

SIR ALEXANDER CUNNINGHAM
AND THE BEGINNINGS OF INDIAN ARCHAEOLOGY.

BY

A B U I M A M

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ABSTRACT

To make Cunningham's archaeological career more intelligible we start our first chapter with an introductory review of his life in the army and his general background. At the same time we have tried to recapture the intellectual milieu of the early British Calcutta in which he worked and which shaped his interests and curiosities, and above all we have tried to present in some detail the influence exerted by Prinsep on him and Prinsep's own archaeological activities. This Chapter is rounded off with an enquiry into the circumstances of the establishment of the Archaeological Survey of India.

Our second Chapter is devoted to the actual explorations carried out by Cunningham and his Assistants in the wide expanses of Northern India, leading to the discovery of most of the ancient Indian cities.

Our third, Chapter deals with the story of Cunningham's ideas and methods of interpreting the actual remains, - coins, inscriptions, architecture and sculpture.

The fourth and concluding Chapter deals in detail with Cunningham's methods of exploration, excavation and dating and his general attitude to archaeology, things and people and his place in archaeology, Indian and general.

PREFACE.

The full story of Indian archaeology has not yet been told. Yet when we compare the chronological scheme of Indian history of Sir William Jones with that of Mabel Duff a hundred years later we are amazed by the revolution in the knowledge of Indian history that had in the meanwhile taken place. Indeed the story of that revolution is one of the most fascinating tales of human ingenuity and patience. The remains of India's ancient history remained neglected, as Cunningham put it:

'Till curious Saxons, from a distant land,

Unlocked the treasures of two thousand years'

Curiously enough no study has yet been made of the life and work of the most outstanding figure of those pioneering days of Indian archaeology and history, - Sir Alexander Cunningham (1814-1893). And yet, we felt, that the understanding of Indian history itself remains imperfect without some such study. The present thesis is an attempt to meet that need.

In the task of piecing together the story of Cunningham's life, for large areas of it, we have to depend almost exclusively on his own published writings. All his private papers along with his extensive collection of coins, except for the more valuable ones, were unfortunately lost in shipwreck. However we have utilised a small bundle of letters written by him to Rapson during his retirement in London, that is preserved in the British Museum. We have also used the Departmental Records

preserved in the India Office Library.

Throughout the thesis our emphasis has been on Cunningham's work rather than on the details of his biography. We may point out that this is the first work of its kind on Cunningham.

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List of Abbreviations.

ARASI (Eastern Circle)	Annual Report of the Archaeological Survey of India (Eastern Circle).
Arch. Surv. Ind.	Archaeological Survey of India.
ASIR	Archaeological Survey of India Reports.
As. Res.	Asiatick and Asiatic Researches.
ASB	Asiatic Society of Bengal.
BEFEO	Bulletin de l'Ecole Française d'extreme-orient.
CAI	Cunningham's <u>Coins of Ancient India.</u>
CMI	Cunningham's <u>Coins of Mediaeval India.</u>
Ep. Ind.	Epigraphia Indica.
IA	Indian Antiquary
Ind. Off.	India Office Library.
JASB	Journal of the Asiatic Society of Bengal.
JBBRAS	Journal Bombay Branch of the Royal Asiatic Society.
JRAS	Journal of the Royal Asiatic Society of Gt. Britain and Ireland.

MA SI	Memoirs of the Archaeological Survey of India.
NIS	New Imperial Series (Archaeologi- cal Survey of India).
Prinsep's Essays	<u>Essays on Indian Antiquities</u> <u>of the late James Prinsep, Ed.</u> by Edward Thomas.
Report	Reports of the Archaeological Survey of India of the Cunningham period.
Transac. Roy. As. Soc.	Transactions of the Royal Asiatic Society of Gt. Britain and Ireland.

CHAPTER I.The Beginnings

Alexander Cunningham (1814-1893) was the second son in a family of six. It was a gifted family, for the father, the poet Allan Cunningham (1784-1842) and four of his five sons found places in the Dictionary of National Biography. Joseph (1812-1851), the eldest, became famous as the author of the History of the Sikhs. Peter (1816-1869), the third son, stayed at home and wrote his great work on the history of London.¹ Francis (1820-1875), the youngest, who also saw service in India, edited Ben Jonson, Marlowe and Massinger.²

Allan Cunningham, known as 'the honest' and admired by Carlyle as the 'solid Dumfries stone mason',³ came from Dumfriesshire, Scotland. Trained as a stone-mason's apprentice, he turned early in life to writing poetry. Today he is chiefly known as a collector of old Scottish songs, as the author of the six-volume Lives of the Most Eminent British Painters, Sculptors, and Architects, and as the Secretary of Sir Francis Chantrey, the renowned sculptor. Allan settled in London in 1810.

In Chantrey's studio he became known to many of the

1. Handbook of London, 2 vols. 1849. 2nd Edition in one volume 1850. All subsequent works on London have been more or less indebted to Cunningham's Handbook.

2. In 1870 he published an edition of Marlowe, and in the following year an edition of Massinger. He also published an edition of Ben Jonson in three vols. (1871), and revised the reprint of Gifford's Ben Jonson (1875).

3. Reminiscences, ii, 211.

celebrities of the day. One of these was Sir Walter Scott.

Alexander and Joseph were sent to Christ's Hospital for their schooling, - an institution known for its classical learning and Spartan discipline.¹

Allan Cunningham wanted his two elder sons to go to India with the army. This was financially more profitable than to serve with the army at home. But cadetships were not easy to procure, since appointments were made through patronage.

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1. Coleridge in his Table Talk had an interesting anecdote to tell about the sternness of its discipline:
 'The discipline at Christ's Hospital in my time was ultra-Spartan; all domestic ties were to be put aside. "Boy!" I remember Boyer [the headmaster] saying to me once when I was crying, the first day of my return after the holidays, "Boy!" the school is your father! Boy! the school is your mother! Boy! the school is your sister! The school is your first cousin, and your second cousin, and all the rest of your relations! Let's have no more crying."'

Christ's Hospital claimed among its former students the famous 16th century antiquarian William Camden, the author of the Britannia. It produced such eminent 'Grecians' as Joshua Barnes (d.1712) who was said to know more Greek than an Athenian cobbler; Jeremiah Markland (d.1776); and Thomas Fanshaw Middleton, Bishop of Calcutta (d.1822). Leigh Hunt (d.1859) and Charles Lamb (Elia) were among its 'Deputy Grecians'. Charles Lamb wrote two delightful papers on life in Christ's Hospital: 'Recollections of Christ's Hospital', and 'Christ's Hospital Five-and-thirty years Ago.' (Material taken from Henry B. Wheatley, London Past and Present. Based upon the Handbook of London by the late Peter Cunningham. London, 1891. Three volumes. pp.394-98 Vol. I.)

Sir Walter Scott, fortunately, showed a friendly concern. He extracted promises of cadetships, for one son from Lord Melville, then the President of the Board of Control, and for the other from John Loch. Lockhart records ¹ how the jubilant Sir Walter appeared at Chantrey's breakfast table one morning and greeted the sculptor saying, - 'I suppose it has sometimes happened to you to catch one trout (which was all you thought of) with the fly, and another with the bobber. I have done so, and I think I shall land them both. Don't you think Cunningham would like very well to have cadetships for two of those fine lads?' 'To be sure he would, Sir Walter', said Chantrey. This was in May 1828.

India. Cunningham's career in the army:

Thus began Alexander's Indian career. He obtained his commission as Second Lieutenant in the Bengal Engineers on 9 June, 1831, after passing through the Company's military Seminary at Addiscombe; and he had ^a further six months' training at the Royal Engineers' Estate at Chatham. On 9 June, 1833, he landed in Calcutta.

Here a quick look at the main landmarks in his army career, followed chronologically, will serve the useful purpose of providing the necessary background on which to trace his development as an archaeologist - which is our real concern in the present thesis.

1. Quoted in the obituary notice on Cunningham in the JRAS, 1894, p.167.

After a period at Calcutta, Delhi and Banaras with the Sappers, he was appointed as one of Lord Auckland's aides de camp in 1836. He remained in this post until 1840, in which year he married Alicia Maria Whish, the daughter of Martin Whish, a Bengal Civil Servant, and accepted the post of Executive Engineer to the King of Oudh. In an interesting reference to Cunningham in one of her letters Emily Eden wrote how he had 'thoroughly earned his appointment ('the excellent appointment at Lucknow') by four years' constant service' and how they were 'all very unhappy at his going'. He was 'the most thorough gentleman in mind, and very clever and original' and he had always been 'a great favourite with G. [i.e. Auckland]'. She even expressed a hope that 'Mr.D. [apparently a common friend] might accidentally fall in with Allan C. or find an opportunity of seeing him,' so that he could mention how well his son was thought of, and how well he was now settled.¹

In the meantime, in 1839 - between July and September - he had been sent on an adventurous geographical mission to Kashmir to survey the region of the sources of the Panjab rivers,

1. Up the Country: Letters written to her sister from the Upper Provinces of India. 2 vols. London, 1866. Third Edition, p.215, vol.2. letter dated December 30, 1839. On Thursday, January 30, 1840: '... G. came on with all the rest and passed the evening with us, and then set off for his appointment at Lucknow. He is a great loss in every way, and has been with us for four years nearly' p.247, vol.2. Curiously enough Emily Eden does not say anything about Cunningham's interest in antiquities as she does humorously about Cantley's interest in fossils.

a report on which, submitted from Lucknow, (8th Feb.1841) was published in the Journal of the Asiatic Society of Bengal.¹

This journey opened the door of new and exciting experience for the adventurous youth who was destined to live the life of an explorer, alike in the field of geography and antiquity. He had to carry on investigations, on this occasion, at heights reaching up to 15,700 ft. and in regions unseen by Europeans before. 'I continued my way along the right bank of the river', he wrote, 'with the proud consciousness that I was the first European who had ever visited that part of the Chundra Bhaga'. Besides Geography, he carried on other investigations as well - he interested himself in details of revenue and commercial matters such as the shawl wool of Lahul and Ladakh; population, dress and customs; and above all the antiquities of the region. At Barmawar he copied inscriptions; from the Raja of Rajaori he procured a history of the country, some orders of Aurangzib and Nadir Shah and a copy of a grant of the Rajaori territory by Bahadur Shah. He also collected specimens of Kashmiri sings and ancient Kashmiri coins.

In 1842 however he was called away from service at Oudh as his presence was necessary with the army, which was operating in Bundelkhand, having been sent to capture the Raja

1. 'Abstract Journal of the Route of Lieutenant A. Cunningham, Bengal Engineers, to the Sources of the Punjab Rivers', JASB, 1841. pt.I. pp.105-115.

of Jaitpur, who had rebelled.¹ He got his first opportunity to establish his reputation as a field engineer next year, when in the battle of Punniar he managed by a particular stratagem to turn the captured guns against the enemy. This engineering feat brought him honour; he was mentioned in despatches, bemedalled, and promised a brevet rank.

He stayed on with the Gwalior contingent, as its Executive Officer, until February 1846, when new developments in Panjab called for his services there. In the battle of Sobraon (1846) he confirmed the military reputation that he had already gained.

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Boundary commissions and geographical explorations: He was by now established as one of the most trusted officers in the Company's service both for his skill as an engineer and his drive, energy and hardihood. His talents were now utilised in other, wider fields of British affairs in India, vast areas of which were in a state of flux in this period owing to the thrusts and counter-thrusts of the British and their antagonists.

1. Cunningham to Govt. of India, No.292, Delhi 15th Feb.1885. In this letter Cunningham submitted his desire to retire from service and along with this he sent a sketch of his career. Some of the details of his career contained in this chapter are to be found in this letter.

^aIn tendering my resignation of the post of Director General of the Archaeological Survey I trust that I shall not be thought presumptuous in bringing to the notice of Government a brief outline of my services. The fact is that I have served so long—very nearly 54 years — that none of the present officers of Government can have any personal knowledge of the first twenty years of my service, during which I was employed in several important situations, both Civil and Military, both to my own credit, and to the satisfaction of Government.

During the next two years he was given important and hazardous assignments which carried him into the most inhospitable regions of Himalayan and desert India.

