essays.]

The following is the numismatical description of my medal :—

SULTÁN HUSAIN SHÁH SAFFAVÍ,
Reigned in Persia, A.H. 1106-1135, (A.D. 1694-1722).

SILVER.

LEGEND OF THE OBERSE.

السلطان العادل الهادي الكامل الولي ابو المظفر السلطان بن السلطان
Centre سلطان حسين شاه ۱۱۱۸ بهادر خان
الصفوي خلد الله ملكه و سلطانه ضرب اصفهان

REVERSE.

Area. لا اله الا الله محمد رسول الله علي ولي الله
Margin. علي حسن حسين علي محمد جعفر موسلي علي
محمد علي حسن محمد

OVERSE :—The Sultan the just, the spiritual guide, the perfect, the ruler, *Abul Musaffar ul Sultán bin ul Sultán*, Sultán Husain Sháh, Behádur Khán, of the Safví race : may God perpetuate his kingdom and his dominion ! Struck at Isfahán, A.H. 1118 (A.D. 1694).

REVERSE :—There is no God but God ! Muhammad is the prophet of God ; Ali is the favorite of God.

Margin :—Ali, Hasan,—Hosain, Ali,—Muhammad, Ja'far,—Mása, Ali—Muhammad, Ali—Hasan, Muhammad.

(The twelve Imáms in the order of their succession).

SPECIMEN II.

Is a coin presented to me by General Ventura to complete my series of the Pathán sovereigns of Dihlí, being the only one of the founder of that dynasty which I had yet seen. Since then Capt. Burnes has favored me with the sight of a duplicate in less perfect preservation, procured by himself, I believe, at Kabúl. I give it as a specimen of what rupography can do under the most unfavourable conditions.

The form seems imitated from that of the Abbassite khálifs, having the legend in concentric circles written in the Kufic form of Arabic. The facsimile represents exactly by the dark parts where the surface is worn smooth ; however, by carefully comparing the two specimens, the whole has been made out satisfactorily with the aid of my brother, Mr. H. T. Prinsep.¹

It is curious that the common title of *Shaháb ul din*, by which Muhammad is generally known in Indian history, does not appear on this Ghaznah dirhem, which gives him the two-fold designation of *Ghids ul din*, 'the supporter of the faith,' and *Moaz ul násir te din*, 'the humbled of the defender to the faith'—(so. to the Kaliph of

¹ [I have slightly modified Mr. Prinsep's reading.]

Baghdád). Probably the patent for the new title of *Shaháb ul din*, 'the flaming sword of faith,' given in honour of his brilliant and destructive expeditions into India, had not yet arrived from the court of the Kaliph.¹ If so, the word *tisain* (90) in the date may be read wrong.

SHAHÁB UL DÍN, MUHAMMAD BIN SÁM,
Founder of the Ghorí dynasty of Dihlí. Reigned A.H. 588-602 (A.D. 1192-1206).
SILVER. Weight, 73.4 to 92.6 grains.

LEGENDS ON THE CONCENTRIC CIRCLES OF THE OBTVERSE.

- Line 1 هو الذي ارسل رسوله بالهدى ودين الحق ليظهره علي الدين
كله ولو كره المشركون
2 لا اله الا الله محمد رسول الله السلطان الاعظم
3 غياث الدنيا والدين ابوالفتح
4 محمد بن سام

DITTO OF THE REVERSE.

- Line 1 ضرب هذا الدرهم في بلدة غزنة سنة ستة و تسعين و خمس
ماية
2 الناصر لدين الله السلطان المعظم معز
3 الدنيا والدين ابوالمظفر
4 محمد بن سام

[The inscriptions are copied at length in plate xli.]

OBTVERSE:—(From the Koran)—'It is he that sendeth his messenger for righteousness,' etc. [Surat, ix. 33, and lxi. 9.]

There is no God but God, Muhammad is the prophet of God!—The mighty sovereign *Ghids ul dunya va u' din*, *Abu'l fateh*, Muhammad bin Sam.

REVERSE:—This *dirhem* was struck in the city of Ghaznah, in the year five hundred and ninety-six.

Al Násir le din illah [the Khalif], the mighty sovereign, *Moaz ul din*, *abu'l Muza'ffar*, Muhammad bin Sam.

SPECIMEN III.

Among the coins discovered by General Ventura in the great tope at Manikyála, and described in vol. iii., pl. xxi. [v.] figs. 10 and 11, [Art. VI.], were two of the Sassanian type, having Sanskrit legends on the margin of the obverse. I did not then attempt to decipher them, nor am I aware that their explanation has been since effected elsewhere.

Captain Burnes has been so fortunate as to pick up three more of the same curious coins, in his present journey, which are now in my hands, with other rare antique produce of his successful research.

¹ [The history of this double nomenclature will be found in detail in my Essay on the Coins of the Pathán Kings of Dihlí. London, 1847.]

They have every appearance of having been extracted from some similar ancient monument; which is by no means improbable, for we may be very sure that full half of the fruits of the late explorations of the various toposes have evaded the hands of their explorers, and are scattered about the country to be hereafter picked up gradually from pilgrims or professed dealers; for a trade will soon be organized in such articles, if it be not already established. There is no harm in this, as it will tend to preserve such relics from destruction; but we must for the future be on our guard against spurious specimens, which will multiply daily.

Captain Burnes' discovery has been of the greatest service toward the deciphering of the Sanskrit legend: his coins have helped me to the general purport of the marginal writing, even if they have not wholly explained its contents. I found on collating the five legends now at my command, that three of them (*vide* pl. xli.) were short of the others by two letters, which in the most perfect of Captain Burnes' coins might be clearly read as *nita* नितः. Remembering an analogous omission on one of the Gupta coins of Kanauj, wherein some specimens had the epithet *vijayaja* and others *vijayajanita*—both of the same meaning, I concluded that the preceding anomalous letter on all the coins must be a ज, and, indeed, it has no small affinity to the modern Nāgari and Bengālī j. The two preceding syllables, again, there could be no doubt about; being in all five examples देव *deva*. Now, *devaja* and *devajanita*, 'offspring of the gods,' is the well-known epithet of the ancient Persian monarchs as well as of the Sassanian race. Thus, in the trilingual inscription on the Nakshi-rustam sculpture given in Ker Porter's travels in Persia, vol. i., 548, we have in the Greek character: ΤΟΥΤΟ ΤΟ ΠΡΟΘΗΟΝ ΜΑΔΑΚΝΟΥ ΘΕΟΥ ΑΡΤΑΞΕΡΟΥ ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΥΩΝ ΑΡΙΑΝΩΝ ΕΚΤΕΝΟΥΣ ΘΕΩΝ ΤΙΟΤ ΘΕΟΥ ΠΑΠΑΚΟΥ ΒΑΣΙΛΕΥΣ, which is repeated below in two forms of Pehlvi.

The same title in Sanskrit, *devaputra shahān shāhi*, it may be remembered, is applied to the king of Persia in the Allahābād pillar inscription, as revised at p. 233, vol. i.

Again, on the Sassanian coins, read by the Baron de Sacy as far as they are published by Ker Porter (for I have not yet been able to obtain a copy of the Baron's work on the subject), the Pehlvi legend runs:

مزدن به شهپور ملکان ملکا منوچتری من یزدان

Mazdezn beh Shahpura malakān malakā¹ minochatri men yezdan.

'Adorer of Ormuzd, excellent Shahpur, king of kings, offspring of the divine race of the gods.'

¹ In the examples given, I should read this passage—*Malakān malak Airānan*, etc.; but the Sassanian coins require study ere they can be properly made out.



Capt. Burnes's
coins
from Cabul.

Ventura's
from
Manihyala

১৮৮৩
 ১৮৮৩

۱۱	۱۲	۱۳	۱۴	۱۵	۱۶	۱۷	۱۸	۱۹	۲۰	۲۱	۲۲	۲۳	۲۴	۲۵	۲۶	۲۷	۲۸	۲۹	۳۰	۳۱	۳۲	۳۳	۳۴	۳۵	۳۶	۳۷	۳۸	۳۹	۴۰	۴۱	۴۲	۴۳	۴۴	۴۵	۴۶	۴۷	۴۸	۴۹	۵۰	۵۱	۵۲	۵۳	۵۴	۵۵	۵۶	۵۷	۵۸	۵۹	۶۰	۶۱	۶۲	۶۳	۶۴	۶۵	۶۶	۶۷	۶۸	۶۹	۷۰	۷۱	۷۲	۷۳	۷۴	۷۵	۷۶	۷۷	۷۸	۷۹	۸۰	۸۱	۸۲	۸۳	۸۴	۸۵	۸۶	۸۷	۸۸	۸۹	۹۰	۹۱	۹۲	۹۳	۹۴	۹۵	۹۶	۹۷	۹۸	۹۹	۱۰۰
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

From the Suburban ...
 ...
 ...

Same commencement in the Nakshi Rostam sculpture — 𐎠𐎡𐎴𐎧𐎺𐎠𐎧𐎹𐎡𐎹

On the coin with the winged cup, Marsd. Num. Or.

[illegible]

DXXZIII

Legend on dirhem of Muhammed Bin Sâm.

1 circle
 2
 3
 centre

هو الذي ارسل رسول الله الى من ... من الناس
السلطان المظفر لا اله الا الله محمد ربه
الواثق عباد الله الامين

centre

W. West Lick

after J. Prinsep.

Published by Stephen Austin, Hartford.



The natural deduction hence was that the rest of the Sanskrit legend would also turn out to be a translation, or an imitation of the Sassanian formula; and thus, in fact, it has proved to be.

INDO-SASSANIAN DIRHEM.

SILVER. Weight, 53 grains.

LEGEND.

OBVERSE:—Head of Mithra (Ormuzd); Pehlvi very distinct, but unread; see pl. xli.

REVERSE:—On the field, three letters of an unknown alphabet (like the Armenian?) or perhaps numerals?

Margin:—

श्री हितिविर ऐराणच परमेश्वर श्री फा हितिगान देवजानित

Sri hitivira Airāna cha parameswara Sri Vāhitigān devajanita.

In this legend the only actual letters at all doubtful are the *p* and *me* of *parameswara*, and the first and last letters of the name. Indeed, the first letter is different in every example, as will be seen in the lithographed plate [xli.], as though they were all different names of the same family. Now to analyse the sentence:—

Hitivira I suppose to be a corrupt writing of **हृदिवीर** *hridivira*, 'noble in heart,' equivalent to the Pehlvi word *beh*, translated by 'excellent.' *Airāna cha parameswara*, and the supreme lord of Airān or Persia, may be read (perhaps better) *Airān va Pārseswara*, the lord of Iran and Fars. For the name, we have severally *pha*, *cha*, *va*, *gha*, or *hā*! followed by *hitigān* or *hitikhān*; and, lastly, *devajanita*, as before explained.

I am quite at a loss to find owners for such names; and although this is the third time I have alluded to this coin, gaining little by little each time, still I fear we have much to learn before we can unravel its entire history. For the present I leave unnoticed the Pehlvi legend, merely placing under view in the annexed plate corresponding passages from regular Sassanian coins, which, being titles, will soon lead to a knowledge of their alphabet and meaning.

[As intimated under Art. XV. (vol. i., p. 410), I have intentionally reserved all notice of the bilingual and trilingual emanations from Indo-Sassanian mints, and their subordinate illustrative varieties, until I could associate my latest tentative readings with Prinsep's closing illustration of this interesting division of Oriental Numismatics.

I have elsewhere (vol. i., p. 65) adverted to the obstacles that present themselves to any precise definition of the permutable

letters of the Pehlvi alphabet, which may not chance to be supported by the context, or some leading indication calculated to assure its exactitude; but, in the present instance, we have to encounter dialectic modifications and transmutations from other tongues, in addition to the ignorant treatment of a language at the best but imperfectly known to us.¹ The legends I have ventured to designate as Scythic, in virtue of their seeming derivation and the assimilation of certain of their forms to the Tartar alphabets, are to this time simply unintelligible.

The classification of these complicated materials will be seen to present somewhat of a difficulty—even if the data permitted it, they could not well be adapted to any epochal order—nor do the medals sufficiently accord to follow suit under the simple typical arrangement. I am, therefore, reduced to group the different series by the linguistic test, as exemplified by the following outline:—

- A. Scythic (two varieties).
 - A a. Scythic and Sanskrit.
 - A b. Scythic, Sanskrit, and Pehlvi (two varieties).
 - A c. Scythic and Pehlvi.
- B. Pehlvi and Sanskrit (two varieties).
- C. Pehlvi, Scythic, and Kufic.
- D. Second variety of unidentified characters with Kufic.
- E. Kufic (alone).

CLASS A: Unidentified characters, supposed to be Scythic. Figs. 9 and 10, pl. xvi., 'Ariana Antiqua.'

I notice the class, represented by the above cited engravings,

¹ [For example, of all those who are learned in Zend and its cognate languages—of the various Professors who edit Pehlvi texts, or who put together Grammars of that tongue—no single individual has to this day been able to add one line of translation to the bilingual inscriptions of Hájí-ábád (Ker Porter, pl. xv., p. 513; Westergaard, 'Bundehešb,' p. 83; Spiegel, 'Grammatik,' p. 175, etc.), beyond what De Sacy had already taught us in 1793. In brief, our power of interpretation fails us exactly where the Sassanians have omitted to supply us with the Greek translations they appended to some of the parallel texts, which, however, unfortunately extend but little beyond the titular and dynastic præordium of the inscription more immediately in question. I may, however, notice favourably Dr. Haug's tentative interpretations, confessedly incomplete as they are.]

merely as introductory to the several ramifications of the unidentified alphabet on the coins of later date, which form the subject of my present synopsis. I have to refer, however, momentarily to a still earlier exhibition of the literal series in the degradation and gradual transmutation of the original Greek legends, on the lower Kanerki coins, into the conventional forms and symbols of this system of writing—so that the Greek epigraph of PAO NANO PAO OOHFKI KOPANO degenerates into the, to us, confused jumble of signs, which the cognate characters on other medals alone teach us to look upon as real and *bonâ fide* vehicles of phonetic expression—now extant upon the pieces engraved as No. 17, pl. xiv., 'Ariana Antiqua'; No. 6, pl. xxii., *suprà*; and No. 16, pl. xiv., 'Ariana Antiqua.'

The Sassanian proper money, more especially under reference, exemplifies the free and independent use of the debateable character, as opposed to the possible mere mechanical barbarization of a foreign tongue in the other instance, and would seem to evidence the local currency of the speech it was calculated to embody in one section at least of the dominions acknowledging fealty to the successors of Ardeslîn Bálbiek.¹ Next in literal simplicity, though probably of a varied site and but little approximate period, must be quoted the series so peculiarly Indo-Sassanian in their identities, which still restrict themselves to this style of writing—Nos. 19, 20, 'Ariana Antiqua,' pl. xvi.

The Indo-Sassanian money with unmixed Sanskrit legends has already been adverted to, but further examples of the subordinate classes may be consulted under the following references:—'Ariana Antiqua,' pl. xvi., fig. 18 (षहि); *ibid*, pl. xvii., fig. 11, and pl. xxi., fig. 20; 'Jour. Roy. As. Soc.,' vol. xii., pp. 341, 342, etc.; 'Ariana Antiqua,' pl. xvi., fig. 8.

CLASS A α: (Bilingual Scythic and Sanskrit). Type, fig. 6, pl. xvii., 'Ariana Antiqua.'

¹ [Other specimens of money bearing these peculiar legends may be seen under 'Ariana Antiqua,' pl. xvii., Nos. 12 to 15.]

OVERSE :—Head facing to the right.

LEGEND in unidentified characters. 'Jour. Roy. As. Soc.,' vol. xii., pl. iii., fig. 21.

REVERSE :—Fire altar and supporters about the pedestal of the altar
 श्रीटटे | षहि श्री ?

CLASS A b: (Trilingual, Scythic, Sanskrit, and Pehlvi?). Pl. v., figs. 10, 11; and pl. xli., figs. 1 to 5.¹

OVERSE :—Device, as in the plate; the tiger-crest is less obscure on other coins.

Centre :—Unidentified characters.

Margin :—Legend also of doubtful import, but expressed in Sanskrit letters.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
 श्रीहितिविरखरलाचपरमेश्वरश्रीषाहितिणतदेवनारित

The above transliteration, based upon mechanical configurations alone, gives the preferable reading of each character, deduced from a collation of the legends on the numerous coins extant. As the language this legend embodies is, up to this time, unknown to us, there are no precise means of selecting the intentional as opposed to the technically rendered letters. For instance, it is doubtful whether the 6th form should be taken to stand for ख, ऐ, or वे. The 9th letter may be only one of the frequently recurring व's; but I read it as च, in accord with Prinsep, on the authority of one of Sir A. Burnes's coins (now in the possession of General Fox), which gives the character with more than usual distinctness. In the letters 10 to 14, I again follow Prinsep, on the principle of the probability of the combination rather than upon the positive assurance of the imperfectly discriminated letters which compose the word. And, with some such similar tendency, I formerly proposed the substitution of ष as the modern representative of No. 16, in preference to the optional फ or व of my author's text, a conjectural emendation since amply confirmed by the configuration of the letter in question on one of Colonel Lafont's coins in the British Museum.

¹ [Also 'Journal Asiatique,' vol. vii. (1839), pl. xvii., p. 34; 'Ariana Antiqua,' pl. xxi., fig. 22; 'Jour. Roy. As. Soc.,' vol. xii., pl. iii., figs. 17 to 20.]

REVERSE :—

To the left . . . افزو = ۱۱۵۴

To the right . . . پون شم دات = ۱۱۵۴

Margin:—Legend similar to that on the obverse exergue.

CLASS A c: (Bilingual, Scythic and Pehlvi).

To complete the classification, I refer to two coins as yet incompletely deciphered in the Pehlvi, and altogether unintelligible in their Scythic legends, a description of which will be found at p. 332, 'Jour. Roy. As. Soc.,' vol. xii.

VĀSU-DEVA.

CLASS B: (Bilingual, Pehlvi and Sanskrit).

Prinsep's delineation, pl. vii., fig. 6,¹ sufficiently displays all the typical details of these pieces; I have merely to deal with the legends.

OVERSE:—To the right of the figure is Pehlvi, but illegible in the specimen engraved.

(Increase) افزوت . . . = ۱۱۵۴

To the left . . . دات شم دات

سف ورسو تيف

Or *Siv Varsú tef for Sri Vāsu deva.*

Margin :

۱۱۵۴ دات شم دات دات شم دات دات شم دات
پون شم دات سف ورسو تيف وهران اچ ملتان ملکا

'In nomine justī judicis,'² *Siv Varsáo tef, Brahman, King of Multán.*

¹ [Other engravings and facsimiles may be consulted in 'Ariana Antiqua,' pl. xvii., fig. 9; 'Jour. Roy. As. Soc.,' vol. xii., pl. iii., figs. 9 to 15.]

² [The usual formular opening, corresponding with the Arabic *بسم الله*.

See Anquetil 'Zend Avesta,' vol. ii., p. 341, correctly ۱۱۵۴ دات شم دات
M. Spiegel does me but bare justice when he concludes that I was unaware of his previous decipherment of a portion of this marginal legend when I published my first paper on the subject in the pages of the 'Jour. Roy. As. Soc.,' vol. xii., p. 343. In truth, in those days, I was but as little in the way of seeing German books, as I have limited facility of reading them now; but I quoted, with full and deserved commendation, Prof. Olshausen's treatise, and noticed all other continental works, referring to the subject, of which I was able to obtain knowledge. In his 'Grammatik der Huzvāreschsprache' (Wien, 1856), M. Spiegel reclaims the title to priority of interpretation of the opening portion of this sentence, which it seems appeared in May, 1844 ('Jahrb. für wissenschaftl.-Kritik.' Mai, 1844, p. 703). And, further, he desires to

pretation of the name of زاولستان *Zāwlistān* on the reverse;¹ but the word that precedes it still continues an enigma, and I hesitate to propose for acceptance either the geographical definition of پنجواي the old capital of Arachotia, a religious association with the Sanskrit पूजा *worship*, or a temporal indication of rulership, of which this may be the undeciphered exponent.

In typical design these coins are in a measure connected with an exceptional style of Sassanian money,³ attributed to Khosrú II. (A.D. 591—628). The obverse head on these innovations has but little identity with that on the Indo-Sassanian pieces, and is only associated with the device of the latter in the novelty of the front face. The reverse figure, on the other hand, accords exactly with the bust on the eastern money. I have not myself had an opportunity of examining any one of the few extant pieces of the former class, and rather hesitate to propose decipherments on the strength of mere engravings; but as there is only one word about which there is any doubt, I may reproduce the legends as follows:—

OBVERSE:

To the left (with the usual monogram) سوسیوس

To the right . . . سوسیوس سوسیوس
 هوسروی ملکان ملکا

¹ [I would note *en passant* the entire absence of the Pehlvi 𐬀𐬎𐬌 = 𐬀𐬎𐬌 in these legends, the 𐬀𐬎𐬌 = 𐬀𐬎𐬌 , the Sanskrit 𑀧𑀺𑀢𑀺𑀓 uniformly supplying its place as in the Vendidad, Zend, *Vēskerdānt*; Pehlvi, *Kawul*.—'Anquetil,' vol. i. 267.]

² [Rawlinson, 'Jour. Roy. As. Soc.,' vol. xi., p. 126; 'Abulféda,' ۳۳۳. ۳۵۶; 'Journal Asiatique,' vol. x., p. 94; *Pangoui*; Reinaud, 'Fragments,' p. 114; 'Ayin-i Akbari,' vol. ii., p. 167.]

³ [See Ouseley, 'Medals and Gems' (London, 1801), No. 8; 'Jahrbücher' (1844), No. cvi., p. 29, pl. No. 7; Longperier, pl. xi., fig. 3; Olshausen, p. 65; 'Numismatic Chronicle,' vol. xi., p. 137; Mordtmann, 'Zeitschrift,' p. 138. Ker Porter gives an engraving of a coin with a similar obverse, pl. lviii. fig. 18. *Reverse*: 'A single upright figure, . . . executed in a very barbarous style, having a chump-headed, dwarfish effect.'—vol. i., p. 133. Longperier's No. 4, pl. x., from the cabinet of the Duc de Blacas, is identical in its types: the author assigns this piece to Khosrú I. Dr. Mordtmann follows this attribution, and interprets the legends—*Obverse*: 𐬀𐬎𐬌 𐬀𐬎𐬌 . *Reverse*: 𐬀𐬎𐬌 𐬀𐬎𐬌 (= 34) 𐬀𐬎𐬌 , with a conjectural addition of 'Iran afzud Kirman.'—p. 93. It is a question with me whether this coin is not due to Khosrú II. rather than Khosrú I.]

REVERSE:

To the left هفت سيده = دود = ۳۳
(An: 37 of his reign.)

To the right سلو ۳۳
ایران افروت

Dr. Mordtmann reads the final word, omitted in the above, as ۳۳, *Uzaina Chuzistan*. I certainly should not thus transcribe the letters as they appear on the *Jahrbücher* coin; and, possibly, if I did so, I might dissent from the present interpretation: however, as I am not prepared to set copies against originals, I abstain from further comment.

CLASS B: Variety. (Bilingual, Pehlvi, with Sanskrit mint-marks?). Plate xxxiii., fig. 3.¹

OBVERSE:

Pehlvi legend ۳۳ = نپکی ملکا or ونکی ملکا

The initial letter is convertible as و or ن, and is frequently either omitted altogether or inserted in the field apart from its succeeding ۳. The ۳ itself is often degraded into a double loop, which alters its character completely. The ۳و, or ۳ with E *final*, there is no doubt about; and the strange combination that follows, which, in many instances, expresses nothing but ۳و = مزد, proves to be a mere bungling formation of the letters ۳و = ملک, the ۳ being elongated by the addition of the tail stroke, which properly belongs to, and is the distinguishing mark of the ۳ as opposed to the old Sassanian ۳. The final ۳ of ۳و usually appears on the left of the bust.²

CLASS C: (Trilingual, Pehlvi, Scythic, and Kufic).

