ART. XX.—*Comments on Recent Pehlvi Decipherments. With an Incidental Sketch of the Derivation of Aryan Alphabets. And Contributions to the Early History and Geography of Tabaristán. Illustrated by Coins.* By E. THOMAS, F.R.S.

The plates which accompany this article have only recently been rescued from an obscure corner, where they had lain for years unappreciated.¹ They originally constituted one division of a comprehensive medallic series, illustrative of the annals of the Sassanian Kings of Persia, which were prepared under the supervision of the late J. R. Steuart, from specimens in his own cabinets, and executed by the same conscientious Italian artist who engraved the copper-plates of the Sauráshtran coins inserted in one of the earliest numbers of our Journal (vol. iv. p. 273, o.s.).

The two engravings, which now appear for the first time, embrace the concluding section of the series of *ten* 4to. plates devoted to the coins of "the Sassanian dynasty," and represent the specially transitional period immediately succeeding the Arab conquest. They furnish choice and consecutive examples of the introductory Muslim mintages, ranging from the crude imitative reproductions of Sassanian money by the first Muhammadans in Persia, and mark, in their gradations, the progressive stages of the Pehlvi mintages of the more settled rulers, up to the final adoption of the Kufic of the Kūrán as the official alphabet of the expanded dominions of the Khalifs.

The majority of these pieces have already been described in our pages (vols. xii. p. 253, xiii. p. 373); but as I hesitated to burden the Society with such costly and elaborate designs, these engravings may, even at this distant date, fitly contribute to the elucidation of the general subject, and serve to

¹ These plates are now the property of that enterprising collector of Oriental antiquities, Col. S. C. Guthrie, who has freely permitted them to be used, *in transfer*, on stone, by the Royal Asiatic Society. The reduction from the original 4to. form on copper to the 8vo. reproduction now presented, signalizes an epoch in the history of the lithographer's art, and exemplifies a process which, under scientific treatment, even improves upon the effect of the metal engravings.

keep alive the interest in an obscure branch of research, the attendant difficulties of which necessarily limit the number of investigators. I propose to restrict the present notice of the coins to little more than a mere recital and explanation of their legends, with occasional references to the general progress of the study of the Pehlvi language that has marked the interval since the publication of my later papers on these subjects. As regards the purely numismatic aspect of the question, I am the more anxious to reserve any extended remarks, as our Society will be glad to learn that the illustration of this period of the history of the East is likely to receive considerable accessions, in the description of the magnificent collection of the late M. de Bartholomai, which is already in an advanced stage towards publication under the practised treatment of our learned Foreign Associate, Dr. Dorn, of St. Petersburg.

As preliminary and introductory to my special subject, I have to advert prominently to the discovery of the day, the "Moabite Stone," and the bearings of its typical alphabet upon the later developments of cognate Semitic characters on coins and other contemporary records; and somewhat unwillingly to reply, as briefly as possible, to certain criticisms which have appeared of late upon the Palæographic definitions and deductions put forth in my previous essays in this Journal.

The proclamation of Mesha, engraved on the now unhappily defaced monolith of Dibon, which has created so great a sensation in the Biblical world,¹ presents but little of novelty to advanced students of initiatory Greek Numismatics, or

¹ La Stèle de Dhiban, M. Clermont-Ganneau, *Révue Archéologique*, March, 1870, p. 184. Derenbourg, *Journal Asiatique*, Jan. and Feb. 1870. Schlottmann, March 15. *Times*, May 5. *Zeitschrift*, i. and ii. Heft. 1870.

Notices more readily available to English readers may be found in Professor Rawlinson's article in the *Contemporary Review*, vol. xv. (August and November) 1870, p. 96, *et seq.*; and in Dr. Wright's learned and exhaustive paper in the unhappily concluding number of the *North British Review*. From the latter I extract the following close summary:—

"An alphabet common to all the Shemitic populations of Syria—an alphabet from which were derived the Greek letters on the one side, and all the later alphabets of the East on the other.

"This alphabet is, doubtless, almost, if not absolutely identical with that employed by the poets, prophets, and historians of the kingdom of Judah and Israel, when they committed their works to writing; and it may be well for scholars to bear this in mind when attempting conjectural emendations upon the Biblical texts."—*North British Review*, October, 1870.

Palæographers who are able to trace the offshoots of the Phœnician alphabet from the Pillars of Hercules to the banks of the Jumna.¹ Nevertheless, its contributions are varied and valuable, presenting us with a complete alphabet of an ascertained date, some century and a half earlier than any other parallel document,² a singularly close association in the configuration of some of its letters with the most authentic forms of Archaic Greek, and a new geographical site of dominant Semitism on the frontiers of Cuneiform strongholds.

Beyond the ordinary identities with the early Greek characters already freely recognized, the forms of the letters Γ 7, Δ 4, and Ζ Z, are specially marked; we have new outlines of the digamma Υ and the Ξ Ξ, a modification of the Δ 6, and a varied definition of the Τ x, many of which peculiarities connect this most authoritative exemplar of the normal alphabet with the more clearly defined Aramæan and Persian types of Semitic writing.³

More than twenty years ago⁴ I ventured to dissent from De Sacy's identification of the Sassanian letter 𐭠 as *m n*; an interpretation which he had adopted on the faith of Anquetil du Perron, who had derived his knowledge of Pehlvi from the imperfect teachings of the Pársis of Bombay.⁵ Although I was in a position to determine that De Sacy was in error,

¹ Num. Chron. iii. n.s. p. 280.

² Dr. Wright fixes the date of the inscription as "approximately in the 2nd year of Ahaziah's reign, or the beginning of that of his brother Jehoram" (B.C. 896, 894). The seals and tablets from Sargon's treasure chamber are supposed to belong to the time of Assher bani pal (about 667 B.C.). The Assyrian Lion weights are understood to be earlier (Mr. Norris, J.R.A.S. xvi. p. 215); and Sir H. Rawlinson places some of his Ninevite tablets in the eighth century B.C. J.R.A.S. 1870, p. xxx. See also vol. i. n.s. p. 187.

³ Gesenius, *passim*. M. de Luynes, in *Prinsep's Essays*, ii. p. 166. Dr. Levy's "Contributions to Aramæan Numismatics," 1867. M. de Vogüé, "Mélanges," p. 146. The outlines given in the text were copied from the paper impressions of the original stone in the Palestine Exploration Collection; they have, however, suffered greatly in the reduction into type.

⁴ J.R.A.S. vol. xii. o.s. (1850), p. 265. See also Num. Chron. xii. p. 77.

⁵ Anquetil himself, in speaking of the learning of his own instructors at an anterior period, or in the middle of the eighteenth century, uses the words, "L'ignorance était le vice dominant des Parses de l'Inde." (*Zend Avesta*, p. cccxxvi.; Burnouf, *Yaçna*, p. x.) Dr. Haug gives us an amusing pendant to this statement in saying, "The European reader will not be a little astonished to learn that Anquetil's work was regarded afterwards as a kind of authority by the Destûrs themselves." (*"Sacred Language of the Pársis."* Bombay, 1862, p. 21.) See also Westergaard, J.R.A.S. viii. p. 350; and Max Müller, "Chips from a German Workshop," i. pp. 122, 167, 172, etc.

I was not, at the time, equally advanced in the power of saying what the real purport of the character might be, though I subsequently discovered that its true value was nothing more than the *long* or double *i* of the Sassanian alphabet, having an equally well-ascertained counterpart in the Chaldæo-Pehlvi, in the form of In support of these binary identifications, I re-examined the question under its various aspects, somewhat at large, in a late number of this journal,¹ as I was aware that there was a disposition to adhere to the old reading among many who had compromised themselves by accepting the original definition, even to the extent of its reception and incorporation into modern grammars and glossaries.² The question has lately been revived by the direct negation of my justification for this correction by Dr. Martin Haug,³ with a reiteration of the claims of the Pársi rendering of *m n* (*man*).

¹ Vol. iii. n.s. p. 260.

² I conclude it is to some such feeling of hostility at my venturing to differ, not only from certain Continental professors, but more expressly from their masters in Bombay, that I owe an amusingly rabid attack in the "Révue Critique" (27th March, 1869), by M. Justi. The tone of this article would alone prevent my conceding to it any serious notice; but it is clear that no object could be attained by my entering upon a discussion with the author, or those who accept his interpretations upon texts the very alphabet of which is still in dispute. So that, although M. Justi's eccentric lucubration has received the commendation of M. Renan (Rapport, Journal Asiatique), I am content to surrender the writer to the more congenial conflict with his countryman, Dr. Haug, who has already sounded the note of defiance, about the "grave errors" of my "vicious" critic, whom he contemptuously designates as "a mere follower of Spiegel." (Pahlavi-Zand Glossary, pp. 25, 32.)

³ Dr. Haug is scarcely candid in affirming that "the phonetic value of the character has been thought to be *i*, chiefly on account of its resemblance in form to the Zend letter (An Old Pahlavi-Pazand Glossary, 1870, p. 44). There is far more varied testimony towards the identification than this abrupt utterance would imply, as I have, in effect, repeated above. My first acceptance of the letter as *i* dates from 1852 (Journal Royal Asiatic Society, xiii. p. 375); and I find Dr. Haug confessing in 1862 (Essays on the Sacred Language of the Parsees, Bombay, p. 45) that *Barj* is the Chaldee *bar*, "son," (*ben* in Hebrew and Arabic); the *j* at the end is another pronunciation of the relative *i* (or *izdfat*) above mentioned [in *Bagi*]. It is curious that the Professor should at this period have so accurately realized and defined the mission of the letter and its direct association with the short *i*, and yet have failed to detect its positive import. It was reserved, however, for his later baptism in the fire-worship of the Gujaráti Destúrs to convert him from his hard-earned European knowledge to their atmosphere of placid ignorance, and the restoration of the contested symbol

I have held from the first that the idea of combining consonants, for the purpose of eliding the inherent short *a* of the conventional Aryan speech, was altogether undeveloped in the Semitic alphabet of the Sassanians, though the system had already been elaborated in the more critical Bactrian adaptation of the old Phœnician characters in its parallel contact with the contrasted *Lât* or *Pâli* character of the Indian provinces. This tendency is readily exemplified in the practical transcription of Greek names on the local coinage, where we find the Bactrian "Eukratides" and the Indian *Pâli* "Agathokles" coalescing the consonant succeeding to the *k*, in either case to denote emphatically the absence of the soft *a*. Here the object of compounding and connecting letters is obvious enough;¹ but the most singular fact which the advocates of the rendering of the Sassanian 𐭥 as 𐭥𐭥 = *m n* are altogether unable to explain is, if, as they confess, the two simple letters 𐭥 *m* and 𐭥 *n* were written separately in the parallel text, with an optional value of *man* or *min*, why, or for what possible object, an arbitrary compound should have been introduced to convey the self-same sounds, a resulting alphabetical combination, moreover, which, according to their own showing, did *not* necessarily elide the short vowel. If this particular sign 𐭥 had been a composite character for *m n*, matured during the progressive manipulation of the normal alphabet, it ought to show some traces of the parent letters, whereas the simple 𐭥, in its various gradations, flows easily

to Anquetil du Perron's faulty version of *man*, contributed of old by the less degraded representatives of the *Pârsi* faith in 1759.

Mr. E. W. West, C.E., whose good service to the cause of Indian palæography in his facsimiles and decipherments of the inscriptions on the walls of the Western Cave Temples, I can freely bear testimony to, has lately undertaken the study of Pehlvi, in concert with Dr. Haug, of Munich, and has argued the question of the value of the character under discussion with much patience and ingenuity in opposition to my interpretation. I am unable to discover that he has at all shaken my position, and I regret to find that he ignores, or unduly subordinates, the very important evidence in favour of the *z*, to be drawn from the previous identities of the Phœnician and other derivative forms of 𐭥. (*Journal of the Royal Asiatic Society*, 1870, p. 364.)

¹ A large assortment of these compounds is given in my plate of the Bactrian alphabet (*Num. Chron.* iii. n.s. plate vi.), and the particular instances above cited may be consulted in Gen. Cunningham's plate v. vol. viii. of the same journal; and the facsimiles illustrating Professor Dowson's article on Bactrian Inscriptions, *J.R.A.S.* xx. o.s. p. 221. See also Professor Wilson's Kapurdigiri Inscription, *J.R.A.S.* xii. p. 153.

from the archaic model on the Moabite stone to the crystalized forms of the Pehlvi and Zend *type* letters 𐭥 𐭦 (in some founts more distinctly $\text{𐭥}=\text{𐭦}$), which were based on MS. writing, and engraved by independent parties on the Continent, altogether prior to any suggestion of this unpremeditated controversy. In addition to this difficulty about the *m n*, Mr. West has introduced a new element of discord in summarily attempting to convert the very palpable $\text{𐭥}=\text{𐭦}$ of the Chaldæo-Pehlvi into a 𐭥 ; and, finally, Dr. Haug desires to elevate a badly defined $\text{𐭥}=k$ in the Sassanian text of the inscription into a new and extraneous letter, representing the sound of "*kat*." It may be said that this does not present a very long list of variants, after all; but the determination of the value of the most important of these characters as *m n*, or *i*, constitutes a positively vital question, as its decision in a measure carries with it the determination of the structure of the language itself.

Up to this time the Inscription Palæography maintains its archaic features in the absolute isolation of letter from letter. The tendency to continuous MS. writing, due to the consecutive flow of the pen upon a smooth surface, has already been adverted to (J.R.A.S. iii. n.s. p. 252). Its effect was speedily to reduce the Sassanian Pehlvi into the irrepressible conjunction of consonants and general reticulation of letters, which has added an adventitious obstacle to the free decipherment of the ancient writings in their modern garb. This tendency may be traced, in its progressive action, in the accompanying plates, and in its more ample development in the limited table of compounds prefixed to the description of the coins, in my previous article (vol. xii. p. 274). But the later Pársi complications may be exemplified by the demand of Dr. Haug upon his European printers for several hundred different forms to secure sufficient ambiguity for his client's interpretations.