John Lawrence, the Governor of Panjab, gave him the duty of accompanying the troops as Political Officer to take charge of Kāngrā.¹ Then he had to carry out the difficult tasks of laying down the boundaries between Ladakh and Tibet, between the territories of Gulab Singh and those of the British, and between Bikaner and Bahawalpur.

Since 1846 the question of the supply of shawl wool to India from Tibet had been worrying the British. Indeed, mutual adjustments were made with Gulab Singh - at Cunningham's suggestion incidentally - so as to include Spiti in the British dominions, for the sole purpose of ensuring its uninterrupted supply. Moreover, the British Government was also eager to obviate future border complications with China. The government therefore appointed a Commission in 1846, consisting of Cunningham and Vans Agnew, to settle the border between Ladakh and Tibet and between the territories of the British and Gulab Singh.²

1. C.'s letter to Govt. op.cit.

2. Alexander Cunningham, Ladāk. London, 1854, pp.12-15, and 'Memorandum by Capt. A. Cunningham detailing the boundary between the territories of Maharaja Gulab Singh and British India, as determined by the Commissioners, P.A.Vans Agnew, Esq. and Capt. A. Cunningham of Engineers.'
JASB, 1848, pt.I. pp.295-297.

As the Chinese Commissioners did not arrive in time another commission was formed. This was an elaborate expedition charged with various missions. Geographical, geological, palaeontological and antiquarian investigations were as much its objective as the demarcation of borders.¹ Its personnel were carefully chosen - Cunningham himself; Lieut. Henry Strachey, who had earned fame by his bold visit to the lake of Mānasarovara; and Dr. Thomas Thomson, the well-known botanist² - and special care was taken to equip it properly with portable magnetic and meteorological instruments.

Cunningham particularly, carried out scientific investigations as varied as observations of temperature and moisture, magnetic dip, declination and intensity; obtaining of meridian altitudes and equal altitudes of the sun; and the collection of vocabularies of the various dialects of the Dardu language with the idea of comparing them later with Persian, Pashtu, Sanskrit and Hindi.³

In those remote Himalayan regions, where Yaks were used for locomotion and only rope bridges were available for crossing rushing mountain torrents, the expedition proved to be a really

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1. According to the letter of Instructions of the Foreign Secretary, H.M. Elliot. See 'Correspondence of the Commissioners deputed to the Tibetan Frontier; communicated by H.M. Elliot, Esq., Secretary, to the Government of India, Foreign Department.' JASB, 1848, pt.I, pp.89-105.
 2. Ladak, op.cit. p.15.
 3. 'Correspondence of the Commissioners deputed to the Tibetan Frontier etc.' op.cit. p.96. He also observed the possible points of army installations. — See 'Journal of a trip through Kulu and Lāhul, to the Chu Mureri Lake.' JASB, 1848, pt.I, pp.201-30.

difficult affair. Cunningham's routes lay through points as high as 18,600 ft. where the air was rarified. At one point he and his servants became sick from headache and sleeplessness.¹ In the cold of December (1848), owing to a mishap, he had to live without a tent, exposed to the full fury of snow and rain. He became ill with acute rheumatism and two of his servants were so ill that they could not be moved even from Hazrut to Shamsabad, a distance of only 6 miles.² He found the whole country of Darcha in Lahul to the Chumurari lake 'a vast uninhabited desert, without a single tree, or even a bush knee high, and but scantily supplied with water.'³ In Nakpo Goding Pass, 17,000 feet above the sea, he shot a specimen of the rare Kiang or wild horse, The Equus Kiang previously seen by Moorcroft. 'The ball had passed through his heart - a lucky shot for a fowling piece at 180 yards'.⁴

There was however also a pleasanter side to this otherwise grim story. As an important emissary from the mighty British he was received with much cordiality by Maharaja Gulab Singh and was presented with many valuable gifts, - 'A large scarlet cloak lined with fine sheep skin'⁵ on one occasion and

(Correspondence of the Commissioners etc, op. cit.

1. Ibid. p.110.

2. Alexdr. Cunningham 'Diary of the Tibetan Commission, from the 29th August 1847, to 10th January, 1848'. JASB, 1848. pt.I, p.130.

3. 'Journal of a trip through Kulu and Láhul, to the Chu Mureri Lake'. JASB, 1848, pt.I, p.230.

4. Ibid. p.227.

5. 'Diary of the Tibetan Commission etc.' op.cit. p.122-123.

'a Khelat of 13 pieces' at their farewell meeting on the 23rd November.¹ Cunningham presented the Maharaja with a box with a mechanical singing bird.²

During the period of comparative leisure when waiting for the Chinese commissioners, he found an opportunity to satisfy his antiquarian curiosity. He obtained permission from the Maharaja to visit the ruined temples in Kashmir. He measured them - often in great discomfort, since some of them were 'swarming with' bugs³ - took drawings and notes and wrote a paper for the JASB - his first published study of Indian monuments.⁴

Other antiquarian studies followed, with important results. He visited Shahbazgarhi, discovered the site of Jamalgarhi, and identified Lani-gāt as Alexander's Aornos. His 'most valuable acquisition' was two Kuṣāṇa inscriptions. One of these inscriptions mentioned the name 'Gushang'. He observed: 'As I was the first to read their name upon the Indo-Scythian coins, I feel much satisfaction at finding my reading so fully confirmed by the discovery of this inscription.'⁵ He collected

'Diary of the Tibetan Commission etc.' op. cit.

1. ~~Hand.~~ p.126. A present of three pieces, with a letter, was given for his brother Capt. J.D. Cunningham.
2. On the 6th Nov. when he dined with the Maharaja, 'he was very communicative, ... and showed [him] specimens of his mountain artillery, small pieces that can be carried either by men or by bullocks. They [were] called Shêr-bachchas and Bâgh-bachchas or Tiger-cubs and Leopard-cubs'. Ibid. pp.122-123. When asked if he had any Kashmiris in his army Gulab Singh replied, "Kuchh kām kā nahīn, "They are useless". Cunningham, Coins of Mediaeval India, London, 1894. p.25
3. 'Diary etc.' op.cit. p.124.
4. 'An Essay on the Arian order of Architecture as exhibited in the Temples of Kashmir', JASB, 1848, pt.II, pp.241-327.
5. 'Correspondence of the Commissioners deputed to the Tibetan Frontier' op.cit. pp.104-105.

Gandhāra sculptures from Rani-gāt and Jamalgarhi and directed his attention to the question of the identification of Taxila. He also announced the discovery of the three early mediaeval Sanskrit works, Anargha Rāghava; 'Śringāra-Tilaka¹; and Vāsavadatta-charitra of which he claimed the first two were only known by name and the third altogether unknown.²

The outcome³ of his geographical and anthropological studies during this mission was the valuable work entitled Ladāk, Physical, statistical and Historical; with notices of the Surrounding countries,⁴ published at the expense of the Court of Directors.⁵ It carried a map of the region - compiled by John Walker, the famous geographer to the Company, to whom Indian cartography owes so much - which proved particularly

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1. On Anargha Rāghava and Śringāra-Tilaka see Subhadra Jha's translation of Winternitz, A History of Indian Literature, Vol.III, pt.I, Delhi, 1963. p.27 and pp.270-271.
 2. 'Correspondence etc.' op.cit. p.98.
 3. Babu Ramgopal Ghose however contested this claim and informed the Asiatic Society that all of them were in fact procurable in Calcutta. (JASB, 1848, p.327. Proceedings of April). His letter was referred to the 'Oriental Section' of the Society but the rest of the story is obscure. In the next issue of the Proceedings it is recorded that the Society had received a letter from Cunningham in reply to Babu Ramgopal Ghose and that also was referred to the 'Oriental Section'. (JASB, 1848 pp.453 and 454). But the contents of the letter are not given not in the succeeding Proceedings are the findings of the 'Oriental Section' mentioned. The whole matter seems to have been quietly dropped.
 4. His fellow-explorer Dr. Thomas Thomson likewise wrote Western Himalaya and Tibet, London 1852.
 5. London, 1854. With 31 plates - many of which were most beautiful paintings of landscapes and palaces by Cunningham himself.
 6. Cunningham to Govt. of India, 15th Feb. 1885, op.cit.

valuable. The book¹ won the "honourable mention" of the French Geographical Society² and made his name widely known. Soon after in 1858 in L. Vivien de St. Martin's essay on Geography in Julien's Mémoires sur les Contrées Occidentales we find frequent reference to Cunningham and his book, and particularly the map is spoken of in high terms. More than 70 years later F.W. Thomas in his foreword to the second volume of Francke's Antiquities of Indian Tibet³ paid high tribute to this work: 'Prior to the appearance of Cunningham's Ladák ... information concerning Western Tibet was based almost exclusively upon the reports of travellers, Cunningham's work was of great importance, furnishing not only a great deal of systematic information concerning the geography, topography, meteorology, and economics of the whole region, but also a description of the ethnology and common life, the Government, the religion, the languages, and the history His remarkable historical and topographical

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1. Cunningham wrote in his Preface p.v: 'I have endeavoured in the following pages to give, to the best of my ability, and according to my means of information, a full and accurate account of Ladák. ... I have read every work that I could procure (and I have neither spared pains nor expense) regarding Ladák or Tibet.' It contained discussions of geography, commerce, people, history, customs, traditions, religion, dress, food, ceremonies both social and religious, arts and crafts, language and instruments used in religious rituals and also included skull measurements and drawings, a copious vocabulary comparing the local tongue with the various dialects of the Dards, the Afghans and the Kashmiris, of the Hindu races of the Himalaya and of the Indo-Tibetans of Kunawar. The meteorological observations recorded by Csoma Körösi of Kanum over a period of two years for his friend Dr. Gerard came into Cunningham's possession and were incorporated in Ladák. (Life and Works of Alexander Csoma Körösi by Theodore Duka London, 1885 p.98 and Ladák p.184.).
 2. Cunningham to Govt. of India 15th Feb.1885 etc.op.cit. His official report on Ladakh had already obtained for him from Lord Dalhousie the compliment that he had 'well deserved the thanks of Government'. Ibid.
 3. Calcutta, 1926, p.vi.

insight enabled him to produce a work which is susceptible much more of ^mplification than of correction, and which will retain its value as an original source.¹

The last phase of Cunningham's army career: With the flaring up of the Second Sikh War (1848-49) following the murder of Vans Agnew, Cunningham was called back to his old duties. He was present at the battles of Chillianwala and Gujarat and was mentioned in despatches. He also received the promised brevet majority.

He returned to Gwalior to stay there for four years between 1849 and 1853.² He was transferred to Multan in 1853

1. Cunningham's reputation as a geographer was well established before he embarked on his career as an archaeologist. We find in the Society's Proceedings of May 1848 that he had agreed to edit an unpublished geographical article of Wilford that had been lying with the Society for forty years and to which attention was drawn by H.M. Elliot. (JASB, 1848 pp.452-453). The paper was eventually published in the JASB for 1851 (Francis Wilford, 'A Comparative Essay on the Ancient Geography of India, pp.227-72 and 470-86) but without any reference to Cunningham's editing.
2. An interesting fact of this Gwalior interlude - and which incidentally shows the wide range of his interests - is the elaborate experiments that he carried out with the stones and timber of Gwalior to investigate their properties as building materials. The report was considered valuable enough to be published by the Thomason Engineering College, Roorkee in their Professional Papers series (no.iv. A few notes and experiments on the stone and timber of the Gwalior territory showing their value as Building Materials, 1854). Even when reporting on these experiments he did not forget archaeology; 'The hills which furnish the best building materials in the Gwalior territory are the low sandstone ranges which extend from the ancient Kotwâl or Kuntalpurî on the north, to Bhilsa in the South, a distance of more than 200 miles. On detached points of this range stand the celebrated forts of Gwalior, Narwar, Chanderi, Bhilsa, and Raisen At Udipoor, Eran, Pathâri, and Gyârispoor, all in the same range, there are some of the finest existing specimens of Indian sculpture and architecture: and lastly around Bhilsa, the hills of Sâncî, Sonâri, Satchâra, Bhojpur, and Andher, are covered with the mysterious topes or solid masonry mounds of the Buddhists. All these remains of the architectural grandeur and sculptured magnificence of

Footnote No.2 on p.13 continued ...