I do not design to reproduce any detailed description of the

¹ ['Ariana Antiqua,' pl. xvii., figs. 5, 7, 10, etc.]

² [M. de Longperier attributed one of these coins to Hormusdas III., interpreting the Pehlvi as ۳و = ۳و = اهریمزد (Médailles de la Dynastie Sassanide, Paris, 1840, pl. i., fig. 1, p. 56). Dr. Mordtmann, again, assigns a coin, similar in its typical style to No. 10, pl. xvii., 'Ariana Antiqua,' to Azermidukht, pl. ix, fig. 31, p. 194, Zeitschrift, etc.]

coins I would group under this heading; a delineated specimen of the class may be consulted in fig. 4, pl. xvii., 'Ariana Antiqua';¹ and my own attempts at their decipherment, together with facsimiles of the legends, are to be found at p. 329 *et seq.*, vol. xii., 'Jour. Roy. As. Soc.'

I advert to them now merely to complete the reference to the several series connected by similarity of linguistic legends with classes B, and B variety, above noticed.

Silver: weight, 58.4 grains. British Museum.

OBVERSE:—The usual linear imitation of the old Sassanian head, as adopted by the Arabs.

To the left: The standard monogram and **𐭠𐭣𐭥𐭥**

To the right: Legend in unidentified characters, of the same style as in classes A, B.

Margin:—In Pehlvi letters **𐭠𐭣𐭥𐭥**, and in Kufic letters the words **بسم الله**.

REVERSE:—The ordinary fire-altar and supporters.

To the left . . . **𐭠𐭣𐭥𐭥 = شست و سه = Sixty-three A.H.**

To the right . . . **𐭠𐭣𐭥𐭥 = خبوس Khubus.²**

Margin:—

Upper compartments: unidentified characters as on obverse.

Lower compartments:

To the left The standard monogram.

To the right **𐭠𐭣𐭥𐭥 = افزو**

Doubtful dates, 68 A.H. and 69 A.H.

CLASS D: (Bilingual, variety of unidentified character with Kufic).

To bring under one view the various transitional modifications of Sassanian money that may, by any possibility, bear upon the mixed series already noticed, I would advert to two subordinate classes, the first of which seems in its alphabetical devices to pertain to more westerly nations, though the sites of

¹ [See also Olshausen, German text, p. 56: 'Numismatic Chronicle,' vol. xi., p. 130.]

² [Khubus in Kermán, see Ouseley (خبوس) 199; 'Abulféda,' p. 442; Marco Polo *Kobinam*, p. 107.]

discovery connect it with the Central Asian types above enumerated.

Facsimiles of four of these pieces are given in Fræhn's 'Die Münzen (1832) Nos. 434, 435, pl. xvi., figs. \aleph and \beth ; and 'Jour. As. Soc. Beng.,' No. 101 (new series), pl. iii. figs. 6a, 7. Here again the epigraphs are bilingual; the legend on the right appears to read from the outside, commencing at the front point of the tiara, and the forms of the letters give it a decidedly Phœnician aspect, though for the present their elements defy decipherment. The short word on the left of the Sassanian crown is expressed in Kufic letters, its foot-lines being towards the centre of the piece. Professor Fræhn conjectured that the combination on fig. \aleph might be resolved into the title of المهدي the Khalif (A.H. 158—169 A.D. 774—785), and this interpretation receives confirmation from a more legible specimen of the coinage lately acquired by the British Museum.¹ On fig. \beth and other coins the word appears to be composed of the letters سكي or سلي; but on an unpublished specimen of Colonel Anderson's the name is fairly legible as محمد* which, it will be remembered, was Al Mahdî's proper designation.²

Class E: Kufic (alone).

I complete the series with a set of medals having many characteristics in common with the money classified under the heading D, though it is a question whether in point of antiquity they are not entitled to take precedence of their bilingual counterparts. The connexion and association between the two is marked both in the general design of the obverse device, and more distinctly in the distribution of the symbols on the reverse, where Ormazd's head, rising from the flames of the fire-altar, pronounces them either derivatives from a common stock, or imitations the one of the other. The peculiarity of the coins of Class E, however, consists in their having attained to the correct

¹ [Major Cunningham's collection.]

² [Price's 'Mahommedan Hist.,' ii. 23. Fræhn, 'Recensio,' p. 24, etc. 'Handbuch zur Morgenländischen Münzkunde,' Stickel Leipzig (1845), p. 50.]

exhibition of Kufic legends, pure and simple. The earliest published piece of this class is also to be found in Professor Fræhn's comprehensive works.¹ The exergue on the obverse was read by that accomplished scholar as

بسم الله محمد رسول الله الخاقان الاعظم جمال امير المؤمنين

To this I am able to add from coins in the possession of Col. Abbott (1), and Capt. Hay (3), the novel, though imperfectly deciphered, legends—

OVERSE :—

بسم الله محمد رسول الله حمدله مامريه الامير علي سلمن الله

The concluding words on other specimens seem to read . . . سلمرله ; and in one instance . . . سلمرله .

On the reverse the pedestal of the altar is formed of the word على .

CLASS E : Variety.

TALHAH BIN TAHIR, A.H. 209 to 213.

Copper : size, $5\frac{1}{2}$; weight, 30 (and 31) grains. A.H. 209.

Two specimens, British Museum (Cunningham collection).

OVERSE :—

Centre : لاله الا الله وحده لاشريك له

Margin : بسم الله ضرب هذا الفليس بعمر ستة تسع و مائتين

REVERSE :—Central device, a barbarized Sassanian head, to the right, with the usual flowing backhair, and traces of the conventional wings above the cap ; the border of the robe is bossed or beaded.

In front of the profile is the name الطلحة

Margin : محمد رسول الله مامريه الامير طلحة علي يدى عبدالله

I have two difficulties in regard to the above transcript from the original Kufic. The one in respect to the name of the place of mintage, which is visible on only one of the two specimens quoted, and is there somewhat confused in the original definition of the several letters, and otherwise obscured by oxydation. The third and fourth upright lines are opened out, or slanted away from one another, towards the top, which usually indicates

¹ ['Novæ Symbolæ ad rem Numariam Muhammedanorum Petrop,' 1819, p. 45, pl. ii., fig. 14.]

the letter ع; though this sloping off may, perhaps, be a mere fortuitous imperfection of the die-engraving, the final letter is best represented by a modern ج, though it may, if needful, be converted into an ج.

The second point is of less consequence, and extends only to the almost invisible outline of the word I have supplied by ידי, under the requisitions of sense rather than on the absolute authority of the single coin which retains in any degree of distinctness that portion of its mint impress.

BRÁHMANÁBÁD COINS.

I am anxious to refer, even though momentarily, and in a necessarily imperfect manner, both from the condition of the materials and the want of preparation on my own part, to an interesting series of Indian coins that have only lately been brought to light during the excavation of an inkumed city in the province of Sindh, which Mr. Bellasis, its enterprising explorer, designates, perhaps somewhat prematurely, by the title of the ancient Bráhmanábád.¹

However, be the site what it may, the laying open of this ruined town has made us acquainted with a class of essentially local money, of which the circle of our Oriental numismatists had previously no cognizance. Unfortunately, for the due and full explication of their historical position, the pieces obtained from this locality are nearly, without exception, of copper; and, in common with their more rare associates of silver, have suffered to an unusual extent during their prolonged entombment.

The general character of the coins, numbering some thousands, and in mere bulk sufficient to fill a 28 lb. shot-bag, is decidedly exclusive, involving Kufic legends with occasional provincial devices, and pertaining, as I suppose, to the Arab

¹ [Its exact position is stated to be 47 miles N.E. of Haidarábád. An account of the city of Bráhmanábád was first published by Mr. A. F. Bellasis in Bombay in 1856. A paper by Col. Sykes, on the same subject, appeared in the *London Illustrated News* of Feb. 21, 1857; and Mr. Bellasis' plans and sections in the number for the 28th of the same month.]

potentates of Mansúrah, who ruled over the lands of the lower Indus after the decay of the central power of Mohammedanism at Baghdád. The money of Mansúr bin Jamhúr (منصور بن جمهور الكلبي),¹ the last Governor on the part of the Umayyid Khalifs (about 750 A.D.), heads the list. I do not advert to the earlier coinages of central Asia, which have been transported, in the ordinary course, to the site of their late discovery; but commence the series with the coins which bear on their surfaces the earliest extant mention of the celebrated capital Mansúrah, the Arab reproduction of the still more famed Bráhma-nábád of classic renown.²

¹ [See 'Baládari,' Reinaud's 'Fragments, 'Arabes et Persans relatifs a l'Inde,' Paris, 1845, p. 211.]

² ['Amrou, fils de Mohammed fils de Cassem fonda, en deçà du lac, une ville qu'il nomma Almansoura. C'est la ville où résident maintenant les gouverneurs,'—p. 210. In a previous passage, Baládari tells us, 'Ensuite Mohammed fils de Cassem, se porta devant la vieille Brahmanabad, qui se trouvait à deux parasanges de Mansoura. Du reste Mansoura n'existait pas encore, et son emplacement actuel était alors un bois. Mohammed plaça un lieutenant à Bahmanabad; mais aujourd'hui la ville est ruinée.'—Reinaud, p. 198. The Arabic author from whom these facts are derived, named يحيى البلاذري, died in

279 A.H. or 892 A.D. See also Reinaud, quoting Albirání's 'Tárikh-i-Hind Fragments,' p. 113. The MS. of the latter author's Kánún has the following:—

بهمنا وهي منه الكبرى وسميت منصوراً لأن فاتحها قال نصرت

Jaubert, in his translation of Edrisi, on the authority of the original, states that the local native name of the place was ميران. Masúdi tells us, 'I visited Multán after

300 A.H., when أبو الدلائل المنصور أسد القرشي السامي was king there.'

At the same time I visited el Mansúrah, the king of that country was then أبو المنذر عمر بن عبدالله, [of the family of Habbár ben el Aswad.]—p. 385,

Sprenger's Translation. Again, with regard to the extent and importance of the kingdom, we are informed, 'All the estates and villages under the dependency of el-Mansúrah amount to three hundred thousand; the whole country is well cultivated, and covered with trees and fields.'—p. 386, *ibid.* Further references to the geographical and other questions involved will be found as follows:—Vincent's 'Commerce of the Ancients,' London, 1807, vol. i., p. 145. Gladwin's 'Ayin-i-Akbari,' vol. ii., p. 137, *et seq.* 'Marásid-al-Itala,' vol. ii., p. 161. 'Istakrí' (A.H. 300 to 309), and Sind is the same as Mansúrah Mansúrah which they call Sindh.'—pp. 12 and 147. Ouseley's 'Oriental Geography' (London, 1800). 'Ibn Hankal' (A.H. 331 to 366). 'Gildemeister de rebus Indicis' (Bonn, 1838), p. 166.

Col. Anderson's Translation, 'Jour. As. Soc. Beng.,' vol. xxi., p. 49. Reinaud's 'Géographie d'Aboulfeda,' vol. i., p. 386, etc. 'Liber Climatum Arabic Text,' J. H. Maeller, Gothe, 1829. Reinaud's 'Mémoire sur l'Inde,' p. 235. 'Ancient Accounts of India and China,' London, 1733; ditto, Reinaud's edition, Paris. Elliot's 'Historians of India,' Calcutta, 1849. Elliot's 'Appendix to the Arabs in Sind,' Cape Town, 1853. 'Ariana Antiqua,' p. 413. 'Jour. As. Soc. Beng.,' vol. vii., pp. 93, 279; vol. x., p. 183; vol. xiv., p. 75. McMurdo, 'Jour. Roy.

I should be disposed to conjecture a considerable interval to have elapsed between the issue of this currency and that bearing devices somewhat in common, which displays the name of Abdulrahman (No 3 *infra*), but I am not now in a condition to enter into any satisfactory speculations as to the precise identity of this monarch, or the dates of any of his successors, whose names can be but faintly traced on the worn and corroded surfaces of the coin, submerged with the town of which it necessarily constituted the bulk of the then existing currency. I await, in short, the further supplies of better specimens, promised me by the energetic antiquarians on the spot,¹ and, individually, more leisure to look up the rather obscure history of the divisional government which these coins represent.

I have one remark to add in reference to the peculiarly local character of these numismatic remains, and the restricted antiquity of the town, as tested by the produce of the habitations hitherto penetrated, in the fact of the very limited number of Hindú coins found among these multitudes of medieval pieces, and that even these seem to be casual contributions from other provinces, of no very marked uniformity or striking age.

MANSUR.

No. 1, Copper : weight, 33 grains ; size 6.

OBVERSE :—

Area : لاله الا الله وحده لا شريك له

Margin : Illegible.

REVERSE :—

Area : Central symbol nearly effaced, above which appears the name محمد, and below the words رسول الله.

Margin : بسم الله ضرب [هذا الفلاس بالمنصورة سامرية
 منصور (sic)]

As. 'Soc.' vol. i., p. 23 *et seq.* Burnes' 'Bokhara,' vol. iii., p. 31. 'Jour. Roy. As. Soc.' vol. i., p. 199. Postan's 'Observations on Sindh,' p. 143. Pottinger's 'Beloochistan and Sindh' (London, 1816), p. 381. Wood's 'Oxus' (London, 1841), p. 20. Mohammed Ma'sum's 'History of Sind,' A.D. 710 to 1590. 'Bombay Government Selections,' new series, No. xiii. (1855.)

¹ [Messrs. Frere, Bellasis, and Gibbs, of the Bombay Civil Service.]

No. 2 :

OBVERSE :—Device altogether obliterated.

REVERSE :—

Area : Central symbol in the shape of an elongated eight-pointed star : above, محمد; below, رسول الله.

Margin : (sic.) بسم الله ضرب هـ بالمنصورة مما امره منصور

ABDULRAHMAN.

No. 3, Copper : size, 5 ; weight, 44 grains.

OBVERSE :—Central device, a species of quatrefoil, or star with four points, on the sides of which are disposed, in the form of a square, the words محمد رسول الله عبدالرحمن. The outer margin of the piece is ornamented with a line of dots enclosed within two plain circles, with four small dotted semicircles to fill in the space left vacant by the angular central legend.

REVERSE :—A scalloped square, surrounded by dots, within which, arranged in three lines, are the words بالله عبدالرحمن لسلعار; the concluding word I am unable satisfactorily to decipher, it is possibly the name of Abdulrahman's tribe.

MUHAMMED.

No. 4 : A unique coin of apparently similar type—though with an obverse absolutely blank—replaces the name of Abdulrahman on the reverse by that of Muhammed. The concluding term is identical with the combination above noted.

ABDALLAH.

No. 5 : Copper.

OBVERSE :—Device as in No. 3 (Abdulrahman).

LEGEND : محمد [رسول الله] عبدالله

REVERSE :—Blank.

No. 6. Copper : size, $3\frac{1}{2}$; weight, 18 grains.

OBVERSE : Central device as in No. 3, around which in a circular scroll may be partially read the formula لا اله الا الله وحده لا شريك له.

REVERSE :—Centre device composed of the name of عبدالله *Abdallah*; the two portions عبد and الله being crossed at right angles, in somewhat of accord with the scheme of the obverse device.

The marginal legend is arranged in the form of a square and consists of the words محمد رسول الله [الا] مير.

No. 7. Silver: size, 2; weight, 8.4 grains.¹ Devices are discontinued and replaced by simple Kufic legends, as follows:

OBVERSE:— لا اله الا الله وحده لا شريك له

REVERSE:— محمد رسول الله الامير عبدالله

No. 8. Copper, of similar legends. Other specimens vary in the division of the words, and omit the title of *Al Amir*.

OMAR.²

No. 9. Silver: size, 1½; weight, 9 grains. Five specimens.

OBVERSE:—No figured device. Legends arranged in five lines.

بالله محمد رسول الله عمر

Marginal lines, plain or dotted, complete the piece.

REVERSE:—Kufic legends alone in three lines.

² بالله بنو عمروية النصر

No. 10. Copper: size, 4; weight, 35 grains. Common.

Legends as in the silver coins, with the exception that the بنو is placed, for economy of space, in the opening between the ل's of بالله. The die execution of these pieces is generally very inferior.

No. 11. Copper: size, 3½; weight, 21 grains. Unique.

OBVERSE:—Blank.

REVERSE:—

Centre: بنو — عمروية النصر

Margin: — س بالمنصورة سنة اربع — ?

OMAR (?)

No. 12. Copper: size, 4½; weight, 36 grains. Mr. Frere, unique.

¹ [Among the silver coins exhumed from the so-called Brāhmanābād some are so minute, as to weigh only 1.2 gr.]

² [I am inclined to identify this ruler with the Omar bin Abdallah, above indicated as the reigning sovereign of Mansurah, at the period of the geographer Masūdi's visit to the valley of the Indus, and of whom he speaks further in the following terms:—'There is some relationship between the royal family of el-Mansurah and the family of esh-Shawārib, the Kadi, for the kings of el-Mansurah are of the family of Habbār ben el-Aswad, and have the name of Beni 'Amr ben 'Abd el-Ayiz el-Karshī, who is to be distinguished from 'Amr ben 'Abd el-Ayiz ben Merwān, the Omaiyyide (Khalif)'.—Sprenger's 'Meadows of Gold,' p. 385. See also Gildemeister, quoting 'Ibn Hankāl,' p. 166, and Elliot, citing the same author ('Historians of India'), p. 63.]

OVERSE:—Central device, four lines crossing each other at a common centre, so as to form a species of star of eight points; four of these are, however, rounded off by dots.

LEGEND, arranged as a square:

محمد رسول الله

with single dots at the corner angles, and two small circles filling in the vacant spaces outside of each word.

Margin: Two plain lines, with an outer circle of dots.

REVERSE: Central legend in three lines within a triple circle composed of dots, circlets, and an inner plain line. I transcribe the legend, with due reservation, as:

بنو بالله عمروية النصر



XXI.—ADDITIONS TO BACTRIAN NUMISMATICS, AND DISCOVERY OF THE BACTRIAN ALPHABET.

(JULY, 1838.)

It is not an easy matter to gratify my numismatical readers with a plate of entirely new Bactrian coins so frequently as they would wish; for, independently of the time and labour requisite for engraving them, the subject, as to new names at least, may be looked upon now as nearly exhausted. Opportunities, however, still occur of verifying doubtful readings, of supplying names where they were erased or wanting in former specimens, and of presenting slight varieties in costume, attitude, and other particulars, which tend to complete the pictorial history of the Bactrian coinage.

For these several objects I enjoyed a most favorable opportunity during the visit of General Ventura to Calcutta last winter; his second collection, though possessing few types or names absolutely new, boasted of many very well preserved specimens of the small silver coinage of Menander, Apollodotus, Lysias, Antimachus, Philoxenes, etc. The General most liberally conceded to me, from his abundant store, several that were wanting to my own cabinet, both of silver and

copper ; and he placed the rest also at my disposal, to draw, examine, and describe, as I might feel inclined. Unfortunately, I refused to take charge of the Indo-Scythic gold series for examination, finding nothing particularly new among them, the consequence of which was that the whole were stolen by some sharper at the hotel where the General was residing, and none have since been recovered ! I am now speaking of last January ! Since then I have received a coin and drawings of several others from Gen. Court ; also two or three from Gen. Allard ; and, latterly, the whole produce of Capt. Burnes' search in the neighbourhood of Kábul have been entrusted to my care. It is the very latest arrival from him (or rather from a valuable member of his expedition, Dr. Lord), consisting of two beautiful coins of Eucratides, that stimulates me at once to give forth all that have accumulated in my Bactrian drawer since I last wrote on the subject. I must give Dr. Lord's coins the first place, because one of them is, perhaps, the most curious and important that has yet fallen into our hands.

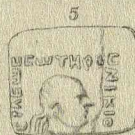
Plate xlii. contains etchings of both of these coins to which I would thus draw prominent attention. Dr. Lord thus describes the place and circumstances of their discovery :—

'I do myself the pleasure to forward two coins, which I have been so fortunate as to find during my late visit to Turkistán. The double-headed coin I found at Tash Korghán, the other at Kundúz.'

Fig. 2 I need not particularly describe, as, though new to us, it has been published from other specimens in France. The reverse has a naked figure of Apollo in lieu of the Dioscouri.

Fig. 1 is an unique medallion (that is, a tetradrachma) of Eucratides.

OBVERSE :—A fine youthful head and bust of the king wearing a plain steel helmet, with the bands of the diadem protruding behind.



On the area above and below—ΒΑΣΙΛΕΥΣ ΜΕΓΑΣ ΕΥΚΡΑΤΙΔΗΣ in the nominative case.

REVERSE:—Busts of a man and a woman looking to the right: hair simple and without diadem; legend above ΗΑΙΟΚΛΕΟΥΣ, below ΚΑΙ ΛΑΟΔΙΚΗΣ.

Supplying the word *υος*, we have here the parentage of Eucratides developed in a most unexpected way: 'The great king Eucratides, son of Heliocles and Lao-dice.' The former is a well-known Greek name, but it is evident from the absence of title and diadem that he was a private person, and yet that his son, having found his way to the throne, was not ashamed of his unregal origin.¹

I have long been pledged to my readers to give them a new alphabet for these Bactrian legends, and I think the time has now arrived when I may venture to do so; or at least to make known the modifications which have been elicited by the abundance of fresh names and finely preserved specimens which have passed under my eye since that epoch. It must be remembered that the only incontestible authority for the determination of a vowel or consonant is its constant employment as the equivalent of the same Greek letter in the proper names of the Bactrian kings. Beyond this we have only analogies and resemblances to other alphabets to help us, and the conjectural assumption of such values for the letters that occur in the titles and epithets of royalty as

¹ [I have omitted some of Prinsep's original speculations in regard to the Indian origin of Eucratides' mother, that he was led into by the faulty drawing of the coin supplied to him by Mr. Masson, and which the sealing wax impression of the original in his possession did not enable him to rectify until new information reached him at the moment of the publication of the current number of the 'Jour. As. Soc. Beng.,' when the error was unhesitatingly corrected by a fly-leaf note.]

may furnish an admissible translate of the Greek in each and every case.

It will be my object presently to show that this can be done, as far as the coins are concerned, by means of the Sanskrit or rather the Pálí language; but in the first place it will be more convenient to bring forward my revised scheme of the alphabet as far as it is yet matured. Unfortunately the exceeding looseness of orthography and caligraphy which could not but prevail when one foreign language (for such it was to the Greek die-cutters) was attempted to be rendered by the ear in another character, equally foreign to the language and to the scribes, with abundance of examples before me, renders it almost impossible to select the true model of some letters for the type-founder!¹

I begin with the initial vowels:

γ, α. This symbol continues to occupy the place of the vowel α in all the new names lately added to our list, beginning with the Greek Α, of which we have now no less than seven examples. The other short initials appear to be formed by modifications of the alif as in the Arabic, thus:

γ, α, is constantly employed for the Ε of Greek names.

⌈ u, is found following it in the word Eueratides, as though put for the Greek ρ, but other evidence is wanting.

ϕ [with the head-line reversed], i² though seldom met with on the coins, is common in the inscriptions, and by analogy may be set down as i.

ο á [the Numismatic an, plate xi.], is employed in words beginning with AN.