Had the Bombay Pársis really understood the language they pretended to interpret, they might have printed every text in their possession, and at the same time have secured far

greater legibility, with the detached letters of their limited alphabet, instead of complicating the decipherment by the use of imitative MS. interlaced forms, for the partial definition of which no less than sixteen pages of modern type were required.¹

Finally, to reduce me to definite extinction, under the Pehlvi aspect, MM. Haug and West have put forth a trial piece, or competitive essay, in the form of a new and improved version of the bilingual inscriptions of Sapor engraved on the smoothed inner surface of the cavern at Hájíábád. My own tentative reading of this confessedly obscure text,—a text, be it remembered, that had set European linguists at defiance for half a century,²—was given with sufficient reserve,³ a feeling which does not seem to be shared by later interpreters. All I can say is, that if this translation, revised by Dr. Haug in 1870, after a preliminary ventilation by Mr. West in our pages in 1869, really and truly represents the purport of the original inscription, the “divine” King Sapor must have arrived at a very advanced stage of dotage before he could have consented to put his hand to such a document.⁴

¹ The Old Pahlavi-Pazand Glossary devotes sixteen pages (25–41) to “the various phonetic powers of the letters and their compounds occurring in the glossaries,” etc., and its Editors confess that the list of needless obscurities is far from exhausted.

² In 1858, I said in my edition of “Prinsep’s Essays,” ii. p. 108, “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 Hájíábád, 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.”

³ J.R.A.S. iii. n.s. p. 339.

⁴ Lest my readers should suppose that I am exaggerating in this matter, I append M. Haug’s revised version in his own original words:—“After titles, etc., ‘the king. As we shot this arrow, then we shot it in the presence of the satraps, the grandees, peers and noblemen; we put the foot in this cave; we threw the arrow outside that it should reach the target; the arrow (was) flying beyond that (target); whither the arrow had been thrown, there was no place (to hit), where if a target had been constructed, then it (the arrow) would have been manifest (?). Afterwards it was ordered by us: an invisible target is constructed for the future (?); an invisible hand has written, ‘do not put the foot in this cave, and do not shoot an arrow at this target after an invisible arrow has been thrown at this target;’ such wrote the hand.”—Haug, Pahlavi General Glossary, p. 64. This reads like a very chaotic version of the ancient fable of Minuchear, whose arrow from the peak of Damavand was to settle new boundaries, but whose progress through the air the incredulous reduced from the pretended Divine

One of the most curious points in this controversy is that Dr. Haug, whose accepted local oracle denounces in unmeasured terms¹ the ignorance of his fellow Pársis of Bombay—proposes, like myself, to rectify their orthographical errors by an appeal to the unpolluted sources of “Sassanian Inscriptions.”² It is clear that, under these conditions, the typical alphabetical scheme ought to be subjected to the most rigorous and thoroughly *independent* criticism; otherwise, if it be allowed in any way to lend itself to the needs of preconceived Pársi interpretations, it not only fails in its appointed mission, but perpetuates the very faults it is invoked to correct.

I have shown (p. 411, note 3) that Dr. Haug was very nearly fathoming the real import of the ancient character 𐬨; but what shall we say of his elected antagonist,³ M. Spiegel, who, after unconsciously admitting the mechanical configuration, and recognizing the true value of the sign in question, still theoretically hugged the ancient delusion of Anquetil in an opposite sense, despite of a second proof, amid his new materials, of its patent fallacy, in the obvious existence of a fourth vowel in his own Pehlvi MSS., to which he was obliged to concede an independent value amounting to something more than the force and effect of a short *z*, thereby confessing, in the very fact, that the normal language he was dealing with required some such additional letter, which he clearly did not

interposition to the mechanical aid of a wounded eagle.—Chronicles of Tabari, i. p. 280.

¹ For the last 500 or 600 years, the knowledge of *Pāzand*, or pure Persian, has gradually declined amongst Persian scholars in general, and especially amongst Pársi priests; so much so, that very few of the *Destúrs* can now either write or understand it correctly, as can readily be seen from their imperfect notes in Pāhlavi books, and incorrect modes of expression in other writings. This ignorance has prevailed to such an extent that though the priests learn this glossary, parrot-like, off by heart, yet they cannot critically make out the exact meanings of many words, but are satisfied with mere guesses, etc.—*Destúr Hoshang Jamasp*, in his *Old Pahlavi-Pāzand Glossary*, p. ix.

² *Ibid.* p. vii.

³ There has been a good deal of needless acerbity introduced into these discussions, and Dr. Haug seems to exist only in a permanent state of warfare with the rest of his countrymen. Spiegel, however, is more distinctly singled out for condemnation in such amiabilities as the following: “As regards his views of the character of the language, and his explanations of the non-Iranian element, linguists are not likely to feel satisfied.” “The title of (a later) work, ‘The Traditional Literature of the Pársis,’ in its connexion with the conterminous literature, is therefore more pretentious than appropriate,” etc. etc. (*An Old Pahlavi-Pāzand Glossary*, pp. 16, 20.)

know how to provide for in his vague alphabetical reconstructions.

In his first publication, the *Pârsi Grammar* (1851), M. Spiegel expressly declared that the identical character 𐭥 was the *Yâ'i m'arúf*, or known *yâ*, as opposed to the *Yâ'i majhûl*, or unknown *yâ*, represented by the Zend ξ .¹ In his subsequent work on the "*Huzváresch-sprache*" (1856), he servilely adheres to Anquetil's *Boman* 𐭥𐭥𐭥𐭥 for 𐭥𐭥𐭥𐭥 (pp. 169, 172); but simultaneously enters in his Pehlvi alphabets the letter above referred to outlined as 𐭥, to which he assigns the value of *é* (pp. 27, 48, 53).² This letter, as I have attempted to prove in my previous article, is, however, nothing more than *i* final, or the *izâfat*³ which plays so important a part in old and new Persian vernaculars, and which may be traced in the accompanying plates from the final 𐭥 in Khusrui, figs. 1, 2, to the positive conjunctive but instructively isolated *izâfat* in figs. 3, 4, etc. I must, however, do M. Spiegel the justice to say that he has discarded the obnoxious *Boman* from his latest Pehlvi vocabularies.⁴

The Editors of the *Old Pahlavi-Pazand Glossary*, though they do not admit the letter 𐭥 to a place in their table of alphabets, are constrained to recognize its true import amid the list of compound characters, where 𐭥𐭥 is acknowledged to represent the sounds of "*at, hi, or khi.*" Why then, by parity of reasoning, should not 𐭥 be equal to the *ii*, or, in

¹ *Grammatik der Pârsisprache* (Leipzig, 1851), p. 22.

(a) *z.* oder 𐭥𐭥𐭥𐭥 یای معروف ist der Zend vocal 10, z. B. 𐭥𐭥𐭥𐭥 = بيم etc.

(b) *é.* oder 𐭥𐭥𐭥𐭥 یای مجهول wird im Pârsi durch 𐭥 ausgedrückt, in خورشید, دیر, etc.

² *Grammatik der Huzváresch-sprache.* (Wien, 1856.)

³ *J.R.A.S. n.s.* iii. p. 262. The name *Khusrui* on the coins was for a long time supposed to be *Khusrub*. J. Müller, *Journal Asiatique* (1839), vii. pp. 335, 342; Olshausen, *Nam. Chron.* xi. 135; Rawlinson, *J.R.A.S.* x. I myself at one time shared this impression, which received much force from the parallel Armenian *Khosrov* (St.-Martin, *Arménie*, i. 412). The contrast, however, between the forms of the letter in question and that of the true *b* in the accompanying plates must be held conclusively to settle the point.

⁴ *Die Traditionelle Literatur der Parsen* (Wien, 1860), p. 424; *J.R.A.S.* xii. p. 275.

effect, furnish a modified form of the ancient letter whose purport as *ii* or *i* I have been contending for?¹

The question raised by Mr. West, in his late article in this Journal, seems primarily to limit the discussion between us, as to what course we should pursue to establish our independent positions: he desires to try the language of the Sassanian inscriptions by the upward test of the Pársi fragments extant in Bombay, and the local interpretations accepted in that last refuge of Zoroastrianism. I, on the other hand, aim at the more comprehensive criticism afforded by the dialects of immediately proximate lands, and the inductive teaching of the earlier alphabets, preserved on medals, seals, and other antiquarian remains, which come down to the confessed starting-point of the attempted neo-Persian reconstruction of the ancient rituals, under Ardashir Bábak and his immediate successors. The representatives of the archaic creed to whom this duty was entrusted are most candid in their admissions of the difficulties they had to encounter consequent upon the pretended destruction of the scriptures of the old Fire-Worshippers by Alexander the Great,² and the unavowed but more important influence of 557 years of discouragement and obscurity of the religion itself, which succeeded, under the Seleucidæ and Arsacidæ, up to the date of the attempted revival of their ancestral faith.

Nor did the ancient tongue itself fare better than the lost books which embodied the primitive rites. So long as the original Pehlvi maintained its position as the ruling vernacular

¹ By some strange want of perception, the Editors of this Glossary have confounded the *i* and the very differently formed *b*, so that they describe the identical as + = *ab* (sic) and or + = *ai* with charming indifference (p. 30).

² There is no possible pretence for saying that Alexander destroyed the ancient literature of the land; the single Palace and the Royal Archives at Persepolis were burnt; but so far from the Macedonian conqueror having proposed to himself any mission of eradicating old creeds, he rather took to them under their pleasant aspects. The real destroyers of the primitive lore were the Muslims, who nevertheless revered, and for a time preserved, and finally translated all that was worth having in the accessible Pehlvi MSS. It would rather seem that the new Zoroastrianism ought to take its date from the latter period of depression; for there clearly were plenty of Pehlvi MSS. still extant in A.H. 318 = A.D. 930.—See Reinaud, Abulfeda, p. lxx. note 2.

cular utterance, current among all classes of the nation, the limited seventeen letters of the coeval alphabet fully sufficed to convey any required sense to the comprehensions of those who thought and spoke in the common language. We have a nearly parallel illustration of this faculty of using short-hand notation in the colloquial Hindi of the present day, which resolutely refuses to avail itself of the intricacies of the more elaborated Sanskrit characters, and adheres consistently to the simple detached consonants of antiquity, with all the associate uncertainty of intonation. But the typical Persian language clearly became degraded on its own soil, under the action of successive waves of conquest, irregular hostile occupation and the introduction of foreign speech into the official documents of court and camp, as alien rulers chanced to dominate. Such influences, apart from the general depression of the religious communities, who alone had an interest in the preservation of the sacred texts, must have rendered any satisfactory reconstruction of the earlier rituals a task far beyond the powers of the degenerate *Mobeds* of the scattered Fire-temples, even if the old letters of the alphabet had not been then, as now, altogether insufficient to define obsolete grammatical inflexions, and still less competent to restore the purport of a lost tongue.

The language of the inscriptions, under these conditions, may be held to have primarily followed the mixed speech of the head-quarters, which consisted of a sort of Eastern *Lingua Franca* or Mesopotamian *Urdú*, abounding in Aramaisms, and in the selected epigraphs under review, freely interspersed with independent religious texts, which were by no means necessarily Zoroastrian.

The language of the books, on the other hand, if they truly reproduced the ancient texts, should have presented a modified form either of primitive Pehlvi, archaic Zend, or, at the lowest, a dialect but little removed from the Persian Cuneiform. But, to judge by its composite character, it would seem as if the dry bones and *disjecta membra* of the old Iranian rituals had been galvanized into a specious vitality by the introduction of Semitic verbs with Persian terminations, added to which the practice of writing one word and

pronouncing another savours strongly of priestcraft, whose revision in this case was neither competent nor honest. If to construct grammars and dictionaries out of such materials be a labour of high ingenuity, I can concede that much credit to our modern authorities; but I must be excused if I remain incredulous as to the value on finality of the results thus obtained.

If I have had to suggest anything derogatory to the attainments of the modern Pársi teachers in the Western Presidency, I am glad to have the opportunity of quoting, with renewed hope, our own Royal Asiatic Society's motto, "Ex Oriente lux," as, by a singular chance, I have this day (11th Jan., 1872) received from Bombay a comprehensive series of the publications of the later earnest revivers of the old lore, in their adopted home under the British flag—in the shape of even more difficult reading than the Pehlvi itself, as explained and illustrated by Guzráti commentaries; but I recognize with satisfaction the conscientious endeavours of the present representatives of the archaic faith in Bombay to encounter, and I trust overcome, many of the difficulties inherent in their ethnic language—in this I am the more encouraged by the tone of mixed frankness and confidence disclosed in Destúr Behrámjí Sunjana's preface to his new Pehlvi Grammar,¹ which augurs well for the future, in a seeming aspiration of the local Pársis to free themselves from European dogmatism, and to rehabilitate their national speech by their intuitive hereditary perceptions, from independent

¹ A Grammar of the Pahlavi Language, by Peshotun Dustoor Behramjee Sunjana. (Bombay, 1871.) Preface, p. iii.: "The pronunciations of the Semitic terms as used by the Dustoors of Irán and of India are founded on the well-known authority of *Malik Namah Assooree*, which, as will be mentioned hereafter, is now more than 1200 years old, and at the time when this work was written the Pahlavi language was in its pristine use amongst the Zoroastrians of Irán. The modern Orientalists of Europe, however, have modified such pronunciations, but such modifications I do not feel justified in recommending to my Zoroastrian brethren." Of course, I am not likely to endorse all our new grammarian's notions, many of which are clearly crude, and require for their correction that foreign travel and outside ventilation which I have advised above; but not the less may I welcome an effort at free thought, and a seeking after the truth, which I admire above all things. One word of warning, too, I must add to those who may be disposed to over-estimate the advantages of Iranian descent, in the revival and reconstruction of their ancient tongue, as they must bear in mind that for generations past they have been domiciled and educated in a foreign land, and learnt from their cradles to frame their ideas in an alien idiom; so that their ancestral language, or even its modern representative, has to be acquired anew.

sources and the extant documents of their creed. I am sanguine that these records may be largely augmented when the less passive members of the community undertake to scrutinize their own Indian depositaries, or boldly seek to penetrate into other closed receptacles of the obscure literature of the past,—in lands to which they have preferential access.

In concluding this branch of a single alphabetical controversy, I may be permitted to reproduce a more comprehensive view of the general question, which I submitted *vivâ voce*, but with scant preparation, to the Meeting of the Royal Asiatic Society on the 9th April, 1866.

As this merely suggestive outline has never been formally incorporated in our *Transactions*, I make no apology for quoting in full the semi-official report of the proceedings of the meeting of that date from the *Athenæum* newspaper.