- 2¹/₄ Ancient India are formed in the same range of soft sandstone hills which, although they form a portion of the Great Vindhyan mass, have not hitherto received any separate name which might distinguish them from other portions of the same mountain chain'. (pp.1-2).

and in 1854 dismantled its defences.¹ In 1856, now a Lieutenant Colonel, he was again assigned by Lord Canning a special task, - that of setting up a Public Works Department in the newly annexed province of Burma. He remained occupied with his duties there until November 1858 and thus escaped the horrors of the Mutiny.² With Burmese affairs reasonably straightened out³ he was called back as the Chief Engineer to reorganise the Public Works Department of the North Western Provinces [i.e. modern U.P].

He retired from the army with the rank of Major-General on 30 June, 1861 after twenty-eight years of service.⁴ He was then 47, and at this age launched on an entirely new career as the Director of the Archaeological Survey of India which was created in that year at his behest.

1. Report V, p.125.

2. While posted in Burma, under instructions from Major Phayre, Commissioner of Pegu, he kept a daily register of the rise and fall of the river Irawaddy at Thayet Myo, Prome and Henzadah, from the highest flood in 1856 to the minimum rise in 1858 and the result was published in the JASB, 1860. 'Memorandum on the Irawadi River, with a monthly register of its rise and fall from 1856 to 1858 and a measurement of its maximum discharge'. pp.175 ff.

3. He received special thanks from Lord Canning for his administration there.

See Cunningham to Govt. of India. 15th Feb. 1885 op.cit.

4. The only memorials of his engineering career in India are the stone bridge of ten arches which he built over the river Morar at Gwalior and the monument to Vans Agnew, his friend, at Multan, which he had designed.

Cunningham's initiation into archaeology: As we have seen, archaeology had cast its spell over him long before. The question may be asked as to why ~~and~~ he, an army engineer, became involved in the archaeology of the sub-continent? What factors pushed him into the career that was to secure for him a place in history? It all began with James Prinsep.

Cunningham arrived in India at a time when Indian archaeology was stirring into life after having languished in comparative inactivity for a period of nearly thirty years following the death of Sir William Jones and the gradual departure of his colleagues from India.

The extraordinary genius under whose magic wand Indian archaeology was being resurrected, was James Prinsep (1799-1840),¹ who was by training an architect and by profession an assay-master.

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1. Arrived in Calcutta in September 1819 at the age of twenty. After a spell as the assay-master in the Banaras mint, Prinsep returned to Calcutta in 1830 as the deputy assay-master. In 1832, he succeeded Wilson as the chief of the mint and remained in the post until 1838 when he returned to England in broken health. He died on 22 April, 1840, in his forty-first year. While at Banaras he completed the mint building according to his own plan and also built a church. He was on the Committee for municipal improvements of the city and earned a name for himself by improving the drainage system of the city by constructing a tunnel. He also built a bridge over the Karmanāsā and restored the mosque of Aurangzib. While at Calcutta he completed a canal begun by his brother (Not Thoby) which was considered to be a very skilful piece of engineering; reformed weights and measures, introduced a uniform coinage and devised a balance so delicate as to indicate the three-thousandth part of a grain.

Cf. Dict. of National Biography.

In a few years of thrilling excitement and incredible industry,¹ Prinsep, - aided by others in India and Europe, - made perhaps more discoveries in Indian archaeology than were made in the whole half century before.²

1. Prinsep literally worked himself to death. After his departure for England in broken health, the new editor of the JASB commented: '... collectors in all parts of India were in the habit of submitting to his inspection whatever they lighted upon as unusual, and sought his reading and interpretation but the study and exertions required for the satisfaction of these numerous references to his individual skill, although entered upon with a zeal participated only by those who have achieved much, and feel that there is yet more within their reach which ought to be the result of their own discoveries, were too severe for the climate of India, and the Editor's robust constitution sunk at last under the incessant labour and close attention given to these favourite studies at the very moment when the richest collections of inscriptions, coins, and relics, that had ever been got together [i.e. the collections of Masson, Burnes and Dr. Lord] in India, were actually on their way to Calcutta as materials for maturing the results he had achieved.' (JASB, 1838, Pt.II, p.1047)
2. At the close of the decade in 1841 Wilson was able to record: 'Few inquiries of an archaeological purport have been attended with so abundant a harvest of discovery as those of which India has been recently the field The hitherto unnamed and unknown members of successive or synchronous dynasties now pass before our eyes as well-defined individuals and in connected order; and revolutions of a religious as well as of a political origin may be discerned, if not with all the minuteness we could wish, yet with a distinctness that demands unquestioning reliance. The means by which these additions to our knowledge of the past have been effected, are the numerous monuments and coins which have been found ... in Turkestan, Afghanistan, and the Punjab,' Ariana Antiqua, London, 1841, pp.2 and 3.

Indian archaeology at the time of Sir William Jones: Although Sir William Jones was aware of the very significant help that the study of India's material remains could render towards the reconstruction of her history,¹ his main interest was literary rather than archaeological. Chambers, whom Francis Buchanan described as 'the most judicious of our Indian antiquaries',² on the other hand was perhaps inclined to put more emphasis on archaeology. 'Probable conjectures at least, if not important discoveries' could be made, he hoped, by calling in the assistance of ancient monuments, coins, and inscriptions³

The establishment of the Asiatic Society of Bengal and the publication of its Journal certainly gave a fillip to

1. The history of the Hindus was 'involved in a cloud of fables' and there were 'four general media' he thought of 'satisfying our curiosity.' Of these four media, - which included languages and letters, philosophy and religion and 'written memorials of ... sciences and Arts' - 'the remains of their old Sculpture and Architecture' was one. Nothing was however said about inscriptions and coins.
See 'The Second Anniversary Discourse, Delivered 24 February, 1785'. Asiatick Researches, I. (1788) p.421.
2. Asiatick Researches, VI (1799) p.163.
3. William Chambers, 'Some Account of the Sculptures and Ruins at Mayakipuram, a place a few Miles North of Sadras, and known to Seamen by the name of Seven Pagodas', dated 17th June, 1784.
Asiatick Researches, I (1788) p.158. William Chambers, who died in 1793, was one of the early political servants of the East India Company. He was also a distinguished oriental scholar.

antiquarian studies.¹ The first issue of the Asiatick Researches (1788) was particularly rich in archaeological material.² But the number of archaeological articles gradually dwindled in later years simply because the time was not yet ripe for researches into the antiquities of India. The scattered remains about the country - stūpas, pillars, sculptures, the rock-cut caves, inscriptions and coins - were as yet hopelessly unintelligible, since no reliable textual material was available for their interpretation and the technique of studying them without the aid of texts was, of course, not yet developed. Groping in darkness would only lead, as it in fact did to some extent, to all sorts of wild speculations and theories.

1. '... so powerful an incentive to diligent enquiry and accurate communication, as the establishment of this Society must now prove.' - to quote a contemporary opinion. Chambers, op.cit.p.145.
2. Apart from Chambers's paper on the Seven Pagodas, the most important were Wilkins' translation of the Badal Pillar inscription (pp.131-141), the Deva Pāla Deva inscription from Munger (pp.123-130) and the Amara Deva inscription from Bodh-Gaya (pp.284-287). There was 'A Description of a cave near Gyá' (i.e. the Nāgārjuni Cave) by John Herbert Harrington (pp.276-283) the main interest of which was the translation of two inscriptions, which were in Gupta script, by Wilkins. There was also 'An Indian Grant of Land' literally translated from the Sanskrit, as explained by 'Rāmlóchan Pandit', and communicated by General Carnae (pp.357-367) and 'Inscriptions on the Staff of Fírúz Shah - Translated from the Sanskrit, as explained by Rādhácānta Sarman' (pp.379-382) - presumably by Jones himself

The output of purely archaeological writings at this time was thus understandably low and undistinguished, except for the somewhat precocious reading of Gupta characters by Wilkins¹ - a feat rather amazing in its abruptness.

Tod:² One of the most important events that set the

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1. Sir Charles Wilkins (1749-1836). He arrived in Bengal in 1770 in the service of the East India Company. He earned undying fame as the first Englishman to gain a thorough mastery of Sanskrit and Sir William Jones himself acknowledged his debt to Wilkins. Wilkins was inspired to learn Sanskrit by the example of his friend Halhed. Wilkins was also the first European to study Sanskrit inscriptions. In 1778 he played the leading part in establishing the first printing-press for oriental languages and cut the types with his own hand. He left India in 1786. In 1800 he became the Librarian of the Company and on the establishment in 1805 of the Company's college at Haileybury he accepted the offices of examiner and visitor. He died in May 1836.
Cf. Dictionary of National Biography.
 2. Lieutenant-Colonel James Tod (1782-1835). Political Agent to the Western Rajput states. Famed for his two voluminous works, Annals and Antiquities of Rajasthan and Travels in Western India. 'Tod's industry was unbounded. After spending the day and half the night patiently listening to "dismal tales of sterile fields, exhausted funds, exiles unreturned, and the depredations of the wild mountain Phil", he seizes the first opportunity of release, even at that late hour, to continue his journal and to write up a lengthy account of the day's visitors. Even sickness, so long as he had possession of his reason and strength enough to write or travel, never deterred him from these self-imposed duties.' D.R. Bhandarkar during the 1906-07 tour in Rajputana discovered the now familiarised photograph of an Indian painting showing Colonel Tod and his pandit at work. The Pandit may be Yati Gyānchandra. The artist may have been 'Ghassi' whom Tod frequently mentions in his personal narrative as preparing his illustrations for him.
Material taken from ASIR 1907-08. Henry Cousens, 'The late Lieutenant-Colonel James Tod'. pp.219-222.

trend of post-Jonesian archaeology was the publication in 1827 of Tod's memoir on Indian coins in the first volume of the Transactions of the Royal Asiatic Society.¹ This paper was based on Tod's own collection and it can be said to have marked an era² in as much as it brought into prominence, for the first time, many of the later well-known series of coins which were soon to revolutionise the whole concept of Indian history. Kuṣāṇa ~~and Parthian~~ coins were described, the first Indo-Bactrian coins to be found within the borders of India were noticed, and Gupta coins were illustrated, - to mention a few. Tod, indeed, like his earlier compatriot Mackenzie,³ was an indefatigable collector and amassed as many as 20,000 coins.⁴

1. 'An Account of Greek, Parthian, and Hindu Medals, found in India' pp.313-342. Read on June 18, 1825.

2. Indeed, Prinsep called him the father of Indian numismatics. 'On the connection of various ancient Hindu coins with the Grecian or Indo-Scythic Series'. JASB, 1835 p.623.

3. Mackenzie (1753-1821) however was not so great a coin collector as a collector of inscriptions and manuscripts. In connection with his topographical survey, Mackenzie visited nearly every place of interest south of the Krishnā river, and prepared over 2,000 measured drawings of antiquities, carefully laid down to scale, besides facsimiles of 100 inscriptions, with copies of 8,000 others in 77 volumes. (On the authority of Burgess in 'Archaeological Research in India' read by him before the Oriental Congress at Stockholm in 1889. Quoted by C.E.D. Black, A Memoir on the Indian Surveys 1875-1890, London, 1891, p.321 f.n.) Mackenzie also had been to Orissa. He used to move about with a host of Pandits. (For the origin of his interest in the South Indian antiquities see JRAS, 1835, Proceedings, pp. XI ff.) Mackenzie, who started life as an army engineer in the service of the East India Company saw active service in Mysore, Ceylon and Java. Later he was made the Surveyor General of India.

4. 'For the last twelve years of my residence in India, (amongst Mahrattas and Rajputs) the collecting of coins as an auxiliary

F/note 4 cont. from p.21.

4. to history was one of my pursuits: and in the rainy season I had a person employed at Mathurá and other old cities to collect all that were brought to light by the action of the water while tearing up old foundations, and levelling mouldering walls. In this manner I accumulated about 20,000 coins of all denominations'
Tod, op.cit. Transactions of the Royal Asiatic Society
Vol.I, 1827 p.314.