The medials seem to be formed in all cases by a peculiar system of

¹ [It will be seen that under the combined poverty and imperfection of the only Bactrian type available in Europe, I have had much difficulty in doing justice to Prinsep's latest revision of this alphabet. As my author's own forms were often faulty and defective, it was of course useless to reproduce the deficient letters, or to do more than indicate as nearly as possible, though necessarily in somewhat of a patchwork manner, the essential position in which he left the study of Arian palæography.]

diacritical marks; of these the *i* is the best determined, being found applied to almost all the consonants in the form of a small stroke crossing the letter. The *ā* is uncertain; it may be a prolongation below in the *r*,—a foot stroke or *mātra*. The *e*, I judge from the Manikyāla inscription, to be a detached stroke behind and above; in a few cases only joined. The *u* may be the loop so often seen at the foot of the written letters. I feel it to be a little premature thus to assign sounds without any positive authority; but it was from a similar assumption of the value of its vowel marks that I was led to the discovery of the Indian pillar alphabet.

With regard to the consonants, I ought, perhaps, to follow the order of the Hebrew alphabet; but, as the language to be expressed is allied to the Sanskrit, it may be more convenient to analyze them in the order of the latter.

h, ka. This letter on further scrutiny I find invariably to represent *k*; and its place is never taken on the coins by *γ*, as I formerly supposed. It occurs also with the vowel affix *i*, as *ki*; also, but seldom, with the *u*, as *ku*; and with the subjoined *r*, as *kra*. In the compounds, *kla*, *kli*, a form is adopted more like the Hebrew *q p* (quere *ח*). There are two or three examples in support of it.

ś, kh, is limited as such to the name of Antimachou; but I find it also representing the *g* in Abagason. In the written tablets we have various forms seemingly identical with it; yet one of these, with the vowel *i*, is used in some places for *dhi* (intended for the inflected *i*?). There is no small affinity between them and *γ*, *Q*, the *kh* of the old Sanskrit written invertedly.

[1st, see second form of Numismatic *ϣ*; 2nd, the same inflected with *r*; 3rd, the compound represented by the eleventh letter in the inscription from the brass cylinder, pl. vi., vol. i.] I place these forms here because they occur several times in the tablets, and they bear some resemblance to the *g* of the Pehlvi.

Of the Sanskrit palatials neither the Greek nor the Chaldaic alphabets contain any proper examples—the *ch* and *j* are modified to *z* and *ts*—which letters we must expect to find substituted for the Sanskrit class च छ ज झ.

[No. 1, a *v* reversed; 2, a *q* reversed. See Numismatic *chh*, pl. xv.] The first of these forms is found at the close of a series of words terminating each in the same vowel inflection, *i*, *e*; which makes me suppose it to be the Sanskrit conjunction *cha*, uniting a string of epithets in the locative case. As yet I have no stronger argument for its adoption.

ʒ, or *q*, *ja* (*tsa*?). The form of the Chaldaic *ts* *ʒ*, agrees well with

the first; indeed, in many coins of Azes, the Bactrian form is identical with the Chaldaic. I find that in every case this letter may be best represented by the Sanskrit ञ *j*; and, indeed, in the early coins of Apollodotus, etc., its duplicated form [the fourth letter in Maharāja, pl. xii.] seems to be copied from the ancient Sanskrit झ, reversed in conformity with the direction of the writing. The only inflection I have met with of this letter is *ju*.

I can make no discrimination between cerebrals and dentals; because the Greek names translated have of course no such distinctions, but from the variety of symbols to which the force of *d* and *t* must be ascribed, I incline to think the alphabet is provided with a full complement, though it is in the first place indeed almost a matter of option which letter to call *d*, *t*, *r*, or *n*, they are all so much alike—thus for *t* we have 𐎧, 𐎨, 𐎩, and 𐎪, and with the vowel *i*, 𐎫, 𐎬, etc.

As the equivalent of *d* again we have the same 𐎨, 𐎩, 𐎪, and also three other forms [1st, the second of the fifth Tradata, pl. xii; 2nd, the third of Menander; 3rd, the penultimate in No. 32, pl. xii.]: and for *dhi*, [*dhri* and *dhi*] the formerly evidently 𐎫 with 𐎨 subjoined; the latter quasi *tthi* or *ddi*: sometimes it is nearer 𐎫 *ri*.

I do not attribute this ambiguity to the letters themselves so much as to the carelessness and ignorance of the writers, who might pronounce the foreign name Apollodotus, indifferently Apalātada, Apaladata, and even Apalanata. Being obliged to make a choice, I assume as in my former paper—

𐎧, 𐎨, for *ta*, whence the various inflections.

𐎩, *tta*, *tha*, commonly used for *dh*, and its inflections.

𐎪, 𐎬, for *da*, *nda*.

𐎫, *na*. I do not perceive any indications of the other nasals, and indeed, they seem to be omitted when joined to another consonant: but I find something corresponding to the *anuswara* attached below the vowel *a*, and before consonants it seems represented by *m*.

𐎭 *pa*. The first of the labials is one of the best established letters. It has been discovered also inflected, and united with either *h* or *s* in 𐎭 *pha* or *spa*: also with *li* in *pli*, and in other combinations which will be noticed as they are brought forward.

𐎮, *φ*, *pha* or *fa*? I have no stronger reasons than before for continuing this value to *φ*:—it seems in some few cases to usurp the place of *v*; it is inflected also.

Ba? is still undetermined; in the doubtful name above quoted, ΑΒΑΓΑΣΟΥ, it seems to be replaced by 𐎨 or 𐎩—the aspirate is also unknown.

𐎯 *ma* 𐎰. This letter admits of no doubt whatever; but in the

Menander form, ψ , I now recognize the inflection *me*, corresponding with the Greek name more closely. The second or what may be called the printed form of *m* has a considerable affinity in form with the old Sanskrit \mathfrak{m} or \mathfrak{z} , whence it may be almost as readily derived as the Burmese form of the Páli *m*.

Λ *ya*. This letter is unchanged : it invariably replaces *s* and *y*, and sometimes *j* where the latter would be expressed by the Sanskrit \mathfrak{y} or \mathfrak{j} . It may perchance have been modified from the letter, for in some examples it is turned up on the sides thus, ω ; the inflected form *yi* is of common occurrence : *yu* less common.

\mathfrak{r} , \mathfrak{r} , \mathfrak{s} , *ra*. It is necessary to preserve these three representatives of *r* ; I incline to think that the prolongation below may be the *mātra* or the long *ā* inflection, *rā* ; for the first form is used in Ermaïou where there is no intervening vowel. It is only distinguishable from *d* by the foot-mark of the latter, which seems to be often omitted notwithstanding.

\mathfrak{r} , *la*. Further acquaintance has taught me that this is the only representative of Λ in Greek names : the instances wherein the *l* before appeared to be replaced by \mathfrak{r} have been disproved by duplicate coins. The inflected form \mathfrak{r} , *li*, has numerous examples among our new acquisitions.

\mathfrak{v} *va*, and *vi*, rest on strong but not indisputable authority, as will be seen below.

\mathfrak{h} , \mathfrak{h} , *ha*, has been removed from its former position as *h* on ample grounds ; and the value now assigned has, I think, equally strong support—though as far as Greek names are concerned it rests solely on the initial syllable of Heliocles, *he*. There is, again, a similarity worthy of remark between \mathfrak{h} inverted, and the old Sanskrit *ha*, \mathfrak{h} , \mathfrak{h} .

\mathfrak{s} , *sa*. To this letter I gave the sound of *o* on the former occasion, because I found it the general termination of nominatives masculine in Zend and Páli—replacing the Sanskrit *visarga*, *ah* or *as*. Since then I have found the same letter (affected with the vowel *i*) in two Greek names as the equivalent of *si*, and I am too happy on other considerations to adopt this as its constant value ; whether the dental *s* of the Sanskrit will best represent it remains to be seen, but the nearest approximation in form occurs in the Hebrew \mathfrak{s} : there are certainly two other characters [one like a *k*, or \mathfrak{p}], and \mathfrak{p} , having the force of *s* or *sh*. The former I should presume to be the Sanskrit *sha* \mathfrak{p} , from its likeness to the old form \mathfrak{p} . The latter, \mathfrak{p} , may be a variation of Λ , for which it is sometimes used, but rather by change of the Greek *z* to \mathfrak{z} , than as being the same letter, for elsewhere it takes the place of the Greek \mathfrak{z} as in \mathfrak{z} \mathfrak{z} , while Λ occurs for *z* in the same word. In

form it seems to be the Chaldaic *n*, or *th* soft. Several inflections of these letters have been observed.

It will be naturally expected that the alterations I have been compelled to adopt in the value of many of the above letters must produce considerable modifications in my former interpretation of the Bactrian legends. Indeed, when I look back at my attempt of 1835, I must confess that it was very unsatisfactory even to myself. I was misled by the Nakshi-rustam trilingual inscription, wherein the title of king of kings has been uniformly read as *malakán malaká*, though I balanced between this and the term *maharáo*, having found PAO on the Indo-Scythic series. But, once perceiving that the final letter might be rendered as *sa*, which is the regular Pálí termination of the genitive case, I threw off the fetters of an interpretation through the Semitic languages, and at once found an easy solution of all the names and the epithets through the pliant, the wonder-working Pálí, which seems to have held an universal sway during the prevalence of the Buddhist faith in India.

The best test of the superiority of a Pálí interpretation will be found in its application to the several royal titles of the Greek kings, which were previously quite unintelligible. The first of these is simply ΒΑΣΙΛΕΩΣ, which is constantly rendered by פארוס *maharájasa*, the Pálí form of महाराजस्य. It is true that there is some doubt whether the long vowel *á* is here applied to the *h* and *r*; but we have long since been accustomed to the omission of this and even other vowels in the Satrap coins of Suráshtra. The word is often written פארוס, whence I have supposed the dot or dash below to stand for *á*.

The next title is ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ, which we find replaced by *maharájasa rájarájasa*, a perfectly sound and proper expression according to the idiom of the Sanskrit. But in one class of coins, that of Azes, there are some very well preserved specimens, in which the second part of the title is פאריאדז, which is evidently *rájátirájasa* (or *adhi*, for the letter has a turn at foot, and may be meant for *dhi*), the regular राजधिराजस्य of the paramount sovereigns of India. The syllable *dhi* is often written ʎ *ti*, ʎ *ri*, or even *ti* or *gi* (?) but the vowel *i* shews what is meant.

To the title of king of kings is generally added on the Greek side the epithet ΜΕΓΑΛΟΤ, for which we have an addition in Bactrian of the word פרוס *mahatasa*, one of the forms of the Pálí genitive of *mahán* (or *mahat*) great, which makes only *mahatah* महतः in Sanskrit. The full title then is thus found to be *maharájasa rájadhirájasa mahatasa*, which is far preferable to the clumsy and unsatisfactory *malakao kak-kao malako* of my former paper, now rectified by the rejection of ʎ as *ka*.

The next title in the list is $\Sigma\Theta\Theta\text{PO}\Sigma$, for which we have rather a dubious word of four letters, either *dadatasa* or *nandatasa*, the former equivalent to ददतः the bestower of *dāna*, a word comprehending protection as well as charity;—the latter to नन्दतः ‘of the giver of pleasure.’

The epithet of next frequency is $\text{ANIKHTO}\Sigma$, the unconquered, which is translated by *apavihatasa* (Sans. अपविहतस्य), the unbeaten or invincible. It is this word principally which leads me to make $\text{† } va$, and to distinguish it from $\text{† } ti$ and $\text{† } li$, with the latter of which I before confounded it.

Next in order comes the somewhat similar expression $\text{NIKH}\Phi\text{OPOT}$; but the correct definition of this epithet is preserved in *jayadharasa*, the bearer of victory. In one instance the *dh* is written separately 𑀧𑀸𑀓𑀭 ; in others (like the *dh* of *adhi*) it is *jayadarasa*, but there can be little doubt of the sense; and this word is a strong confirmation of the value of the letter φ , or φja .

There is a second epithet of nearly the same signification which is common enough on the Seleucid coins, but comparatively rare on those of Bactria, $\text{NIKATOP}\Sigma$. This epithet was found on the unique coin of Amyntas, of which Col. Stacy was unfortunately robbed, and on one or two others. In the Bactrian translation the same word is used in every case as for $\text{NIKH}\Phi\text{OPOT}$, namely, *jayadharasa*, the possessor of victory, or the victorious.

There remains but one epithet to be accounted for (for $\Phi\text{IAONATOP}\Sigma$ of the Apollodotus unique coin does not seem to be translated):—it occurs on the coins of Heliocles, Spalurmes, and Archelies; I mean ΔIKAIOT ‘the just’—a rare epithet in any but the Arsacidan line of kings. This is everywhere rendered by *dhamikasa* (Sans. धर्मिकस्य) the exact expression required, and one constantly applied to Indian kings.

I am wrong in saying that the epithets are here exhausted, for on the unique coin of Agathocleia in Dr. Swiney’s possession there is a singular epithet $\Theta\text{EOTPO}\Sigma$, ‘heavenly dispositioned,’ yet unaccounted for: of these, the two or three first letters are lost, and the last two $\text{𑀧𑀸 } tasa$ may terminate *devamatasa* or some such simple translation. It is a curious fact that the name of the queen does not appear to be feminine in the Bactrian legend; and the title *mahārājasa* is also in the masculine.

There is another expression on a coin of Spalurmes, viz., ‘king’s brother,’ $\Sigma\text{ΠAATMO}\Sigma \Delta\text{IKAIOT AAEATOT TOT BAZIAEON}\Sigma$, the Bactrian translation of which at first seemed inexplicable; but, by means of



another coin, I think I have solved the enigma, as will be presently explained.

Another expression for the 'great king of kings,' is met with in one example only, as far as my information goes, namely, in the rude square coin of Spalirises, of which four specimens have passed through my hands: here the expression runs *maharajasa mahatakasas* (quasi महाताकस); but no great stress can be laid on such rude specimens.

Having thus satisfactorily disposed of the regal titles, we may place once more under review the whole of the Greek names with their Bactrian transcripts collated from a multitude of specimens.

GREEK NAME.	BACTRIAN IN ROMAN CHARACTER.
AZOT	<i>Ayasa</i> (pronounced <i>Ajasa</i>)
ΔΙΔΙΣΟΥ	<i>Aylishasa</i> .
ΑΠΟΛΛΟΔΟΤΟΥ	<i>Apaladatasa</i> .
ΑΓΑΘΟΚΛΕΩΣ.....	(found only in the old Sanskrit) गगणक्षेत्र
ΑΓΑΘΟΚΛΕΙΑΣ	<i>Fakasaghlitasa</i> (or <i>yasa</i>).
ANTIMACHΟΥ	<i>Anti-makhasa</i> .
ANTIALKIDΟΥ	<i>Anti-atikidasa</i> .
ΑΜΥΝΤΟΥ	<i>Amitasa</i> .
ΑΡΧΕΛΙΟΥ	(unique, Bactrian name erased).
ΑΒΑΓΑΣΟΥ	<i>Abakhashasa</i> .
ΕΥΚΡΑΤΙΔΟΥ	<i>Eukratidasa</i> .
ΕΡΜΑΙΟΥ	<i>Ermayasa</i> .
ΗΛΙΟΚΛΕΩΣ	<i>Helayaglayasa</i> .
ΔΙΟΜΗΔΟΥ	<i>Tayamidasa</i> .
ΛΙΣΙΟΥ	<i>Lisasa</i> (or <i>Lisikasa</i>).
ΜΑΥΟΥ	<i>Ma-asa</i> (or <i>mdyusa</i>).
ΜΕΝΑΝΔΟΥ	<i>Medanasa</i> (or <i>Menanasa</i>).
ΦΙΛΟΞΕΝΟΥ	<i>Pilasinasas</i> (or <i>Plijasinasa</i>).

Then follow a class of coins in which the names are either quite different on either side, or the Greek is intended for a transcript or translation of the native appellation.

ΟΝΟΝΟΥ (of Vonones).....	<i>Spalahdrasa</i> (or <i>Balahdrasa</i> ?)
ΣΠΑΛΤΡΙΟΥ (or ΣΗΑΛΤΜΟΣ).....	<i>Spalafarmasa.</i>
ΣΠΑΛΡΙΣΟΥ.....	<i>Spalirishasa.</i>

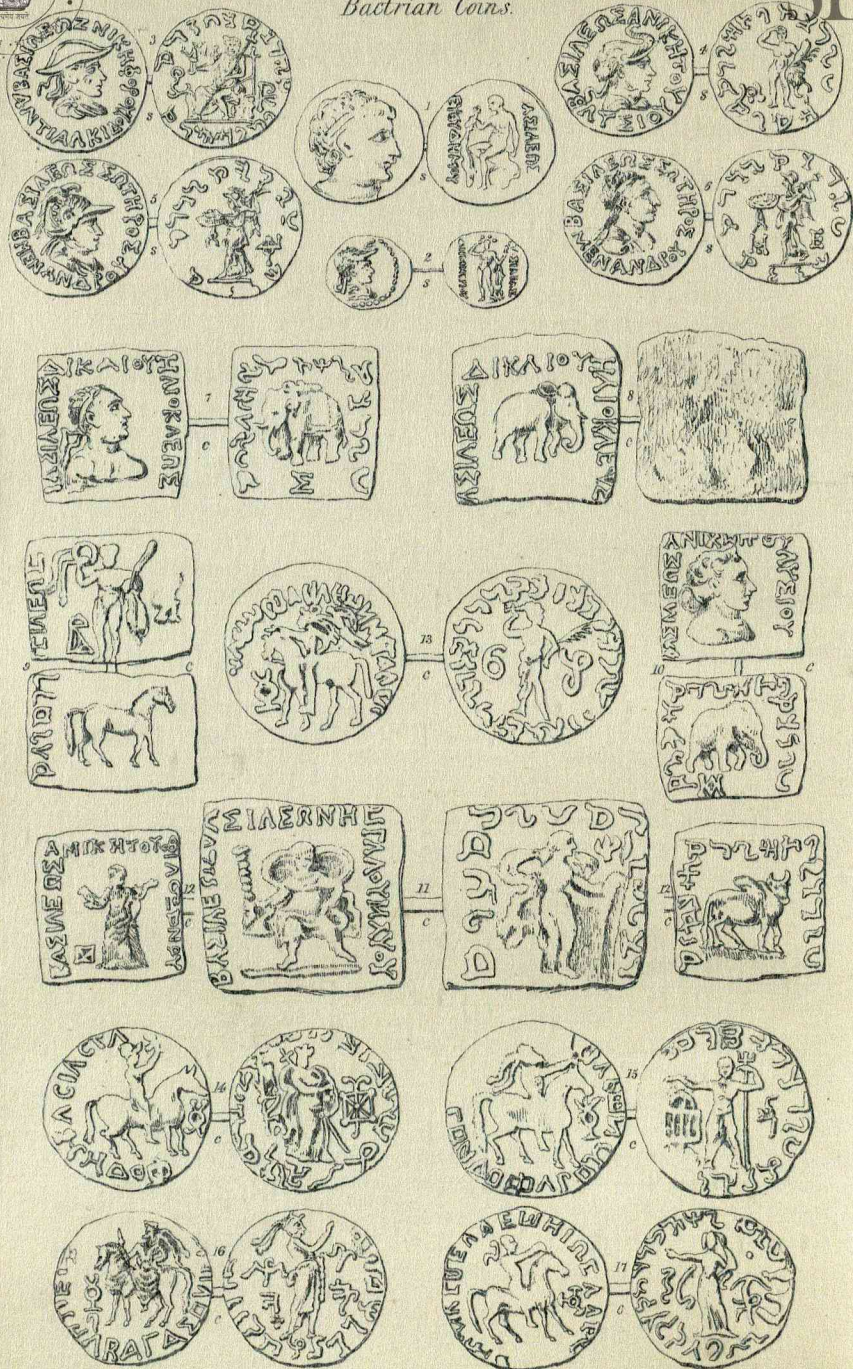
Then the group of the Ferres, or Phraates dynasty, if we may so call it, of which some new specimens will be introduced presently—

ΤΥΝΔΟΦΕΡΡΟΥ	<i>Farahetasa nandatasas.</i>
ΓΟΝΔΟΦΑΡΟΥ	<i>Farahetasa gandadharasa.</i>
ΗΡΟΝΑΣΦΕΡΡΟΥ	<i>Pharateklisanadharasa?</i>

but it may be doubted whether all these are not in reality the same name, *Farahetasa*, coupled with the title corresponding to ΣΑΤΗΡΟΣ, written in a loose manner.

On the reverse of the coins of the second Hermæus (or perhaps the

Bactrian Coins.



third), having a Hercules for reverse, commences another series of native names, forming what we have designated the Kadphises or Kadaphes group. After the change from ΕΡΜΑΙΟΤ on the obverse, to ΚΑΔΦΙΖΟΤ, we have still precisely the same reverse as before, and it is preserved through a numerous series;—the title of mahārāja is not to be found, nor is it easy to see where to commence either the Greek reading ΚΑΔΦΙΖΑ or ΚΑΔΦΙΖΩ ΧΩΡΟΥ, or the Bactrian, which may be transcribed *dhama . . rata Kujulakasa sabashakha* (?) *Kadaphasa*:—in this reading, if we can make out nothing else, there are at the least two names, *Kosoula* (also written *Kozulo* and *Kozola*), and *Kadphizes* (also written *Kadaphse* and *Kadphises*), accounted for. The distinctions on the small coin of ΚΟΠΑΝΟΤ ΖΑΘΟΤ ΚΑΔΦΕΟ I am unable as yet to make out for want of further samples.

Connected with the same family we then come to the long inscription on the Mokadphises coins, which may be read by comparison of a great many examples:—

Maharajasa rajadhirajasa sabatracha ihacha mahiharasa dhi mahadphisasa nandata.

‘Of the great sovereign, the king of kings, both here and everywhere seizing the earth, etc., Mokadphises, the saviour?’

I do not insist upon any of these epithets, *sabatra mahidharasa*, for in fact they vary in every specimen. The *dhi* also looks in many coins more like *dha*, quasi *dhama Kadphisasa*. On some the reading is rather *sabalasa saviratasa mahichhitasa* महीचितः sovereign?). On some gold coins, again, the name more resembles *vavahima Kadphisasa*, agreeing with the Greek ΟΟΗΜΟ ΚΑΔΦΙΧΟ.

It remains only to apply my theory of the Bactrian alphabet to the inscriptions on the cylinders and stone slabs extracted from the topes at Manikyāla, etc., but this is a task of much more serious difficulty, and one not to be done off-hand, as all the rest has been! I must, therefore, postpone the attempt until I am better prepared with my lesson; and, meantime, I will proceed to describe briefly the contents of

PLATE XLIII.

Fig. 1 is a small silver Euthydemus in Capt. Burnes' collection: it resembles exactly the medallions already published of the same prince. Weight, 62 grs. See pl. xxv., vol. iv., fig. 1, ‘Jour. As. Soc. Beng.’

Fig. 2 is a hemidrachma of Demetrius also belonging to Captain Burnes. See one figured from General Ventura's collection, pl. xiii., fig. 2.

Fig. 3, a silver coin of Antialcidas, presented to me by General Ventura. Execution very good. Weight 10½ grains.

OBVERSE:—ΒΑΣΙΛΕΥΣ ΝΙΚΗΦΟΡΟΤ ΑΝΤΙΑΔΙΚΑΟΤ. Head of the king with a flat helmet shaped like a cocked hat:—chlamys on the shoulders, and diadem seen under the hat.

REVERSE:—Bactrian legend, *Maharajasa jayadharasa Antialikidasa*. Jupiter

seated holding a small figure of victory:—at his feet to the right, the forepart of a small elephant with trunk elevated. Monogram on the left composed of P and Δ ¹.

Fig. 4, a similar drachma of Lysias, belonging to General Ventura: unique.

OBVERSE:— $\text{BAΣIAEΩΣ ANIKHTOT AYΣIOY}$. Head of the king, with the Demetrius helmet, shaped like an elephant's head.