The Right. Hon. Viscount Strangford in the chair.—Mr. Thomas, adverting to recent controversies respecting the parentage of the various modes of writing in use in ancient India, spoke "On the Adapted Alphabets of the Aryan Races." These were the results of his palæographical investigations: The Aryans invented no alphabet of their own for their special form of human speech, but were, in all their migrations, indebted to the nationality amid whom they settled for their instruction in the science of writing: (1) The *Persian Cuneiform* owed its origin to the Assyrian, and the Assyrian Cuneiform emanated from an antecedent Turanian symbolic character; (2) the *Greek* and *Latin* alphabets were manifestly derived from the Phœnician; (3) the *Bactrian* was adapted to its more precise functions by a reconstruction and amplification of Phœnician models; (4) the *Devandgarî* was appropriated to the expression of the Sanskrit language from the pre-existing Indian Pâli or *Lât* alphabet, which was obviously originated to meet the requirements of Turanian (Dravidian) dialects; (5) the *Pehlvi* was the offspring of later and already modified Phœnician letters; and (6) the *Zend* was elaborated out of the limited elements of the Pehlvi writing, but by a totally different method to that followed in the adaptation of the Semitic Bactrian. Mr. Thomas then proceeded to advert to the single point open to discussion involved under the 4th head, tracing the progress of the successive waves of Aryan immigration from the Oxus into the provinces of Ariania and the Hindu Kush, and the downward course of the pastoral races from their first entry into the Panjâb and the associate crude chants of the Vedic hymns to the establishment of the cultivated Brahmanic institutions on the banks of the Sarasvati, and the elaboration of Sanskrit grammar at Taxila, connecting the advance of their literature with the simplified but extended alphabet they constructed in the Arianian provinces out of a very archaic type of Phœnician, and whose graphic efficiency was so singularly aided by the free use of birch bark. This alphabet continued in use as the official writing under the Greek and Indo-Scythian rulers

of Northern India, until it was superseded by the superior fitness and capabilities of the local Pāli, which is proved by Asoka's scattered inscriptions on rocks and monoliths (Lāts) to have constituted the current writing of the continent of India in B.C. 250, while a similar, if not identical, character is seen to have furnished the prototype of all the varying systems of writing employed by the different nationalities of India at large, from Sind to Ceylon, and spreading over Burmah, till the Indian Pāli meets Chinese alphabets on their own soil in Annam. In conclusion, Mr. Thomas pointed out the importance of the discoveries of Norris and Caldwell, derived from completely independent sources, regarding the Scythic origin of the introductory Indian alphabets.

No substantive article was ever prepared or published in further development of the somewhat comprehensive theory thus enunciated; but its purport has been quoted with seeming approval, and, as far as I am aware, without hostile comment in France and Germany. The subject has likewise been discussed at two several meetings of the Asiatic Society of Bengal.¹ With the general tenor of these *quasi* conversational proceedings I have no possible cause of dissatisfaction. Naturally, the living representatives of the Indian Aryans resented any notion of their ancestors having borrowed, even more convenient mechanical vehicles for the expression of thought, from the ignorant Dravidians of the south;² but the facts are cumulatively against them, especially

¹ Journal Asiatic Society, Bengal, and Meeting, 6th Feb., 1867, p. 33.

² The subjoined quotation is in so far a virtual reproduction of my letter, inviting the discussion, *in situ*, of the comparative priority of Indian alphabets, which was read at the Meeting of the Asiatic Society of Bengal, on the 5th February, 1867. I have taken thus much of liberty with the printed report, as to rectify the singular error of the local press, which contrived to arrange my *data* in the directly opposite sense to the concurrent argument; and as chance would have it, by a casual transposition of the descriptive headings of the alphabets, to obscure completely the whole question, either to Eastern or Western comprehensions. I have, perhaps, been over-confident of the strength of my position, in abstaining, until this moment, from any protest against an editorial blunder, which, in mild terms, left me in a complete minority. But I am quite content to revive this corrected version as a basis for future discussion.

"I am glad to find that my notice of the derivation of Arian alphabets attracted attention, and I am most curious to learn the course the discussion took at the Meeting of the Asiatic Society of Bengal; more especially as I am now following out the Indian section of the inquiry, and have arrived already at some unexpected results, tending to confirm the original *Dravidian* derivation of the *Sanskrit* alphabet. The readers of our Journal will not fail to call to mind that Prinsep, in his early comments upon the Lāt alphabet, pointed out that, in many instances, the *aspirate* letters were formed by a duplication of the lines of their corresponding *simple* letters. The question was not raised as to *when* these aspirates had been designed, but the inference was, that they had been formed simultaneously with the simple letters, and out of the same elements. I have a different theory to propose, which I submit for the examination and comments of your members: it is to assume that all the simple letters were Dravidian, and constituted a complete and sufficient alphabet for that class of languages, while the aspirates were later additions required for the due expression of *Māgadhī* and other northern dialects, as the Sanskrit in after-times added its own sibilants to the latter alphabet.

as they have now an opportunity of selecting new adversaries

A glance at the subjoined comparative alphabets will show the twenty consonants (out of the full twenty-one) of the Dravidian system, as opposed to the thirty-one consonants of the Prakrit of Asoka's edicts. Of the additional aspirates of the latter scheme, two only can in any way claim to be ordinary duplications, the *chh* and *th*; while a more simple origin might be sought for the latter in a common circle: *dh*, *dh*, and *ph* may fairly be taken as intentional modifications of their corresponding normal letters; but *kh* and *gh*, like *th* and *dh*, have more in common as fellow aspirates than association with their own leading consonants; and, finally, *jh* and *bh* seem to have been unfettered adaptations. The *s* (𑀲) again differs from the *y* (𑀹) only in the reversal of the leading lower limb. As the alphabetical data, upon which alone we have now to rely, are derived from inscriptions embodying a different language, and dating so late as B.C. 250, we can scarcely expect to recover the missing Dravidian consonants; but one, at least, of the vowel tests is significant in the extreme. The Dravidian vowels, as contrasted with the Sanskrit series by Caldwell, arrange themselves as follows:—

Sanskrit, *a*, *ā*, *i*, *ī*, *u*, *ū*, *rī*, *rī*, *lī*, *lī*, *ē*, *āī*, *ō*, *āū*, *ṛ*, *ṛ*.

Tamil, *a*, *ā*, *i*, *ī*, *u*, *ū*, —, —, —, —, *e*, *ē*, *ē*, *o*, *ō*, —, —, —.

"The value of the simple *e*, in the Lāt character, admits of no doubt, the outline of the letter takes the form of 𑀲, while the elongated vowel is constructed by a duplication of the sound, effected by the addition of a medial *e*, thus 𑀲=ee, apparently the original Dravidian *ē* (or possibly *ēī*), but which, in Asoka's inscriptions, is made to do duty for *āī*. In the more distinctly Sanskrit adaptations of the Devanāgarī Bactrian alphabet, the initial *a* (?) formed the basis of all the other vowels, whose varying values were discriminated by their several vowel marks.

"I am unwilling to enlarge upon an avowedly speculative suggestion, but I think few will fail to detect the contrast between the archaic crudeness of the simple letters and the more complicated and cursive forms of the aspirates in the Lāt alphabet. Had the latter class of characters uniformly followed the typical design of their corresponding simple letters, there would have been more reason to have assumed a simultaneous and congruous initiation; but the introduction of anomalous signs among the *gutturals*, the remarkable cursive development assigned to the aspirates, as opposed to the stiff outlines of their simple prototypes (an advance equal in degree, but less obviously marked in the *dh* and *dh*), and the inconsistent development of the *bh*, upon the basis of the old *ḍ*, all seem to indicate a later and independent elaboration of the aspirates.

THE NORMAL DRAVIDIAN ALPHABET.

Consonants.			
𑀫 <i>k</i>	𑀭 <i>g</i>	𑀮 <i>n</i>	
𑀯 <i>ch</i>	𑀰 <i>j</i>	𑀱 <i>ñ</i>	
𑀲 <i>t</i>	𑀳 <i>d</i>	𑀴 <i>n</i>	
𑀵 <i>t</i>	𑀶 <i>d</i>	𑀷 <i>n</i>	
𑀸 <i>p</i>	𑀹 <i>b</i>	𑀺 <i>m</i>	
𑀻 <i>y</i>	𑀼 <i>r</i>	𑀽 <i>l</i>	𑀾 <i>v</i>
𑀿 <i>h</i>			

Vowels.

𑀭 *a* 𑀮 *i* 𑀯 *u* 𑀰 *e*

Medial Vowels.

𑀱 *kā*, 𑀲 *ke*, 𑀳 *ki*, 𑀴 *kī*, 𑀵 *ku*.

THE PRAKRIT OR LĀT ALPHABET.

Consonants.			
𑀫 <i>kh</i>	𑀭 <i>gh</i>	𑀮 <i>n</i>	
𑀯 <i>chh</i>	𑀰 <i>jh</i>	𑀱 <i>ñ</i>	
𑀲 <i>th</i>	𑀳 <i>dh</i>	𑀴 <i>n</i>	
𑀵 <i>th</i>	𑀶 <i>dh</i>	𑀷 <i>n</i>	
𑀸 <i>ph</i>	𑀹 <i>bh</i>	𑀺 <i>m</i>	
𑀻 <i>y</i>	𑀼 <i>r</i>	𑀽 <i>l</i>	𑀾 <i>v</i>
𑀿 <i>h</i>			

Vowels.

𑀭 *a* 𑀮 *i* 𑀯 *u* 𑀰 *e*

Medial Vowels.

𑀱 *kā*, 𑀲 *ke*, 𑀳 *ki*, 𑀴 *kī*, 𑀵 *ku*.

Sanskrit additions to the Lāt alphabet, 𑀶=𑀶, 𑀷=𑀷.

in the more advanced "Scythians" as their possibly later teachers,¹ who would equally, and more definitively sustain the argument of priority in the art of writing in India, against the intrusive Vedic Aryans, whose education, by their own admission, had been greatly neglected up to the period of their entry into the land of the seven rivers.²

But to revert to the old data upon which I based my conclusions on this branch of the subject, nothing could have been more graphic, in the whole history of literary events, than the unpremeditated concert of evidence, gleaned in different lands, from hopelessly severed starting-points; presented, on the one part, by Mr. Norris's decipherment of the Scythian Tablets of Darius, at Bihistún, and the almost simultaneous production of the results of Dr. Caldwell's patient researches *in situ* into the languages of the South of India, which, on examination, developed such strange identities of verbal and grammatical formations, as to authorize the representatives of the old and the new to say, essentially, we are at *one*.³

Nor could anything be more striking as a second and subdued parallel, in the same direction, than Dr. Caldwell's detection of the Drávidian element in the Brahui form of Belúch speech with the associate testimony of our coins as to the sustained and persistent use of the Páli, or *Lát* alphabet, which descended in the ordinary course to the Greeks, with their outlying possessions in Arachosia, and which held its local dominancy, even to the competitive triumph over the elsewhere universally-adopted Bactrian writing of proximate lands.

¹ Muir, vol. ii., edit. 1871, pp. 423, 438, 437, 488. The succession of occupants, now conditionally accepted, runs: 1. The Forest tribes; 2. The Drávidians; 3. "A race of Scythian or non-Aryan immigrants from the N.W.;" 4. The Aryan invaders.

² Prinsep's Essays, London, 1858, ii. p. 43; Numismatic Chronicle, 1863, p. 226, and 1864, p. 43; J.A.S. Bengal, 1864, p. 255; Wilson, Rig Veda, London, 1857, iii. pp. xviii. xix.

³ See Norris, Jour. R.A.S. xv. p. 19; Caldwell's Drávidian Grammar (1856), pp. 23, 43, 95, 100, 102, 104, 105, etc.; Hunter's Rural Bengal, pp. 112, 126, 168, 176, 180, etc.; Dr. Stevenson, Bombay Branch J.R.A.S. 1847, p. 328; B. St.-Hilaire, Jour. des Sav. 1857, p. 42, and 1862, p. 241; Prinsep's Essays, ii. pp. 43, 151; J.R.A.S. i. n.s. p. 466; ii. n.s. p. 46; Burnouf, Yaçna cxlv., August Schleicher, Compendium, pp. 11-14. V. St.-Martin, Étude sur la Géographie . . . d'après les Hymnes Védiques, Paris, 1859, p. 82. [Results definitively concurred in by Mr. Muir, ii. p. xxiv.]

Having, I hope, shown some slight justification for my previous interpretations, I pass on to the examination of the new materials more amply illustrating the developments of the Semitic alphabet. Its expanse has already been traced from the western basin of the Mediterranean to the *Doab* of the Ganges; from the Persian Gulf, fitfully, to the Lower Indus,¹ where it touches the legitimate Bactrian of the Indo-Scythian and Sâh kings.² It is seen to have been indigenous in Armenia and Median Atropatène,³ and now our coins⁴ enable us to

¹ J.R.A.S. iv. n.s. p. 505; Num. Chron. (1870), x. p. 139.

² J.R.A.S. iv. p. 500. Journ. Bombay Branch R.A.S. 1869, plate iv. fig. 1.

³ "Early Sassanian Inscriptions" (Trübner, 1868), 133. Num. Chron. xii. Pl. 4 (page 68), figs. 5, 6, 7. Lindsay, Pl. x. 27. Dr. Levy, "Zeitschrift," xxi. Pl. ii. 2—6.

⁴ Silver. Size, 4½. Weight, 58 grains. British Museum. *Unique*.

Obverse—Head of king to the left, thinly but not closely bearded, with a low Parthian tiara surmounted by two rows of studs. Monogram in Chaldæo-Pehlvi, 𐭮𐭥.

Reverse—The usual Parthian type of the king seated on his throne holding out a bow. Monogram, 𐭮𐭥 (*Tambrax*, the capital of Hyrcania). Legend in imperfect Greek, ΒΑΣΙΛΕΥΣ ΜΕΓΑΣ ΣΑΝΑΒΑΡΟΥΣ.

Date in the field ΓΤΤ (313 of the Seleucid era = A.D. 2).

Associate Bactrian Coin of Sanabares.

Copper. Weight, 111.6 grains. British Museum. *Unique*.

Obverse—Head of king to the left, lightly or meagrely bearded, wearing the Parthian cap studded with jewels. Close fitting vest, with jewelled collar, and a boldly ornamented border to the outer garment. Legend, ΒΑΣΙΛΕΥΣ μέγας.

Reverse—Winged figure of Victory, to the right, holding out chaplet, as on the Bactrian coins of Maues, Azas, &c. Legend, ΣΑΝΑΒΑΡΟΥΣ.