Ventura and Indian archaeology: But the immediate cause of a renewed interest in Indian archaeology was provided in 1830 by Ventura, the Italian-French General of Ranjit Singh. Ventura, according to Prinsep,¹ was inspired by the notorious Italian tomb-robber Belzoni's activities in Egypt and decided to dig into the bowels of the Indian 'pyramids' - those mysterious towers, locally known as 'topes', - that studded the plains of northern India. Ventura selected for his operations the 'tope' at Manikyala since it had already attracted notice as being described in Elphinstone's Caubul.² The discoveries made by Ventura³

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1. 'On the Greek coins in the Cabinet of the Asiatic Society,' JASB, 1833, p.28.
 2. An Account of the Kingdom of Canbul, London 1815.
 3. In 1833 Prinsep thought that 'the most successful in this interesting line of research, partly from the advantage of his rank in Maharaja Ranjit Singh's service, has been General Ventura,' (JASB, 1833 p.28). Ventura was so pleased to see the reference to his discoveries in the Journal, when pointed out to him by Captain C.M. Wade, the Political Agent at Ludhiana, that he at once offered the whole of his finds to the Society. (JASB, 1834 pp.313 and 314 and 143). Later he permitted another lot of 500 coins - which was on transit to Paris, entrusted in the care of the Chevalier Allard - to be exhibited in the Asiatic Society (JASB, 1834 p.526 and 591. Proceedings of November and December). Ventura himself visited Calcutta in the winter of 1837-38 with another collection. With his usual liberality he again offered to Prinsep any novelties that he wanted for his cabinet. Prinsep unfortunately did not accept the Indo-Scythic gold series as there was nothing new in it. He regretted it later as the whole lot was stolen from the hotel where the General was residing!
(JASB, 1838, pp.636-637.)

were publicised in the newspapers of the day.¹ Notice was also taken of Ventura's finds in Europe. The Journal Asiatique for March 1832 contains two short notices on them by Reinard and Saint-Martin.²

Prinsep and Indian Archaeology: Prinsep, who earlier had helped his chief in the Mint, Dr. Wilson,³ - also the then Secretary

1. James Prinsep, 'On the Greek Coins in the Cabinet of the Asiatic Society', JASB, 1833, p.28. The account was reprinted in the Asiatic Researches XVII pp.600-603. This attempt to publicise the discoveries through the medium of newspapers, as early as in 1830, is noteworthy in the background of the fanfare of publicity that regularly attended later the exploits of Layard and Schliemann. Cunningham did not usually indulge in publicity through this popular medium - his discoveries in any case were not perhaps dramatic enough. Only his discovery of the Bhārhut Stūpa in 1876 was considered sensational enough to receive prominent public notice in the Times, the Athenaeum and the Builder. It was also proposed to reward him with the distinction of a K.C.S.I (Cunningham to Govt. of India, 15th Feb. 1885 op.cit.).
2. No. 9 pp.276-279 and pp.280-281 respectively. Also infra p.169.
3. Horace Hayman Wilson (1786-1860). In 1808 nominated assistant-surgeon on the Bengal establishment of the East India Company. On his arrival however appointed assistant to John Leyden at the Calcutta Mint, where in 1816 he became an assay-master. 'Excited by the example and biography of Sir William Jones' (to use his own words), he 'entered on the study of Sanskrit with warm interest,' In 1813 his first translation of Meghadūta. In 1819 he completed the first Sanskrit-English Dictionary. During nearly the whole of his stay in India Wilson held the office of Secretary of the Asiatic Society of Bengal, commencing from 2 April, 1811. In 1832 he was selected to fill the chair of Sanskrit at Oxford, which had been founded by Joseph Boden in 1827. In 1836 he succeeded Wilkins as the Librarian to the East India Company and also as the examiner at the Company's College at Haileybury.
Cf. Dict. of National Biography.

of the Asiatic Society with the classification and engraving of coins for the publication of his paper on the coins in the Society's Cabinet,¹ kept up the interest thus created in ancient coins,² which was further stimulated by the impending currency reform of the East India Company. When he succeeded to the Secretaryship of the Asiatic Society on Wilson's return to England and started his own Journal in 1832³ he at once appealed to all those who had 'opportunities of forming collections in the upper provinces' for more coins and inscriptions. He tried to 'instigate' them by holding before them the example of Tod, Ventura and also Lieutenant Burnes.⁴ He pointed out the great treasures in store for collectors in the Indo-Gangetic provinces. 'But it is by no means in the Punjab alone that we are to look for antiquarian riches: the north-western provinces of India offer as large a field of enquiry - and if the coins of Kanouj and Oudh are less interesting from the nature of the characters in which their legends are graven being wholly

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1. H.H. Wilson, 'Description of Select Coins, from originals or drawings in the possession of the Asiatic Society', Asiatic Researches, XVII (1832) pp.559-606.
 2. Indeed Wilson went so far as to be of the opinion that 'the continuance of his labours in this department [i.e. coins] of inquiry may be considered as the most important consequence of the publication of the paper in question'. Ariana Antiqua, op.cit. p.8.
 3. i.e. The Journal of the Asiatic Society of Bengal. It was however not until 1842 that the Asiatic Researches was finally abandoned as the official journal of the Society in favour of the JASB. The Centenary Volume of the JASB, pp.51-53.
 4. James Prinsep. 'On the Greek coins etc.' op.cit. JASB, 1833 p.28. Burnes had sent him a few coins 'collected ... in the Ancient Bactria a country but recently opened to the investigation of the antiquarian'. Ibid.

unknown, they should nevertheless be regarded as more curious because they speak this unknown language and remain the only records of kingdoms and revolutions whose existence is but faintly discernible on the page of history.¹

Early Archaeological activities: Prinsep's appeal was enormously successful. He was endowed with the rare capacity of instilling some of his own enthusiasm and ardour into others. A new breed of officers arose who interested themselves in the mysterious remains of the country's past, although preoccupied with their official duties. From Ventura they had learnt there was fame in it; from Mackenzie they had learnt there was also possibly money in it.² On their various rounds in the four corners of India, these officers began to shower on Prinsep coins, inscriptions and rubbings in profuse numbers. Prinsep gratefully acknowledged how his colleagues were labouring in various regions to provide him with his raw material. The net cast by him was indeed far-flung and the band of collaborators

1. Ibid. 'On the Greek Coins etc.' op. cit.

While emphasising the potentialities of the Indo-Gangetic provinces, the veteran collector Tod also had said; 'Let not the antiquary forget the old cities on the east and west of the Jamna, in the desert, and in the Panjáb, of which I have given lists, where his toil will be richly rewarded. I possess bags full of these Indo-Getic gentry;' (Tod used 'Indo-Getic' or 'Indo-Sacae' for Indo-Scythic.) The Asiatic Journal, May-August 1835, p.13. Tod's letter to the editor, 'Indo-Grecian Antiquities'.

2. It was at least known that the Mackenzie collection was purchased by the Government of India for a lakh of rupees. See JASB, 1836, p.513. Proceedings of September.

was impressively large.¹

Soon both the collectors and the interpreters were acting in a spirit of friendly competition. In an amusing aside, Prinsep expressed his apprehension that a fresh memoir from Mr. Masson might anticipate some of the discoveries that Prinsep was himself about to claim 'in this fair and highly interesting game of antiquarian research!'² Col. Stacy felt 'disheartened on beholding the treasures of Gen. Ventura and his followers' because the Bactrian coins were thought to be of more interest and greater value.³

In their quest for fame, these officers were neither daunted by the prospects of physical hardship, nor were they put off by the monetary loss that such a pursuit sometimes involved. Col. Stacy 'would be seen enduring the burning heats

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1. He mentioned: 'Colonel Stacy at Chitor, Udayapur and ... Delhi; Lieutenant A. Conolly at Jaipur; Captain Wade at Ludiana; Captain Cautley at Seharanpur; Lieut. Cunningham at Benares, Colonel Smith at Patna; Mr. Tregear at Jaunpur; and Dr. Swiney ... in Upper India. And for the exterior line, Lieut. Burnes at the mouth of the Indus; Messrs. Ventura, Court, Masson, Keramat Ali and Mohan Lal in the Panjab; besides whom I must not omit Messrs. H.C. Hamilton, Spiers, Edgeworth, Gubbins, Capt. Jenkins, and other friends, who have occasionally sent me coins dug up in the districts'. - 'On the Connection of various ancient Hindu coins etc.' op.cit. JASB, 1835, p.623 f.n. He also referred elsewhere (JASB, 1837, p.319 Proceedings of May.) to the exertions of Mr. Tregear, particularly with the collection of Gupta gold coins.
 2. 'Further Notes and Drawings of Bactrian and Indo-Scythic Coins', JASB, 1835, p.327.
 3. Ibid & p.622 James Prinsep, 'On the connection of various ancient Hindu coins etc.'

of May, or the cold of December, under trees or in common sarais in Central India; digging in deserted ruins, or poring over the old stores of village money-changers, after having (the principal difficulty and art), won their confidence, sometimes their interest, in the object of his pursuit; sparing neither money nor time to gain his end, and after a hard search and fatigue, sitting down, while his impressions were still warm and vivid, to communicate the result of his day's campaign'.¹ What was true of Stacy was also true of many others. Dr. Swiney used to buy an old Pyse for a current Pyse from the baniyas who always had stores of old coins which they would put aside as useless.²

Prinsep was in no time flooded with coins and inscriptions, - materials in fact, which changed the very trend of the Indian researches. 'The tenor of the chief publications of the past year', Prinsep said,³ 'has been turned aside from the objects of natural Science to which it was supposed future Indian researches would principally be confined, by a train of antiquarian discovery of an unexpected and highly interesting nature' He also informed his readers about 'the great

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1. James Prinsep, 'On the connection of various ancient Hindu coins etc' op.cit. JASB, 1835 p.622.
 2. James Prinsep, 'Bactrian and Indo-Scythic Coins - Continued'. JASB, 1833, pp.405-406.
As his agent Swiney used to employ a 'trustworthy servant' - curiously enough usually a Mussalman tailor! Coins were also bought by the seer. Cunningham once bought 2 seers of Nāga coins and they numbered to about 1,750 specimens' JASB, 1865 pt.I. p.123.
 3. Preface. JASB, 1834, pp.V and VI.

interest ... excited in Europe by many of the papers ... and the letters he received from Oxford, London and Paris' This abundance of material also enabled him to embark on a programme of publishing a regular series on coins and facsimiles of inscriptions in the succeeding numbers of his Journal, with a view to building up a large corpus of various types of Indian Indo-Bactrian and Kuṣāṇa coins. Appropriately for the assayer-master of the Calcutta mint, coins always remained Prinsep's first interest. His material was so plentiful that he was able to remark in 1836 that he could 'afford to be fastidious, and not only reject coins of the baser metals, but limit the admission even of golden novelties to those of one size, weight and value! ' ¹ Indeed his readers complained that he was 'deluging them with old coins! ' ²

The most notable among Ventura's followers in Panjab and Afghanistan were Court, - another French general in the service of Ranjit Singh - Masson and Honigberger. ³ Also joined

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1. 'New Varieties of the Mithraic or Indo-Scythic series of coins and their imitations', JASB, 1836, p.639.
 2. James Prinsep, 'Further Notes and Drawings etc.' op.cit. JASB, 1835, p.327.
 3. Dr. Martin Honigberger was a native of Transylvania. He travelled overland to Panjab in 1827 and entered the service of Rājīt Singh as a physician. As he did not think the Maḥaraja placed sufficient value on his services, he left the post and again set on a journey overland to Europe via Bokhara and Khiva in 1834. While in Kabul he joined Masson in exploring the antiquities of the region. (JASB, 1834, p.143. Proceedings of March). On leaving Bamian, he nearly lost his life when set upon by robbers. In the struggle, the Kafila Bashi, the same man who had earlier conducted Burnes and Dr. Gerard, received several wounds in attempting to defend his charge. (JASB, 1834, p.246. Proceedings of May).

forces the two interesting Indians - Shekh Keramat Ali ¹ and Munshi Mohan Lal.² Masson, who resided in Kabul discovered in 1833, the immense site of Begram, in the course of his search for Alexandria ad Caucasum.³ The site, appropriately called by Masson the 'Second Babylon',⁴ proved to be a veritable mine of ancient coins, from which, according to Masson's estimate the

1. On Keramat Ali the following information from JASB, 1834, p.247 Proceedings of May, may be quoted in full:

"The Secretary also laid on the table an extensive collection of ancient coins, received through Capt. Wade and Lieut. Conolly from Mulvi [sic.] Shekh Keramat Ali, now residing at Kábúl, on the part of the British Government. Shekh Keramat Ali is well known as the companion of Lieut. A. Conolly in his journey from Persia to India On quitting Calcutta, in 1832, to join his new appointment, he carried with him copies of all the plates of ancient coins up to that time printed, and others were afterwards forwarded to him, to assist him in the search he zealously undertook to make for Bactrian and Hindu coins, then only sparingly known to us. Later in the field, and bringing none of the knowledge of the subject possessed by his European competitors, his comparatively undirected efforts have been wonderfully successful:{.