REVERSE:—Bactrian legend, *Mahārajasa apavihataśa Lisiasa*. (The copper square pieces have *Lisikasa*). Hercules naked standing, with club and lionskin, as on the coins of Demetrius.

Figs. 5, 6. Two varieties of Menander, not yet depicted in the journal, given to me by General Ventura, who has many of a similar nature. In one the prince wears a handsome helmet, in the other he has the simple diadem. The reverse of both agrees with the one engraved in pl. xiv., fig. 1, except that Minerva looks in the contrary direction.

HELIOCLES, KING OF BACTRIA.

Fig. 7. The first coin of Heliocles which I have yet seen in India. It belongs to General Ventura. A square copper or bronze piece in excellent preservation.

OBVERSE:— $\text{BAΣIAEΩΣ ΔΙΚΑΙΟΥ ΗΛΙΟΚΛΕΟΥΣ}$. Diadem'd head of the 'just king, Heliocles,' somewhat similar in features to Eucratides.

REVERSE: Bactrian legend, *Mahārajasa dhamikasa Heliyaklayasa*:² an elephant equipped with howdah and trappings walking to the right; monogram Σ .

Fig. 8. A less perfect coin of the same king presented by the General to myself.

In lieu of the head of Heliocles, the obverse bears an elephant, naked, walking to the left, Greek legend as above. The reverse is irrecoverably lost.

It is, perhaps, unnecessary here to retract my former doubts of the existence of a Heliocles in the Bactrian dynasty, since they have long been removed by the account of the silver medals in France. We have as yet seen none but these two copper specimens in India, but the probability is that both silver and copper might be found in Bactria proper, to the north of the Hindu Kush or Imaus.

An opinion has been started by Mionnet, in opposition to many European numismatists, that Heliocles was no other than Eucratides the second, the parricide. The surname of $\DeltaΙΚΑΙΟΣ$, so unsuitable to such a character, he supposes given through fear or adulation, which I agree with M. R. Rochette in thinking too great an anomaly to be allowable: but without seeking to account for this staggering circumstance, we can now help M. Mionnet to a very powerful argument in his favour from the unique coin of Dr. Lord described in a former part of this paper, which proves that Eucratides' father was a Heliocles; and we know that it was common to call an eldest son by his grand-

¹ N.B. The etching of this coin is a total failure: the plate was laid by for several months and the acid would then barely touch it. In retracing it, the native engraver has quite wandered from my original, and I perceive it too late for alteration on more than half the edition of the plate.

² The ante-penultimate letter might be better read *Sra*, or *Sri*: which would give a Sanskrit version of the name,—*hilyasriyasya*, 'having a sun-like prosperity.'

father's name, as is, indeed, universally the custom to the present day both in Eastern and Western countries.

Fig. 9. I have introduced this duplicate of the single mutilated coin depicted in fig. 8, pl. xv., among the then doubtful group, because General Ventura's present specimen exhibits the name in the Bactrian, 𐎧𐎠𐎡 *ayasa*, and thus proves it to belong to the abundant series of AZES' coins.

Fig. 10 is a square copper coin of Lysias kindly added to my cabinet by General Ventura.

It is in better preservation than any before published.

OBVERSE:— $\text{ΒΑΣΙΛΕΩΣ ΑΝΙΚΗΤΟΥ ΑΥΣΙΟΥ}$. Head of Lysias, with diadem. Mionnet says of a similar coin, 'représenté en Hercule, la massue sur l'épaule gauche'—but I do not perceive these characteristics very distinctly.

REVERSE:—Bactrian legend, *Mahdrajasa apavihatasa lisikasa*, 'of the unconquered king *Lisika*.'

I perceive that both Mionnet and M. Raoul Rochette give to Lysias the square coins of Spalyries or Spalurmies; though there is no resemblance whatever between them. M. Raoul Rochette writes in the 'Journal des Savants,' Mars, 1836, p. 136:—

'Cette autre médaille de Lysias diffère sous tous les rapports de celles que nous possédions déjà du même prince: elle est restée inconnue,¹ à tous les savants et voyageurs Anglais qui, depuis plusieurs années se sont appliqués avec un zèle si louable à recueillir ces précieux monuments de la civilisation Grecque enfouis dans le sol de l'Inde: et l'exemplaire que nous devons à M. le général Allard, et que je publie, est encore unique. La fabrique, qui ressemble à celle de la médaille du roi anonyme, que j'ai fait connaître,² accuse sensiblement une époque de décadence, d'accord avec la forme carrée du \square et de l' \square qui commencent à paraître sur la monnaie des Arsacides, à partir de Phraate III. à une époque qui doit s'éloigner bien peu de l'âge de notre Lysias. On pourrait voir un autre rapport entre cette monnaie Bactrienne et les médailles du même prince Arsacide, dans le titre de juste, ΔΙΚΑΙΟΥ , qui se lit habituellement sur les médailles de Phraate III. . . . mais ce qui constitue ici la particularité la plus remarquable et la plus neuve, c'est la qualification d' Adelphe, ΑΔΕΛΦΟΥ , affectée par Lysias, &c.'

When the mistake of attributing this coin to the wrong person is corrected, it is curious how perfectly the observations of the learned antiquarian of Paris confirm the conjecture to which I have been led by the deciphering of the Bactrian legend:—the coin is that of the 'son of a king Spalahara or Balahara;' in bearing the effigy of Hercules it agrees with the corrupted coins of Hermæus II. and others

¹ The drawing of the very coin described by M. R. R. was published by myself in June, 1835, but I did not deem the name legible, nor has it proved so at Paris, by their making Lysiou out of Spalurmou. I stated my reason for not publishing earlier to be, that I might not forestall the 'As. Soc. of Paris' in describing General Ventura's splendid collection.

² It is not obvious in what this great resemblance consists;—one coin is square, the other round:—one has a Greek legend only; the other a bilingual one—the equestrian figure is the obverse in one, the reverse in the other. The anonymous coin was first published in the 'Asiatic Researches' in 1831, and in the Journal for 1833 and 1834.

of the Pherres or Phrahetasa (Phraates?) type, which appear to belong to one family. M. R. R. agrees with our discoverer Masson in locating them in an Indo-Greek dynasty at Nysa, or near Jelálábád, where their coins are found in the greatest abundance.

I have introduced an engraving of a very perfect specimen of this coin given to me by Mr. Trevelyan, who got it from Mohan Lal, as fig. 3 of pl. xlii.

It may be remembered that the name of Vonones is not found on the Bactrian side of his coins, but a totally different word, 𑀧𑀲𑀸𑀓 *Balaharasa* as I read it, or perhaps *Balāharasa* (बलाहरस), the patron of champions, a term nearly equivalent to 'Satrap.' Now on all the coins of Spalyries (or Spalurnes) hitherto found, the initial letter has been unfortunately cut off; but the three next are *lahāra*, the same as above, wanting only the final genitive inflection: the next letters may be read *putasa*, for (पुत्रस) 'of the son.' Putting the whole together we have (𑀧 Ba) *lāharaputasa* *dhamikasa* *Balafaramasa*, 'of Balafarama (either for Balaparama, or बसवर्म, whose strength is his armour) the just, the son of Balāhara.' Therefore, as he was brother of the cotemporary of Vonones, 'the then king' must also have been a son of the same person: and we should expect to find another coin of a somewhat similar type struck by him. These conditions are satisfactorily combined in the rude square coin of Spalirises, depicted in pl. xv. and pl. xxviii., fig. 7. He has the same flowing mantle from the shoulders, the sceptre of royalty, and his native name appears to be Balirishasa: thus the father's native name is Balahāra; the eldest son's Balirisha, and the second son's Balavarma, and the copper money of the whole triad is distinguished for its exceeding rudeness no less than its conformability of type! The silver money of Spalurnes and Spalirises has not yet been found, or we might probably find that it maintained the name of Vonones, the Parthian king, or his successor, on the obverse.

The style of these three names commencing with Bala,—and the title in particular of the first, Balahāra,—call to mind the Balhāra dynasty of north-western India, of which the epoch cannot be said to be yet well defined. One of the earliest foreign authorities, the historian Masoudi, who wrote in 947 A.D., says:—'The dynasty of Phoor, who was overcome by Alexander, (had) lasted 140 years: then came that of Dabschelim, which lasted 120 years: that of Yalith was next, and lasted 80 years, some say 130. The next dynasty was that of Courous: it lasted 120 years. Then the Indians divided and formed several kingdoms; there was a king in the country of Sind; one at Kanauj; another in Kashmir; and a fourth in the city of Mankir

(Minnagara?) called also the great Houza, and the prince who reigned there had the title of Balhára.¹

$120 + 80 + 120 = 320$ years, estimated from Alexander's time, brings us to B.C. 3, or, allowing a few more years to Porus, say 10 or 20 A.D. Now, the reign of Vonones I. as king of Parthia is dated by Vaillant from A.D. 6 to A.D. 20, so that the accordance of time is here perfect, and we need seek no other explanation of the paramount Persian sovereign's name and effigy on one side, while the other modestly bore that of his tributary, because we have witnessed the same in the Satrap coins of Suráshtra. The native kings were apparently allowed to have the copper coin to themselves. The religion here, however, is polytheistic, the effigy that of Hercules or Baladeva.

Without insisting upon their being the same person, I cannot help mentioning that the name of Balarishi is found as one of four brothers by different mothers, who cut a conspicuous figure in Indian fable. Balarishi, Vikramarka, Bali, and Bhartrihari; the second of these is the celebrated Vikramáditya, whose reign falls 56 years before Christ, and he was the son of one Gandha-rupa, or, as the fable has it, of a *gandharva*, in the mortal disguise of an ass. Wilford interprets the tale by making Vikramáditya the son of Bahram Gor of Persia by an Indian princess, and, to account for the anachronism of 400 years, is forced to imagine there were several kings of the same name,—which would be likely enough if he admitted (as seems certain from our coins) that Vikramáditya is a mere title. We shall presently allude again to this circumstance.

Fig. 11. From General Ventura's collection. A more perfect specimen of a hitherto illegible coin. It is now seen to belong to Mayes.

OVERSE:— $\text{BA}\Sigma\text{IAE}\Sigma\text{E}\text{ } \text{BA}\Sigma\text{IAE}\Sigma\text{N}\text{ } \text{ME}\Sigma\text{AAOT}\text{ } \text{MAYOT}$. Front figure of the king seated on a chair or throne, a shawl (?) on his shoulders, and a club or knotted sceptre in his right hand like that given to Mokadphises.

REVERSE:—Much worn and indistinct, a female holding some object like a scarf with both hands, and having a flowing robe behind, like that of the Vonones group. Bactrian legend, *rajadhirajasa mahatasa maasa*, and on the field $\Psi\Lambda$ used numerically (?).

The discovery of this rare specimen, only the third known of the prince whose name it bears,² will be highly gratifying to the numismatists of Paris. It will, in the first place, remove the doubt entertained by M. Raoul Rochette himself whether the un-Greek appellation Mayes might not be used for *Mao*, 'the moon,' as a divinity and not as a king; or whether, united to the title $\text{BA}\Sigma\text{IAE}\Sigma$, the compound may

¹ Wilford's Essay, 'Asiatic Researches,' ix., 181.

² I have just received another Mayes of different type from Capt. Burnes too late for insertion here.—J.P.

not be equivalent to the name of Apollodotus: 'ce n'est là, du reste, qu'une conjecture que je soumets avec beaucoup de défiance aux lumières de nos philologues indianistes, desquels seuls il est permis d'espérer la solution de ce curieux problème.'

The problem is now solved so far that we find him an earthly sovereign with similar titles to those of Azes,—and that he is not Apollodotus! The native name, composed of three letters, I should have formerly read MAO, but on the new, and I think correct, system now adopted, it must be read *Mā-asa* or *Mayusa*, as near an approach to the Greek, or by the Greek to it, as the relative alphabets would allow. Of the name itself, I am inclined to identify it neither with *Maia*, the mother of Mercury (though the caduceus favors this idea, and the Indian *Māyā* is also the mother of Buddha), nor with *Mao*, as lunus,—though Chandra is a common name enough,—but rather with *Māyu* (मायुराजः), the son of Kuvera, the god of riches (whose name also is frequently adopted by princes),¹ and it may have been borne by a contemporary or successor of Apollodotus, who swayed the sceptre but a short period in some part of the Panjáb, if it is necessary to suppose them of the same age.

PHILOXENES.

Fig. 12. A square copper coin in most respects agreeing with the former one, also of General Ventura's collection, but having apparently a difference in the orthography of the Bactrian name. On comparing the drawing of the silver Philoxenes in the 'Journal des Savans,' with the rapid sketch I had taken of the same coin while in Calcutta, I perceive that I read the name and title wrong; which is my reason for inserting this better preserved coin:—the legend is clearly *maharajasa apavihatasa plijasinasasa* (or *Phildsinasa*). On the silver coin the epithet is *apavihasasa* (quasi अपविहसस्य)—not to be laughed at! but I think the *s* must be a blunder.

M. Raoul Rochette judges from the military aspect of Philoxenes that he was a satrap placed with a regal title on the north frontier of the Bactrian kingdom when threatened by the Scythians; but the circumstance of none of his coins having been found by Masson in the upper field, while several have come to light in the Panjáb, would tend to contradict this hypothesis, as much as the *Ceres Carpophore*, or abundance personified, and humped bull of his copper coin. This learned critic does not allow that the brahmany bull has any reference to India, because it is seen on the Seleucid coins; but in the only specimen I have in my cabinet of a Seleucus with a bull reverse, the animal is altogether of the European breed.

¹ See notes on the Allahábád inscription, Nov. 1837, p. 972.—*Pálaka Ugrasena, devardshtraka Kuvera*. As the Parthian kings were styled *devajanita*, this country of the devas may have been in the north, as was indeed the fabulous country of Kuvera, the god-king.

COINS OF THE AZES GROUP.

A great deal remains to be done ere we shall be able to clear the history of this numerous and interesting series of coins. Every day new types and varieties spring up, generally of tinned copper or bronze.

Fig. 13 is a specimen in good relief lately sent down to me by General Allard; there was another in the collection sent home by General Court under care of M. Meiffredy, of which I was favored with the sight of the drawing. On this the name on the Greek side was entire, and thence I am enabled to complete my description.

OBVERSE:—BACIAΣYC BACIAΣYHVN METAAOV VNΔOΦEPPOV,—rāja in a brahmanical dress, upper part of the body naked,—on the head a turban (?) with flowing fillets. The small figure of victory holding a chaplet over him forms the peculiarity of the device, of which there are yet but three samples. The monogram, which was before so unintelligible to us, I now recognise as a combination of two letters of the old Sanskrit alphabet, *ṣ* and *ṇ*, *m* and *n*.¹

REVERSE:—Whether the figure in a brahmanical costume, holding a trident in the right hand and a palm branch in the left, is Neptune, Siva, the river Indus, or the king, I am not sufficiently initiated in the art to determine. No two reverses seem to be exactly alike, though formed of the same materials; the legend on the present in Bactrian is

Maharajasa rojarajasa nandatasa jayadharasa (?) Farhetasa.

I do not pretend to be satisfied with the last epithet, nor with the name, which, however, I collate with M. Court's. I have conceived it possible, on a former occasion, that it referred to Phrahates, the predecessor of Vonones, or another of the same name: but there are too many uncertain letters in it to build theories safely upon. At any rate, the same name of five letters, here seen below the figure of Siva, is found on all the rude coins ascribed formerly to *Unad* (now corrected to) *Undo-pherres*, with exception of the penultimate letter, which is there always formed like an *f*. *Fara-etisa* (?), to which *ndatasa* (*soteros*) is invariably added—on M. Court's coin this epithet may be preferably read *ṇṇṇṇṇ* great!

On the area are two Bactrian letters, which might be profanely taken for 'six shillings' by an uninitiated handler!

Fig. 14. A variety of the same group, in General Ventura's recent collection. In this the horseman looks in the opposite direction, and the beginning of the name VNΔOΦερρο is visible. The monogram is composed of *ṣ* and *ṇ*,—*ṣṇa*.

On the reverse, a well clad female holding still the trident (though it looks more like the cross) walks to the left—a Greek and a Bactrian monogram on either side, of complex form: legend as before, the name below.

Fig. 15. Another novelty from General Ventura's store, of which a duplicate has been sent to France by M. Court.

In all respects but the name the obverse corresponds with the foregoing. The

¹ I may here note that fig. 14, pl. xxxii., is also a coin of *Farheta*, with the letters *ṣṇ* as a central symbol.

name in the two coins yet brought to light of this species is quite distinctly ΓΟΝΑΘΦΑΡΚΤ, which is either another member of the family or a corruption of the last.

The erect front-faced figure on the reverse is dressed in the Hindu dhoti, and extends his hands over a new symbol of gridiron fashion—in his left hand is the trident. This figure has been conventionally styled 'Siva,' when he appears with his bull on the Indo-Seythie coins. The native name is as before, *Farahetasa*, with the addition of *netadharasa*, 'the bearer of something not very intelligible, unless we make the first syllable $\Delta\lambda$, *jaya*, 'victory.'

Referring to the observations in a preceding page about the brothers of Vikramāditya, I cannot forbear mentioning that in Gondophares we might almost recognize the father of Vikramāditya himself; for in the word Gondo-phares we have a signification not very remote from Gandha-rupa; *φapos* being pallium, vestis exterior,—the compound may mean 'having a cloak made of the skin of the *gandha*, *gonda*, *gor*, or wild ass.' Whence may have originated the fable of the Parthian king doomed to assume the guise of an ass during the day.

These are speculations certainly, much in the Wilford strain, but the curious coincidence in so many names is enough to lead even a matter of fact man aside from the justifiable deductions of sober reason.

Fig. 16, like the last, adds a new name to the Bactrian list. The coin, a thick copper piece in tolerable preservation, was sent down to me by General Allard a short time ago; it is as yet, I believe, unique.

OBVERSE:—(βασιλεως βασιλεων μεγάλου) ΑΒΑΤΑΣ□V—'of the great king of kings, Abagases:' there may, perhaps, be another letter before the Α. The king, known by the flowing fillets of his diadem, seems dressed in a petticoat, *rāja* fashion—and he sits sideways on a richly caparisoned horse, looking to the right. Monogram χ as before, but with the Bactrian letter η beneath it.

REVERSE:—The same royal personage (by the fillets) as if performing the functions of high priest. The dress is so precisely Indian, that I feel disappointed in not finding a regular Sanskrit name below; nor can I produce much of accordance between the Bactrian and Greek names—the letters are *abakhafasa*. On the field are various insulated alphabetic symbols,—Bactrian and Greek, and, under the latter, one which looks like a modern Nāgari *n*, न, but is more probably a Bactrian letter.

The last figure in the plate (from General Ventura's store) is a duplicate of the Azes coin published as fig. 22 of pl. xvii. Between the two one important fact is established, namely, that at this period of the Azes dynasty the use of the Greek was entirely lost, while the native character was written with greater correctness in the same or rather the inverse ratio. The Greek legend is a mere jumble of letters, but the Bactrian reads continuously—

Maharajasa mahatasa dhamikasa rājatirajasa Ayasa,

'Of the great king, the mighty, the just, the king of kings, Azes.'

The figure of Abundance with her cornucopia has a compound symbol on the left, which might be read *Sri*, her Indian name; and on the right the two letters ζ , ς , *kha* and *dha*, used numerically. (P)

The perfect Greek medals of Bactria proper, however beautiful as works of art, ought not to turn away our attention from these corrupted or 'barbarous' specimens which mark the decadence of Greek dominion and Greek skill. These are the most precious to the student of Indian history: through their native legend he may yet hope to throw light on the obscure age of Vikramāditya, and the Scythian successors of the Greeks on the north of India. Hitherto these classes of rude coins, though very numerous, have been much disregarded, and on that account I now invite attention to them, and promise to return to the task myself when I have fresh materials collected and arranged; my text being, 'those coins on which the native and Greek legends differ, or record different names.'

[Following out the plan I have adopted on previous occasions, of combining the substance of Prinsep's discoveries with a general outline of the present state of our knowledge of the various subjects embraced under each heading, I subjoin—

1st. A revised plate (xi.), and a cursory letter-press review of the Bactrian alphabet, as elucidated by the latest available evidence, and illustrated by a valuable comparative table of the transitions of the early Semitic Alphabets, furnished me by M. le Duc de Luynes (pls. xi.^a xi.^b).

2nd. A brief introductory notice of the Arian nomenclature, and the parallel transcription and translation of the Greek names and titles occurring on the coins.

3rd. An abstract of the leading theories for the epochal and serial distribution of the list of monarchs adopted severally by the authors who have specially devoted themselves to the study so effectively inaugurated by Prinsep.

4th, and finally, I annex an outline but numerically comprehensive catalogue of all the Bactrian coins I have had an opportunity of examining, together with references to the various publications wherein the more important pieces may chance to have been figured and described at large; further, to improve, as far as possible, the general series, I have added such examples as I felt myself justified in citing from Major



Cunningham's inedited plates;¹ and, to complete the typical details, I have compiled from the coins themselves a table of mint monograms (pls. xi.^c xi.^d), which I trust will be found to afford a full and exact summary of these important records.

I.—REVIEW OF THE BACTRIAN ALPHABET.

Whatever of modifications or discrepancies of form may be apparent in the Bactrian character, as opposed to the Semitic alphabets of the West of parallel date, there can be but one conclusion as to their joint derivation from a single parent stem. It would be absurd to suppose that the Phœnician and its cognate ramifications curtailed and yet complicated into the crude signs of their own system the more copious and advanced alphabetical series of the East. Indeed, there is internal evidence to the contrary, and the process of simplification of certain characters by the latter can be traced and detected in the mere mechanical configurations alone, and otherwise most of the changes and adaptations of the Arian scheme can be explained and accounted for by the double action of the needful increase in the total number of letters, and the effect of contact with the independently perfected alphabet of India proper.

The proofs of the common origin of the two styles of writing are to be found in the direction followed by both—from right to left,—in the leading idea of the construction of the majority of the characters of either, and, more definitively, in the approximation and close unity, in each series of the several forms of ב, 𐎁 [𐎂], 𐎃, and 𐎄.

¹ [It is perhaps necessary for me to explain more distinctly the reserve I feel called upon to exercise in this regard. Major Cunningham, some years ago, prepared and printed off a series of eighteen plates of Bactrian coins, designed for the ultimate illustration of his long contemplated work on 'The Successors of Alexander in the East.' These lithographs were most obligingly communicated to myself, and others interested in cognate studies in anticipation of the due order of publication. They contain facsimiles of many important coins that I should have been glad to have cited to improve the series now given, but as I trust the author will shortly be enabled to make public his elaborated memoir, I ordinarily abstain from anticipating the novelties he has delineated, even under the full acknowledgment appended on the rare occasions that I have quoted from this source.]



In regard to the date of the elaboration of the improved system, it would be vain to speculate with any pretension to accuracy; but it may be safe to say, while adverting to the internal fixity of the Semitic alphabet and the very remote period at which it can be shewn to have been in free use,¹ as well as to the material progress achieved up to that date, that the Bactrians must have separated and organized their system at an era considerably antecedent to B.C. 250,² which is the earliest epoch at which any example of their epigraphy can at present be quoted.

Symptoms of such an independent advance may be tested in the fact, that at the period in question, many of those letters of purely Semitic formation, which were retained comparatively intact as representatives of identical phonetic values, are found to exhibit a far more striking approximation towards the ultimately accepted forms of the modern alphabet than their correspondent characters of the Western system in use under the Seleucidæ.

¹ [For instance, its having formed the model of the Greek alphabet, which itself is admitted to have been employed in the 9th and 10th centuries B.C. Mure, 'Hist. Greek Lit.' iii., pp. 403, 424, 430, 456. M. E. Renan considers that there is evidence authorizing the induction that the Hebrews wrote in the 'phénico-babylonien' alphabet at the time of the coming out of Egypt. 'Histoire Générale des Langues Sémitiques,' p. 108. Paris, 1855.]