Prinsep's Essays, ii., p. 215. Engravings of both pieces are to be found in the Numismatic Chronicle for 1871, pl. vii.

This king's name is supposed to be identical with that of *Sanabassar*, "the ruler."—(Esdras, i. ii. 12, 15; iv. 18, 20. Ezra, i. 8, 11; v. 14, 16.) The derivation of the term has hitherto been considered uncertain; the dictionaries give one of its variants as "Ignis cultor"; but the simple version here seems to be سنا "light," with the conjunction of بر from بردن "to bear," or بآذر "with fire," in the Biblical form. Though the سنا as a Semitic word might seem out of place in combination with an Aryan termination, I should feel no difficulty in this respect, as the languages were conterminous and interchangeable in many quarters. *Sand* was latterly so established a titular term that we find سنا and سنای on monograms, and *Sand ul Millat*, "light of the faith," on the coins of the Ghaznavides.—J.R.A.S. ix. 367. The Armenians speak of "Sanassor," son of Sennecherim. (Moses of Khorene, i. cap. 23, p. 103, French edition, and cap. iii. p. 145. St.-Martin, *Armenie*, i. 411, mentions *Sanadroug*, "the *Izates* of Josephus.")

carry it into Hyreania, or so much further on its way towards those essentially ancient seats of Aryan civilization on the Oxus, the archaic existence of which has lately been confirmed by fresh and independent evidence, in amplification of Sir H. Rawlinson's discoveries in 1866,¹ prominently

¹ "The belief in a very early empire in Central Asia, coeval with the institution of the Assyrian monarchy, was common among the Greeks long anterior to Alexander's expedition to the East, and could only have been derived from the traditions current at the court of the Achæmenian kings. This belief, again, is connected through the names of Oxyartes and Zoroaster with the Iranian division of the Aryan race, and receives confirmation from the earliest memorials of that people. . . It is with the Eastern Iranians, however, that we are principally concerned; as the founders of Central Asian civilization. This people, on the authority of the Vendidad, may be supposed to have achieved their first stage of development in Sughd. Their language was probably Zend, as distinguished from the Achæmenian Persian, and somewhat more removed than that dialect from the mother tongue of the Aryans of the south. A more important evidence, however, of the very high state of power and civilization to which they attained is to be found in the information regarding them preserved by the celebrated Abu Rihan Al Birûnî, himself a native of the country, and the only Arab writer who investigated the antiquities of the East in a true spirit of historical criticism. This writer supplies us with an extensive specimen of the old dialects of Sughd and Kharism. . . He gives us in those dialects the names of the twelve months, the names of the thirty days of the month, and the five Epagomenæ, together with the names of the signs of the Zodiac and of the seven planets, and lastly of the mansions of the moon. A portion of his nomenclature is original, and offers a most curious subject for investigation; but the majority of the names can be compared, as was to be expected, with the Zend correspondents, and, indeed, are much nearer to the primitive forms than are the better known Parsee equivalents. According to Abu Rihan, again, the solar calendar of Kharism was the most perfect scheme for measuring time with which he was acquainted; and it was maintained by the astronomers of that country that both the solar and lunar Zodiacs had originated with them, the divisions of the signs in their system being far more regular than those adopted by the Greeks or Arabs. . . . Abu Rihan asserts that the Kharismians dated originally from an epoch anterior by 980 years to the era of Seleucidæ, a date which agrees pretty accurately with the period assigned by our best scholars to the invention of the Jyotisha or Indian calendar."

—*Quarterly Review*, October, 1866, p. 488, etc.

This last is, perhaps, the most interesting item we gain from Al Birûnî's revelations. That there should have existed, in Kharism, a serial system of dating, commencing from 980 years anterior to the official epoch of the Seleucidæ (312–311 B.C.) = 1304 B.C., was startling enough; but it is seldom that a given arithmetical problem obtains such definite results as to establish, beyond its own mission, so distinct an identity between scattered and severed branches of one and the same section of the human family; and it is something more than a curious coincidence to associate with this independent method of reckoning the fact that the Oriental world has been wearying itself, for a long time past, to explain whence, how, and why, a fixed sacrificial date, variously calculated by modern astronomers, and possibly, but imperfectly, sustained in the transmuted versions of the old texts, should have developed so close an identity, in its latest and most matured average, with the original numbers of 1304 B.C.; but such would seem to be the result of the independent tests applied to the Jyotisha observation of the Colures, still in use in the Vedic rituals of India under the confession of the later Brahmanical exponents of the ancient creed.

See also Num. Chron. N.S. iv. pp. 46, 126; Colebrooke, Asiatic Researches, viii.; Archdeacon Pratt, Journal Asiatic Soc. Bengal, 1862, p. 49; Max Müller,

noticed in my essay on Sassanian Inscriptions.¹ Dr. Sachau, to whom the Oriental Translation Fund has lately confided the preparation of a critical edition of the leading MSS. upon which Sir H. Rawlinson based his researches, has already made vigorous progress beyond the fettered range of a single work, and will doubtless, in due time, give the world a very comprehensive account of our *proper* Aryan cradle.² Meanwhile, we welcome a contribution from the improved text of the Arab geographer, Al Istakhri,³ which affirms independently the early traditions of Aryanism of speech in those distant lands, and brings me face to face with an identification, which may chance to prove of considerable importance in the general inquiry: that is, the association of the ancient name of the kingdom of *Khárizm* itself,⁴ with the misinterpreted modern

Sanskrit Literature (1859), p. 521; Text of Rig Veda, vol. iv., *preface*, p. lxxiv.; Journal Royal Asiatic Society, Dr. Whitney, vol. i. n.s. p. 316; Sir Edward Colebrooke, "Note on the preceding article," p. 332; Strabo, ii. c. i. 15, xi. c. vi. 1, c. vii. 3, c. xi. 5; Pliny, vi. 18, 19; Arrian, iii. c. 29, vii. c. 16; Chronique de Tabari, i. 119; Wilson, *Ariana Antiqua*, 144; Rawlinson's Herodotus, i. 564; Journal Royal Geographical Society, xix. (1849), p. lxiv., and Sir R. Murchison's Address, 1867, p. 38.

¹ Trübner & Co., London, 1868, p. 120. See also Num. Chron. vii. n.s. p. 143. Since the above text and associate notes were set up in type, Sir H. Rawlinson has continued the publication of his expositions of the ancient Geography of the Oxus, in a paper contributed to the current number of the *Edinburgh Review* (Jan., 1872), from which I extract the subjoined notice; but, in explanation of a somewhat dubious expression in the context, I am given to understand that the emplacement of the original "Oromasdian" *Hapta Hindu* on the Upper Oxus, is not in any way to be understood to conflict with the *later* Vedic designation of the *Saptu Sindhu* of the Panjáb.—"As these identifications are all new and contravene the criticism of the last hundred years, it may be necessary to cite some authority in their support. First, then, for the application of the name of *Hapta Hindu*, or 'the seven rivers,' to the Upper Oxus, there is the direct authority of Abu Rihán." See Elliot's *Historians*, i., p. 49. "India, or the Panjáb, had been previously understood by the critics." (p. 13.)

² Dr. Sachau says:—"The most valuable part of Al ákbár el Bakiya seems to me that which refers to the Central Asiatic Mesopotamia, the country between the Oxus and Jaxartes, and its southern and northern centres of civilization, *i.e.* Sughdiana and Khiwárizm. Birúni's information on this subject is alike new and important, for these countries were the homestead of Zoroastrianism and the focus of Central Asian civilization, which, shortly before it was trodden down by the Mughals and Tatars, struck a traveller, like Yákút, with admiration. By the help of Birúni we shall be able to trace the outlines of the dialects of Sughdiana and Khiwárizm, and to bring back the history of those countries."—*Academy*, Nov. 1, 1871.

³ "Bibliotheca Geographorum Arabicorum," M. J. de Goeje (Lugd. Bat. 1870). See also Prof. Nöldeke's review of this work in the *Academy*, Oct. 1, 1871, p. 461.

⁴ "In the *Seythie* version of the Behistun cuneiform inscription of Darius, the name of the province of *Khárizm* is expressed by '*Varasmīya*,' admitting a free and optional interchange of the consonants *m* and *v* or *w*; the parallel *Persian*

term of "*Huzvārish*," ordinarily applied to one of the divisions of Pehlvi writing.¹ If the archaic Oriental names, which I have subdued into a foot-note, confess to an identical derivation and primary purport, we may have to bring the written language, the cognate alphabet embodied on the banks of the Euphrates,² into closer relations with the undetermined palæography of the Eastern nidus.

For a long time past a vague impression has prevailed that the sister dialect, expressed in the kindred Pehlvi character, might likewise be connected with the geographical limits of the less disturbed settlements of the Aryan Fire-worshippers.³ A curious confirmation of this supposition has lately been contributed by the publication of the Arabic text of *Ibn Khor-dādbah*, a man in a manner born in the faith, as his name implies, who classes the sanctuaries of Zoroastrianism under the emphatic topographical designation of the "land of the Pehlvis." I reproduce the passage from the excellent French translation of the *unique* Oxford MS. by M. Barbier de

cuneiform text reproduces the name more closely as *Uvarazmia* or *Uvarazmish*." —(Mr. Norris, J.R.A.S. xv. pp. 28, 97, 191.)

Mr. Norris and myself have since discussed this question, and I find that he was under the impression that he himself had already conceived such a solution. However, as we have both sought for any published declaration to that effect, we are quite content to concur in the probable coincidence now put forth.

¹ Destūr Hoshangji Jamaspji, in his *Oimydā*, Bombay, 1867, preface, p. iii., asserts, that "*Huzvārēsh* means nothing, and can neither be explained from the Persian nor from a Semitic language." The latest Pārsi attempt at the explanation of the term is that of Destūr Sanjana, who transforms it into *Huzvekhaldæa*, i.e. the Chaldee language. —(Dr. Haug, in *Trübner's Record*, Nov. 30, 1871, p. 75.)

² "It is to be written in the writing of the Avesta, or in that of Sevat (Chaldæa), which is *uzvārsh*." —(Haug, p. 42, quoting J. Müller.)

³ "Dilem was the Media inferior, Mazenderān and the countries between the Caspian and the Tigris, one of the original seats of the Pehlvi (*Heeren*, Act. Soc. Gött. xiii.). Dilem was also a retreat of that language. In the breaking up of a great empire, the institutions of the conquered race always linger in the extremities. The Caucasus, the country of Derbend, Segestān, and Kermān, thus sheltered the ancient language and religion of Persia, and thus the mountains of Dilem retained till the tenth century the worship of fire, and perhaps, therefore, the Pehlvi, with which that worship had been connected." —James Morier, *Persia*, etc. (1812), pp. 288, 406. See also Malcolm's *History of Persia* (1815), i. p. 203; Ouseley's *Oriental Geography*, pp. 141, 146, 195; and passim, on the subject of languages, pp. 76, 114, 143, 152, 159, 174, 251; Rawlinson, J.R.A.S., x., note, p. 143; Haug, *Glossary*, p. 34.

Meynard (*Journal Asiatique*, 1865, p. 278). "Pays des Pehlevis—Hamadán, Dinavar, Nèhavend, Míhrdjánkadak, Maçabadán, Kasvín. Cette ville, qui est à 27 *farasangs* de Rey, forme la frontière du Deilem; elle comprend la ville de Mouça et la ville de Mubarek. Zendjân, selon les uns, est à 15 *fars.*, selon les autres à 12 *fars.* d'Ahbar; Essinn, Jaillasán et le Deilem."¹ (See also p. 254, *ibid.*)

But this is far too large a subject to be treated incidentally, or in subordination to our present inquiry. I therefore revert to the special subject of this paper, and proceed to describe the coins figured in the illustrative plates; as introductory, however, to which, I prefix comparative Tables of the Pehlvi Alphabet, exhibiting (I.) the limited number of simple signs in use upon the currency of the Arabs, and (II.) the amplified and discriminated characters employed by the Pársís at the present day.

I. COMMUTABLE SOUNDS OF THE NORMAL LETTERS ON THE COINS,
INCLUDING THE LATER PERSIAN DEVELOPMENTS.

1	ا ه خ ح ع	{ a, h, h, kh, ain.	8	و ک	k.
2	ب	b.	9	م	m.
3	ط ذ ث ت م	{ t, th, d, z, or f.	10	ا و n	n or w.
4	ل ر	r or l.	11	د گ د ي ج	or ج.
5	ز	z.	12	ـ final, or detached	izáfat.
6	س	s.	13	چ	ch ز ج.
7	ش	sh.	14	پ or ف	p or f.

¹ پهلوی nomen regionis, a qua lingua pehlevica (زبان پهلوی) nomen duxit B. et alio loco پهلہ dictae, qua voce provincia urbium دینور et اصفهان ری significatur B.—Vullers' Lexicon.

The original passages from Hamza Isfaháni and Ibn Mukaffa are quoted at large by J. Müller, *Bull. der K. Bayer. Akad. der Wissensch.*, Sept. 1842, p. 106.

Dr. A. Sprenger, *Die Post- und Reiserouten des Orients* (1864), p. 53, "Gibál (das Gebirgsland)," p. 54, "Das Land der Pehlewier."

II. MODERN PEHLVI.

1	د	ا	A.	12	و	ك	K.
2	ل	ب	B.	13	ذ	گ	G.
3	م	ت	T.	14	ل	ل	L.
4	چ	ج	J.	15	ه	م	M.
5	ن	خ	KH.	16	ا	ن	N.
6	و or د	د	D.	17	ا	و	W.
7	ر	ر	R.	18	د	ه	H.
8	ز	ز	Z.	19	ي	ي	I.
9	س or و	س	S.	20	ي	ي	I <i>final</i> .
10	ش	ش	SH.	21	چ	چ	CH.
11	غ	غ	GH.	22	پ	پ	P.

PLATE I.

No. 1. OBVERSE.

To the left—*a.* the Monogram = *Am*.

„ *b.* = *Afzud*. Increase.¹

To the right, facing the profile of the king,

c. = *Khusrui*, (coin) “of Khusrú.”

REVERSE.

To the left—*a.* *Date* = *سيه* 30th (year).

To the right—*b.* *Mint* = *ان* or *هر*.

¹ Olshausen was under the impression that this word might be taken to correspond, in general terms, with the Arabic *دام ملكه* (Num. Chron. p. 48). Cf. also in the mixed dialects *زود* *zud*, *زياد* *ziyad*, *زاد الله*, “May God increase,” etc. But I should prefer to associate it with the extensive class of Mint marks which so abound in the subsequent division of the Kufic coinages, and which refer more

No. 2. OBLVERSE.