2. Mohan Lal was one of the first Indians to receive English education at the Delhi Anglo-Indian College. When he was presented to the Asiatic Society in August 1834 by Mr. Trevelyan he was described as 'this first fruit of English education in the ^{mus}fussil!' Mohan Lal accompanied Lieut. A. Burnes as his Persian Munshi in his journey to Bokhara and Persia. Later he joined Dr. Gerard. He was inspired to write on the antiquities and the peoples of the countries he visited by a chance perusal of some issues of the Journal of the Asiatic Society. (JASB, 1834, p.9). In August 1834, when he came to Calcutta to exhibit the various articles brought from Afghanistan, he was introduced to the members of the Asiatic Society. The collection consisted of ancient coins, seeds of fruits, flowers and trees, pieces of sculpture and specimens of the manufactures and natural productions of Afghanistan. Extracts were read from the journal which he regularly kept in English from the day he joined Lieut. Burnes' party. (JASB, 1834, p.364 Proceedings of August).

Footnotes 3 and 4 cont. from page 30.

3. Charles Masson, 'Memoir on the Ancient Coins found at Beghram, in the Kohistán of Kábul'. JASB, 1834, p.153.

4. Ibid p.154.

people annually gathered thirty thousand, which they melted down. During the next four years, after he had succeeded in allaying the mistrust of the people,¹ he himself collected the staggering number of thirty thousand coins.² He thought of shifting the field of his activities to Balkh when he was threatened by a rise in the price of coins as a result of increased competition.³ He was not only a collector of coins, but also excavated numerous Stūpas in the region.⁴

In the meanwhile, however, developments had taken place in other branches of archaeology as well - in the collection and discovery of inscriptions for instance and also in recording the equally mysterious pillars, some of them bearing inscriptions in the ~~then~~ unknown 'Lāṭh characters' (i.e. Aśokan Brāhmī), which were to be found in many parts of the Gangetic provinces. In 1835~~8~~ Hadgson, the British Resident in Nepal, sent to Calcutta the drawings of the Bākhrā, Arā-rāj and the Nandan-garh pillars and also of the Kesariyā stūpa.⁵ Also in the

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1. Masson, 'Memoir etc.' JASB, 1834 op.cit. p.154.
 2. H.H. Wilson, Ariana Antiqua, London 1841, p.11.
 3. 'Extracts from Mr. Masson's letter to Dr. J.G. Gerard, on the Excavation of Topes, dated Tattung, 22nd March, 1834'. JASB, 1834, pp.329-332.
 4. Masson's collections and excavations formed the subject-matter of Wilson's Ariana Antiqua, published in 1841, in which Masson himself contributed a Memoir on the Topes of Afghanistan. It is worthy of note that Masson also made a respectable contribution towards the development of the Kharoṣṭhī script. See infra p.220
'At an early period of his researches he proposed to the Government of Bombay to transfer his actual and all future collections to the East India Company, on condition of their defraying the cost of his operations. The proposal was favourably received, and from the year 1834 until 1837 Mr. Masson was sedulously employed in the pursuit, in which he had engaged with equal intelligence and zeal, on behalf

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Footnote No.4 from page 32 cont....

4. and at the expense of the East India Company. In the course of time the collections which he had formed and which included above thirty thousand coins, was transmitted to England and deposited in the Company's museum.' (Ariana Antiqua, loc.cit.) The remainder of the Masson collection was bought by Cunningham at a sale in London. (Later Indo-Scythian coins, p.111, Vārānasi edition). Masson was of American origin. (R.B. Whitehead, Catalogue of Coins in the Panjab Museum, Lahore, Vol. I. p.3 Oxford, 1914).
5. B.H. Hodgson, 'Account of a Visit to the Ruins of Simroun, once the capital of the Mithila Province'. JASB, 1835, p.121.

same year J. Stephenson paid a visit to the ruins of Bākhrā-Bassār, described the pillar and the ruins of the city and presented to the Society a broken Buddha statue bearing the creed on the pedestal.¹ Liston visited Kasiā² and later drew attention to the Kahaon pillar.³ Great curiosity was roused by Stacy's discovery of the first Grecian sculpture ever to be found in India.⁴ Lieut. Burnes had written in 1833 an 'Account of the Jain Temples on Mount Abú in Guzerát'.⁵ Great sensation was also created by the accidental discovery by Cautley while excavating the Doab Canal, of what Prinsep called a sub-terranean town, seventeen feet below the surface near Behat.⁶ Kittoe

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1. J. Stephenson, 'Excursion to the Ruins and site of an Ancient City, near Bakhra, 13 cos north of Patna, and six north from Singhea'. JASB, 1835. pp.131-138.
 2. JASB, 1837, p.239. Proceedings of April.
 3. D. Liston, 'Notice of antiquities discovered in the eastern division of Gorakhpur; with a copy of an inscription on a stone pillar, etc.' JASB, 1838, pp.33-36.
 4. JASB, 1836, p.517. Proceedings of September. Also, Lieut.-Col. L.R. Stacy, 'Note on the discovery of a relic of Grecian Sculpture in Upper India'. *Ibid.* pp.567-570. Also *infra* p.144.
 5. JASB, 1833, pp.161-167.
 6. Capt. P.T. Cautley, 'Discovery of an Ancient Town near Behat, in the Doab'. JASB, 1834, pp.43-44. Cautley called it an 'Oriental Herculaneum'. (*Ibid.* p.43). Some of the finds from the site were illustrated in the JASB, thus being the first minor antiquities from an Indian site to be ever published. Prinsep later remarked: 'The exhumation of this subterranean town has not perhaps been followed up with so much vigour as it would have been, had not its discoverer's attention been diverted to other antiquities of more overwhelming interest - the fossil inhabitants of a former world - before which the modern reliques of a couple of thousand years shrink into comparative insignificance.' JASB, 1835, p.624.

contributed a series of papers on the antiquities of Orissa between 1837 and 1839 when he was touring the area in search of coal. In the course of his wanderings he visited Khaṇḍagiri and discovered the Dhāuli and Jaugadā inscriptions.

But the crowning achievement of all these labours of the decade, was the decipherment of the Brāhmī script and the consequent clearing up of many of the mysteries of ancient Indian history.¹ The discovery by George Turnour (1799-1843) that the Piyadasi of the inscriptions, whom Prinsep had thought to be a King of Ceylon, was no other than the Asoka of the Pāli annals, was received with great wonder.² But the interest became keener when Prinsep further discovered from the same inscriptions that

1. A series of papers in the JASB, 1837. pp.451-463; 467-477 and 566-609.

2. 'Since I came down to Colombo, I have made a most important discovery, a valuable collection of Pāli works was brought back to Ceylon from Siām, by George Nadoris, modliar, ... in 1812. In that collection I have found the Dīpowanso or Mahāwanso compiled by the fraternity at Anurādhapura to which the Mahāwanso refers!!

'In running over the book cursorily I find the following lines in the sixth Bhānawāro ... in reference to Dhamma Asoko:-

'Here then we find that Asoka was surnamed Piyadassi; and if you will turn to the 5th Chapter of the Mahāwanso, especially pp.28,29, you will see the circumstances under which Buddhistical edifices were simultaneously erected all over India'

From the Honourable Mr. George Turnour's letter to James Prinsep. JASB, 1837, pp.790-791.

Turnour was born in Ceylon. He was in Ceylon Service and in the latter part of his career was a member of the Supreme Council of Ceylon.

Asoka-Piyadasi was also the contemporary of some of the western monarchs of the 4th century B.C., namely, Antiochus and Ptolemy.¹ To the European student of Indian history 'nurtured in the school of Western classical associations'² as he was, nothing comparable in excitement had happened since Jones's rediscovery of the identity of Sandrocottus and Chandragupta.³

1. James Prinsep, 'Discovery of the name of Antiochus the Great, in two of the edicts of Asoka, King of India'. JASB, 1838, pp.156-167, and 'On the Edicts of Piyadasi, or Asoka, the Buddhist monarch of India, preserved on the Granar rock in the Gujerat penninsula, and on the Dhanli rock in Cuttack; with the discovery of Ptolemy's name therein'. Ibid. pp.219-282.

2. Ibid. p.219.

3. The elated Prinsep wrote: "As long as the study of Indian antiquities confines itself to the illustration of Indian history it must be confessed that it possesses little attraction for the general student, who is apt to regard the labour expended on the disentanglement of perplexing and contradictory mazes of fiction, as leading only to the substitution of vague and dry probabilities for poetical, albeit extravagant, fable. But the moment any name or event turns up in the course of such speculations offering a plausible point of connection between the legends of India and the rational histories of Greece or Rome - a collision between the fortunes of an eastern and a western hero, - forthwith a speedy and spreading interest is excited'

Ibid. p.156.

Cunningham's collaboration with Prinsep: It was indeed difficult not to catch the contagion of Prinsep's enthusiasm. In his first few years in Calcutta, Cunningham at once came under Prinsep's spell. He was initiated into the mysteries of Indian archaeology by the master himself, - a fact which Cunningham used to recall with pride in later life. Cunningham believed that he was carrying on the unfinished task of Prinsep.¹

Indeed Prinsep formed a special attachment for his young friend hardly out of his teens. Cunningham himself provides us with some interesting glimpses of that unequal friendship through some of the letters that Prinsep wrote to him at that time.² Cunningham also records:

'During a great part of the years 1836 and 1837, the most active period of his career, I was in almost daily intercourse with him. With our mutual tastes and pursuits this soon ripened into the most intimate friendship. I thus had the privilege of sharing in all his discoveries during their progress. ... when

1. Such was Prinsep's power of commanding allegiance that, long after his death, when Kittoe (for Kittoe see infra p.65 n.1) came under a cloud in his official life he indulged in anti-quarian studies to 'drown unpleasant reflections' and his only gratification was that in so doing he was 'partly carrying out the wishes of [his] late amiable and learned patron, James Prinsep, who often expressed a wish that [he] should ramble over the district of Behar and cater for him'. 'Notes on the Viharas and Cahityas of Behar', JASB, 1847, Pt.I. pp.272-273.

2. Report I. Introduction.

I recollect that I was then only a young lad of twenty-three years of age, I feel as much wonder as pride that James Prinsep should have thought me worthy of being made the confidant of all his great discoveries'.¹

Cunningham proved to be a very bright pupil indeed. He quickly mastered the essential elements of Indian archaeology and was before long himself taking part in the decipherment of the Kharoṣṭhī and Brāhmā alphabets. His advent was formally announced and welcomed by Prinsep in the 1834 issue of his Journal where Cunningham's first article, a note on 'The Roman coins from Manikyala' was printed. 'We compliment our young friend', Prinsep wrote, 'upon the success with which he has commenced his numismatic studies, and shall always be happy to profit by his criticism.'² As his friendship with Prinsep became warmer, his link with the Asiatic Society became closer,³ and archaeology became his first love. Henceforth wherever he might be he remained loyal to archaeology and remembered the Society.

1. Report I. pp. VII and X.

2. JASB, 1834, p.635.

3. At the February 1836 meeting of the Society Cunningham was elected a member. (JASB, 1836 p.124). In October 1837 Cunningham became a member of the Special Committee appointed by the Society to select one of the designs for the pedestal of the Allahabad Column submitted by Captain Edward Smith of the Engineers. (JASB, 1837, p.799. Proceedings of October.) In February 1868 he was elected an Honorary Member of the Society. (JASB, 1868 p.62. Proceedings of February.) In March 1880 he was elected on the Society's Philological Committee and Coins Committee. (JASB, 1880, pp.51 and 53. Proceedings of March.)