² [I am not able to discover upon what precise authority M. Renan extends the spread of Semitism to Bactria at the period indicated in the subjoined extract, but I conclude he associates it in some way with the accession of 'la dynastie (d'origine arienne) qui éleva à un si haut degré, au viii^e siècle, la puissance de Ninive,' and the subsequent establishment of the kingdom of Babylon:—'Un fait beaucoup plus important que tous ceux qui viennent d'être cités, est la transmission qui se fit, vers le viii^e siècle avant notre ère, de l'alphabet sémitique à tous les peuples du monde ancien, par l'action combinée de la Phénicie et de Babylone. Semé sur toutes les côtes de la Méditerranée jusqu'en Espagne,^a porté vers le Midi jusqu'au fond de l'Éthiopie, gagnant vers l'Orient jusqu'au Pendjab,^b l'alphabet sémitique fut adopté spontanément par tous les peuples qui le connurent;' p. 195, 'Hist. Gen.']

^a L'alphabet phénicien était devenu, sous diverses formes, l'alphabet commun de tous les peuples méditerranéens, avant d'être remplacé par l'alphabet grec et par l'alphabet latin, c'est-à-dire par deux transformations de lui-même. Dans le monument de Téos, déjà cité, l'expression τὰ φοινικία (s. e. γράμματα) désigne le texte même de l'inscription.

^b L'alphabet zend paraît se rattacher aux alphabets araméens. Quant au dévanāgarī, son origine sémitique est restée très-douteuse, malgré les efforts de M. Lepsius pour l'établir.



Tracing more closely the internal constitution of this adaptive alphabet, we have to allow—(1) for the creation of nearly double the number of letters previously existing in any known Semitic series, incident to the linguistic demands of a more exact language; (2) for a hitherto-unheeded discrimination between consonants and vowels; and lastly, for that strange anomaly in Semitic writing, the introduction of the medial vowels in the body of, or attached to, the covering consonant, which was calculated so seriously to affect the normal form of the latter.

With these ample materials for comparisons and inductive definitions, it may be said that it should be easy to arrive at the truth; but it must be remembered that the very multitude and conflicting nature of the possible causes creates, in itself, a difficulty in selecting the ruling one. And as has already been remarked, we are not by any means in possession of the whole evidence in the case, but have to decide upon the facts presented to us by three literal series at a given point of their several histories, when each had already arrived at advanced maturity.

However, let the special instances be proven or not, thus much may be conceded on the general issue:—1st, That in the formation of the Bactrian alphabet the leading tendency was to follow Semitic tracings; 2nd, That the normal types of the parent stock were altered, adapted, and even devoted to new purposes, as occasion required, for the due exhibition of the more ample and exact speech they were now called on to embody; and 3rd, That the pre-existing and indigenously-matured Pálí alphabet of the South exercised more or less influence in the ultimate determination of many of the forms, more especially in regard to that extraneous element—the definition of the vocalic sounds.

With this limited preface I introduce the detailed examination of such letters of the entire series as seem to furnish data in support of the results above indicated, otherwise avoiding all

notice of those characters which neither illustrate the general derivative question, nor present any difficulties in regard to their own forms and values.¹

It will be seen that I follow the order of the Lát alphabet, as arranged by Prinsep in his early engravings.

1. Regarding the value of the letter *k* in its leading lapidary form, or its numismatic modifications, there has been from the first but little question. Some apparent anomalies, however, present themselves in the way of a ready determination of the prototype from whence the Arian letter derived its outline. The normal configuration of the Semitic *כ*, *Caph*, seems to have been devoted, in the Bactrian system, to the representation of a new articulation;² and the prevailing style of the Phœnician *פ*, *Koph*, was superseded in the Eastern alphabet by the appropriation of an almost identical character as the exponent of *s*. And yet, amid the enigmas of Semitic palæography, it is curious to mark the community of design apparent between the Bactrian *𐎧* of extreme Eastern maturation and one of the Aramæan varieties of the *p* preserved on the monuments of Egypt.³

2. The *kh* of the Bactrian system will be seen to have gone through a succession of forms, whether under its numismatic or lapidary progressional course: this is possibly owing to its infrequent use, whereby it retained a less determinate position in the general alphabet. It is found on the coins of—(1) Antimachus; (2) Archebius; and (3) Kozola

¹ [It is needful that I should specify more precisely the nature of the materials whereby I propose to justify my inferences:—1st, In regard to the lapidary characters. The Kapurdigiri inscription may be examined in Mr. Norris's most scrupulous mechanical transcript, copied from an inked-cloth impression taken from the rock itself, and published in the 'Jour. Roy. As. Soc.,' vol. xii., p. 153; as an additional verification of the facsimile, I have been able to consult the original calico transfer, in some cases available in duplicate, as well as Masson's own eye-transcript, executed with such obvious care and accuracy on the spot; and, finally, advantage has been taken, in the few possible instances, of the seemingly correct outlines afforded by an indifferent Calcutta lithograph, designed by Mr. J. W. Laidlay, and purporting to have been drawn from a facsimile by Captain A. Cunningham, copied *in situ*.—The Manikyála stone inscription is engraved in pl. ix. of this work, and the entire transcript has been compared and tested anew, from the original—now rectified as to its position on the walls of the Bibliothèque Imperiale—since my remarks at p. 125, vol. i., were printed off. The Wardak inscription, which may be classed with the monumental rather than with the numismatic section of palæography, is reproduced in pl. x., and the urn itself is before me for reference. The numismatic characters are necessarily gathered from diverse sources, which it would be tedious to expose at large. It may be sufficient to say that the apparent age of the coins has ruled the order of the several exemplars inserted in the plate of alphabets.]

² [*J* or *jh*, *infra*.]

³ [See Gesenius, Carpentras Inscription, tab. 4; and type table of Semitic Alphabets *infra*, series No. 3.]

Kadaphes, in each case in correspondence with the Greek χ . Its Kapurdigiri outline is well ascertained, and equally so is its value, as the equivalent of the Pāli $\eta = \text{ख}$. I have not been able to trace it very positively in the Manikyāla writing, and the form I adopt from the Wardak urn is likewise only conjecturally inserted in virtue of outline similarities. I have also entered in the plate the most prominent of the numismatic varieties, whose originals seem often to exemplify the mere crudities of imperfect engraving; but the letter, as it appears on one of Archebius' coins,¹ presents a striking peculiarity in the supplementation of a small hook, such as is used to denote the simple η , which would almost seem to indicate an acknowledgment of the necessity of some further means of discriminating a character, in many instances liable to be taken for a t or an r . The precise sound of the ancient Semitic η *Kheth* (*Hheth* or *Oheth*) is not very well determined; and if it were not for the seeming appropriation of the design of the legitimate Phœnico-Babylonian η to the representation of the Arian *ch*, it might be possible to refer the origin of the Kapurdigiri guttural to a reduction of the superfluous lines of the Achæmenian η , to which stage the complicated figure of olden days had already been brought, and whose unchanged outline was finally accepted by the Greeks as their aspirate η .

3. $\varphi = \text{अ न}$. This letter, regarding which some doubt at first existed, is now the received exponent of the sound indicated by the characters of the kindred alphabets set against it. The only difficulty connected with it consists in the question which necessarily arises as to what effect the horizontal foot-stroke, occasionally supplemented to its radical form, in common with those of the φj and ηt , may chance to have upon its ordinary phonetic value. The Kapurdigiri Inscription, with a single doubtful exception,² leaves the original letter unadded to, and the Manikyāla stone alike abstains from the augmentation. The Steatite urn (pl. vi.) seems to insert the stroke in the one case in the word **भगवान** and to omit it in the second version of the same title.³ The Wardak Inscription, which, it may

¹ [In the possession of Colonel Abbott.]

² [The instance I refer to occurs in the 14th line in the word *gabagarasi*, corresponding with the Girifār Pāli *gabhāgāramhi*. The first *g* has the horizontal foot-stroke, which is clearly to be traced in the cloth impression: it is also entered in Mr. Norris's first copy from that facsimile, but it has been omitted in the lithograph. Masson's eye-copy gives it in full distinctness; and Major Cunningham's transcript fully acknowledges the existence of some such mark, though in the Calcutta lithograph the sign is transformed into an *anusvāra*.]

³ [Prinsep, I see, has given it in both cases; but there is no trace of the line on the lid of the vase itself.]



be added, will be seen to contain a striking number of ग's in proportion to the rare occurrence of the letter in the cognate inscriptions, must be supposed to insert the sign or its substitute, in the form of a back stroke (easily confounded with the subjoined र r), in the majority of instances, while, in one case, the g is positively deficient in that or any other subjunctive mark.

For the present, therefore, I am disposed to conclude that this line constitutes a mere optional addition to the simple letter, possibly having its origin in a design more completely to distinguish the g from some of the literal compounds, with which it was liable to be confounded.

Regarding the origin of the character itself, I should be inclined to attribute its derivation to a semitically outlined and more cursive imitation of the Pāli 𑀧. The proper 𑀧 g of the Pāli series, which so nearly corresponded with the Phœnician 𐤂 g, will be seen to have been devoted to other purposes in the organization of the Bactrian alphabet;¹ hence a new form had to be found to represent the functions of the g, which it is easy to conceive may have been taken from a character of proximate sound in the independent series of the South.

4. 𑀧 = 𑀧𑀭. The sign 𑀧𑀭 gh has been noticed and commented upon under its numismatic aspect, at p. 207, vol. i. It remains for me to confirm the true outline of the character from lapidary sources. The gh is not a letter of very frequent occurrence, so that the possible examples in the whole Kapurdigiri Inscription are limited to three. In tablet iv., line 8, the Arian letters that should correspond with the Gīrnār च's in the words *Berīghoso* and *Dhānmaḡhoso*, are imperfect, both in the original cloth transfer and in Masson's eye-copy. Mr. Norris transcribed them therefore as simple g's. However, the recurrence of the letter (tablet xiii., line 5), in its full form, and in due correspondence with the Pāli च in the word *Upaḡhato*, leaves no doubt that the earliest lapidary outline is identical with that employed on coins.²

5. 𑀧𑀭. Major Cunningham claims, among his other discoveries in the Arian alphabet, to have detected the sign employed to represent this sound. I have had occasion to doubt the finality of this assignment (vol. i., p. 102), and for the present am constrained to leave the Arian column of equivalents of this letter unfilled.

6, 7. I pass by the various forms of च and छ, which are sufficiently assured in their early demonstration, as well as obvious enough

¹ [Y. No. 26.]

² [In addition to the proved example of the letter on the Behat coins, it is occasionally met with in monogrammatic combination on the Azes series. It also occurs in the last line of the Wardak writing (pl. x.), and in Captain Pearse's copper-slip inscription, 'Jour. As. Soc. Beng.,' vol. xxiv. (1855), pl. xv., p. 328.]

in their subordinate gradations, as exhibited in the plate, merely noting with reference to what has already been said on the derivation of the Bactrian *kh*, that the simple form of the Achæmenians and Artaxerxes Longimanus, or their joint prototype, may well be imagined to have furnished the model of the less stiffly-fashioned Bactrian *ch*.

8. $\varphi = \varepsilon$ ज. I proceed to consider the various equivalents of the letter *j*. The Kapurdigiri and Manikyāla outlines of the character closely accord with the simple numismatic type, while the dotted inscription on the Wardak vessel develops certain vaguely executed forms, which are scarcely consistent with one another, but which may generally be said to shew a considerable modification of the primary design.

The peculiarities in the numismatic character consist in some cases of an apparent duplication of the letter by the insertion of a second forward limb, and in the nearly uniform addition of the horizontal foot-line noticed as in occasional use in connexion with the normal form of *g*. And in these instances, also, I am almost forced into the conclusion that this extra line was not designed to have any effect upon the articulation of the consonant, as the same word, Rajadirajasa, is written alike, with or without the lower lines of the *j*'s (ex. *g*. Eukratides and Kadphises), though the earlier examples affect the former, while the later return to the monumental outline. In regard to the association of the normal letter with any character of Semitic organization, I may note its near correspondence with some of the secondary forms of the Western \mathfrak{z} , though it is clear, if any such identity is to be admitted, that the sign must be understood to have been appropriated to the expression of a foreign and very different sound in the Eastern system.

9. The definition of the Indian Pāli form of the *jh* was effected by Prinsep in March, 1838 ('*Jour. As. Soc. Beng.*,' vol. vii., p. 272; *supra*, vol. ii., p. 36). As the Kapurdigiri correspondent passages, wherein this letter might have been expected to be met with, were defective in the one place (tablet vi., line 7), and differently cast in the other (tablet xiv., line 2), the Arian configuration of the character has hitherto remained undetermined. The authority for the present assignment rests therefore solely upon the legends on the coins of Zoilus, where the letter copied in the plate is found as the representative of the Greek *z* in the king's name. It will be remembered that the Devanāgarī alphabet possesses no equivalent of the letter *z*;

¹ [Some of the Azes' coins so far modify the shape of this adjunct as to give it a merely forward direction from the base of the letter, in seeming conformity with the parallel simplification noticed under the letter *g*, p. 149.]



It is curious also to note, in the Kapurdigiri inscription, what may possibly chance to be a parallel simplification of the dental *t* out of the complicated lines of the *th* of the same order of consonants; except

¹ ['Cujus nomen (ΙΓ) signum cruciforme significare constat.' Gesenius, p. 47.]

that, if this derivation is to hold good, the supposition of the conversion of the Semitic γ into the former letter must fall through, and to the cerebral $\dot{q}h$ of the Bactrian scheme must be conceded the title of inheritance of the alphabetical outline of the Phœnician *Daleth*. Though, in this case, as the primary form of the original Semitic γ *telh*, like its derivative denomination, is indeterminate, and the Bactrian adaptation is equally uncertain in its point of departure, it will, perhaps, be preferable to adhere to the definition which supposes a construction of the simple $\gamma = t$, in unison with the parallel development of \beth *b* and γ *r*, from the nearly identical rudiments of the simple letters of the earlier series, and consequently to regard the adaptive dental *th* as a linear improvement upon the tortuous form of the Western alphabets, and as based in one portion of its configuration at least, upon the modified representative of its own simple letter.

13. The \dot{q} is an alphabetical sign of limited use; but it is of consequence correctly to determine its normal form, with a view to the illustration of the history of the associate characters of approximate sound, and the determination of the progressive modifications of the letter itself. Its positive shape in its monumental expression is sufficiently defined (as given in the plate)¹ by the Kapurdigiri Inscription. It would seem to retain its original outline in the Manikyāla writing, and is frequent amid the coin legends, though strange to say, in these instances it never occurs in its full and definite development as an isolated and uncombined letter, but only appears in its true shape in composition with the vowel *i*, to receive which its side limb has to be considerably prolonged: hence a question arises as to whether the radical configuration of the character was not subjected to a modified design in its ordinary expression as a simple letter; as such, it may possibly have furnished the model for the sign usually exhibited as $\dot{\gamma}$; and it is clear that the resulting elongation of the upper line and the rounding off of the angular turning point might easily occur in the ordinary degradation of the character. And this suggestion brings me once more to face an acknowledged difficulty,—the intent and meaning of the horizontal foot-stroke attached. Hitherto I have had to deal with letters that derived little or no advantage from this supplementation; now a new light seems to break upon the subject, and it would almost appear that the foot-line in this case, like the Parthian semicircular dot of Naksh-i-Rustam, still extant in the diacritical mark of the Syriac \dot{d} , was designed to discriminate the \dot{d} , or at all events to distinguish it from some character

¹ [It is equal to $\dot{\gamma}$ in tablet iv., line 12, and tablet vii., line 2; but it corresponds with $\dot{\gamma}$ in tablet vii., line 3, in *ekadesam*.]

nearly allied in shape but differing in phonetic value. As a general rule (for there are few exclusively consistent ones in this series), the character used to express \bar{d} is individualized by the cross-stroke, while the almost identically-formed t 's and r 's are preferentially left unmarked.¹ The value of the letter \neg as \bar{d} , whether doing duty as cerebral or dental, is proved by its alternation and interchange with the true dental ς in the antepenultimate in the name of Apollodotus, and in the titles *Tradatasa* and *Rajaḍirāj*. So that, whether we accept it as a derivative from the old $\mathfrak{q} = \text{𐎧}$,² or as an ordinary $\neg = \text{𐎧}$ t , adapted to a modified articulation, its reciprocal value remains much the same.

14. The cerebral $\bar{d}h$ is not a letter in frequent requirement, and though the Arian equivalent is freely developed in the lengthened edict of Kapurdigiri, it need cause no surprise that it should not have been met with amid the brief legends on the coins, especially when it is seen how little discrimination was made between simple letters and aspirates, and what scant scruple was exercised by the die-engravers in the interchange of one \bar{d} for another, or the more vague substitution of t 's³ in place of \bar{d} 's.

15. The cerebral n well retains its original Kapurdigiri⁴ identity in the later Manikyāla lapidary writing, and on the engraved silver disc from the same locality. Among the modified letters of the Wardak inscription it is more difficult to determine its correct correspondent; for, if we are to follow the Manikyāla inscription, the ordinary \neg has now become λ , which form duly appears on the brass vessel; but the \mathfrak{q} is here so far changed as in some cases almost to look like a return to the model of the early $\varsigma = \text{𐎧}$ of the Kapurdigiri legends.

16. The $\neg = \lambda$ \neg , is a letter which admits of but little question, from its first appearance on Asoka's monumental edict to its latest use upon coins. Its form is of importance under the comparative palæographical aspect, in that it assimilates so closely in its simple outline to the nearly homophonous Hebrew \neg d of modern days, thus exhibiting the more speedy advance towards maturity of the Eastern system in contrast to that of the West, whose expression of the letter in 250 B.C. had in most instances diverged but little from the primitive sign.

¹ [*Ex. gr.* Eukratidasa. *Tṛadatasa*. Some of Apollodotus' coins mark the penultimate \bar{d} , but in the better executed specimens the foot-stroke appears as an 𐎧 . See note on that name in the Coin Catalogue.]

² [Among other inconveniences of imperfect type, it will be seen that I am compelled to use the same sign for j and \bar{d} . The real difference between the two is properly discriminated in the plate.]

³ [Coins of Azes, *et. seq.* 'Wardak,' i., p. 163.]

⁴ [Precision in the use of this \mathfrak{q} seems to have been as little regarded as in other cases already noticed. *Ex. gr.* $\mathfrak{q} = \text{𐎧}$ usually. $\mathfrak{q} = \text{𐎧}$, 4, 9.]

17. The letter *th*, in its early lapidary development, likewise admits of but little cavil; but it is doubtful whether its form is to be detected amid any of the inscriptions or coin-legends subsequent to its proved appearance on the Kapurdigiri rock. Its derivation, as well as that of its fellow *t*, has been already commented on in association with Nos. 11 and 12.

18. $\text{𐎧} = \text{𐎧}$. Regarding the letter *d* in its isolated aspect but little need be said; its absolute identity, in the earliest form of which we have knowledge, with the ordinary $\text{𐎧} = \text{𐎧}$ of the same alphabet, is singular, and often proves inconvenient. It appears to be but little changed in the process of time intervening between the endorsement of Asoka's edicts and the engraving of the Manikyāla stone, though the associate 𐎧 in the latter writing seems to have been considerably modified from the old type. On the coins, this *d* remains but little varied, either under the provincial or ordinary progressional influence. I have still to speak of the subjunction of the horizontal foot-stroke. If the theory be sound that this adjunct is attached to *d*'s and other special letters, and is never supplemented to the *n*'s,¹ then the second letter of the ordinary form of the name of Menander must be read as a *d*, which is certainly opposed to the probabilities of orthographical transliteration. If there were any authority for so doing, I should prefer to interpret the single compound as *nan*, assuming the foot-mark to be a mere simplification of the arrow-pointed *anuswāra* of the Kapurdigiri system; but here, again, difficulties present themselves, as the sign can scarcely be uniformly accepted as the mark of *n*, and indeed as a suffix to the 𐎧 *d*'s and 𐎧 *s*'s, it affects another form. It would still be possible to infer that the discriminating sign of the *d* here supplemented to *n* might stand for the duplication of the succeeding *d*, in accord with Pāli requirements of orthographical expression; but I should be sorry to propose so hazardous a conjecture without more definite and positive evidence than I am yet in possession of. To dispose of the succeeding letter in Menander's name, under this, its proper heading, I may note that the character hitherto received as *n*, appears, from an examination of the best specimens of the multitudinous hemidrachmas of this sovereign, to be a combination of the equivalents of *drd*.

19. $\text{𐎧} = \text{𐎧}$ *dh*.² The definition of this letter is well ascertained,

¹ [Certainly this latter rule seems to hold good, with the single exception, if such it be, here noted. I have nowhere else succeeded in finding a pointed *n*.]

² [For a long time the Parthian *dh* was supposed to be represented by an outline similar to the above. The correct form is given in the plate, under 𐎧 . (See 'Jour. Roy. As. Soc.,' vol. x., p. 118; vol. xii., p. 264.)]

and its outline undergoes but little change throughout the entire period represented by the various Arian writings antiquarians have as yet been able to assemble for scrutiny and comparison. I notice it in this place merely for the purpose of drawing attention to the curious coincidence of its form with that of the Achaemenian letter (522 to 456 B.C.), entered in the Phœnician series of the *Duc de Luynes* as the equivalent of the *ʾ Tsade*. This outline, it will be seen, departs notably from the ordinary run of the derivations from the old *Tsade*; and hence a question might arise as to whether the exceptional letter may not have been borrowed from the independently matured Bactrian series to represent a sound not very dissimilar to its own, but whose precise articulation did not exist in the Arian system.

20. *ʾ* = *⊥* *𐎠*. The Kapurdigiri *n* of manifest Semitic derivation, which here had to represent the sound of *d* or *n* at will, seems to have preserved its, to us, normal form on the early coins of the Greek monarchs. Menander, at least, uses it in near parallelism with its counterpart *d*, and Philoxenes places its import as *n* beyond a shadow of a doubt, by inserting it as the penultimate letter of his own designation. The character, however, was soon doomed to modification, whether on account of the objection to one symbol having to represent two diverse sounds, we need not stop to inquire; but on the hemidrachmas of Dionysius the *n* has become little more than a perpendicular line, and stands in strong contrast to the initial *d*, which follows the old model. On the Kadphizes' coins (No. xxvi.) the *n* is formed almost like a Greek *p* of the obverse legends, and approximates more to the old design of the *𐎠* than to that of the simple *𐎠*. On Kozola Kadaphes' coins the *n* is figured as a perpendicular line with a single arrow-barb on its top like the letter I have transcribed as *𐎠* from the Manikyāla stone and the Wardak urn; and, finally, on some of the Bactrian Satrap coins the letter appears with the full arrow-point, which may either indicate a modification of the form or value of the character, or may simply imply the addition of a short vowel to the original letter.

21. *P*.—The Arian *p* is a letter which presents no difficulty, either in its original ascertainment or its use in its onward course. But it claims special notice, in companionship with the *l* of the same series, on account of its departure from the standard Phœnician type, in the direction assumed by the indicative adjunct, which constitutes the very essence of the character. The Semitic *p* is shaped like a Bactrian *𐎠* *a*: that is, the distinguishing curve from the leading down-stroke is turned to the left, while the letter *𐎠* of the former series produces the side curve to the right. In the Arian alphabet both these methods of formation are abandoned in favour of a directly opposite mode of

definition, which strikingly identifies the resulting characters with the corresponding letters of the Pálí. These coincidences may, of course, be purely fortuitous, but, taken with other indications of connexion between the two schemes of alphabetical notation, I am disposed to accept the double evidence as more distinctly evincing a designed change.