To the left of the field—*a.* the Monogram **س**.

„ „ *b.* **س** = **افزود** *Afzūd*.

To the right *c.* **س** = **هوسروی** *Khusrūi*.

Margin—**س** = **عبد** “Servitor.” (*Cf.* **عبد الله**, etc.)

REVERSE.

To the left—*a.* *Date.* **س** = **س** چهل 43 A.H.

To the right—*b.* *Mint.* **س** = **س** or **س**, etc.

No. 3. OBLVERSE.

To the left of the field—*a, b.* Monogram, with *Afzūd*, etc.

To the right—*c.* **س** = **موهالف** *Muhalib-i*

س = **ابوسفاران** *Abū Safarān*.

Margin—**س** = **بسم الله** “in the name of God,” in Kufic characters.

With **س** = **مک** or **مر** in Pehlvi.

REVERSE.

To the left—*a.* *Date.* **س** = **س** شش هفتاد A.H. 76.

To the right—*b.* *Mint.* **س** = **س**; the initial letters of the name of the city of **س** *Dārābgird*.

or less to the fullness and sufficiency of the money itself, such as **س**, **س**, **س**, etc. This attribution extends itself naturally into the inquiry as to whether the concurrent introductory monogram does not follow some such similar law, as we find the Mint-mark **س** amid the Kufic issues, where it is supposed to stand for **س** or **س**, “rectitudo, integritas,” or the exact parallel of **س**, etc. (See Stickel, *Zeitschrift*, 1864, p. 773.) Though we need not limit the range of interpretation to Semitic identities, when we have the ever-recurring Persian **س**, **س**, the Huzvārish **س**; even if the leading term might not be extended in its ejaculatory sense to **س**, **س**, **س**, etc.

No. 4. OVERSE.

Left—The usual Monogram and Afzúd.

Right—The same Pehlvi legend as in No. 3.

Margin as in No. 3.

REVERSE.

Left— = پنچ هفتاد = 75 A.H.

Right— = بیش . Baiza.

There is some doubt about the correct attribution of this Mint. I have satisfied myself that بیش is the preferable transcription; but the question still remains, as to what locality the designation applies. I had suggested, as the nearest sound, *Baiza*, but Dr. Mordtmann contends for فسا or بسا.¹ There need be little difficulty in reconciling these two readings, taken by themselves, as Ibn Khordádbah tells us that *Fasa* was also called البیضا (Journal

¹ Dr. Mordtmann has hitherto enjoyed the exclusive privilege of describing the Constantinople collections. I am glad to see that the Turks are beginning to appreciate Numismatics in their higher sense, and Western Orientalists may compliment them on the original work of Djevet E'fendi, which the French epistomist designates by the title of "Coup d'œil sur les Monnaies Musulmanes." This publication enumerates the following novelties from the cabinets of Subhi Bey, who has since been nominated to the Government of Damascus, where we may wish him every success, on such promising ground, in the further acquisition of new aids to history. 1st. Une monnaie coufique, frappée à Hertek (هرتك) chef-lieu d'un district du Tabaristán, dans l'année 28 de l'hégire (648-649), dont la légende circulaire portait بسم الله ربی. *Au nom de Dieu, mon maître.* 2nd. Une monnaie coufique de l'an 27 (657-658), sous le Khalife 'Ali, dont la légende circulaire était الولی الله, *l'ami de Dieu.* 3rd. Deux monnaies coufiques de l'an 38 et 39 (658-660), ornées de la légende circulaire du No. 1: *Au nom de Dieu, mon maître.* In addition to these pieces, Djevet E'fendi quotes two coins of Abd' Allah Zobeir, of *Dárâbgird*, A.H. 60, and *Yezd*, A.H. 61. As the author acknowledges his inability to read the Pehlvi legends, I need not stop to contest his reproduction of عبد الله ابن زبیر امیر المومنین, the concluding title of which legend I have adverted to under Coin No. 5.—Journal Asiatique, Août, 1862, p. 185. See also a notice in the Zeitschrift, 1863, p. 39, on Subhi Bey's Coins.

Asiatique, 1865, p. 274). But the definite emplacement of the site requires further examination. Hamza asserts that the Arabic name is a mere translation of the old Persian name of *دراسفید*, "white gate," the true Persian name having been *نسایک* (Yákút, p. 127).

No. 5. OBERSE.

Left as above.

Right—*عبدولا امیر* = *Abduld Am'r-*

درا دین دوسر = *درا دین دوسر* or *درا دین دوسر* *i-Koreishán.*

Margin—*بسم الله* in Kufic.

REVERSE.

Left—*چهار پنجا* = *A.H. 54.*

Right—*د* = *د* and *دا* *i.e. Dárábgird.*

It must be confessed that the Pehlvi version of the Arabian tribal name very imperfectly reproduces the original sound of *قریش* *Koreish*, and hence most of our Numismatists prefer to render the associate title by the conventional *أمير المومنين* "Commander of the Faithful," or by some equally strained interpretation. I have consistently adhered to my first suggestion, in support of which I may refer to Hamza Isfaháni's list, "De ordine chronologico regum Coreischitarum" (*في سيرة توارخ ملوك قریش*), at the head of which he places Abu Bakr, with Omar, Usmán, Ali, and Moavía, in succeeding order (Hamza Ispahanensis, ed. Gottwaldt, St. Petersburg, 1844).

No. 6. OBERSE.

Left as usual.

Right—*اومر* = *Aumar-i-*

اوبیتالان = *Ubaiddullah.*

Margin—*الله احمد*.

REVERSE.

Left—*هشت شست* = *A.H. 68.*

Right—*دین* = *Baiza.*

No. 7. OBERSE.

Left as usual.

Right—The same as No. 5.

The margin has in addition the usual Kufic بسم الله
and the Pehlvi word دروددمرد

REVERSE.

Left—نمدم = هفتاد A.H. 70.

Right—نرم = هوت Khuzistán (Ahwáz).

No. 8. OBERSE.

Left as usual.

Right—اتنزا = نمدمد } Doubtful reading.
هشران = دسدمد

Margin—بسم الله ول الامر.

REVERSE.

Left—نمدمد = پنچ هفتاد A.H. 75.

Right—نمدمد = کرمان Kermán.

No. 9. OBERSE.

Left as usual.

Right—The same names as No. 8, in Pehlvi.

Margin—Similar legend in Kufic, with the addition of the
Pehlvi ان = ان.

REVERSE.

Left—نمدمد = دو هفتاد A.H. 72.

Right—نمدمد = کرمانان The province of Kermán.

No. 10. OBERSE.

Left as usual.

Right—نمدمد = حارث Hārith bin

عبدولان Abdullah.

Margin—بسم الله محمد رسول الله.

REVERSE.

Left— = چهر هفتاد A.H. 74.

Right— = Baiza.

No. 11. OVERSE.

Left as usual.

Right— = میخاف *Musdb-*

= زوفیران *i-Zobeir.*

Margin— بسم الله [بفدوی].

REVERSE.

To the left— = دو هفتاد A.H. 72.

= کرمانسی . . . Kirmánsi . . .

No. 12. OVERSE.

To the left—Monogram = ام .

= افرون .

To the right, in *Kufic*—الحجاج بن *Hijáj bin*

یوسف *Yusaf.*

Margin—بسم الله .

REVERSE.

Left— = نارهفتاد A.H. 79.

Right— = Baiza.

No. 13. Similar Coin.

OVERSE.

Margin, in *Kufic*, لله الحمد .

REVERSE.

Left— = سی هفتاد A.H. 73.

Right— Baiza.

No. 14. Similar Coin.

OVERSE.

Margin, in Kufic—بِسْمِ اللَّهِ لَا إِلَهَ إِلَّا اللَّهُ
مُحَمَّدٌ رَسُولُ اللَّهِ

REVERSE.

Left-هشت هفتاد = دو-م سوم دوم-Left-78. A.H.

Right— هوت = دادم *Ahwáz.*

No. 17. Copper Coin.

OVERSE.

Left—Traces of the Monogram $\text{ش} = \text{am}$

Right-افزون = *Afzūd.*

Margin, in *Kufic*—بسم الله.

REVERSE.

Right—Date, $\text{هشت شست} = \text{دو و دو و دو}$ A.H. 68.

Left—*Mint*, ۵۹ = ۱۵ Dárábgird.

افزود = ۱۴۱۵ - Margin

No. 18. Copper Coin.

OVERSE.

Left— اف = ف

افزود = Right-۱۴۱۵

Contre-marque, or hall mark, in Kufic--.

REVERSE.

Left—*Date*, illegible (68?).

Right—*Mint*, Dárábgird.

افزودن = $\text{Margin} - ۱۴۱۵$

Other dates on similar coins—Mr. Bland, A.H. 65;
British Museum, A.H. 67.

No. 19. Damascus, A.H. 79.

OBSERVE.

لااله الا

الله وحده

لا شريك له

REVERSE.

الله احد الله

الصمد لم يلدو

لم يولد ولم يكن

له كفوا احد

Deus est unus, Deus
est æternus, non genera-
vit neque generatus fuit,
neque ullus ipsi similis
uno.—Kurán, Surah xii.

Margin—

ضرب هذا الدرهم

بدمشق في سنة تسع

وسبعين

محمد رسول الله ارسله بالهدى ودين
الحق ليظرة على الدين كله ولو كره المشرك

Kurán, Surah ix. etc.—كون

No. 20. Copper Coin. Unique. A.H. 13*=130 odd.

Sassanian

Head.

لااله الا

الله وحده

لا شريك له

Margin— هذا الفس (فلوس) —

بسم ؟ — وثلاثين ومية

In appropriate conclusion to this specifically Kufic transition from the imitative Pehlvi series of the Sassanian Monarchs, I annex an outline of the leading Mint cities, whose title to coin money was recognized under the more settled occupancy of the Arabian administrators in Persia. This table is not only instructive in itself, in defining the geographical distribution of the recent conquests, but may prove of considerable value in testing, retrospectively, the ancient monetary centres, whose designations are so imperfectly preserved in the curtailed and transmutable forms of the old Pehlvi characters.

The subjoined list has been compiled by Col. Guthrie, and embraces the latest acquisitions of his own collection, those of the British Museum, and of Mr. Rogers, H.M. Consul at Cairo. The identification of the Mint cities has been revised by Senhor C. Camerino, a brother collector of coins, and an experienced decipherer of Arabic legends.

ابرشهر	Abrshahar, "cloud city" (Nishápúr)	92 to 93.
آذربایجان	Azerbaiján (Tabríz)	105.
افریقہ	Afríkiah (Africa)	103 „ 118.
الباب	Al Báb (Derbend)	118 „ 123.
المباركة	Al Mabáraka (Africa)	108 „ 119.
الاندلس	Al Andalus (Spain)	93 „ 113.
اردشیر خرة	Ardeshír Khurra (Khuzistán)	90 „ 98.
ارمینیه	Arminia	100 „ 107.
بلخ	Balkh	128.
بلخ البضا	Balkh al Baiza (Daghestán)	111.
البصرة	Al Basrah	80 „ 128.
بعلبك	B'albec (Syria).	
دبیل	Dabíl (Armenia)	84.
درجرد	Darabgird (Fárs)	92 „ 97.
دستوا	Destúa (Khuzistán)	96.
دمشق	Dimishk (Damascus)	79 „ 132.
جی	Jay (Irak Ajami)	90 „ 129.
جندی شاپور	Jandi Shápúr (Khuzistán)	80 „ 97.
فرات	Farát (Forát Maissan, the Persian Bahmanshír)	95.
همدان	Hamadán	90 „ 98.
حران	Hurán (Ispahán?).	
هراة	Hirát	90 „ 99.
حمص	Himṣṣ (Emesa)	116.
اصطخر	Iṣṭakhar (Persepolis)	90 „ 98.

جزيرة	Jezírah (Mesopotamia)		128 to 129.
كرمان	Kermán		90 „ 103.
الكوفة	Kúfah		79 „ 132.
ماهي	Máhi (Hamadán?)		70 „ 96.
مدينة السلام	Madínat es salám (Bághdád)		23.
ميسان	Maisán (Irák Arabi)		95 „ 96.
منادر	Manáder (Khuzistán)		90 „ 94.
مرو	Merv (Khorásán)		91 „ 110.
نهر تيرى	Nahr Tíra' (Khuzistán)		90 „ 97.
رامهرمز	Rámhormuz (Khuzistán)		80.
الري	Al Rai (later name, المحمدية)		84 „ 98.
ساپور	Sápúr (Fárs)		84 „ 98.
السامية	Alsámíat		131.
سرخس	Surakhs (Khorasán)		90 „ 99.
سرق	Sorraḡ (Khuzistán)		93 „ 99.
سوق الاهواز	Súḡ al Ahwáz (Khuzistán)		80 „ 98.
السوس	Al Sús (Khuzistán)		90 „ 94.
سيستان	Seistán		92 „ 97.
طبرية	Taberia (Tiberias).		
التيمره	Al Tiemarra (Ispahán)		90 „ 97.
واسط	Wasaṭ (Irák)		85 „ 131.

TABARISTÁN COINS.

I have purposely reserved for separate notice two coins (Nos. 15 and 16) of Mr. Steuart's plates, which symbolize an independent series, whose types retain their provincial individuality in obvious contrast to the leading characteristics of the ordinary Arabico-Khusrúí mintages, and which, in their monetary isolation, revive the ancient traditions and historic romances of the later Aryan conflicts with the ever-advancing Turanians, in their enforced refuge on the southern shores of the Caspian,—a locality singularly favoured by na-

ture, whether in regard to aspect, climate, soil, commercial facilities, or ultimate means of defence,—an oasis in Eastern lands, which in its many obvious gifts impressed alike the Macedonian conqueror, the classic historians, and the Arabs, who styled it the “White India.” In more modern times, its luxuriant forests obstructed the progress of the great Tímúr, who had to revert to the ethnic axes¹ for the passage of his hordes; and in later days, our own adventurous travellers recognized and rejoiced in the unaccustomed notes of its birds, and the sight of its richly variegated foliage backed by the open view of a northern sea.²

Having lately had occasion to examine the ancient geography of Hyrcania, with a view to determine the site of the capital of the Parthians at the outset of their national career,

¹ “I contrived to delineate the head of one (peasant), at the same time representing the manner in which many carry the *tabr* (تبر) or axe for cutting wood, and the form of this instrument. It is headed with iron, the wooden handle being generally about three feet long. Here I may take an opportunity of remarking, that throughout most parts of this province nearly all the men, several women, and even little children, carried *tabrs* of this kind, either in their hands, like walking sticks, or resting by the curve on their shoulders.”—Ouseley, iii. 269.