He got his first taste of what Prinsep called 'field-archaeology' at Banaras where he was transferred. Wishing to imitate Ventura¹ he proposed to excavate the great Dhāmek stupa at Sārnāth and started work on it in December 1834. He had the whole hearted support of James Prinsep and later Prinsep, Captain Thoresby and Major Grant shared the cost with Cunningham.² All this labour, however, ended in disappointment, as no relic deposit was found inside. Long afterwards, looking back on his inexperienced days he reflected:³ 'When I began this work I was not aware that many of the most hallowed of the Buddhist Monuments were only memorial stupas, raised over spots rendered famous by various acts of Buddha'

As early as October 1836 Prinsep announced the discovery by Cunningham of a new name in the Gupta dynasty - that of Skanda Gupta - first from the Bhitari pillar inscription and then from two unique coins, one in his own and one in Prinsep's collection. For the increasing knowledge about the hitherto unknown Gupta dynasty through the medium of coins and inscriptions, Prinsep declared everybody was 'almost entirely beholden to the researches of Lieut. A. Cunningham and Mr. V. Tregear.'⁴

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1. Prinsep's note on J. Stephenson's 'Excursion to the Ruins and site of an Ancient city near Bakhra etc.', JASB, 1835, p.132.
 2. This ran into a sum of a little over five hundred rupees. The excavations continued until January 1836. For details see Report I, pp.110-130.
 3. Ibid.
 4. James Prinsep, 'New Varieties of the Mithraic or Indo-Scythic Series etc.', op.cit. JASB, 1836, pp.643 and 647-648.

Cunningham helped Prinsep in making a thorough scrutiny of all the Society's available collections. The collaboration indeed was so close and Prinsep learnt to depend on him so much that he wrote that his own contributions would not have been possible without Cunningham: 'Henceforward my readers should understand, and they will soon perceive the fact, that my coin essays are joint productions, and that I have an auxiliary at my elbow, far better acquainted with the contents of, I may say, all the collections of coins in India, than I have leisure to become. With his zealous aid in hunting out the unpublished varieties of every class I hope to make these notices complete' ¹ Indeed Cunningham made his mark so quickly that in 1837 Rev. Mill² also noted the indebtedness of the Indian antiquarian studies to the 'zeal and activity' of Cunningham. In January 1839 and after Prinsep's departure, when a large collection from Afghanistan arrived in Calcutta³, the members of the Society felt that 'in the absence of ... Captain Cunningham, Mr. V. Tregear, and Colonel Stacy, there were no persons in Calcutta to whom the examination, arrangement, and

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1. 'New Varieties of the Mithraic or Indo-Scythic Series etc.' op.cit. JASB, 1836, p.652. In February 1837 Cunningham again arranged the coins in the Cabinet of the Asiatic Society. JASB, 1837, p.156. Proceedings of March.
 2. Principal of Bishop's College, Calcutta. On the occasion of his retirement in September 1837, Pandit Kamalā Kānta wrote a Sanskrit eulogy in which he compared Mill with Kālidāsa. 'Kalidasa come again among us'. JASB, 1837. Proceedings of September.
 3. Supra, p. 17n1

report upon the relics and coins could be committed with confidence'.¹

By 1840 we find him very much involved in archaeology. He is prodding others for coins and inscriptions. Lady Sale promises to send him 'impressions of all curious coins that she may meet with'. With the Sārnāth excavations over he is longing to attack the Bihar stupas. The country north of Patna is full of 'topes' - Kesariyā, Bassār, Bākhrā - none of which have been opened. Could not the Asiatic Society manage to have an excavation made? If only he were at Patna he 'would have the topes across the Ganges opened in two months'! He must visit Faizabad where he had heard that there is a pillar. He had other interests as well. He is also lithographing 'a large drawing of a beautiful silver patera of a Sassanian king on horseback, killing a lion'. New genuine coins are not turning up but the forged ones are becoming plentiful. And so on.²

In November 1835 he presented the Asiatic Society with some of his Sārnāth finds - small Buddha images - and also copies of inscriptions and impressions of coins.³ A further lot was received by the Society in October 1836.⁴ Also in 1836

1. "Coins and relics from Bactria", JASB, 1838 p.1048.

2. In his letter to the Society. JASB, 1840, pp.859-860. Proceedings of November.

3. JASB, 1835 p.651. Proceedings of November.

4. JASB, 1836, p.588. Proceedings of October.

Cunningham took the first facsimile of the inscription on the Bhitari column (near Ghazipore) 'under serious disadvantages' and sent it to the Society.¹

We have already taken note of his archaeological activities during his Kashmir and Ladakh missions in 1839 and 1846-48 - including his major fieldwork of the period of detailed measurements of the Kashmir temples.² It was also during these missions that he came by a copy of Mirza Mughal Beg's map of Panjab³ and studied it for the purpose of locating probable sites.

In fact, Cunningham had been looking for antiquities both while on the march and while posted at various military stations. He studied the antiquities of Kanauj when he visited it in January 1838.⁴ During his period as the Executive Engineer of the King of Oudh he discovered the actual site of Sankissa.⁵ He utilised his stay in Gwalior and Mahobā by studying their antiquities, - in 1852 he visited Khājūrāho for the first time and explored it.⁶ In 1853 and 1856 he

1. JASB, 1836, p.303. Proceedings of May.

The column itself was first brought into notice in 1834 by Tregear. While making a drawing of the pillar both Cunningham and Tregear uncovered the inscription from below the ground level. Also JASB, 1836, p.661 and JASB, 1837 p.2.

2. *Supra* p.10.

3. Mirza Mughal Beg was employed for ten years by Wilford between 1784-94 to survey Panjab and the Kabul valley. Wilford later prepared a map on the basis of the survey. This map later came in Cunningham's possession.

4. Report I p.287.

5. 'An Account of the Discovery of the Ruins of the Buddhist city of Sankassa', in a letter to Colonel Sykes F.R.S. JRAS, 1843, pp.241 ff.

6. Report II, p.425.

carried out some excavations at Harappā.¹ In 1853 the importance of the site of Mathurā, which had been known since Stacy's discovery of the Bacchanalian group, was brought into prominence by Cunningham when he found, inside the Kāṭrā Square, two large capitals of columns.² This discovery was followed in 1860 by his reading of a circular inscription round the base of a column from the jail mound which revealed the existence of a monastery on the site called the Huviṣka Vihāra; - this Huviṣka he equated with the King of the same name of the Wardak inscription and with the Huṣka of Rājatarāṅgiṇī and published his results in the JASB for 1860.³

It appears that all this while he had also been toiling to acquire some working knowledge of Sanskrit.⁴ A good grounding in the classics he already had. And by the mid-nineteenth century the Indian archaeologist was well provided with translations for 'text-aided' archaeology. Hindu literature both religious and secular was being translated from the days of Jones onwards.⁵ To this body of Sanskrit literature was gradually being added literature on Buddhism in growing quantity.⁶ This debt of the Indian archaeologist to the

1. Report V. pp.105-106.

2. Report III, p.15.

3. Report I. pp.238-239, and JASB, pp.400-401, Literary Intelligence. Letter to the President of the Society. Also JASB, 1863, p.143 and JASB, 1864. pp.228-229

4. Later on he picked up some Persian.

5. Jones himself translated Śakuntalā and Manu. Wilkins translated the Bhagavad Gītā. Colebrooke's Amarakosha was published in 1808, Moḍr's Hindu Pantheon in 1810, and

Footnotes from page 42 cont...

5. Vans Kennedy's Hindu Mythology in 1831. Houghton prepared another translation of Manu which was published in 1825. And above all were Wilson's translations; particularly his Hindu Theatre (1826-27) which created a stir, and his studies of the Purānas and the Rig Veda (1850).
6. Csoma's Writings; and Upham's Mahāvansi (1833). Turnour's Mahāvanso with its valuable introductory essay on Pāli Buddhistical literature (1837); Rémusat's translation of Fa Hsien (1836) and Nouveaux Mélanges Asiatiques (1825-26 and 29); and a few years later a number of most important publications like Hardy's Manual of Buddhism (1853), Bishop Bigandet's Legend of the Burmese Buddha (1866); Tārānāth's translation by La Combe through the Russian version of Vassilief (1863); Burnouf's Buddhisme Indien and Le Lotus de la Bonne Loi; Foucaux's translation of Lalita Vistāra (1860); Schlagintweit's Buddhsim in Thibet (1863) and Alabaster's Siamese Life of Buddha (1871). Also important were Trøyer's RājāTarangini (3 Tomes Paris, 1840-52), Kern's translation of Varāha Mihira (1865) and Monier William's Dictionary (1851) (We come across frequent references to all these books in all Cunningham's writings.)

literary and linguistic scholar was humbly acknowledged by Cunningham himself in a characteristic passage: '... I beg it to be distinctly understood that we field archaeologists make no claim to more than ordinary scholarship, and that if we have been successful in many of our archaeological researches we can truly ascribe our success in great measure to the hitherto difficult path having been smoothed by the labours of our great Sanskrit scholars, whose translations have placed within our reach nearly all the chief works of Indian learning. If we have sometimes been able to perceive what escaped the notice of our more learned contemporaries, it has been owing to the lift that we have got from them; for, as the old scholiast says, Pygmaei gigantum humeros, &c., "even pygmies on the shoulders of giants can see farther than the giants themselves."¹'

The discovery of Buddhism and its impact:

During this period, which may be called the formative period of his archaeological career, he was leaning more and more towards the study of Buddhism, its archaeology and history in India. A general interest in Buddhism was being stimulated in this period with the better understanding of the stūpas and their purposes;² the readings of Kharoṣṭhī and Brāhmī inscriptions; the discovery

1. Report I p. XLIII.

2. See Appendix A

of the Indo-Scythian coins; the increasing number of the translations of Buddhist texts and above all the travelogues of the Chinese pilgrims, - the fruits of the tireless labours of scholars like Csoma¹ and Hodgson, Turnour and Rémusat, Burnouf and Lassen and Prinsep.² Indeed, one of the most outstanding events in the development of Indology is the impact of the ~~discovery~~ discovery of Buddhism in the second quarter of the nineteenth century - the sudden realisation of the very important role of Buddhism in Indian history, a fact which was very imperfectly grasped by the Jonesian School. Jones and his colleagues were grappling with the Purāṇas, the Epics and the law-books. The history of pre-Muslim India to them was the history of the Hindus. Even the stūpas, ~~as we have seen~~, were 'pyramids' and according to one at least dedicated to 'Mahadeo',³ in common with those in Egypt and in Ireland!

1. On Csoma, the Hungarian scholar, read Theodore Duka, Life and Works of Alexander Csoma de Kőrös, London, 1885.

2. One example will suffice to give some idea of how laboriously, step by step, the knowledge about Buddhism was gained. This is the fascinating story of the way the Buddhist Creed was first understood. It was first noticed, without any comprehension, on the pedestal of the Buddha statue from Bākhṛā, sent to the Society by Mr. Stephenson. (See JASB, 1835, pp.128-138.) Later the same inscription was noticed on the slab which Cunningham had extracted from inside the Dhāmek stūpa and sent to the Society. The two inscriptions were read with the help of Dr. Mill and Govind Rām Sāstrī, 'Mr. Wilson's intelligent Pandit'. Its meaning was understood from Csoma, who discovered similar verses in his Tibetan books. But they had not yet realised that they were dealing with the Buddhist profession of faith. The whole mystery however was solved, when Ratna Pāla, the Christian convert from Ceylon who resided in Calcutta and used to help Prinsep with his inscriptions, instantly recognised it as the Buddhist

Footnotes continued from page 45.

2. Creed. This was later confirmed by Hodgson from his Nepalese experience. (Ibid. and B.H. Hodgson, 'Further Note on the Inscription from Sárnáth'. JASB, 1835, pp.211-215)
3. Reuben Burrow, 'Memorandum concerning an old building, in the Hadjipore district etc.' Asiatick Researches II (1790) pp.477-478.