22. $\text{𑀧} = \text{𑀘}$. The ph , unlike the p , which maintains its integral identity throughout, is subjected to changes and modifications that demand specification. Its Kapurdigiri indicator is freely developed, and the original idea of its formation, upon the basis of its own simple letter, may be traced in the additional stroke inserted in the onward course of the writing, beyond the perpendicular line of the parent 𑀧 . In its ordinary written form it is with difficulty discriminated from a 𑀧 , and this chance of confusion may possibly have led to the marked alteration which may be observed during its numismatic course to the 𑀧 of Godophares' money, and again to the $+$ of Kadphises' mintages.

23. The Arian δ is the letter of all others that most intimately identifies its own alphabet with the parallel Semitic offshoot of more Western culture. The derivation from some common parent being admitted in each case, it is curious to mark the independent development of the early Bactrian type of 250 B.C., as opposed to the stationary Phœnician δ in use under the Seleucidæ; and, progressing onwards, it is still more strange to note the large amount of derivative identity the Parthian letter of Ardeshr Bábégán holds in common with the Bactrian character of earlier days, as well as the close similarity of the joint resultants more definitively exemplified in the Partho-Bactrian coinage. Further, among the coincidences attending the evolution of alphabetical symbols, it is singular to note a parallel advance towards the most approved modern form of the character achieved *proprio motu* by the Palmyrene writing.¹

24. $\text{𑀧} = \text{𑀘}$. The shape of this character is as well defined and equably sustained, as its value is undoubted; but little, therefore, need be said in reference to it. It would, indeed, have been a matter of interest to have traced the possible combination of alphabetical rudiments whence it derived its standard configuration; but, as our starting point for all comparisons consists in an already matured literal series of many centuries growth, it would be useless, in the absence of the more primitive forms, to institute any contrasts based upon materials apparently so largely modified from their primary outlines.

25. $\text{𑀧} = \text{𑀘}$. At first sight the Bactrian m might be pronounced to

¹ [Gesenius, tab. v., pl. xi. a, and Type Table *infra*.]

have nothing in common with the Semitisms of the Western alphabets; but on examining the question more closely, it seems by no means impossible to conceive that the Eastern product retained in effect a portion of the original elements of the ancient character. The rejection of the superfluous down stroke of the Phœnician *m*, which, as it stood, conflicted with the Arian *di*, would reduce the former letter into the Eastern representative of *mi*, and the further necessity of again discriminating the uninflected consonant from this latter combination may reasonably have led to the ultimate simplification of the current form of the *m*, and the reservation of the cross stroke for its own proper purpose, as the sign of the medial vowel *i*.

26. $\Lambda = \text{𐤠}$. As with the *m*, I was almost on the point of pronouncing against any possible Semitic influence in the formation of the Bactrian *y*; but it is clear that, if the doctrine of intentional simplification of the characters under the needs and requirements of a more perfect language is to be held valid, much of the primary identity of the Phœnician 𐤠 might be traced in the form ultimately adapted to the Arian alphabet: here, again, a rejection of the redundant up-stroke, which in the Eastern scheme constituted the suffix *r*, and the omission of the second down-stroke of the Western palatal, which expressed an *o* in the Arian series, would leave the character very much in the form extant upon the Kapurdigiri rock. Though I confess that, knowing as I do how much mere mechanical comparisons of forms, under imperfect data, are liable to mislead, I am unwilling to press such arguments, or to claim more than a possible association of minor coincidences, where the broad question is supported by such definite evidence.

27. $\daleth = \text{𐤢}$. The letter *r* of the Bactrian series, as found in the monuments of B.C. 250, is of high importance in proving at how much earlier a date it had become developed into the since dominant Hebrew form than the same character of the cognate alphabets of the West. That it is fundamentally the same letter in both may easily be conceded; and the manner in which the nearly fellow character, the *t* of one series, the *d* of the other, advanced into maturity, is likewise striking. The same may be said of the $\text{𐤠} = \text{𐤡}$ of the Bactrian and the 𐤢 *wau* of the Western scheme. As a simple letter, the standard *r* remains but little changed. In combination, however, like the *anuswāra* of the Bactrian system, it presents difficulties from the innate obstacles to the conjunction of the literal forms of Semitic alphabets, which, even under the necessities of Arian speech, seem to have progressed but slowly, and by imperfect rules, in this direction. The small back stroke at the foot of the covering consonant clearly

stands for the letter *r*; but it is a question whether the act of subjunction invariably implied the suppression of the short sound of *a* inherent in the leading consonant; and supposing such to be the ordinary intent and purport of the act of combination, it is doubtful whether the brief *a* is absolute after every open consonant. In the incompleteness of literal definition, so characteristic of all Semitic writing, much must necessarily have been left to the reader's knowledge of the speech so symbolized, to supply orthographical deficiencies; and as we find the compounds *San*, *Sin*, etc., so we may fairly assume that the *Dhrama* of Kapurdigiri and the *Dhramika* of the coins were intended to be read as *Dharma* and *Dharmika* (धर्म); the Southern Pāli of course duplicated the *m* in lieu of the compound *rm*. Major Cunningham has discovered a method of combining the *rm*, subsequently introduced into the Bactrian numismatic alphabet, whereby the γ was run into the \cup for the apparent purpose of stifling the intermediate *a*; and I am the more disposed to concur in this assignment, since I imagine I observe in all the words representing *Dharma*, wherein this compound is used, that the tail stroke of the usual subjunct *r* is rejected from its place at the foot of the *dh*.

Among other progressive efforts towards the due discrimination of the superposed *r*, I detect a remarkable, though solitary, instance of its expression by a dot above the succeeding consonant in the name of *Arkhabiyas*. This means of representing the *r* is somewhat in parallel accord with the system of the South, where the sign was figured as little more than a prolonged dot above the conjunct letter. But even among these Pāli alphabets we have no very positive example of its employment prior to the Sāh inscription at Gīrnār, though there is every reason to suppose that it was in use much earlier than the date of that writing.

28. The formation of the Bactrian *l* presents no peculiarity demanding comment. I may, however, note its representation by the letter *r* on the medals of *Heliocles*, and I may refer to the substitution of *l* for *r* in the *Dhauli* inscription, and the parallel interchanges of these letters in the Western languages of Persia. 'Jour. Roy. As. Soc.,' xiii., 375.¹ The Parthian *l*, it will be seen, retained much of the original figure of the Bactrian type, and had nothing in common with any of the direct offshoots from the Phœnician model.

29. $\gamma = \text{𐎧}$. The *v* of the Bactrian system may be fairly taken to correspond with the original idea of a Semitic 𐤅 *vau*; indeed, some of the intermediate forms of the latter consonant-vowel assimilate completely with the outline of the analogous semi-vowel of the Eastern series.²

¹ [See also 'Caldwell's Dravidian Grammar,' p. 120.]

² [Gesenius, p. 26, and tab. i., 4, 5; Judas, tab. i., and Type Table *infra*, series 1.]

The identities of the γ & have been already alluded to, vol. i., p. 103. The letter is only further remarkable for the difficulty with which it is at times discriminated from the nearly similarly outlined t 's and r 's. The intentional distinction seems to consist in the more straight formation of the head line, and the angularity given to its point of junction with the down stroke, which also participates in the lesser degree of curvature. At Manikyála a further divergence may be detected in the extra length given to the perpendicular line.

31. $\text{𐬔} = \text{𐬑}$. I am unable to detect any direct affinity between the earliest monumental form of the common Bactrian s and the antecedent outlines of the Semitic 𐤓 . The nearest approach, indeed, to the ordinary configuration of the Eastern letter is afforded in the p of the Western system. The Duc de Luynes enters, under the Seleucidan period, a form of 𐤓 nearly identical with the Arian numismatic symbol, but the ascertainment of the value of the character is marked as doubtful, and even if finally admitted, I should prefer to pronounce in favour of its derivation from the Bactrian exemplar, rather than the indebtedness of the latter to the Western source. The formation of the Kapurdigiri s seems to have been effected by the delineation of a downward curve, but little dissimilar to the ordinary b , into which was inserted a perpendicular line,—a method of definition which the *Sinaitique* 𐤓 (*circa*, 18 B.C.) seems singularly enough to have preserved. In progress of time the Arian s becomes more cursive, or rather takes such a form as should avoid the necessity of a second application of the pen. Under neither form does it seem to have anything in common with the Pálí 𑀲 .

32. $\text{𐬕} = \text{𑀲}$. The second, or palatal, s of the Arian series need scarcely be looked for among the signs of strictly Semitic origin, and may be accepted as an independent invention to meet the wants of Sanskrit vocalization.¹ The earliest Pálí form of this 𑀲 , as I have before remarked, seems to have been borrowed from the Bactrian outline which stood for the 𐬕 . The Southern edicts of Asoka make use of but one s , and the contrast between the two systems of writing, in this respect, may be readily exemplified in the word 𐬔𐬕𐬑 *sususha* of the Arian inscription, which is written 𑀲𑀲𑀲 *susunsá* in the Girnár text (xiii., 3).

33. $\text{𐬖} = \text{𑀲}$. The Arian sh , unlike the letter last referred to, must under every aspect be supposed to have had a counterpart in the languages of the West, and its identity in shape with the secondary

¹ [I have elsewhere adverted to a possible Parthian derivative from this character, but as the language of the Bilingual inscriptions, wherein the former occurs, is still undetermined, the value and association of the Western form remains purely conjectural. See 'Num. Ch.', xii., 78.]

forms of the Phœnician ψ is sufficiently striking. Its absolute inversion, under its Bactrian adaptation, need cause no surprise, as the obvious necessity of discriminating its power from the compound *me*, whose outline, under the local system of insertion of medial vowels in the body of the covering consonant, exactly imitated the configuration, and hence the latter may presumptively be taken to have conflictingly superseded the proper functions of the ordinary *sh*; which sibilant had therefore to be provided with a distinctive though not altogether novel form of character.

34, 35. $\gamma = \text{अ } \eta = \text{आ}^1$ The Bactrian alphabet, in common with the Indian Pāli, possessed distinguishing signs for the long and short vowel *a*, though it was deficient in this respect in the quantitative symbols for the *i* and the *u*, for each of which a single form had to respond to the double articulations. The Arian system, like its Southern associate, duly contrasted the initial and medial outlines of both vowels and diphthongs. The initial forms of the soft and hard *a*'s are marked in plate xi., the authority for the latter resting solely on the numismatic character made use of, with dubious propriety, in the name of Apollodotus. The Kapurdigiri Inscription either does not mark the difference between the powers of the two vowels, whether initial or medial, or the failure to discover the additional sign, must be attributed to its shape and isolation from its covering letter, and the state of the surface of the rock, which was evidently opposed to its detection, unless the observer chanced to know sufficient of the language to expect and seek for the simple dot which constitutes the essential difference. As a medial, the short *a* may be held to be ordinarily inherent in each consonant; and the long *a*, in appropriate coincidence with the arrangement of the other vowels, is defined by the detached dot, the discriminating adjunct of the *i* initial.

The Bactrian η admits of no approximation to any of the purely Semitic forms of \aleph ; indeed, it approaches nearest in identity to another

¹ [Colonel Rawlinson has annexed to his exposition of the value of the Persian cuneiform *a* an elaborate note ('Jour. Roy. As. Soc.,' vol. x., pp. 54, 78), on the general subject of Arian *a*'s and their correspondents in the Semitic system. One of the few points upon which I altogether dissent from his conclusions is his assumed derivation of the Parthian and Sassanian *a*'s from the original Hebrew \aleph *ʾāin*. The languages in question, so far as we have present knowledge of them, did not need any alphabetical symbol for the latter utterance; indeed, when Arabic came to be written in Pehlvi characters, the simple \aleph of the old series had to perform the representative functions of the foreign articulation. It seems much more reasonable to infer that the Eastern copy of the *a* (whether exclusively devoted to that vowel, or permissible as a substitute for η in the conterminous dialects), was based upon some of the varying forms of the original Phœnician *a* rather than upon the outline of a letter for which the adapters had little or no use, and whose normal and subsidiary configurations were almost without exception opposed to the graphic delineation eventually adopted into the derivative alphabets. Cf. also Gesen., p. 21, etc.]

letter of the Western series, namely, the **ḍ**. It is possible that this character may have been incorporated from the common stock, and subjected to new duties; but I should prefer to suppose a positive invention of a new character, or a very marked simplification of the complicated cross-strokes of the earliest **ṣ**, rendered requisite, like many of the other changes, by the necessity of avoiding complex outlines among the radical letters, with a view to their facile reception and legible representation of the short vowels in combination.

The radical form of the full or initial Arian **ṛ** = *a* claims extraneous attention, in the fact that its outline constituted the basis for the construction of all the other vowels and diphthongs of its own alphabet, which are severally distinguished by the additional marks supplemented in each case to the normal *a*, while the same discriminating signs suffice, in combination with consonants, to represent the medial form of their several fundamental letters.

An indication of no little importance in the question of derivations, developed by this law, is to be detected in the imitation and simplified extension of the orthographical rule of the Pāli, which took the initial **ṛ** as the basis of certain other vowels and diphthongs, discriminating them from the simple letter *a* by supplemental additions; thus **ṛ** *a* became **ṛ** *ā*, **ṛ** *o*, **ṛ** *an*, etc., while *i*, *e*, *u*, had separate forms. The Arian scheme, following out this notion with more effective systemization, made **ṛ** the groundwork of the entire vocalic series.

38. The vowel *u* demands a passing notice, rather for the modification it undergoes than for any difficulty in its recognition. The initial on the Kapurdigiri rock is formed by the addition of a foot-line to the standard *a*, in the forward direction of the writing; and a similar mark effectively fulfils the duty of the medial vowel in combination with consonants. An optional interchange of symbols for the initial may be observed on the coins of Eukratides, which is instructive as evincing the limited precision of the orthographical science of the period. In some cases the opening syllable of this name is defined by a combination of the medial sign of the *e* prefixed to a squarely-outlined *u* initial; in others, the sound of *eu* is represented by a fully developed initial *e*, followed by an unattached and completely formed initial *u*. The numismatic *u* medial is speedily transformed into a loop, which form it retains throughout its later monumental course.

41. The equivalent of the Sanskrit **अ** *an* is formed in the Kapurdigiri inscription of the subjunction of an arrow-point to the foot of the normal **ṛ** *a*, and may reasonably be supposed to figure in convenient modification of the standard **ṛ** *m*, whose sound it convertibly responds to. A similarly outlined suffix is used for the same purpose in com-

bination with consonants, as in *Kambayi*, *Gandharanam* (tab. v.). On coins the stiffness of the adjunct is amended by its transformation into a semicircular curve in continuation of the down stroke of the γa , a symbol which, it may be remarked, still retains the elements of the primary $\cup m$. The change may be attributed to the greater facility of expression, incident to the continuous use of the pen in current writing, as contrasted with the earlier chisel sculpture of lapidary epigraphy, which had nothing to gain by uninterrupted lines. This numismatic suffix appears frequently on coins and inscriptions of more recent date conjoined with the letter $\mathfrak{p} s$, in positions, as regards the latter, which clearly necessitate the interpretation of the compound as *san*, 'year;' though I notice an apparent inability to define the requisite *anusvāra* in combination in the names of Menander, Amyntas, and Gondophares, which it is difficult to account for.¹

32. The *st* of the Bactrian alphabet is remarkable as being the only standard compound consonant in the entire range of the Kapurdigiri edict; the subjunction of the *r* was allowable with any consonant that required the combination; but the suffix of the *t*, or rather its incorporation with another character into a distinct sign, was reserved for the conjunction now cited; and this compound retained so much of the force of a distinct letter that it admitted of the insertion of a vowel or the subjunction of the *r* like any other simple consonant. The divergence from the Kapurdigiri outline in the later examples of its use is limited to a straightening off of the cross-lines, whereby it is conveniently discriminated from the character *i* or *hi*, with which it was otherwise liable to be confounded.

Before taking leave of these imperfect contributions to the

¹ [Colonel Rawlinson attributes these omissions to a general orthographical law common to the Persian cuneiform and the Bactrian systems. His remarks on the subject are as follows:—

'I need not multiply examples of the absorption of the nasal, as the first member of a compound articulation; for I have already, as far as argument is concerned, abundantly verified the existence of such an orthographical law; and it is one, moreover, with which the identical construction of the numismatic Bactrian^a has long ago familiarized Orientalists.'

Colonel Rawlinson is in error in regard to the second and third names quoted, the insertion of the *anusvāra* is palpable and undoubted, and, when looked for, it is visible enough in one instance in Major Cunningham's plates, on whose authority I conclude the author speaks. The Kapurdigiri inscription further evidences that this assumed rule, if sound at all, is, in practice, rather constant to the opposite effect, as I may instance at hazard from the names of *Devanampriya*, *Antioke*, *Antikina*, and the words *pashandeshu* (tab. v.), *athasantiranaya* (tab. vi.), etc.]

^a 'Remark the orthography of the names of Menander, Antimachus, Antialcidas, Amyntas, etc. In Indian Pāli the nasal is preserved before the consonants of all classes. See 'Essai sur le Pāli,' p. 80.' 'Jour. Roy. As. Soc.,' x., 132.

history of Bactrian Palæography, and terminating these introductory remarks by the exhibition of the positive data of facsimiles, I desire to advert cursorily to the Parthian or Chaldaeo-Pehlvi and the cognate Sassanian-Pehlvi literal series, exemplars of each of which have been inserted in pl. ix. The first of these claims its position in the general inquiry, in appropriate elucidation of many of the alphabetical coincidences and derivative identities already adverted to; the second founds its title to notice, in this place, upon its apposite intermediary position in the progressive palæographic development of the writing of Asia and the important part it will be seen to have played in its position, as the sole apparent vehicle of speech, whether official or domestic, under the specially national reconstitution of the Persian empire,¹ and the influence that, even in its official extinction, it carried with it into the learning and literature of the conquering Arabs;² while its alphabetical forms and difficultly-comprehensible language survive so largely in their fitting

¹ [I have for long past insisted upon one deduction of high import in the history of the Zoroastrian languages, 'in the significant fact implied in the extensively prevailing use of the Pehlvi character, as *prima facie* evidence of the existence and currency of the language itself, or of its mere dialectic modifications. I would cite the universality of its influence throughout nearly the entire Persian empire; its employment as the vehicle of expression for the monumental records of the kings; its uniform official currency in the numerous mints of the Sassanian empire; and the geographical definition of its boundaries from the Tigris and the Persian Gulf on the S.W., to Merv and Zabulistan on the N.E., as manifested by the legends on the Arab coins issued within or near those limits. But beyond this I would now exhibit its acceptance in the affairs of private life, as exemplified by the prevalence of its literal forms on the signets and seals of every-day use. And I would claim this much of deduction from the facts available, that whatever other forms of speech may have existed in the land, whatever of more perfect systems of writing may have been known or employed, it is clear that the seventeen letters of the Pehlvi alphabet sufficed to express all that either official routine or ordinary business transactions required. From our inscriptions and coins we can fix with precision the date of the currency of this style of writing, and unhesitatingly claim its dominance in Persia from A.D. 223 to A.H. 76 (A.D. 695). Our new authorities, the gems, do not of themselves similarly define their own epoch; but we may hope, by testing the forms of the alphabet, and observing closely other significant indications, to fix approximately their place in history.'—'Jour. Roy. As. Soc.,' vol. xiii., p. 374 (1852). See also Westergaard, 'Zendavesta,' i. 19 (Copenhagen, 1854).]

² [Here is their own testimony to one most important fact in the history of civilization:—
در عهد عبدالملک جرید دیوانی از صورت فارسی باعربی
نقل کردند و رقوم بنیاد نهادند
M.S. 'Tarikh Guzidah.' Even so late as 318 A.H. the Arabs were still translating Pehlvi books.—See Reinaud, 'Abulféda,' p. xlv.]

places as monumental, numismatic, and personal records, or the more isolated but carefully-guarded religious services, which, in return, have, in these days, led to the comprehension of one section of the historical epigraphy,¹ otherwise, to us, so enigmatically endorsed upon the less perishable materials of metal or gems.

As I have ventured to infer a derivation of the more distantly cultivated and more obviously divergent Bactrian alphabet from a parentage in common with or intermediately through the Phœnico-Babylonian, it is demanding but scant faith to ask for a more direct concession of the influence of the latter upon the Parthian or Chaldæo-Pehlvi of almost indigenous site, and which, epochally speaking, is so limitedly varied from its obvious prototype.² The Sassanian hereditative, and for a long time

¹ [J. Olshausen, 'Numismatic Chronicle,' vol. xi., p. 62.]

² [It may be as well to indicate, as far as possible, the surface over which there is extant evidence of the spread of this character. Inscriptions graven in its letters, in parallel association with the Sassanian Pehlvi, are to be found—1st, at Persepolis; 2nd, at Shahrzör (35° 50', 44° 24'); and 3rd, at Páí Kúk, within the Turkish frontier southward of Sulimánia, which latter have only recently been discovered by Sir H. Rawlinson, who further states that isolated but earlier varieties of this character are to be found in inscriptions at—1, Amadiáh; 2, Holwán; 3, Shimbor, in the Baktiari mountains; and 4, at Beháhn. Or, to state the case generally, the style of writing has an Eastern limit of 150 miles beyond the Tigris. Further, it is found on certain classes of Imperial Parthian coins ('Vologeses,' iii. etc.), as well as on several varieties of local issues, which up to this time are supposed to be sub-Parthian or Partho-Persian mintages. The most modern date of its use in inscriptions is to be referred to the reign of Shápúr I. (A.D. 240 to 273); indeed, it would appear to have been speedily superseded by the more readily discriminated Sassanian Pehlvi, in which alone the monumental records (Ker Porter, vol. ii., pl. lxviii.), and the coin legends of his successors are couched. *Of* 'Philosophical Transactions,' vol. xlix., p. 593, pl. xviii. (1756). Pellerin 3me 'Supplément' (1767), pl. i., fig. 13, p. 32. De Sacy, 'Mémoires sur diverses Antiquités de la Perse,' pp. 72, 136, 202, etc. Ouseley, 'Medals and Gems' (London, 1801). 'Mionnet,' v. 686. Millingen's 'Sylloge' (London, 1838), p. 84. Ker Porter, pls. xv., xxii., xxviii., etc. Rich's 'Babylon and Persepolis' (London, 1839), pl. xii. 'Ariana Antiqua,' pl. xv., fig. 23, etc. Rawlinson, 'Memoir on Persian Cuneiform Inscriptions,' Jour. Roy. As. Soc., vol. x., p. 118, *et seq.*; and my Pehlvi Alphabets, 'Jour. Roy. As. Soc.,' vol. xii., p. 262; and vol. xiii., p. 3. Westergaard, 'Bundehesh,' p. 84 (1851). 'Numismatic Chronicle,' vol. xii., p. 63; and Dr. Scott's papers, vols. xvii. xviii. *ibid.* Lindsay, 'View of the Coinage of the Parthians,' (Cork, 1852). 'Hang. Ueber die Pehlwi-Sprache' (Gott. 1854).

While adverting to Parthian writing, I feel bound to notice a somewhat pretentious article, recently published, which professes to interpret the legends on several classes of sub-Parthian currencies. The paper in question is inserted in the 'Zeitschrift' of the present year (1857), p. 700, under the title of 'Lettre, etc., sur quelques médailles à légendes iraniennes de l'époque Arsacide, par Comte A. de Gobineau' (Téhéran, le 12 Mars, 1857). As the author seems to have been altogether un-



The **לְבַאכֻשָׁא**—the only doubtful portion of the whole—I understand to mean 'lion killing.' The mixture of Aramaic and Persian in the compound need cause no surprise; neither, I am bound to add, is the orthographical expression of the participle in accord with modern Persian grammar; but these objections are infinitesimal in the interpretation of so irregular and little-known a language as that used in the official records of the early Sassanians.]