Pictet, “*Les Origines Indo-Européennes*” (1859), positively revels in the multitude of Aryan terms for this aboriginal implement, from which the province of Tabaristán took its name, and which he pushes up to the dubious sounds of *tak-tok*, “the voice of the axe”; and though in no wise repudiating the heavy stone period, which might have produced a less definite sound, yet still insisting upon the root *tak*, *taksh*, but admitting very broad latitudes when he comes to the Persian *tabar*, *tavar*, *teper*, *topor*, *dabar*, and *Tabidán*, *Tapak*, *Taprah*, *Tapanchah*, down to *talavári*, *talátr*, and some further undeveloped coincidences that may suggest themselves to the English reader.

² Sir T. Herbert, “Some Yeares Travaile in Africa and Asia,” Lond., 1634–1677; Jonas Hanway, 2 vols., London, 1754; Forster’s *Journey to the Caspian* (1798), 2 vols. 8vo., London, 1808; Sir W. Ouseley (1812), *Travels in Persia*, 3 vols. 4to., London, 1823; Baillie Fraser (1821), *Travels in Khorasán and on the Shores of the Caspian*, 2 vols. 4to., 1825–6 (see also his paper on Northern Khorasán, *Journ. Royal Geog. Society*, viii. p. 308, London); Capt. Arthur Conolly, *Journey to the North of India*, 2 vols. 8vo., London, 1834; Major D’Arcy Todd (1836), *Journ. Royal Geog. Society*, viii. p. 101; Mr. W. T. Thomson (1838), *Account of the Pass from Amol to the Westward, under Mount Damavend, to Rudehan* (with a map), *Journ. Royal Geog. Society*, viii. p. 109. See also, incidentally, Chardin, *Voyages*, Amst. 1725, iii. p. 7, etc.; J. Morier, “*Journey through Persia*” (1808), London, 1812, p. 287; J. M. Kinneir, “*Geographical Memoir on the Persian Empire*,” London, 1813; Sir J. Malcolm’s *History of Persia*, London, 1815; *Viaggi di Pietro della Valle*, Lettera IV. Da Ferhabad e da Cazuin, 1618 A.D.; “*Master Anthony Jenkinson*” (1561 A.D.), Hakluyt’s *Voyages*, i. pp. 386, 395; M. N. de Khanikoff’s most conscientious recognition of other men’s labours and exact definition of his own observations on the passes and later geography of this locality, in his “*Asie Centrale*,” Paris, 1861. Finally, M. N. de Khanikoff has given a *résumé* of the results of M. Dorn’s mission to Mazanderán in 1860 in the *Journal Asiatique*, 1862, p. 214.

I have incidentally met with some curious information bearing upon the general topography of the provinces of Gurgán and Tabaristán, which I may advantageously recapitulate on this occasion. The leading classical evidence, which is reproduced where needful, has for long past been embodied in print or otherwise fully accessible and open to modern criticism, with the single exception of Ptolemy's comprehensive geography of these Eastern lands, which has hitherto been strangely neglected.¹ But, as a general rule, the statements of the Greek and Latin authorities have been tested by European commentators under the single issue of the internal limited and often conflicting testimony of the fragments which have come down to us. In these later days, we have for some time been in possession of very material aid in the more exact definitions and illustrations of the earlier Arabian geographers, whose published texts have recently been largely augmented and improved by our able and indefatigable continental coadjutors; and, finally, the travels of our own countrymen in these unfrequented regions, extending over more than two centuries, have furnished in anticipation a collection of data for the elucidation of much that was previously obscure and unintelligible in the primitive condition of the people who lived upon one of the most important pathways between the old and the new divisions of the Aryan families.

In entering upon the provincial definitions, we must start from the central point of the earliest capital noticed by the Greek writers. I am disposed to revert, in defiance of all new ideas and combinations, to D'Anville's natural identification of Arrian's *Zadracarta*² with the town of *Sári*, which for so many ages irregularly contested with Amol the distinction of the title of the metropolitan city. The *Zadrá* sufficiently accords with a probably faulty transcription of the imperfectly

¹ There seems to have been a very prevalent idea that Hudson had reproduced the whole of Ptolemy's work. He has done so in regard to the text of certain localities, but for the bulk of the original he avowedly confines himself to very meagre extracts.

² Ταῦτα δὲ διαπραξάμενος ἤγεν ὡς ἐπὶ Ζαδράκαρτα, τὴν μεγίστην πόλιν τῆς Ὑρκανίας, ἵνα καὶ τὰ βασίλεια τοῖς Ὑρκανίοις ᾖν. — Arrian, Exp. Alex. iii. c. xxv.

traced native name; and the import and application of *Καρτα* is more distinctly affirmed in Strabo's use of that section of the old name in its isolated form,¹—a conventional term, the meaning of which so peculiarly associated itself with the class of fortification existing at Sári at the period of the siege by Antiochus the Great (*circa* B.C. 212), when Polybius describes the defences, with but slight modifications, as essential counter-parts of the triple enceinte, which may still be recognized and reconstructed amid the ruins of the Persian Dárábgird.² But the latter author's transcription of the introductory name as Σύρυγξ, brings us back naturally to the test of the ancient Aryan derivation of the term, which almost forces itself to the front in सारङ्ग, "Sáringa," a word of extended application,³ but which, in the present instance, may be allowed to divide its claims between a Peacock, or the more probable Herons, who may have been supposed to rejoice in the rice grounds of the open country, or to have affected the shallows of the three ditches of the walled city.

Availing ourselves of the materials exhibited in consecutive order in the following pages, we can now follow the victorious advance of the first Arsaces, with his extruded *Parni* Dahæ,⁴ from his rude stronghold, called after his own name, in the gorges of the mountains east of Gurgán, to his occupation of

¹ Ἡ δ' Ἰρκανία σφόδρα εὐδαίμων καὶ πολλή καὶ τὸ πλέον πεδιάς πόλεσι τε ἀξιολόγοις διεκλιμμένη, ὧν ἐστὶ Ταλαβρόκη καὶ Σαμαριανὴ καὶ Κάρτα καὶ τὸ βασιλεῖον Τάπη, ὅ φασι μικρὸν ὑπὲρ τῆς θαλάττης ἰδρυμένον διέχειν τῶν Κασπίων πυλῶν σταδίου χιλίου τετρακοσίου.—Strabo, xi. c. vii. § 2.

² Flandin, *La Perse*, plate 31, furnishes a plan and elevation of this ancient fortress, and traces—A. The central rock around which the defences were formed. B. Première enceinte. D. Restes d'un mur circulaire, formant la deuxième enceinte. E. Troisième enceinte. G. Fossé. The place had eight gates at equidistant points.

³ Wilson gives a very extended range of meanings to the combined word, but the preferable interpretation in this case would certainly seem to belong of right to the Herons, who reckon among their families a special class of "Ardea Sarunga."—Carey.

⁴ Τοὺς δ' ὅν ἐν ἀριστερᾷ εἰσπλέοντι τὸ Κάσπιον πέλαγος παροικούντας νομάδας Δάας οἱ νῦν προσαγορεύουσι τοὺς ἐπονομαζομένους Πάρνους· εἰτ' ἔρημος πρόκειται μετὰ, καὶ ἐφεξῆς ἡ Ἰρκανία.—Strabo, xi. c. vii. 1.

See also xi. c. viii. 2; c. ix. 2. ἔπειτ' Ἀρσάκης ἀνὴρ Σκύθης τῶν Δαῶν τινὰς ἔχων τοὺς Πάρνους καλουμένους νομάδας παροικούντας τὸν Ὠχον, ἐπῆλθεν ἐπὶ τὴν Παρθυαλίαν καὶ ἐκράτησεν αὐτῆς; and xi. c. ix. 3.

"Parthi, penes quos velut divisione orbis cum Romanis facta nunc orientis imperium est, Scytharum exules fuere. Hoc etiam ipsorum vocabulo manifestatur: nam Scythico sermone exules parthi dicuntur."—Justin, xli. i.

the fertile slopes of Tabaristán;¹ from whence he was to go forth, through the sheltering passes of the Pylæ Caspii, to his onward raids upon the dominions of the Seleucidæ, and the eventual foundation of an empire which should contest supremacy with the successors of the Cæsars. We need not trace in detail the minor stages of this initiative march, the localities themselves remain unchanged, in some cases under other denominations, as occupiers of conflicting nationalities superimposed their own special nomenclatures.

One instructive lesson we gain, by the way, in following the action of the immutable law of pressure downwards and westwards, and the enforced migration of tribes incident thereto, is the discovery that the ethnic capital of *Hyrcania*, which gave its "wolf's" name² to the old kingdom itself, should have been left so far behind, in the redistribution of boundaries, that its primitive site was not even included in the new Hyrcania of Ptolemy's period, but remained with its archaic designation under a slightly modified form to constitute anew the nucleus, and rehabilitate on its own proper ground the veritable province of *Jurján*, under the Arabs and their successors.

If I am right in supposing that the subjoined extracts sufficiently explain themselves in the geographical sense, it remains for me only to encounter a hitherto confessed difficulty, in fixing the site of the Parthian *Τάμβραξ* or *Ταλαβρόκη*. This task, under fairly limited concessions, presents but few difficulties. We find the army of Antiochus the Great entering Hyrcania from a vague direction towards the south, marching in irregular detachments, and, finally, appearing before an extensive open town designated by the name of Tambrax, where there was a royal palace. Antiochus then learnt that the bulk of the troops of Arsaces and many of the

¹ "Erat eo tempore Arsaces, vir sicut incertæ originis, ita virtutis expertæ. Hic solitus latrociniiis et rapto vivere accepta opinione Seleucum a Gallis in Asia victum, solutus regis metu, cum prædonum manu Parthos ingressus præfectum eorum Andragoran oppressit sublatoque eo imperium gentis invasit. Non magno deinde post tempore Hyrcanorum quoque regnum occupavit, atque ita duarum civitatum imperio præditum grandem exercitum parat metu Seleuci et Theodoti, Bactrianorum regis."—Justin, xli. 4.

² گرت. Zend, *vehrka*. S. वृक.

people of the country had taken refuge in Sári ("Syrinx"), a fortified city situated but a short distance off, and in a manner regarded as the capital of Hyrcania. There are no positive indications as to whether we ought to seek for the site of this position to the eastward or to the westward of the proximate asylum; but I should, *primâ facie*, infer the latter, as the advance of the Seleucidan army, though starting from Hecatompylos, seems to have penetrated Hyrcania by the pass of Fîrúzkoh, and to have found itself in the ordinary course impinging upon a wealthy city somewhere between Amol and Sári, at a point not far removed from the modern Barfarosh. A locality which must always have presented natural advantages, calculated to recommend it for the seat of a commercial capital,¹ a title it fully regained in later days by its own unaided merits, altogether in default of royal patronage; as we find Jonas Hanway, in 1743, designating it as "the capital of the province"; and Forster, in 1784, equally recognizing it without question as "the capital." We must remember that between the time of Alexander's appearance in these parts and the Parthian occupation there had been a change in the manners and customs of the dominant race; and whereas the Iranian dwellers in cities had established their regal domicile within the entrenchments of a strong place, the nomads of the north, on the other hand, kept their camps in the open. City walls would have ill suited a race who were wont, in the fullest sense of the term, to live on horseback.²

They possibly built a palace for their king, and distributed

¹ The commercial centre of Hyrcania, on the proximate modern site, is thus described by B. Fraser:—"The rich and extensive plain in which Barfarosh is placed, affording very considerable supplies of those articles produced in Mazanderân, constitutes this spot a mart for those commodities; besides which, it is centrally placed in regard to Kasvin, Tehrân, Shâhrood, and the interior of Persia (being near two principal passes through the Elburz), as well as to Resht, the capital of Ghilân, also a place of very extensive trade. . . . The whole town is built in and surrounded by a forest of high trees; and none of the streets being straight, there is no one spot from whence a spectator can see to any distance. The buildings are indeed so screened and separated by foliage, that except when passing through the Bazars a stranger would never suspect that he was in the midst of a populous city."—B. Fraser, *Caspian*, p. 83.

² *Equis omni tempore vectantur: illis bella, illis convivia, illis publica ac privati officia obeunt; super illos ire, consistere, mercari, colloqui.*—Justin, xli. 3.

their model light horse amid suitable pastures, more or less closely around the fixed rallying point. In such a state of society their dwelling places necessarily left but little sign or record behind them beyond the ashes of the camp fires or the impress of the horses' hoofs, and we might seek in vain for any permanent testimony of their passage through far more settled lands. I am, however, content to leave the exact position of Tambrax only approximately determined, because I am under the impression that the name itself simply expresses the Royal head-quarters, or the capital for the time being, in Hyrcania. The word, in effect, seems to constitute a quaintly-devised Greek form of the abbreviated name of the province of *Tabaristán*, consistently corresponding with the undefined *Ἑρκανία μητρόπολις* of Ptolemy, the Hyrcana of Ammianus Marcellinus,¹ and thus explaining the retention of the previous designation of *Ταλαβρόκη* (a variant of Tambrax), in Strabo's text, where the easily-moved capital is stated to have been established [temporarily] at *Τάπη*. The custom of indicating the province at large, in general terms, without necessarily confining the seat of the ruling power to any given city within its boundaries, is seen to have survived and descended to the later coinage, where we meet with nothing in the entire Pehlvi series but the generic expression of Tabaristán.

It is pleasant, however, amid the coarse savagery of these northern hordes, to find them perpetuating, *ex voto*, the name of their founder, *Arsaces*, so that it became a more enduring title than many others of higher and more established pretensions.² Singular to say, under apparently identical motives, they retained the typical monogram of *Tambrax* **Α**,—which has suggested the present inquiry—as one of their

¹ "Hic amnes duo pervulgati sunt nominis, Oxus et Maxera, quos urgente inedia superantes natatu aliquoties tigres, improvisæ finitima populantur. Habent etiam civitates inter minora municipia validas, duas quidem maritimas, Socunda et Saramanna: mediterraneas alias, Azmornam (var. Amorna) et Solen, et his nobiliorem Hyrcanam."—Ammian Marcell., Ed. Wagner, xxiii. 6, § 52.