Much fantastic speculation was going on respecting the religion and its founder, - in no way better than the speculations of earlier generations - of D'Anville, De Guignes, Giorgi, Couplet, Bailly, Gentil and La Loubere.

The mistake, common until late times,¹ of identifying Woden with Buddha,² we also find in Jones. According to him the religion of Woden, who was 'the same with Buddha', was introduced simultaneously by foreigners into India and Scandinavia and was received much later by the Chinese who softened his name into Fo.³ The foreigners who introduced the religion were in fact, the Egyptians under the leadership of Sesac ('Sá-cya') or Sesostris,⁴ 'about a thousand years' before the beginning of the present era.⁵ Chambers also made the same mistake of identifying Woden with Buddha. He however made the important discovery - by reading travellers' accounts and particularly de La Loubere's account of Siam - that the Siamese god Sommona Codom [> Sramana Gautam] (whose other name was Pout) was no

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1. As late as ~~1854~~ 1854 Cunningham suggests this in his The Bhilsa Topes (London, 1854) p.vii.
 2. Woden = Mercury > Son of Maia
Buddha > son of Maya
Wodensday = Wednesday = Budh Bār.
 3. 'Third Anniversary discourse' 1786. Asiatick Researches I (1788) p.425.
 4. Asiatick Researches, II (1790), p.401.
 5. Ibid, p.125 William Jones, 'On the Chronology of the Hindus', Also 'The Third Anniversary Discourse', As. Res. I. p.425.

other than the Ceylonese god 'Buddou' - even their modes of worship were the same.¹ He further suggested that the same religion also prevailed in some parts of India 'prior to that of the Bramins' and right up to the 'ninth and twelfth centuries' of the Christian era.²

The Bauddhas were thought to be the followers of Jina³ and by looking at the Buddhist statues Wilford⁴ had no doubt in

1. William Chambers 'Mavalipuram etc. ...' dated 17th June 1784. Asiatick Researches I (1788), p.158.
2. Ibid p.166.
3. Wilford 'On Egypt and the Nile of the Ancient Books of the Hindus', Asiatick Researches III (1792) p.299.
4. 'Francis Wilford, an officer of engineers [E.J.Company], was of Swiss extraction. He was a good Classical and Sanskrit scholar, and his varied and extensive reading was successfully brought into use for the illustration of ancient Indian geography. But his judgment was not equal to his learning; and his wild speculations on Egypt and on the Sacred Isles of the West, in the 3rd and 9th Volumes of the Asiatic Researches, have dragged him down to a lower position than he is justly entitled to both by his abilities and his attainments.' Cunningham, Report I, p.II. Wilford was also badly fooled by unscrupulous pandits at Banaras who imposed forged Purānas on him on the basis of which even Sir William Jones was misled into finding the Biblical Genesis story in the Purānas*.

his mind that 'Whether Buddha was a sage or a hero, the leader of a colony, or a whole colony personified, whether ... black or fair' he was either an Egyptian or an Ethiopian.¹ Buchanan² was told by a Brahman of Bengal that 'Buddha was King of Rahar,' which according to him, was 'bounded in the east by the river of Moorshedabad, and from there extends to Benares, being nearly the same with the Soubah of Behar.'³

1. 'Wilford,' 'On Egypt and the Nile etc.' op.cit. p.414.
2. Francis Buchanan Hamilton M.D. (1762-1829); 1794 entered the East India Company's service as a surgeon on the Bengal establishment. Shortly after reaching India he accompanied a mission to the Court of Ava and devoted himself to botanical researches. In 1822 wrote on the fishes of the Brahmaputra. In 1800 he was deputed by Lord Wellesley, Governor-General of India, 'to travel through and report upon the countries of Mysore, Canara, and Malabar, investigating the state of agriculture, arts, and commerce; the religion, manners and customs; the history, natural and civil, and antiquities in the dominions of the Rájá of Mysore, and the countries acquired by the Honourable East India Company in the late and former wars from Tippoo Sultan'. Buchanan's tour in Southern India was followed by a visit to Nepal, in company with another British mission, in 1802, which resulted in his writing a history of Nepal, and making large additions to his botanical collections. On his return he was appointed surgeon to the Governor-General, and accompanied Lord Wellesley on his voyage to England in 1806. Shortly afterwards he was deputed by the Court of Directors to make a statistical survey of the presidencies of Bengal, an enormous work upon which he was employed for seven years, and which was only partially accomplished. In 1814 Buchanan was appointed superintendent of the Botanical Garden at Calcutta, but returned to England in the following year. On the death of his eldest brother, he succeeded to the estate which had been the property of his mother, and took the additional name of Hamilton.
Cf. Dict. of National Biography.
3. Francis Buchanan 'On the Religion & Literature of the Burmas', Asiatick Researches, VI (1799) p.234.

But this paper of Buchanan however may be cited as a landmark in as much as it did a great deal to clear up many misunderstandings about the religion and its founder. This intimate knowledge of the Buddhists he gained by his prolonged stay among the people of Burma and by the reading of a tract on Buddhism prepared by a Buddhist priest.¹ He brought an end to the myth of the Egyptian origin of Buddha.² He discussed the different orders of priests among the followers of Buddhism, and also described the monasteries, temples and the daily routine of life of their priests, including begging. He gave an interesting account of the ceremonies connected with Ordination, from actual observation in Rangoon.³

A new element was now introduced into Indian history - and for a time, at least, it appeared to be by far the most important element. Knowledge of Buddhism helped to correct the perspective of Indian history but not without against distorting it in its own favour. This was the beginning of

1. Buchanan, op.cit. As.Res. VI. pp.265-273.

'A Catholick bishop, residing at Ava sometime ago, asked the chief Rāhān, called Zaradobura, to give him some short treatise, which would explain the heads of the law taught by Godama. The Zarado, willing to satisfy the bishop, wrote for his use the following treatise:' The treatise was written in a question and answer form. Apparently it gives the main tenets of Hīnayāna Buddhism. Buchanan does not say where he obtained the treatise. And he thought that this was the same as the Compendium legis Barmanorum in the museum of Cardinal Borgia which was also written by Zarado of which Paulinus gives an account. This was translated by Father Sangermano.

2. Ibid. pp.258 ff.

3. Ibid. pp.274-293.

that predominance of Buddhism in Indian archaeology that was to characterise it for the rest of the century. Cunningham followed this current fashion, which he had himself been largely responsible for creating. His activities at Sārnāth, his articles in defence of Hsüan Tsang,¹ and finally his explorations in Sankissa and excavations at Sāñchī,² are the landmarks in his progress towards his Buddhism-centred archaeology. Cunningham has been criticised for this preoccupation with Buddhism; but the criticism is perhaps unfair as such a bias was inevitable in the circumstances of the time. Indeed, in a curious way, it was Buddhism which provided him with the best reason for the study of Indian archaeology.

1. *Infra* p.72 n.2.

2. While on his way from Augar to Lalitpur on official tour, Cunningham joined Captain Maisey at Sāñchī on the 23rd January, 1851. Maisey was then engaged on 'special duty' of exploring and preparing a report on the Sāñchī stūpas. The same morning, after only a few hours' work, they found relics of Śāpiputra and Mogallāna, the two chief disciples of Buddha, in the ruins of No.3 stūpa. Cunningham stayed there until 12th March, 1851. Maisey prepared excellent drawings of the bas-reliefs, which, however, the Company hesitated to publish because of the high expenditure. While the matter was still under consideration, Cunningham brought out in 1854 his own work "The Bhilsa Topes". (Report I. p.XXXVIII and General F.C. Maisey, Sāñchi and its Remains, London, 1892, pp.xi and l.) Cunningham had already published an advanced notice of his explorations in 1852. ('Opening of the Topes or Buddhist Monuments of Central India', *JRAS*, 1852. pp.108 ff. It was actually read on July 5th, 1851).

The birth of the idea of a Survey: When he discovered the site of Sankissa he communicated the news to Col. Sykes¹ in London, adding that an archaeological survey of India 'would be an undertaking of vast importance to the Indian government politically, and to the British public religiously. To the first body it would show that India had generally been divided into numerous petty chiefships, which had invariably been the case upon every successful invasion; while, whenever she had been under one ruler, she had always repelled foreign conquest with determined resolution. To the other body it would show that Brahmanism, instead of being an unchanged and unchangeable religion which had subsisted for ages, was of comparatively

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1. William Henry Sykes (1790-1872): entered the military service of the East India Company as cadet in 1803. Obtained a captaincy in 1819 and returned to Europe in 1820. In October 1824 he returned to India, receiving the appointment of statistical reporter to the Bombay Government. For the next few years he was engaged in statistical and natural history researches, and completed a census of the population of the Deccan, two voluminous statistical reports and a complete natural history report illustrated by drawings. He retired from active service with rank of Colonel on 18 June, 1833. His knowledge of Indian affairs led to his being elected in 1840 to the Board of Directors of the East India Company, of which he became deputy chairman in 1855 and chairman in 1856. Member of Parliament. President Royal Asiatic Society, 1858. Sykes was a zealous scientific observer, his favourite pursuits being zoology, palaeontology, and meteorology. Forty-five papers on these subjects were contributed by him to various scientific journals, besides many others on antiquities, statistics, and kindred subjects.
Cf. Dict. of National Biography.

modern origin, and had been constantly receiving additions and alterations; facts which prove that the establishment of the Christian religion in India must ultimately succeed'.¹

In this idea, however, he was only following Colonel Sykes himself in his conclusion in his paper in the JRAS for 1841.²

1. op.cit. JRAS, 1843. pp.246-247.

Fifty years earlier Sir William Jones had a more realistic approach to the question and had correctly predicted that Christianity did not have much prospect of spreading in India: He reasoned:

'As to the general extension of our pure faith in Hindustán, there are at present many sad obstacles to it. The Muselmáns, are already a sort of heterodox christians: they are Christians, if Locke reasons justly, because they firmly believe the immaculate conception, divine character, and miracles of the Messiah; It will be inexpressibly difficult to undeceive them, The Hindus on the other hand would readily admit the truth of the Gospel; but they contend, that it is perfectly consistent with their Sástras: the deity, they say, has appeared innumerable times, in many parts of this world ... and though we adore him in one appearance, and they in others, yet we adore, they say, the same God, We may assure ourselves, that neither Muselmáns nor Hindus will ever be converted by any mission from the Church of Rome, or from any other Church; '

'On the Gods of Greece, Italy, and India ' written in 1784, then revised. Asiatick Researches, I (1788), pp.274-275.

2. 'Notes on the Religious, Moral and Political State of India before the Mohamedan Invasion, chiefly founded on the Travels of the Chinese Buddhist Priest Fa Hian in India, A.D. 399 etc.'
JRAS, 1841, pp.248-484 including Appendix.

Buddhism and its arcaheology was therefore to be studied for the cause of promoting Christianity. For a systematic study of Buddhism, however, the first requisite was a survey at Government cost.

Since writing his letter to Sykes Cunningham had been toying with the idea of a survey. The discovery of Sankissa had in fact left him wondering. In the same letter to Sykes he wrote: 'These few points, which have been ascertained by me on a march upon duty in the rainy season, and without a single halt, will show you what might be done if one had the opportunity of marching leisurely, with time to halt at all places which seemed to offer any objects of interest. To open these, and to search out all the Buddhistical ruins in India, would be works of the greatest interest and importance. With what joy and zeal would not one trace Fa Hian's route from Mathura, his first Indian station, to his embarkation for Ceylon.' The point was driven home by another letter in 1848 to the Asiatic Society of Bengal¹: The publication of all the existing remains of Buddhism - their architecture, sculpture, coins and inscriptions - was infinitely more important for the illustration of the history of India than the printing of the rubbish contained in the Purānas. It was a duty which the Government owed to the country. Moreover, the ~~remains~~ remains of architecture and sculpture were daily

1. 'Proposed Archaeological Investigation' JRSB, 1848. pp.535-536

deteriorating, and inscriptions were broken or defaced.