The next step in the onward course of the Sassanian alphabet, its merging into the Pehlvi of the early Arabs in Persia, which is nearly literatim the same as the Pársis have preserved in Kermán and Gujarát, admits of no possible cavil : how much of the essence of these modified letters the Arabs took into their own superseding Kufic has only been partially investigated, and hitherto insufficiently allowed for ; but the number of the normal forms of Pehlvi that have passed into and been reproduced in the so-called Zend alphabet are palpable and manifest on the most cursory inspection ; and whatever may be the real antiquity of the language of the Avestá, couched in these letters, there can be but one opinion as to the comparatively recent date at which the characters themselves must have been compounded out of more ancient systems of writing.

I now exhibit the Plate of Comparative Alphabets, which I have prepared in supersession of Prinsep's original plate xi. and to complete the data for testing the rise and progress of the Bactrian alphabet from its Semitic elements, I have appended the two plates of the modifications of that class of literal symbols so obligingly prepared for me by the Duc de Luynes, whose original introductory notice I insert in explanation of the derivation of each.¹

ALPHABET PHÉNICIEN (PHÉNICIE PROPRE).

Du temps de Sargon.—Les lettres ב, ד, י, ל, פ, ק, ת, sont prises dans les légendes des deux pierres gravées à inscriptions, découvertes par M. Place sous les taureaux du Palais de Sargon.² Les autres lettres sont tirées de pierres gravées à

¹ [It is a pleasure to me to record the circumstances under which I have to acknowledge M. le Duc de Luynes as a coadjutor in this Essay. During a passing visit to Paris, I was made aware that he had most liberally permitted the Numismatic Phœnician type, prepared for the illustration of his own privately circulated works, to be made use of in the printed sale-catalogue of the Baron de Behrs' coins. Encouraged by this concession, I ventured to solicit a similar favor in my own case, so far as a single elucidatory alphabet was concerned. I need not add that this request was readily complied with ; but moreover, on my subsequently addressing M. de Luynes, with a view to obtaining a more precise idea of the epoch and localities to which these specimen letters were due, I was surprised and gratified by a promise of a mature and comprehensive review of the entire question of Phœnico-Semitic Alphabets, of which the present materials exhibit the performance.]

² Ces légendes sont : עבדבעל et רפתי Obadbaal et Riphothiah.



THE BACTRIAN OR ARIAN ALPHABET.

English	Indian Palli	Lapudary Bactrian	Montanatic Bactrian	English	Indian Palli	Lapudary Bactrian	Montanatic Bactrian
d	𐤠	𐤠	𐤠	ds	𐤠	𐤠	𐤠
u	𐤡	𐤡	𐤡	u	𐤡	𐤡	𐤡
p	𐤢	𐤢	𐤢	an	𐤢	𐤢	𐤢
ph	𐤣	𐤣	𐤣	o	𐤣	𐤣	𐤣
t	𐤤	𐤤	𐤤	z	𐤤	𐤤	𐤤
th	𐤥	𐤥	𐤥	s	𐤦	𐤦	𐤦
ch	𐤧	𐤧	𐤧	sh	𐤨	𐤨	𐤨
j	𐤩	𐤩	𐤩	a	𐤪	𐤪	𐤪
yl	𐤫	𐤫	𐤫	i	𐤬	𐤬	𐤬
n	𐤭	𐤭	𐤭	e	𐤮	𐤮	𐤮
h	𐤯	𐤯	𐤯	o	𐤰	𐤰	𐤰
ph	𐤱	𐤱	𐤱	an	𐤱	𐤱	𐤱
u	𐤲	𐤲	𐤲	u	𐤲	𐤲	𐤲
p	𐤳	𐤳	𐤳	o	𐤳	𐤳	𐤳
ph	𐤴	𐤴	𐤴	z	𐤴	𐤴	𐤴
t	𐤵	𐤵	𐤵	s	𐤵	𐤵	𐤵
th	𐤶	𐤶	𐤶	sh	𐤶	𐤶	𐤶
ch	𐤷	𐤷	𐤷	a	𐤷	𐤷	𐤷
yl	𐤸	𐤸	𐤸	i	𐤸	𐤸	𐤸
n	𐤹	𐤹	𐤹	e	𐤹	𐤹	𐤹
h	𐤺	𐤺	𐤺	o	𐤺	𐤺	𐤺
ph	𐤻	𐤻	𐤻	an	𐤻	𐤻	𐤻
u	𐤼	𐤼	𐤼	u	𐤼	𐤼	𐤼
p	𐤽	𐤽	𐤽	o	𐤽	𐤽	𐤽
ph	𐤾	𐤾	𐤾	z	𐤾	𐤾	𐤾
t	𐤿	𐤿	𐤿	s	𐤿	𐤿	𐤿
th	𐥀	𐥀	𐥀	sh	𐥀	𐥀	𐥀
ch	𐥁	𐥁	𐥁	a	𐥁	𐥁	𐥁
yl	𐥂	𐥂	𐥂	i	𐥂	𐥂	𐥂
n	𐥃	𐥃	𐥃	e	𐥃	𐥃	𐥃
h	𐥄	𐥄	𐥄	o	𐥄	𐥄	𐥄
ph	𐥅	𐥅	𐥅	an	𐥅	𐥅	𐥅
u	𐥆	𐥆	𐥆	u	𐥆	𐥆	𐥆
p	𐥇	𐥇	𐥇	o	𐥇	𐥇	𐥇
ph	𐥈	𐥈	𐥈	z	𐥈	𐥈	𐥈
t	𐥉	𐥉	𐥉	s	𐥉	𐥉	𐥉
th	𐥊	𐥊	𐥊	sh	𐥊	𐥊	𐥊
ch	𐥋	𐥋	𐥋	a	𐥋	𐥋	𐥋
yl	𐥌	𐥌	𐥌	i	𐥌	𐥌	𐥌
n	𐥍	𐥍	𐥍	e	𐥍	𐥍	𐥍
h	𐥎	𐥎	𐥎	o	𐥎	𐥎	𐥎
ph	𐥏	𐥏	𐥏	an	𐥏	𐥏	𐥏
u	𐥐	𐥐	𐥐	u	𐥐	𐥐	𐥐
p	𐥑	𐥑	𐥑	o	𐥑	𐥑	𐥑
ph	𐥒	𐥒	𐥒	z	𐥒	𐥒	𐥒
t	𐥓	𐥓	𐥓	s	𐥓	𐥓	𐥓
th	𐥔	𐥔	𐥔	sh	𐥔	𐥔	𐥔
ch	𐥕	𐥕	𐥕	a	𐥕	𐥕	𐥕
yl	𐥖	𐥖	𐥖	i	𐥖	𐥖	𐥖
n	𐥗	𐥗	𐥗	e	𐥗	𐥗	𐥗
h	𐥘	𐥘	𐥘	o	𐥘	𐥘	𐥘
ph	𐥙	𐥙	𐥙	an	𐥙	𐥙	𐥙
u	𐥚	𐥚	𐥚	u	𐥚	𐥚	𐥚
p	𐥛	𐥛	𐥛	o	𐥛	𐥛	𐥛
ph	𐥜	𐥜	𐥜	z	𐥜	𐥜	𐥜
t	𐥝	𐥝	𐥝	s	𐥝	𐥝	𐥝
th	𐥞	𐥞	𐥞	sh	𐥞	𐥞	𐥞
ch	𐥟	𐥟	𐥟	a	𐥟	𐥟	𐥟
yl	𐥠	𐥠	𐥠	i	𐥠	𐥠	𐥠
n	𐥡	𐥡	𐥡	e	𐥡	𐥡	𐥡
h	𐥢	𐥢	𐥢	o	𐥢	𐥢	𐥢
ph	𐥣	𐥣	𐥣	an	𐥣	𐥣	𐥣
u	𐥤	𐥤	𐥤	u	𐥤	𐥤	𐥤
p	𐥥	𐥥	𐥥	o	𐥥	𐥥	𐥥
ph	𐥦	𐥦	𐥦	z	𐥦	𐥦	𐥦
t	𐥧	𐥧	𐥧	s	𐥧	𐥧	𐥧
th	𐥨	𐥨	𐥨	sh	𐥨	𐥨	𐥨
ch	𐥩	𐥩	𐥩	a	𐥩	𐥩	𐥩
yl	𐥪	𐥪	𐥪	i	𐥪	𐥪	𐥪
n	𐥫	𐥫	𐥫	e	𐥫	𐥫	𐥫
h	𐥬	𐥬	𐥬	o	𐥬	𐥬	𐥬
ph	𐥭	𐥭	𐥭	an	𐥭	𐥭	𐥭
u	𐥮	𐥮	𐥮	u	𐥮	𐥮	𐥮
p	𐥯	𐥯	𐥯	o	𐥯	𐥯	𐥯
ph	𐥰	𐥰	𐥰	z	𐥰	𐥰	𐥰
t	𐥱	𐥱	𐥱	s	𐥱	𐥱	𐥱
th	𐥲	𐥲	𐥲	sh	𐥲	𐥲	𐥲
ch	𐥳	𐥳	𐥳	a	𐥳	𐥳	𐥳
yl	𐥴	𐥴	𐥴	i	𐥴	𐥴	𐥴
n	𐥵	𐥵	𐥵	e	𐥵	𐥵	𐥵
h	𐥶	𐥶	𐥶	o	𐥶	𐥶	𐥶
ph	𐥷	𐥷	𐥷	an	𐥷	𐥷	𐥷
u	𐥸	𐥸	𐥸	u	𐥸	𐥸	𐥸
p	𐥹	𐥹	𐥹	o	𐥹	𐥹	𐥹
ph	𐥺	𐥺	𐥺	z	𐥺	𐥺	𐥺
t	𐥻	𐥻	𐥻	s	𐥻	𐥻	𐥻
th	𐥼	𐥼	𐥼	sh	𐥼	𐥼	𐥼
ch	𐥽	𐥽	𐥽	a	𐥽	𐥽	𐥽
yl	𐥾	𐥾	𐥾	i	𐥾	𐥾	𐥾
n	𐥿	𐥿	𐥿	e	𐥿	𐥿	𐥿
h	𐦀	𐦀	𐦀	o	𐦀	𐦀	𐦀
ph	𐦁	𐦁	𐦁	an	𐦁	𐦁	𐦁
u	𐦂	𐦂	𐦂	u	𐦂	𐦂	𐦂
p	𐦃	𐦃	𐦃	o	𐦃	𐦃	𐦃
ph	𐦄	𐦄	𐦄	z	𐦄	𐦄	𐦄
t	𐦅	𐦅	𐦅	s	𐦅	𐦅	𐦅
th	𐦆	𐦆	𐦆	sh	𐦆	𐦆	𐦆
ch	𐦇	𐦇	𐦇	a	𐦇	𐦇	𐦇
yl	𐦈	𐦈	𐦈	i	𐦈	𐦈	𐦈
n	𐦉	𐦉	𐦉	e	𐦉	𐦉	𐦉
h	𐦊	𐦊	𐦊	o	𐦊	𐦊	𐦊
ph	𐦋	𐦋	𐦋	an	𐦋	𐦋	𐦋
u	𐦌	𐦌	𐦌	u	𐦌	𐦌	𐦌
p	𐦍	𐦍	𐦍	o	𐦍	𐦍	𐦍
ph	𐦎	𐦎	𐦎	z	𐦎	𐦎	𐦎
t	𐦏	𐦏	𐦏	s	𐦏	𐦏	𐦏
th	𐦐	𐦐	𐦐	sh	𐦐	𐦐	𐦐
ch	𐦑	𐦑	𐦑	a	𐦑	𐦑	𐦑
yl	𐦒	𐦒	𐦒	i	𐦒	𐦒	𐦒
n	𐦓	𐦓	𐦓	e	𐦓	𐦓	𐦓
h	𐦔	𐦔	𐦔	o	𐦔	𐦔	𐦔
ph	𐦕	𐦕	𐦕	an	𐦕	𐦕	𐦕
u	𐦖	𐦖	𐦖	u	𐦖	𐦖	𐦖
p	𐦗	𐦗	𐦗	o	𐦗	𐦗	𐦗
ph	𐦘	𐦘	𐦘	z	𐦘	𐦘	𐦘
t	𐦙	𐦙	𐦙	s	𐦙	𐦙	𐦙
th	𐦚	𐦚	𐦚	sh	𐦚	𐦚	𐦚
ch	𐦛	𐦛	𐦛	a	𐦛	𐦛	𐦛
yl	𐦜	𐦜	𐦜	i	𐦜	𐦜	𐦜
n	𐦝	𐦝	𐦝	e	𐦝	𐦝	𐦝
h	𐦞	𐦞	𐦞	o	𐦞	𐦞	𐦞
ph	𐦟	𐦟	𐦟	an	𐦟	𐦟	𐦟
u	𐦠	𐦠	𐦠	u	𐦠	𐦠	𐦠
p	𐦡	𐦡	𐦡	o	𐦡	𐦡	𐦡
ph	𐦢	𐦢	𐦢	z	𐦢	𐦢	𐦢
t	𐦣	𐦣	𐦣	s	𐦣	𐦣	𐦣
th	𐦤	𐦤	𐦤	sh	𐦤	𐦤	𐦤
ch	𐦥	𐦥	𐦥	a	𐦥	𐦥	𐦥
yl	𐦦	𐦦	𐦦	i	𐦦	𐦦	𐦦
n	𐦧	𐦧	𐦧	e	𐦧	𐦧	𐦧
h	𐦨	𐦨	𐦨	o	𐦨	𐦨	𐦨
ph	𐦩	𐦩	𐦩	an	𐦩	𐦩	𐦩
u	𐦪	𐦪	𐦪	u	𐦪	𐦪	𐦪
p	𐦫	𐦫	𐦫	o	𐦫	𐦫	𐦫
ph	𐦬	𐦬	𐦬	z	𐦬	𐦬	𐦬
t	𐦭	𐦭	𐦭	s	𐦭	𐦭	𐦭
th	𐦮	𐦮	𐦮	sh	𐦮	𐦮	𐦮
ch	𐦯	𐦯	𐦯	a	𐦯	𐦯	𐦯
yl	𐦰	𐦰	𐦰	i	𐦰	𐦰	𐦰
n	𐦱	𐦱	𐦱	e	𐦱	𐦱	𐦱
h	𐦲	𐦲	𐦲	o	𐦲	𐦲	𐦲
ph	𐦳	𐦳	𐦳	an	𐦳	𐦳	𐦳
u	𐦴	𐦴	𐦴	u	𐦴	𐦴	𐦴
p	𐦵	𐦵	𐦵	o	𐦵	𐦵	𐦵
ph	𐦶	𐦶	𐦶	z	𐦶	𐦶	𐦶
t	𐦷	𐦷	𐦷	s	𐦷	𐦷	𐦷
th	𐦸	𐦸	𐦸	sh	𐦸	𐦸	𐦸
ch	𐦹	𐦹	𐦹	a	𐦹	𐦹	𐦹
yl	𐦺	𐦺	𐦺	i	𐦺	𐦺	𐦺
n	𐦻	𐦻	𐦻	e	𐦻	𐦻	𐦻
h	𐦼	𐦼	𐦼	o	𐦼	𐦼	𐦼
ph	𐦽	𐦽	𐦽	an	𐦽	𐦽	𐦽
u	𐦾	𐦾	𐦾	u	𐦾	𐦾	𐦾
p	𐦿	𐦿	𐦿	o	𐦿	𐦿	𐦿
ph	𐧀	𐧀	𐧀	z	𐧀	𐧀	𐧀
t	𐧁	𐧁	𐧁	s	𐧁	𐧁	𐧁
th	𐧂	𐧂	𐧂	sh	𐧂	𐧂	𐧂
ch	𐧃	𐧃	𐧃	a	𐧃	𐧃	𐧃
yl	𐧄	𐧄	𐧄	i	𐧄	𐧄	𐧄
n	𐧅	𐧅	𐧅	e	𐧅	𐧅	𐧅
h	𐧆	𐧆	𐧆	o	𐧆	𐧆	𐧆
ph	𐧇	𐧇	𐧇	an	𐧇	𐧇	𐧇
u	𐧈	𐧈	𐧈	u	𐧈	𐧈	𐧈
p	𐧉	𐧉	𐧉	o	𐧉	𐧉	𐧉
ph	𐧊	𐧊	𐧊	z	𐧊	𐧊	𐧊
t	𐧋	𐧋	𐧋	s	𐧋	𐧋	𐧋
th	𐧌	𐧌	𐧌	sh	𐧌	𐧌	𐧌
ch	𐧍	𐧍	𐧍	a	𐧍	𐧍	𐧍
yl	𐧎	𐧎	𐧎	i	𐧎	𐧎	𐧎
n	𐧏	𐧏	𐧏	e	𐧏	𐧏	𐧏
h	𐧐	𐧐	𐧐	o	𐧐		



ECRITURE PUNIQUE

ALPHABET JUIF

SL

Avant 396	De 396 à 332	1 ^{ère} guerre Punique de 264 à 242	2 ^d e guerre Punique de 218 à 203	Du temps de Syphax vers 213	Du temps de Juba 1 ^{er} vers 46 av. J.C.	Sous l'empire Romain Afrique et Espagne	Satrapes de Cilicie vers 401	Cyrrus vers 424	Abdonyme, Roi de Salamine, vers 424	Écriture onéode l'usage de l'Alphab. Date incertaine	Sous les Assyriens	Archaisme d'écriture Sous S. Baruchide
א, א	א, א	א	א, א	א		א	א		א		א, א, א, א	
ב	ב	ב	ב	ב	ב	ב, ב	ב		ב	ב	ב	ב, ב, ב, ב
ג	ג	ג	ג	ג	ג	ג, ג	ג		ג	ג	ג	ג, ג, ג, ג
ד	ד	ד	ד	ד	ד	ד, ד	ד		ד	ד	ד	ד, ד, ד, ד
ה	ה	ה	ה	ה	ה	ה, ה	ה		ה	ה	ה	ה, ה, ה, ה
ו	ו	ו	ו	ו	ו	ו, ו	ו		ו	ו	ו	ו, ו, ו, ו
ז	ז	ז	ז	ז	ז	ז, ז	ז		ז	ז	ז	ז, ז, ז, ז
ח	ח	ח	ח	ח	ח	ח, ח	ח		ח	ח	ח	ח, ח, ח, ח
ט	ט	ט	ט	ט	ט	ט, ט	ט		ט	ט	ט	ט, ט, ט, ט
י	י	י	י	י	י	י, י	י		י	י	י	י, י, י, י
כ	כ	כ	כ	כ	כ	כ, כ	כ		כ	כ	כ	כ, כ, כ, כ
ל	ל	ל	ל	ל	ל	ל, ל	ל		ל	ל	ל	ל, ל, ל, ל
מ	מ	מ	מ	מ	מ	מ, מ	מ		מ	מ	מ	מ, מ, מ, מ
נ	נ	נ	נ	נ	נ	נ, נ	נ		נ	נ	נ	נ, נ, נ, נ
ס	ס	ס	ס	ס	ס	ס, ס	ס		ס	ס	ס	ס, ס, ס, ס
ע	ע	ע	ע	ע	ע	ע, ע	ע		ע	ע	ע	ע, ע, ע, ע
פ	פ	פ	פ	פ	פ	פ, פ	פ		פ	פ	פ	פ, פ, פ, פ
צ	צ	צ	צ	צ	צ	צ, צ	צ		צ	צ	צ	צ, צ, צ, צ
ק	ק	ק	ק	ק	ק	ק, ק	ק		ק	ק	ק	ק, ק, ק, ק
ר	ר	ר	ר	ר	ר	ר, ר	ר		ר	ר	ר	ר, ר, ר, ר
ש	ש	ש	ש	ש	ש	ש, ש	ש		ש	ש	ש	ש, ש, ש, ש
ת	ת	ת	ת	ת	ת	ת, ת	ת		ת	ת	ת	ת, ת, ת, ת

E.T.

166D

PL. X. 2.

légendes plus ou moins longues, dont plusieurs caractères font partie des légendes sur les deux pierres gravées de M. Place et doivent, par là, se rattacher au même alphabet.

Du temps d'Esmunazar.—Alphabet tiré de la longue inscription sur le Sarcophage de ce Roi. [*'Journal Asiatique,'* Avril-Mai, 1856.]

Sous les 1^{ers} Achéménides.—Cet alphabet est formé des légendes sur les médailles les plus archaïques d'Aradus : Tête virile barbue et laurée. Revers, Navire ; au dessus N. B, suivi de lettres numérales variées, Π, Δ, J, Δ, Υ, Ε ; les lettres Ψ et Ω se trouvent sur des pièces d'argent des anciens Rois de Perse représentant un Roi frappant de son poignard un lion dressé devant lui ; auprès, Ω, et au revers : N(i)S(i)B נצב au dessus d'une ville à tous crénelées, &c. Cette pièce est au Musée britannique.

Du temps d'Artaxerxès Longue-main.—Tiré des médailles d'or et d'argent des Rois de Tyr, de Cittium et des Chittim (*cf.* mes Satrapies).

Sous Artaxerxès Mnémon.—Tiré de la numismatique des Rois de Gebal (Byblos) vivant probablement à cette époque (*cf.* mes Satrapies), et de médailles encore inédites de cette dynastie dans ma collection.

Sous Artaxerxès Ochus.—Tiré des Dariques de mauvais travail frappées sous ce Prince.

Sous Alexandre et les 1^{ers} Séleucides.—Monnaie d'or et d'argent aux types d'Alexandre frappée sous son règne et sous ses premiers successeurs à Joppé, Acé, Aradus, et Thœma.

Sous les Séleucides, de 312 à 145.—Lettres isolées et numérales sur les médailles d'Aradus, de Tyr et de Sidon, frappées sous la domination de ces Princes. Médailles de Tyr frappées sous Antiochus IV. et Demetrius II. et de Laodicée au revers d'Antiochus IV.

Sous la domination Romaine, depuis l'an 145.—Monnaie en cuivre d'un travail de décadence frappée à Sidon, Tyr, et Marathus.

DÉRIVATIONS DE L'ALPHABET PHÉNICIEN.

Araméen.—Manuscripts sur papyrus appartenants au Duc de Blacas. Gesenius paraît croire que ces Manuscripts qui font mention de la captivité d'un peuple en Egypte, sont allusifs à celle des Hébreux et pourraient être contemporains. En tout cas, ils sont très anciens. Cependant, le monument de Carpentras, portant une inscription de même écriture, ne paraît pas remonter à une époque très reculée.

Palmyrénien.—La plupart des Inscriptions Palmyréniennes connues ne sont pas plus anciennes que les premiers Empereurs Romains et ne dépassent guères l'époque d'Alexandre Sévère mort en 235 de J.és. Chr. Cependant, il existe une médaille presque archaïque, frappée à Sidé de Pamphylie, dont la légende est évidemment en caractères palmyréniens (voir mes Satrapies).

Sinaïtique vers l'an de J. C. 18.—Cet alphabet est tiré de médailles encore inédites de Rois des environs de la mer rouge et de l'Idumée, dont le principal date ses monnaies de l'an 330 (des Séleucides).

Sinaïtique après l'an de J. C. 18.—Alphabet établi par M. Beer d'après les inscriptions de Gebel Mocatteb. Inscr. veteres litt. et ling. hucusq. incogn. ad mont. Sin. magn. num. repert., &c. Lipsiæ, 1840, 4to.

ECRITURE PUNIQUE.

Avant 396.—Médailles archaïques de Motya, Tsits et Aea, frappées en Sicile. Motya fut détruite en 396.

De 396 à 332.—Médailles de travail grec avec les types de Cérès et de Proserpine, adoptés par les Carthaginois seulement depuis 396, époque où ils commencèrent à honorer ces Déeses, et pièces frappées avec le type du droit imité des monnaies d'Alexandre.