² Justin, xli. 5. Sic Arsaces quæsito simul constitutoque regno non minus memorabilis Parthis quam Persis Cyrus, Macedonibus Alexander, Romanis Romulus, matura senectute decedit, ejus memoriæ hunc honorem Parthi tribuerunt, ut omnes exinde reges suos Arsacis nomine nuncupent.

dynastic symbols. It appears and re-appears in the later coinages, as a nearly immutable constituent of the national heraldic device; wherever the rough camp coining machinery penetrated with the oft-times ephemeral hold of the conquerors, this ancient memorial of the second abiding place of the Arsacidæ, the territorial emblem of the first stage between Caterans and Kings, held its position: and, in the end, only fades out of Numismatic ken, when the more definite strung Bow, the pride of the ancient Parthians, is merged amid the chaotic lines of die-engravers, who servilely copied a device whose import they did not seek to comprehend.

I have now to present in detail the data adverted to in previous pages regarding the geographical mutations of the primeval Tabaristán, the classic Hyrcania, which in modern times is known by the name of "Mázanderán." These contributions to the previous history of the land range themselves under the following heads:—

- I. The outline itinerary of Isidore of Charax.
- II. The theoretical geographical definitions of Ptolemy.
- III. The practical tests of the Arabian post distances.
- IV. The illustrative observations of modern travellers.

EXTRACT I. ISIDORE OF CHARAX'S UPWARD ROUTE.

After "*Κομισσηνή*."

10. *Ἐντεῦθεν Ἑρκανία, σχοῖνοι ξ', ἐν ἧ κῶμαι ιά, ἐν αἷς σταθμοί.*

11. *Ἐντεῦθεν Ἀστανηή (var. Αὔσταβηνή), σχοῖνοι ξ', ἐν ἧ κῶμαι ιβ', ἐν αἷς σταθμοί· πόλις δὲ Ἀσαάκ, ἐν ἧ Ἀρσάκης πρῶτος βασιλεὺς ἀπεδείχθη· καὶ φυλάττεται ἐνταῦθα πῦρ ἀθάνατον.*

12. *Ἐντεῦθεν Παρθυνηή, σχοῖνοι κέ, ἧς αὐλῶν Παρθαύνισα ἡ πόλις ἀπὸ σχολίων σ'· ἔνθα βασιλικάι ταφαί· "Ἕλληνες δὲ Νίσαιαν λέγουσιν.—Isidore of Charax. Geog. Gr. Minores, Paris, edit. Dr. C. Muller, p. 251. See also Hudson.*

This itinerary, of course, has no concern with the geographical definitions of the later Hyrcania; but omitting the progressive stages eastward, from Rai, along the southern open ground upwards and through the passes of Asterabad,

it illustrates the onward section of the route into the hitherto obscure home of Arsaces in the passes of the mountains, so guarded from the south, but so freely open to the inroads of the northern hordes, and in continuation completes the distance to Nishapur.

EXTRACT II. CLAUDIUS PTOLEMY'S GEOGRAPHICAL LIST OF THE TOWNS OF HYRCANIA.

1. *Βαράγγη* 99° 0'—42° 0'.
2. *Ἀδρανθα* 98° 30'—41° 30'.
3. *Κασάπη* 99° 30'—40° 30'.
4. *Ἀβαρβίνα* 97° 0'—40° 10'.
5. *Σόρβα* 98° 0'—40° 30'.
6. *Σινάκα* 100° 0'—39° 40'.
7. *Ἀμαροῦσα* 96° 0'—39° 55'.
8. *Ὑρκανία μητρόπολις* 98° 50'—40° 0'.
9. *Σάκη (ἢ Σάλη)* 94° 15'—39° 30'.
10. *Ἀσμουρνα* 97° 30'—39° 30'.
11. *Μαίσοκα ἢ Μαύσοκα* 99° 0'—39° 30'.
12. *καὶ νῆσος κατ' αὐτὴν πελαγία
καλουμένη Τάλκα* 95° 0'—42° 0'.

13. Together with the more important sea-board town of *Σαραμάννη*, whose position is defined twice over in the Greek text as 94° 15'—40° 30'; the repetition seemingly aiming at the exact establishment of a fixed basis for other coast measurements, whose localities were less clearly marked.¹

The rivers of Hyrcania are specified as the *Μαξήρα* (source, 98° 0'—38° 20'; mouth, 97° 20'—41° 30'); the *Σωκάνδα* (*Νωκάνδα*) (mouth, 97° 20'—42° 0'); and the *Οξυς* (*Ὠξου ποταμοῦ ἐκβολαί*), (mouth, 100° 0'—43° 5').²

¹ To show the licence permitted in the transcription into Greek of local Persian names, I annex a later reproduction of the native nomenclature. Excerpta ex Georgii Medici Chrysococeæ (about the middle of the fourteenth century A.D.). ΤΑΜΠΑΡΙΣΤΑΝ. Αμοῦδ, 77° 10'—36° 35'; Σαρία, 73° 0'—36° 15'; Γαρτζά, 89° 0'—36° 40'; Γόρ (or Σόρ), 89° 0'—33° 0'.—ΚΟΡΚΑΝ. Ιστορβὰ, 79° 20'—37° 5'; Κοργαν, 82° 10'—38° 10'. Then Ντελάμ, i.e. Delam.—Hudson's Geog. iii. p. 5.

² Pliny's list is as follows:—A Caspiis ad orientem versus regio est, Apavortene dicta, et in ea fertilitatis inclytæ locus Dareium. Mox gentes Papyri, Anariacæ, Stauri, Hyrcanii, a quorum littoribus idem mare Hyrcanium vocari incipit, a flumine Sideri. Citra id amnes Maxeras, Stratos, omnia ex Caucasio. Sequitur regio Margiane, etc.—Pliny, vi. xviii.

I have reproduced in the above abstract Ptolemy's list of towns, with the equivalents of *his* latitudes and longitudes reduced into English figures—almost without comment—as I am not about to enter into a disquisition on his system of geography, or otherwise called upon to reconcile the conflicting results of his chaotic first attempt at the scientific reduction of map projections. His longitudes are, of course, utterly worthless, and his latitudes to be received with extreme caution.¹ Still, there is in the Greek text a curious vitality and rehabilitation, under due allowance for transposition of speech, of the Eastern world as existing in his day. Nothing could be more striking than the number of Aryan names of places that we can recognize and restore amid the seemingly unintelligible lists of the Western compiler. But these are temptations which I may safely abandon to M. Pictet, and confine myself to the narrow limits of the Royal cities. The once established capital *Tambrax* I have already sufficiently adverted to, but those who are indisposed to see so violent a transformation from the generic designation of the "land of Axes" must take into account the facility of the Pehlvi transmutation of پ *p*, ب *b*, and و *v*. The recognized Greek representation of *b* by μ π , and the Scytho-Hellenic and other local versions of *m* *b*, illustrated in the vague pro-

¹ Colonel Yule has a curious note upon what he conceives to be Ptolemy's system of map-making. "It is evident that he first drew his maps embodying all the information that he had procured, however vague and rough it might be. From these maps he then deduced his tables of latitudes and longitudes, and his systematic topography. The result is that everything assumes an appearance of exact definition; and indications on the map which meant no more than 'somewhere hereabouts is said to be such and such a country,' become translated into a precision fit for an Act of Parliament."—*Cathay and the Way Thither*. Hakluyt Soc. Publication, p. cli. On the other hand, we must hear what one of the most precise geographers of the present day has to say in favour of the rough system:—"Nous profitons de cette occasion pour faire observer que, tout extraordinaire que puisse paraître l'assertion que les longitudes fournies par une simple opération topographique puissent surpasser en exactitude celles qu'on obtient par des méthodes astronomiques, cette assertion n'en est pas moins vraie si l'observateur n'est pas un astronome consommé, et s'il n'a pas à sa disposition tous les instruments de précision indispensables pour obtenir des résultats d'une grande exactitude."—M. de Khanikoff, *Mem.*, p. 30.

nunciation of Dambavend, as well as the elsewhere fatal defect of the total absence from the adapted Greek alphabet of any signs competent to reproduce the archaic sounds of *ch* and *j*. The terminal *k* need not any more disturb this attribution, as the final Pehlvi 𐭪 *k* is admitted to have had the force of a mere *s* *h*: even if more daring identifications might not point to the interchange of the final, as in Irák اراق and Irán اران (J. Müller, Journ. Asiatique, p. 15), which would reduce the ethnic term into a mere plural of *Axes* تبران, in consistent concert with the *Wolves* گرگان of Hyrcania, or other simple names of places derived from nature's teaching. It remains for me merely to say that I concur in Ouseley's somewhat hesitating identification of Kara Tapah with Ptolemy's Τάλκα,¹ which is satisfactorily corrected in Strabo's Ταπη. Αμαρουσα, as *Amol*, can scarcely be contested; and without

¹ "He escorted us to his own village, called from its situation on a tumular piece of ground, *Kard-Tapeh* or *Tepeh* (قرانه), the 'Black hillock,' distant from Ashraf about seven miles, and in the midst of an extensive level tract, of which the surface was now covered with water and moist clay to the depth of ten or twelve inches, but in summer formed a rich and very fertile plain. Rising above this, the *Tapeh* or 'mount' appeared like an island barely large enough to contain the houses that stood upon it; all light structures of wood, reeds and straw, except one *emdrat*, a mason-work edifice (of brick), which had been erected for the king's accommodation. . . . I had entertained some hopes of being able, in this *Tapeh*, to ascertain the position of Tapè, which Strabo describes as the principal or royal city of Hyrkania, advantageously situate within a little distance of the sea."—iii. 275.

Two difficulties presented themselves, however, to the traveller's mind: "the Turkish name," which he did not regard as an insuperable objection, and the absence of ruins, which he rightly met by the remark that "in the time of Strabo, the houses of this country were most probably constructed of very perishable materials, as in the tenth century after, when Ibn Haukal travelled, and as they are now in the nineteenth."

We have seen how great a latitude is to be allowed in the transcription of native names; but the *Kala Tapah* is not necessarily Turkish or Scythian: the interchange of *l* and *r* was never more free than in Ptolemy's list, where we find λ used in *Sári* and ρ in *Amol*. काल is very good Aryan for black, and تپه is freely admitted into Persian Dictionaries. The Hindustani equivalents are تپه and تپري. And as regards the possible Palace on the hillock, we must remember that among these nomad tribes the rising ground, or small mounds, as the case might be, were always selected as the natural head-quarters of the chief.

laying any undue emphasis upon the possible *Ἀσμουρνα* and the resulting Ashraf, we may safely rectify the *Malroka* by the Persian مارسک, which brings us back to *the snakes*, whom ancients and moderns alike associated with the locality.

The rivers in their erratic courses, it must be confessed, present greater difficulties of identification; but there is one impression that forces itself to the front, that the *Σοκάνδα* can only have been some stream more or less associated with the site of the modern designation of *Nokandah*; the denomination نوکندۀ implies a variation of the course of a river, either by a convulsion of nature or a diversion by human efforts from an old channel; the name¹ could scarcely apply in these lands of timber towns to new foundations; and one of the most curious points in Ptolemy's version is that the *Σοκάνδα* river itself must clearly have joined the *Μαξήρα* before the latter reached the sea.² Indeed it would "almost seem as if Ptolemy's informants, whatever names they applied to the two streams, referred merely to *the two* most important rivers of the country, which seem to have preserved their flow to later days in the modern *Ain* and *Sári*, forming a natural junction below the town of the latter name."³ This, at least, is what we should be justified in assuming on the authority of the prominently marked courses of these rivers in M. Kinneir's map.

¹ Some might claim to read the name as نوکندۀ, but I prefer to follow the Greek, in making it one combined word. More especially, as there is authority for the term کندۀ, which must necessarily refer to ancient usage, in the typical "trench" of King Firúz, who is reputed to have founded Amol, and whose "big cutting" still retains the name of فیروزکندۀ.—Ouseley, iii. p. 310.

² I am quite aware that Sir H. Rawlinson advocates the identity of the *Sokanda* with the "Ab-oskún of the Arabs." آبسکون (*aqua tranquila*.—Vullers, p. 3.)

³ Quintus Curtius also makes his two strangely-designated rivers of Hyrcania join each other (vi. iv. 7), and the almost fabled Zioberus, with its underground current, may have something in common with the newly excavated "*Nokandah*."

EXTRACT III. ROUTE FROM TABARISTÁN TO JÚRJÁN. From Istakhri, Goeje's edit., p. 216 (improved from other sources).

ANOTHER ROUTE.

1. آمول Amol.		1. Amol.
2. ميلة Milah	} = 1 Marḥalat. ¹	2. مامطير Mámátír.
3. برجى Burji		
4. سارية Sáriah	„ 1 „	3. Sáriah.
5. مارسك Márasak	„ 1 „	
6. ابادان Abádán	„ 1 „	
7. طميسة Tamísah	„ 1 „	
8. أستراباد Astarábád	„ 1 „	
9. رباطحفص Ribát i Ḥafṣ	„ 1 „	
10. جرجان Júrján . . .	1 „	
11. دینارزاری Dínárzári . . .	1 „	
12. ارموتلي Armútali . . .	1 „	
13. اشك Ashak . . .	1 „	
14. سمنقان Samankán	„ 1 „	
15. أسفراآین Asfaraáin (old name مهرجان)	1 Marḥalat.	

The other cities of Tabaristán off the main route are given as—1. ناتل ; 2. سالوس ; 3. کلار ; 4. الرویان ; 5. عين الهمم .

Dr. A. Sprenger's exhaustive work, *Die Post- und Reiserouten des Orients*, gives the route from the Atwál, and Albírúni in the same order, as "Amol, Mámatyr, Sáriya."—Plate vi.

Ouseley's *Oriental Geography*, which follows irregularly the real Istakhri, reproduces in general terms the above routes. I have accepted his correction (pp. 175, 182) for No. 5, which has been greatly disfigured by other copyists. See list of variants quoted by M. De Goeje, p. 216, and Sprenger, pp. 52-3.

The excellent edition of Yakút's *Persian Geography* by M. Barbier de Meynard, aided by B. Fraser's personal narrative,

¹ Marḥalat (day's journey).

enables me to fill in satisfactorily the locality No. 14, which is grievously distorted in all the leading authorities. On the same principle, I should not have dared to correct Istakhri's *اَجَر*, etc., No. 13, into Isidore's 'Aṣaāk (*Arsak*), had not Fraser given us the true form in Ribat-i-Aishk, p. 453; and to the same inquisitive observer I owe the rehabilitation of the lost orthography of No. 12, which seems to have puzzled alike the Arabico-Persian Geographers and their modern annotators.

No. 7. The site of the wall against the Túrks, described by B. Fraser (*infra*, p. 47), is prominently noticed by Albírúni, under a disfigured name, but in the correct locality, as the well-known old boundary between "Tabaristán and Júrján." (Sprenger's Map, No. 6.)

The preceding Arabic list of the names of places supplies a far safer basis for the identification of obsolete native designations than the crudely transmuted and foreign Greek version. 1. Amol may be doubtfully associated with the meaning of *آمل* "clean, pure."¹ 2. *ميلة* is given in the Dictionaries as "campus," and the ground around the site still consistently remains open to this day. 3. *برجي* seems to refer to some *bastioned* or fortified site, of which there were many after their degrees in these localities, even if the name might not claim to represent a small offshoot of the grand *البرج* Elburj itself, which the Alexandrian geographer accepted as *Bapdryn*. 4. *Sáriah* I have already attempted to associate with its domestic Herons. 5. *مارسك* obviously suggests a development of *مار*, *Már*, the ancient and *locally* cherished name for the classic Iránian Serpent. 6. *Abádán*, "abodes," in the plural form, is said to have an intensive sense, as prosperity, or flourishing, in the agricultural or resident understanding of the term. 7. The Tamisah of the Sháh Námah, which the Persians call *نميسه* opens a wider range

¹ Ouseley, who delighted in ancient identifications, and who had so many opportunities of tracing the old names *in situ*, quotes from the Tārikh-i Tabaristán a passage to the effect that "A'mul (or Amal) originally signified in the Dilami dialect the same as the Pehlvi *hush* "death, destruction," *واھوش وامل*

iii. p. 310.

of conjecture. 8. *Astarábád*, which was supposed to derive its name from the "stars," has had of late to come down to a much more mundane designation, in the form of the "abode of mules." *Yakút* is distinct in his assertion of *أستر اسم رجل*, and the Sanskrit correspondent readily declares itself in *अश्वतर* "mulus," while all natural probabilities point to the advantages of the locality for such stud purposes, more especially in the choice of Nisean horses, to improve the home-breed of that indispensable cross of the patient and sure-footed donkey, for mountain traffic. 9. *Ribát i Hafş*, the Arabic designation of the next station, probably merely reproduces the native name for the "hyæna," who may well have disputed the gorges of the mountains with the "wolves" who gave their name to (10) *Gurgán* itself. 11. The *Dinárzári* of the next stage seems to be a modern combination. 12. *Armútalí*, the orthography preserved by B. Fraser, is given with so much hesitation by that author, that it will be wise to avoid speculation upon its derivation. 13. *Ashak* is fixed alike by the Greek itinerary, and the testimony of our modern travellers, as the fountain-head of the greatness of Arsaces. 14. The name of *Samankán* is of doubtful origin, but the old designation of (15) *Asfaraáin* is good Aryan in the form of *Míhr-i-ján*, "sun of life," while the new name is asserted, on the authority of Baihakí, to have been derived from the compound "shield-bearers." *Asfar* (اسفر) "a buckler," *Ain*, "law, usage."¹ (*Πελασσιῶς*.)

EXTRACT IV. *RÉSUMÉ* OF B. FRASER'S ROUTE.

Starting from the extreme point eastward, with which we are at present concerned, i.e. "*Boojnoord* (36° 12' 20")," the itinerary proceeds, "fifteen miles to *Sarewán*, *Killah Khán* (*Semulghán*).² The dangerous part of the journey commences immediately on quitting this place: there is a tract

¹ Barbier de Meynard, p. 35.

² "I believe this is the place of Semulghán, which gives its name to the valley. The Fort receives its appellation from being the residence of the Khán."—B. Fraser, p. 591.

of more than ninety miles totally desert, through which various passes lead, by which the Tookománs ascend from their plains below, and carry their depredations into the northern provinces of Persia." *Dehneh Derkesh* (a narrow and rugged pass in the hills that divide the great Elburg range from the smaller mountains and valleys on the north), *Chummun-i-Bansh Killah*, (a plain of considerable extent, which is entirely desert, and sloping towards the west, opens into a still larger one, called, I think, the plain of *Armootullee*. Desert as it now is, there are scattered throughout it many burying-grounds, whose tombstones vouched in a dreary way for the existence of men long since passed away), *Ribat-i-Aishk* ("a ruined caravanserai situated on the slope of the right hand hills, a dismal and dangerous place"), *Gurgán* river, *Gurgán* (camp), *Pisseruc*¹ (near which is a large square inclosure, which had once been the stronghold of a tribe of Eels, called Gereilee, with numerous *Tuppehs* of former villages. The ancient city of *Gurgán* (2 farasangs distant; Gumbuj-i-Káús described p. 613). *Finderisk*, *Peechuck-Muhuleh* (chief centre of a baluk). *A'k Killah*, "the white fortress, numerous hillocks and mounds, certainly the remains of former forts and villages. A'k Killah itself appeared to have been an extensive square stronghold. *Asterabad*,² to *Khurdmuhuleh* (23 miles), to *Nokundeh*³ (14 miles), to *Ashruff*

¹ This interesting specimen of a true forest town is thus further described. "Instead of dull mud walls and flat mud roofs corresponding exactly with the colour of the ground, to which we had been so long accustomed, we found here everything made of wood. . . . The houses were constructed of posts, wattled and plastered with mud. . . . Instead of a wall to protect the place, a deep ditch had been dug . . . a hedge of reeds and creeping thorns, etc. . . . on the inside served to render the defence more perfect, and it was indeed impenetrable to cavalry. The gates and portals were all constructed of wood; a wooden bridge was thrown across the ditch; the very domestic implements, instead of earthenware or metal, were here made of wood."—B. Fraser, p. 610.

² "The appearance of Astrabad differs from that of cities in the southern and more elevated provinces of Persia, as much as that of the respective surrounding countries from each other. The forest or thicket approach on every side to the very ditch; the houses are constructed chiefly of wood. There are no buildings, public or private, deserving of particular notice at Astrabad. The revenue derived from this little province does not exceed 12,000 tománs, or about £7000 sterling."

³ A scattered village in the forest. The houses, built "of frames of rudely squared wood, with uprights and beams, raised upon blocks 3 feet above the ground, with a straw thatch."

(26 miles). At six miles from *Nokundeh* is seen "the ruined wall formerly of considerable strength, and which once extended from the face of the hills to the sea, the boundary between Astrabad and Mazanderan."

(Near *Ashruff*, the ruins of Sufeeábád and the large reservoir in the hills.) Kara-tappah, 7 miles N., also described.

From *Ashruff* to Sar-i-púl-i-Nica (17 miles), open country, fine full stream, etc.

To *Sári*, 18 miles; one mile east the river *Tedjen*, stream broad and strong (*Furrahabad*, noticed) to *Barfarosh*, 30 miles, and onwards to AMOL (22).¹

In addition to the description of the two coins of Tabaristán figured in the accompanying plates, I have endeavoured to complete the Pehlvi and Pehlvi-Kufic series of the *Ispehbeds* from all available sources.² The time at my disposal does not admit of my entering upon the difficult questions of conflicting renderings of the Pehlvi legends, or the complications incident to the use of a double system of dating—the one following the ordinary era of the Hijrah, the other depending

¹ Sir A. Burnes's route was over much of the same ground. After Boojnoord he mentions *Kila Khán*, in the district of Simulgán; *Shahbdz* village (38 miles), the source of the *Gurgán* river, the *Atruck* river, the *Gumbuj-i-Kaus* at Gurgán, *Asterabad*, *Nokandah*, etc. He further notices the recession of the southern waters of the Caspian (ii. 121), and adds, "during these twelve years they have retired about 300 yards, of which I had ocular proof." (See also M. de Khanikoff *Mémoire*, p. 39). *Sári* was avoided on account of the plague, but *Barfarosh* and its port on the Caspian are described (123), as well as the pass of Gudook and *Fírúz Koh*, the real *Pylæ Caspiæ* ("Alexander's route"), the greatest of the passes into Mazanderán, p. 130.

² The distribution of the political power in this division of the Persian empire on the eve of the Muhammadan conquest is thus described by the local historian: "Sowaid occupa Dámeghân sans coup férir. Les Perses s'étant retirés vers Gorgân et dans le Tabaristán, Sowaid quitta immédiatement Dámeghân et marcha à leur poursuite. Il arriva à Bastâm, ville du territoire de Qoumes du côté de Gorgân, et y établit son camp. Il y avait à Gorgân un prince daïlamite, professant la religion perse, appelé *merzebân*, qui régnait sur Gorgân et Dihistân; et chaque ville du Tabaristán avait un prince que, dans la langue du pays, on appelait *ispehbed*. (بند + سپهبد) पति). Tous ces princes dépendaient du merzebân de Gorgân. . . . Or le prince de Gorgân était Daïlamite, et les ispehbeds du Tabaristán étaient du Guilân. . . . [After the submission of the prince of Gurgân the narrative continues:] Lorsque les ispehbeds du Tabaristán eurent connaissance de ces faits, ils vinrent trouver leur suzerain, dont ils dépendaient tous, et qui résidait à Amol, au centre de la province. C'était un homme puissant, un Guilânien, du nom de Feroukhân, et que l'on appelait l'*ispehbed des ispehbeds*. . . . Il portait aussi le nom de *Guil de tous les Guilân*."—Chronique de Tabari, iii. p. 492.

upon the local reckoning by the era of Yezdegird, commencing A.H. 32 or A.D. 651-2. I will therefore reserve any further remarks until after the appearance of Dr. Dorn's promised contributions to the study of the subject already adverted to.

COINS OF TABARISTAN.¹

No. 1. KHURSHÍD.

OBVERSE.

Monogram = ام and = افزود.

To the right— = خورشید for خورشید *Khurshíd*.

Margin— = عبد *Servitor*.

REVERSE.

64. [B. M. coin.]

Right— = تپورستان *Tabaristán*.

Other dates—89, 94, 96, Mordtmann, 97, 99, 100, M., 102, 104, M., 105, M., 113, Tornberg, 114.

No. 2. FERHÁN.

OBVERSE.

Right— = ام and = افزود.

Left— = فرهان *Ferhán*.

Margin—

¹ GENERAL REFERENCES.—O. G. Tychsen, *Addiamentum ad Introd. in rem Num. I. Mihr* and T. C. Tychsen, *Comm. I. de Numis. vett. Persarum in Comm. Soc. Goett.*; Fræhn, *Transactions of the Academy of St. Petersburg*; Justus Olshausen, *Die Pehlewi-Legenden*, Kopenhagen, 1843, translated and published in the *London Numismatic Chronicle*, vol. xi. p. 68. My Article in the *Journ. R.A.S.* vol. xii. (1849), p. 346; Mordtmann, *Zeitschrift*, 1854, p. 173; M. Dorn, *Papers in the St. Petersburg Academy Transactions*; M. Soret, *Letters to the Révue Numismatique*, Belge; C. J. Tornberg, *Symbolæ ad rem Num. Muhammad*, 1856, p. 25; J. G. Stickel, *Handbuch*, 1870, p. 104.

No. 4a. Variant.

سهر اردشیر = االا = عمر بن عالا or *Aumar bin 'Adh.*

Tabaristán. Date, 125.

Olshausen, p. 70; Mordtmann, xix. No. 89; Stickel, No. 65.

No. 5. S'AYID.

OBVERSE.

Monogram, etc., as usual.

To the right, in Kufic—سعيد *S'ayid.*

Margin—عبد = ۱۱۵ and ۱۱۶

REVERSE.

۱۲۵. پنج و بست ست = ۱۱۵ اردشیر

To the right—تپورستان = ۱۱۵ اردشیر

Other dates observed—126, 127, and 128.

No. 6. OMAR.

OBVERSE.

Monogram, etc., as usual.

To the right, in Kufic, عمر *Omar.*

Margin—۱۱۵ and ۱۱۶

REVERSE.

۱۲۲. و بست دوست = ۱۱۵ اردشیر

Right—تپورستان = ۱۱۵ اردشیر *Tabaristán.*

Col. Guthrie has a variety with the date و بست دو = ۱۱۵ اردشیر, i.e. 2 + 20 in the curtailed form. Margin—۱۱۵.

Other dates—124,¹ 127, 128, 129.²

¹ Quoted from Subhi Bey's Cabinet, *Journal Asiatique*, 1862, p. 185.

² No. 6a. M. Tornberg (*supra cit.*) gives a new name from a coin which he describes as follows:—

“Adv. dextr. يحيى Jahja (ben Mikhnâq).

“Reverse.—Sinistr. ۱۲۹ = 129 (a 780, p. Chr.).”

No. 7. JARÍR.

OBVERSE as usual, in Kufic. جرير *Jarír*,

REVERSE.—*Tabaristán*, variously dated 135, 137.

Olshausen, Num. Chron., pp. 72, 75, 84.

No. 8. HÁNI.

OBVERSE.

Monogram, etc.

To the right, in Kufic, هانی *Háni*.

REVERSE.

To the right—*Tabaristán*.

Dated سنم دد دد دد A.H. 137, 138.

No. 9. SULAIMÁN.

OBVERSE.

Monogram, etc.

To the right, in Kufic, سليمان *Sulaimán*.

Dated سنم دد دد دد A.H. 137.

I quote this piece on the authority of Djevet Éfendi (Journal Asiatique, 1862, p. 185), (No. 903).

Dr. Mordtmann has a similar coin (Zeitschrift, 1854, p. 177).

No. 10. MUKÁTIL.

Figure 15. Plate II.

OBVERSE.

Monogram م and م

To the right, in Kufic, مقاتل *Mukátíl*.

Margin—عبد = ع and ۱۱۱

REVERSE.

129. نه ویست ست = ۱۳۸ و ۱۳۹

To the right — ۱۳۸ و ۱۳۹ = تیپورستان *Tabaristân*.

New date, 138. My coin, and 139, J.R.A.S. p. 347.

No. 11. ABDULLAH.

عبدالله *Abdullah*. An 140.¹

¹ Mémoires de la Société d'Archéologie et de Numismatique de St. Petersburg, vol. iii., 1849, p. 272. Quoted by Mordtmann, p. 177.