Première guerre punique.—Médailles au type de la tête de Cérès et du cheval ou du Pégase, d'un bon travail, et que l'on trouve en grande abondance en or, argent, et cuivre.

Seconde guerre punique.—Les mêmes types ou peu variés, mais d'un travail de décadence et de métaux d'un titre bien plus bas.

Syphax.—Médailles de bronze de ce Roi et inscription de Marseille exactement de la même épigraphie que les légendes de Syphax.

Juba 1^{er}.—Monnaies de ce Prince en argent et cuivre.

Empire Romain.—Monnaies puniques d'Espagne et d'Afrique avec des types impériaux en conformes par leur écriture à celles qui portent ces types.

Satrapies de Cilicie et particulièrement ceux de Tarse (*cf. mes Satrapies*).

Cypre vers 424.—Médailles de Salamine, frappées probablement sous le gouvernement d'Abdemon. La lettre Π appartient à une médaille d'Amathus de la même époque.

Abdemon, Roi de Salamine.—Abdemon, Satrape de Cypre, régnait à Salamine. Une médaille de ce Prince, que je possède, porte son nom, עבדמהן.

Ecriture ornée de l'Inscription de Cittium, époque incertaine mais probablement reculée.

L'Inscription en question est celle du Musée d'Oxford reproduite par Gesenius dans ses 'Monumenta Phœnicia,' pl. xi., inscr. No. ix., 2 B.

TYPE TABLE OF SEMITIC ALPHABETS.

I have but little to say in commendation of the subjoined type table of comparative Semitic alphabets, the majority of which consist of such reproductions of the materials of early commentators as the German type-founders chanced to have prepared for the use of printers.

The series Nos. 1, 3, and 4, which are based upon Gesenius' plates, were procured for the casual illustration of the general subject, before I was favoured with the elaborate and more mature facsimiles of the Duc de Luynes, which in a measure supersede the less comprehensive alphabets in type metal,¹ though I have permitted these latter to stand in their introductory capacity, for the purposes of facility of reference. The Kufic literal signs are likewise of but limited palæographic

¹ [The fourth or Palmyrene series is peculiarly infelicitous in its rendering of the forms of the originals; however, M. de Luynes' facsimiles will amend its deficiencies.]



TABLE OF SEMITIC ALPHABETS.

CSL

MODERN
HEBREW.

א ב ג ד ה ו ז ח ט י כ ל מ נ ס ע פ צ ק ר ש ת

1. PHœNICIAN.

𐤀 𐤁 𐤂 𐤃 𐤄 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐 𐤑 𐤒 𐤓 𐤔 𐤕 𐤖 𐤗

2. NUMISMATIC
PHœNICIAN.

𐤁 𐤂 𐤃 𐤄 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐 𐤑 𐤒 𐤓 𐤔 𐤕 𐤖 𐤗

3. ARAMAIC.

𐤀 𐤁 𐤂 𐤃 𐤄 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐 𐤑 𐤒 𐤓 𐤔 𐤕 𐤖 𐤗

4. PALMYRENE.

𐤀 𐤁 𐤂 𐤃 𐤄 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐 𐤑 𐤒 𐤓 𐤔 𐤕 𐤖 𐤗

5. SYRIAC.

ܐ ܂ ܃ ܄ ܅ ܆ ܇ ܈ ܉ ܊ ܋ ܌ ܍ ܎ ܏ ܐ ܑ ܒ ܓ ܔ ܕ ܖ ܗ

MODERN
SYRIAC.

ܐ ܂ ܃ ܄ ܅ ܆ ܇ ܈ ܉ ܊ ܋ ܌ ܍ ܎ ܏ ܐ ܑ ܒ ܓ ܔ ܕ ܖ ܗ

6. KUFIC.

ا ب ج د ه و ز ح ط ي ك ل م ن س ع ف ص ق ر ش ت

MODERN
ARABIC.

ا ب ج د ه و ز ح ط ي ك ل م ن س ع ف ص ق ر ش ت

value, as they do not represent the earliest form of that adaptive alphabet.¹ There are, however, two sets of characters (not of German execution) to which I desire to call attention. No. 2 comprises the Numismatic Phœnician cut for the Duc de Luynes, and imitated principally from the forms of letters prevailing on the coins of Cilicia and Cyprus. The alphabet No. 5 is, likewise, a novelty, for which I am indebted to the Rev. W. Cureton,² who explains its derivation in the following terms :—

‘The type was principally copied from MSS. of the 6th century, and represents the earliest form of the character known to us. It is identical with that of the most ancient MS. in the British Museum, date A.D. 411; but the forms of the letters are made a little more carefully than they were written by the person who copied that MS., and imitate more closely those of some better scribe, although about a century later.’

The alphabet in question claims a double interest, in exemplifying the earliest extant Syriac writing, as well as in its near identity with the Estrangelo graven on the celebrated Nestorian monument of Si gan Fu, dated in the 8th century,³ while its progress on its Central Asian course, thus clearly marked, illustrates the parentage of the Mongol alphabets, whose derivation from a Syriac source has long been freely conceded.

¹ [A valuable contribution towards the study of the palæography of the Arabs has been furnished by J. C. Lindberg (*‘Lettre à M. Brøndsted.’* Copenhagen, 1830), from whose work I cite the following note on the earlier authorities on the subject :— I. G. C. Adler. *‘Descriptio codicum quorundam euficorum in bib. reg. Hauniensi.’* Altonæ, 1780. Silvestre de Sacy. *‘Mémoires sur l’origine et les anciens monumens de la littérature parmi les Arabes.’* *‘Mém. de l’Académie,’* vol. i., p. 247. The same. *‘Notices et Extraits,’* etc., vol. viii., p. 209; and *‘Journal Asiatique,’* 1827. M. Kopp. *‘Bilder u Schriften der Vorzeit,’* ii., 287.—To these I may add Marcel’s *‘Palæographie Arabe,’* Paris, 1828. *‘Ibn Khallikan,’* *‘Orient. Trans. Fund,’* pp. xv., xvi., etc.; and lastly, I would refer to M. Renan’s comprehensive review, p. 320, in his *‘Histoire générale des Langues Sémitiques,’* 1855. While referring to Kufic writing, I must not omit to call attention to the interesting copper-plate grant to the Christian Church in India—which bears the signatures of attesting witnesses—severally in Kufic, Pehlvi, and Hebrew characters. *‘Jour. Roy. As. Soc.,’* vol. vii., p. 343. *‘Madras Journal of Literature and Science,’* vol. xiii. (1845), pl. viii.]

² [Or I should rather say my obligations are due to Mr. Watts, of Crown Court, to whom the type properly belongs.]

³ [*‘La Chine d’Athanase Kirchere.’* Amsterdam, 1670.—*‘Assemani,’* iii., 2nd part, p. 738. Romæ, 1728.—M. Huc. *‘Christianisme en Chine,’* p. 48. Paris, 1847.—*‘Journal of the American Oriental Society,’* vol. v., p. 278.—Reinaud, *‘Géogr. d’Aboulféda,’* p. 365.—Renan, *‘Hist. Gén.,’* vol. i., p. 268.]



Finally, I have introduced a set of Zend letters, more with the object of completing the series of cognate alphabets, than for any credence I wish to claim for them among the other palæographic memorials of the ancient currency of which we have good and authentic proof; and, for the purposes of direct comparison, I have prefixed to this enlarged alphabet the several original Pehlvi characters upon which the Zend correspondents seem so obviously to have been formed.¹

II. ARIAN NOMENCLATURE.

I do not propose to recapitulate the Arian transcriptions of the Greek names; the details of each, together with the variations in the standard orthography, will be found duly marked in the Coin Catalogue, and most of their peculiarities will have already been considered in the determination of the alphabet in whose literal forms they are expressed. The same may be said of the Oriental names, which in process of time superseded the Greek designations, and where the definition must be supposed to be authoritative under its Arian form rather than in the now imitative transcript in Grecian characters. It may, however, be useful to summarize the Arian titles, whether direct translations or local equivalents of the leading idea of titularization adopted from the conquerors, even if it be merely to avoid the tedious repetition of interpretations on the recurrence of each king's little-varied epithets.

1. The more common indigenous titles of *Maharaj*, 'great king,' and its superlative combinations of *Rajadhiraj*, 'king over kings,' and *Rajaraja*, 'king of kings,' scarcely require notice.

2. The equivalent of the Greek $\sigmaωτήρ$ is rendered by the word *Tradata*, a provincial derivative from 𐭠𐭣 , 'to preserve'; and here, as in all cases, I adhere to the manifest orthography

¹ [This Zend type, like the early Syriac just acknowledged, is also the property of Mr. Watts. The very excellent Pehlvi fount, as has been already noticed, belongs to Messrs. Harrison and Co., St. Martin's-lane.]

ZEND ALPHABET.¹

VOWELS.

SHORT VOWELS, <i>Pehlvi</i> ,	ا a.	ی i.	u.
„ <i>Zend</i> ,	ا a. ξ e.	ی i. > u.	
LONG VOWELS, <i>Pehlvi</i> ,	آ ai.	ی i.	
„ <i>Zend</i> ,	آ á. ڤ í. ڤ ú. ξ è. ڤ é.		
„ <i>Zend</i> ,	و o. ڤ ó. ڤ ɔo.		

CONSONANTS.

GUTTURALS,	<i>Pehlvi</i> ,	گ h. ڤ hu.	و g.
„	<i>Zend</i> ,	گ k. ڤ kh. ڤ q. ڤ g. ڤ gh.	
PALATALS,	<i>Pehlvi</i> ,	چ ch.	و j.
„	<i>Zend</i> ,	ڤ ch.	و j.
DENTALS,	<i>Pehlvi</i> ,	ت t.	و d.
„	<i>Zend</i> ,	ڤ t. ڤ th. ڤ th. ڤ d. ڤ dh.	
LABIALS,	<i>Pehlvi</i> ,	پ p.	و b.
„	<i>Zend</i> ,	ڤ p. ڤ f.	و b.
SEMI-VOWELS,	<i>Pehlvi</i> ,	و i or y.	و r.
„	<i>Zend</i> ,	ڤ ɔ (ss med.) y. ڤ r. ڤ (» med.) v.	
„	<i>Pehlvi</i> ,	و v. or w.	و h.
„	<i>Zend</i> ,	ڤ w.	و h.
SIBILANTS,	<i>Pehlvi</i> ,	س s.	ڤ sh. ڤ z.
„	<i>Zend</i> ,	س s. (ç.) ڤ sh. ڤ s. ڤ ڄ ڤ z.	
NASALS,	<i>Pehlvi</i> ,	ن n.	ڤ m.
„	<i>Zend</i> ,	ن n. ڤ ñ. ڤ an. ڤ ڄ ڄ. ڤ m.	

¹ The definition of the Zend Alphabet is adopted from Spiegel's 'Grammatik der Pârsisprache;' the Pehlvi series is confined to the older and unpainted forms.

of the original, without attempting to reconcile the deviations from the laws of Sanskrit grammatical construction, or to trace the process of vernacular degradation; it is sufficient to say that, having the Greek counterpart, and ordinarily an appropriate Sanskrit root, we must remain content to take the inflections and orthographical variations the die engravers have left behind them.

3. The *δίκαιος* of the coins is represented by the term *Dhamika*, or rather *Dhramika*, from धृ, 'to hold, to maintain,' whence धर्म, 'virtue,' etc.

4. The term *νικηφόρος* appears under the optional forms of *Jayadhara* and *Jayata*, the derivation of which, from जि, 'to conquer,' जय, 'conquest,' is sufficiently obvious.

5. The counterpart of *ἀνκητος* appears in parallel accord as *apadīhāta*,¹ for अप्रतिहत, 'unrepulsed' (from हन, 'to strike or hurt').

6. *Mahata* and *Mahataka*, of obvious derivation, occur as the representatives of the Greek *μεγας*.

7. The title *Pradicha*, otherwise *Praticha*, which stands as the indigenous representative of the Greek *ἐπιφάνης*, may readily be identified as the vernacular form of प्रतिष्ठित *Pratishthita*, 'renowned.'

8. The transcripts of the Greek *σατράπης* and *σατρηγός* seem sufficiently assured, as likewise does the translation of 'ΑΔΕΛΦΙΔΕΥΣ' in the local *Brada-putrasa*, 'brother's son.'

III.—THE EPOCHAL AND TERRITORIAL DISTRIBUTION OF THE BACTRIAN MONARCHY.

I have already intimated that I am not in a position, either as regards preparation or present opportunity, to review, with the deliberation the subject demands, the classification of the long list of Bactrian kings, the sole witnesses of whose rule, in the majority of cases, exist in the emanations from their mints

¹ [On Gondophares' coins, *apratihata*.]

exhumed from time to time in and around the ancient seats of government.

In other cases credit is claimed for coins under their faculty of illustrating written history: in this instance they comprehend the sole data for history itself; at least, from their records alone must be drawn, with scant exception, all testimony at present available of the survival, re-institution, and extinction of the dominant Hellenic element on the site of Alexander's furthest conquest in the East. In the almost total absence of annals, whether Occidental or Oriental, it is from the legends stamped upon the public money that we must reconstruct the story of the otherwise unrecorded potentates who swayed the destinies of these lands for upwards of two centuries.

For such tales as these medallic memorials may tell, I must refer to the works of those authors who from time to time have treated this section of numismatics in detail; contenting myself, for the present, with reproducing, with but scant comment, the matured results arrived at by each.¹

¹ [*Independent Works*.—‘Historia regni Græcorum Bactriani, in qua simul Græcarum in India coloniarum vetus memoria explicatur, auctore Theophil. Sigefr. Bayero,’ Petropoli, 1738. Mionnet, ‘Supplément,’ vol. viii. (1837). Lassen, ‘Zur Geschichte der Griechischen und Indoskythischen Könige,’ Bonn, 1838. ‘Coins of Greek, Parthian, and Indo-Scythian Kings of Bactria and the countries on the Indus,’ by Dr. C. Grotefend, Hanover, 1840. ‘Ariana Antiqua: a descriptive account of the Antiquities and Coins of Afghanistan (with a memoir on the buildings called Topes,’ by C. Masson), H. H. Wilson, London, 1841. ‘Historical Results, deducible from recent discoveries in Afghanistan,’ by H. T. Prinsep, Esq., London, 1844. ‘Indische Alterthumskunde,’ von Ch. Lassen, Bonn, 1847.

Calcutta Asiatic Researches.—‘Description of select coins from originals or drawings in the possession of the Asiatic Society,’ by H. H. Wilson, Esq., vol. xvii., p. 659 (1832).

Journal of the Asiatic Society of Bengal.—‘Note on Capt. Hay’s Bamian Coins,’ by H. Torrens, Esq., vol. ix., p. 70. ‘Points in the history of the Greek and Indo-Scythian Kings in Bactria, Cabul, and India, as illustrated by decyphering the ancient legends on their coins,’ by Christian Lassen, Bonn, 1838, vol. ix., p. 251; continued, pp. 339, 449, 627, 733. ‘Notice of some counterfeit Bactrian Coins,’ by Captain Alexander Cunningham, vol. ix., p. 393. ‘Notes on Captain Hay’s Bactrian Coins,’ by Capt. A. Cunningham, vol. ix., p. 531. ‘Description of, and deductions from, a consideration of some new Bactrian Coins,’ by Capt. A. Cunningham, vol. ix., p. 867; note to ditto, p. 1008. ‘Second notice of some forged coins of the Bactrians and Indo-Scythians,’ by Capt. A. Cunningham, vol. ix., p. 1217. ‘A sketch of the second Silver Plate found at Badakshān,’ by Capt. A. Cunningham, vol. x., p. 570. ‘Second notice of some new Bactrian Coins,’ by Capt. A. Cunningham, vol. xi., p.

No. 1.

GREEK DYNASTIES.—GENERAL LIST.

PROF. H. H. WILSON.

	B.C.		B.C.
Theodotus I.	256	Philoxenes	130
Theodotus II.	240	Antialkides	135
Euthydemus	220—190	Archebius	125—120
Demetrius	190	Menander	126
Eukratides	181	Apollodotus	110
Heliokles	147	Diomedes	100
Lysias	147	Hermæus	98
Amyntas	135	Agathokles	135
Agathokleia		Pantaleon	120
Antimachus	140		

BARBARIC KINGS.

SU-HERMÆUS, KADAPHES, KADPHISES.

Mayes	100	Azilises	60
Palirisus	80	Azes	50
Spalyrius	75	ΣΩΤΗΡ ΜΕΓΑΣ, <i>King of Kings</i> .	

130. 'On the Gem and Coins figured in the preceding plate,' by H. Torrens, Esq., B.C.S., vol. xi., p. 137. 'Coins of the Indo-Scythian Princes of Cabul (translations of some uncertain Greek legends),' by H. Torrens, Esq., B.C.S., vol. xx., p. 137. 'Coins of Indian Buddhist Satraps, with Greek inscriptions,' by Major A. Cunningham, vol. xxiii., p. 379.

Transactions of the Royal Asiatic Society of Great Britain and Ireland.—'An account of Greek, Parthian, and Hindu medals, found in India,' by Major James Tod, vol. i., p. 313.

Journal of the Royal Asiatic Society.—'Observations on some ancient Indian Coins in the cabinet of the Royal Asiatic Society,' by Prof. H. H. Wilson, vol. iii., p. 381.

Journal Bombay Branch of the Royal Asiatic Society.—'Observations on the Bactrian and Mithraic Coins, in the cabinet of the Bombay Branch of the Royal Asiatic Society,' by James Bird, Esq., vol. i., p. 293.

Journal des Savants.—M. Raoul Rochette, A.D. 1834, pp. 328, 385. Supplément, 1835, pp. 514, 577; note, 640, (Dr. Honigberger's coins). 2me Supplément, A.D. 1836, February; Allard's (*i.e.* Ventura's) collection. 3ème Supplément, A.D. 1838, p. 736; M. Court's collection; ditto, A.D. 1839, p. 89, ditto.

Journal Asiatique.—M. E. Jacquet, Feb. 1836, 3ème série, vol. i., p. 122; Sept. 1836, vol. ii., p. 234; Nov. 1837, vol. iv., p. 401; Feb. 1838, vol. v., p. 163; May, 1839, vol. vii., p. 385.

Revue Numismatique, Blois.—'Collection Numismatique du Général Court: Rois de la Bactriane,' par Ad. de Longperier, p. 81 (1839).

Numismatic Journal (London).—'Græco-Bactrian Coins,' by Professor Wilson, vol. i., p. 144 (1837). 'Proceedings of the Numismatic Society' (London). 'Memoir, by Professor Wilson, on the recently discovered Græco-Bactrian Coins, 14th Dec., 1837.

Numismatic Chronicle.—Major Cunningham, 'Monograms, etc.,' vol. viii., p. 175. W. C. W. Vaux, Esq., on Bactrian Coins, vol. xvi., p. 108.]

INDO-PARTHIAN DYNASTY.

Vonones	Kodes
Undopherres	Miscellaneous Arsacidan
Gondophares	Kings
Abagasus	

INDO-SCYTHIAN PRINCES OF KABUL.

Kadphises	Ooerki
Kanerki	Baraoro
Kenorano	Sassanians

CONTEMPORARY CLASSIFICATION.

Euthydemus.	
Demetrius	Eukratides.
Lysias	Heliokles.
Amyntas	Antialkides
Agathokleia	Antimachus
	Philoxenes
	Menander
	Pantaleon
	Apollodotus
	Diomedes
	Hermæus
	Su-Hermæus (?)
	'Ariana Antiqua,' p. 267 (1841).

No. 2.

M. DE BARTHOLOMÆT'S LIST.

1. Défection de la Bactriane et commencement du règne de Diodote, vers 256 av. J. C.
 2. Agathocès succède à son père, vers 240 av. J. C.
Euthydème s'empare du trône de la Bactriane par le meurtre d'Agathocès 215 av. J. C.
 3. Pantaleon se maintient dans le Kaboulistan oriental contre Euthydème jusque, vers 214 av. J. C.
 4. Guerre d'Euthydème avec Antiochus après 210 av. J. C.
 5. Traité de paix, conclu avec le Roi de Syrie, vers 206 av. J. C.
 6. Euthydème fait des conquêtes dans l'Ariane et l'Arachosie, vers 200 av. J. C.
 7. Demétrius fils d'Euthydème succède à son père, vers 190 J. C.
 8. Eucratides s'empare de la royauté dans la Bactriane, Demétrius fonde une monarchie dans l'Arachosie et dans les contrées de l'Inde qui avaient été conquises par son père vers 181 av. J. C.
 9. Eucratides fait pendant plusieurs années la guerre à Demétrius et finit par s'emparer de ses états, vers 164 av. J. C.
 10. Eucratides étend ses conquêtes dans l'Inde, vers 160 av. J. C.
 11. Meurtre d'Eucratide, par son fils Heliocles, qui s'empare de la couronne en Bactriane, vers 155 av. J. C.
- Ici commence le démembrement graduel de la monarchie, et les données historiques semblent nous manquer pour tenter même un ordre chronologique quelconque.
12. Antimachus fonde un royaume dans la Drangiane ?
 13. Antialcides réunit sous sa domination l'Arachosie et la Kaboulistan oriental.

15. Ménandre fonde un puissant royaume dans l'Inde.
16. Arsace VI., Mitridate 1^r roi Parthe, envahit la Drangiane, vers 145 av. J. C.
17. Chûte complète de la Monarchie grecque-bactrienne, proprement dite, vers 139 av. J. C. 'Köhnes Zeitschrift,' 1843, p. 76.

The subjoined list has been abstracted from Major Cunningham's lithographed table inserted in the eighth volume of the 'Numismatic Chronicle,' 1843. It will be found to enter into an elaborate detail of the epochal and territorial distribution of the various divisions of the Bactrian empire. The assignment of the geographical boundaries is understood to have been primarily based upon the author's interpretations of the mint monograms discovered on the coins of the different kings. It is needless to add that these results must be received with considerable caution, as most of my readers will appreciate the ordinary difficulties environing the resolution of monogrammatic combinations, as well as the obstacles that exist to the application of the preferable readings under even a well-defined system of comparative geography, a department in which we are sadly deficient in regard to the countries in question.

No. 3.

MAJOR CUNNINGHAM'S TABLE.

NO.	B.C.		
1	256	Diodotus I.	} Bactriana (including Sogdiana, Bactria, and Margiana).
	243	Diodotus II.	
2	247	Agathocles	} Paropamisadæ and Nysa.
3	227	Pantaleon	
4	220	Euthydemus—Bactriana, Ariana (including Aria, Drangia, Arachosia, and Paropamisadæ), Nysa, and subsequently Gandharitis, Peukelaotis, and Taxila.	
5	196	Demetrius—ditto, ditto; and, later in his reign, Patalene, Syrastrène, Larice	
6	190	Heliocles—Bactriana and Paropamisadæ.	
7	190	Antimachus Theos—Nysa, Gand., Peuk., and Taxila.	
8	185	Eucratides—Bactriana, Ariana, besides Patalene, Syrastrène, and Larice, as well as Nysa, Gand., Peuk., and Taxila.	
9	173	Antimachus Nikephoros—Nysa, Gand., Peuk., and Taxila, contemporarily with Eucratides' retention of the rest of his dominions.	
10	165	Philoxenes—succeeds to Antimachus Nikephoros' kingdom	
11		Nicias—ditto, with the exception of Taxila.	
12	165	Apollodotus succeeds Eucratides in Ariana, as well as Pata., Syr., Lar.	
13		Zoilus	
14		Diomedes	} follow Apollodotus in Ariana alone.
15		Dionysius	
16	159	Lysias—succeeds these in Paropamisadæ, and obtains Nicias' dominion of Nysa, Gand., and Peuk.; while Mithridates I. possesses himself of Ariana, having previously gained Margiana from Eucratides.	