'The fact that Buddhism continued to flourish throughout India for many centuries, is to be ascertained from monuments almost alone. Buildings, coins, and inscriptions all point to Buddhistical ascendancy until the attacks of the Musalmáns under Mahomed Ghaznavi. The institutes of Menu, the Ramayana, the Mahabharata, and the fabulous Puranas are all silent regarding Buddhism, as if that religion had never flourished in India'

He also pointed out how 'an enquirer into Indian archaeology, should tread in the footsteps of the Chinese pilgrims Hwan Thsang and Fa Hian'. 'Guided by them he would visit Thanesar and Delhi Behat and Sadhora, Mathura and Sankassa, Kanoj and Ajodhya, Kapila and Kusinagara, Kasi and Pataliputra, Gaya and Rajagriha'

The proposed survey would require the services of at least two persons, 'one of whom should be a good draftsman. But the one to whose judgement the selection of objects for preservation is to be confided should have a knowledge of the ancient history of India. He should be conversant with the sculptured forms and religious practices of the present day, and with the discoveries made by Prinsep and others in Indian Palaeography and Numismatology;'

This then was the germ of the idea the fulfilment of which he was eventually to see and over the destiny of

which he was to preside for a quarter of a century.

The translation and editing of the texts under the aegis of the government had been taking place for a long time. In revealing the ancient history of India, the relative roles of the texts and the actual material remains were however complimentary to each other. The question of archaeology at Government cost was therefore bound to arise sooner or later.

To Cunningham at least, as we have noticed before, the study of the material objects was of more importance than texts of dubious value.¹ When he urged again in 1854 that the Court of Directors should 'authorise the employment of a competent officer to open the numerous topes' and to 'draw up a report on all the Buddhist remains,' he pointed out: 'A work of this kind would be of more real value for the ancient history of India than the most critical and elaborate edition of the eighteen Puráanas'.²

The Asiatic Society of Bengal's attitude to Government Sponsored archaeology: In his idea of Government sponsored archaeology, however, Cunningham was being bold and to a great extent also original. Although fully aware of the importance of

1. Supra p. 54

2. Bhilsa Topes, pp.x-xi.

exploration and excavation,¹ Prinsep and for that matter the Asiatic Society itself, never showed any enthusiasm for archaeological enterprise controlled, financed and organised by Government. The absence of any such ardour on the Society's part is brought into high relief when viewed against its spirited fight for extracting financial support from an unwilling Government for its resolve to bring to completion the printing

1. '... the only accurate data we possessed for adjusting the chronology of Indian princes', wrote Prinsep, 'were those derived from ancient monuments of stone; inscriptions on rocks and caves; or grants of land engraven on copper-plates,' See 'Note on Inscription No.1 of the Allahabad Column', JASB, 1834, p.114. After the reading of the Asokan inscriptions Prinsep expressed his appreciation of the usefulness of excavations: 'Where are they all? On what road are we now to search for these venerable relics, these banyan trees and mangoes, which, with the aid of Professor Candolle's theory, (f.n. 'See translation of his essay on the Longevity of Plants, J.A.S. Vol. III') would enable us to confirm the assumed date of our monuments? The neighbourhood [of the Feroz pillar] should also be examined for traces of a vihāra, a holy tree, a road, and boulees or large pakka wells:— The texture of the stone also should be noticed, that the quarry whence it was brought may be discovered, for now that we know so much of its history we feel a vivid curiosity to pry into the further secrets of this interesting silastambha,'
- 'Interpretation of the most ancient of the inscriptions on the pillar called the lāt of Feroz Shāh, near Delhi, and of the Allahabad etc'.
JASB, 1837, p.576.

of the Sanskrit, Arabic and Persian texts¹ which were abruptly abandoned by the government following the change in its education policy in favour of westernization on the basis of the famous minute of Macaulay.²

In surprising contrast to this attitude, Prinsep expressed himself to be positively against any organised archaeological effort, in his reply to Tod's suggestion recommending 'the establishment of branch-committees of the Asiatic Society at several of the large stations, which would have a happy moral result in calling forth the latent talent of many a young officer in every branch of knowledge within the scope

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1. The government in its communication called the already printed parts as 'stores of waste paper', See JASB, 1835 p.349. Proceedings of July.
 2. For the whole affair see JASB 1835, Proceedings of May and July and Preface pp. vi-vii, 1836. In his Preface to JASB, 1835 (p.vii) Prinsep wrote:

'Without venturing to impugn in any degree ~~the~~ wisdom or policy of a measure which has in the face of all India withdrawn the countenance of Government from the learned natives of the country, and pronounced a verdict of condemnation and abandonment on its literature, it may be allowable in this place to prophecy,^(sic) that the conduct of the Asiatic Society, in stepping forward to rescue the half-printed volumes ... will be approved and applauded by every learned Society and every scholar in Europe.'

Elsewhere lamenting the Government's apathy to Oriental Studies he bitterly wrote:

'In any other country it would be termed national object but here such a term might be misapplied.! In France the Government, alias the nation, published M. Jacquemont's works, - purchases M. Ventura's collections, - devotes an annual grant to the Asiatic Society of Paris of 12,000 francs,'
JASB, 1836. p.248 f.n. Proceedings of May.

Tod in his 'Indo-Grecian Antiquities' (Supra p.26 f.n.1) p.9 wrote:

'The journey of Messrs. Burnes and Gerard into Bactria and

/cont...

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Transoxiana was not undertaken a day too soon. Another year, and even the minor glory of participation in the discoveries made by foreigners in these regions would, to our eternal shame, have been snatched from our hands. It has been left to the ingenious and active-minded Jacquemont to explore the riches of Cashmere; to the Chevalier Ventura to open the tombs of the Bactrian and Indo-Scythian Kings; to Meyendorf to describe Bokhara; to De Körös to sit down for years on our very frontier, amidst the heaps of Buddhist (sic.) literature in Thibet; to M. Masson to remain for years in Balkh to M. Honigberger to luxuriate amongst the tumuli at Cabul: and all before we make a single move!'

Tod also quoted Mohan Lal from his Journal of a tour through the Panjab etc., (Calcutta, 1834 and London, 1835.):

" ... it surprises me much that the English power never consider of such valuable discoveries respecting the old Grecian provinces, which history tells us existed in these very tracts, while the gentlemen of foreign countries wear the crown of knowledge and fame, by disclosing the treasures of antiquity".

Jones already - nearly fifty years earlier - had alluded not without a tinge of anguish to this French generosity in financing Indological studies:

* ... I cannot forbear expressing a wish', he said, 'that the activity of the French in the same pursuits may not be superior to ours, and that the researches of M. Sonnerat, whom the Court of Versailles employed for seven years in these climates, merely to collect such materials as we are seeking, may kindle, instead of abating, our own curiosity and zeal'

('The Second Anniversary Discourse, Delivered 24th February, 1785'. Asiatic Researches, I. 1788 pp.412-413).

of the Society'.¹ While differing from Tod, Prinsep thought that Committees were 'cum^brous, spiritless and inactive engines, for such an end'. What was needed was 'an independent pursuer of the object for its own sake, or for his own amusement and instruction'.²

The Society also turned down a scheme proposed by one of Mackenzie's pandits, Cavelly Venkata Luxmiah³, for the systematic and organised collection, editing and translation of inscriptions from the various parts of Southern India. He envisaged an elaborate set-up in which 'two intelligent scholars' would be employed in every zillah, who would send their materials to a central establishment of Pandits and translators headed by himself.⁴ The Committee of Papers of the

1. 'Indo-Grecian Antiquities' op.cit. Supra p.26 f.n.1. For a similar scheme See Journal of the Archaeological Society of Dehli, January, 1853.
2. 'On the connection of various ancient Hindu coins etc'. op.cit. n JASB, 1835, p.623. It is interesting to recall that more than fifty years later in 1887 Growse in his written evidence before the Public Service Commission used similar arguments in expressing his ideas against Government sponsored archaeology.
3. Or as he wrote it, Lachmia. He was a professor in Madras College and also a Corresponding Member of the Royal Asiatic Society. (See JASB, 1836, pp.51 ff. Proceedings of September). He also founded the native Literary Society at Madras. Venkata Lachmia was one of the first Indian archaeologists. He was preceded by Sri Nivasia - another of Mackenzie's pandits - who wrote a description of the ruins of Rājgir; and the native judge from Tanjore, Ram Raz, who died in 1833 and whose Essay on the Architecture of the Hindus was posthumously published next year. Writing in 1822, (Mentioned by Wilson in his 'Account of the Foe Kūe Kīete!'. JRAS, 1839, p. 129. According to Wilson Sri-Nivāsia wrote in the Calcutta Annual Register 1822 and the

Footnotes continues from page 60.

3. Oriental Magazine 1823.) The Jain Pandit Sri-Nivāsia can be called the first Indian antiquarian. They were joined by Shekh Kiramat Ali and Munshi Mohan Lal and a few years later by the distinguished group consisting of Rajendralal, Indraji, Bhau Daji and R.G. Bhandarkar.
4. Letter of Venkata to the Madras Government. See JASB, 1836 p.511. Proceedings of September.

Society, headed by Prinsep himself, advised the Government against the proposal on the grounds that '... such an extensive scheme would need the control of a master head, accustomed to generalizations, and capable of estimating the value and drift of inscriptions and legendary evidence. The qualifications of Cavelly Venkata for such an office, ... or indeed of any native, could hardly be pronounced equal to such a task, however useful they may prove as auxiliaries in such a train of research. ... it seems impossible to recommend any large outlay of public money in the way he proposes'¹ It is true that the Committee was influenced in its decision by its prejudice against the capability of an Indian to pursue archaeological investigations independently.² But the alternative proposal mooted by them only recommended a limited enterprise - namely, that of the editing of Col. Mackenzie's collections in the Madras College by the Rev. William Taylor.³

1. JASB, 1836, p.512, Proceedings of September.

As a proof of his unfitness for the post the Committee also sarcastically referred to the 'pandit's original and arithmetical mode of weighing authorities,' His remarks on the 'Nandavarrum dynasty of Andhra' was cited as an instance:

"As this is a very obscure dynasty, confidence can only be placed in the inscriptions. From the materials already possessed in the collection of Col. Mackenzie, I suppose one-eighth of the history of this dynasty is complete, and the remainder should be completed by further research."
Ibid.

2. It is very interesting to hear the echo of the sentiment even half a century later, in Ferguson (For Ferguson see *infra* p.67 n.3). Also all the European witnesses, including Fleet, who gave their evidence before the special Sub-Committee on archaeology of the Public Service Commission in

Footnotes continued from page 62.

2.

1887 expressed themselves to be sceptical about successfully training up Indians for independent archaeological investigations. (For the Report infra pp.276ff). Fergusson in his little book entitled Archaeology in India (London, 1884), written mainly for the purpose of exposing the fallacies of the archaeological ideas of Rajendralala Mitra, (~~for Rajendralala see infra p. 276ff.~~) questions the fundamental assumption that an Indian can ever be the equal of a European. The real interest of the volume he thought would be 'found to reside, not in the analysis of the archaeological works of Babu Rajendralala Mitra, but, in these days of discussions on Ilbert Bills, in the question as to whether the natives of India are to be treated as equal to Europeans in all respects. Under present circumstances it cannot fail to interest many to dissect the writings of one of the most prominent members of the native community, that we may lay bare and understand his motives and modes of action, and thus ascertain how far Europeans were justified in refusing to submit to the jurisdiction of natives in criminal actions. If, after reading the following pages, any European feels that he would like to be subject to his jurisdiction, in criminal cases, he must have a courage possessed by few; or if he thinks he could depend on his knowledge, or impartiality, to do him justice, as he could on one of his own countrymen, he must be strangely constituted in mind, body, and estate'. (Ibid. pp.vi-vii).

Elsewhere ('Notes on Babu Rajendralala Mitra's Paper on the Age of the Cave at Ajanta', JRAS, 1880, pp.139-151) he questioned whether Rajendralala had 'ever heard of the science of Archaeology, as it is understood in Europe'. (Ibid. p.142) and he despaired of making himself understood by 'the Babu' since he was 'speaking in a language the other did not understand'. (Ibid. p.146).

Exactly one hundred years earlier Jones had observed; 'Whoever travels in Asia, especially if he be conversant with the literature of the countries through which he passes, must naturally remark the superiority of European talents; the observation, indeed, is at least as old as Alexander;

Footnotes continued

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2. and, though we cannot agree with the sage preceptor of that ambitious Prince, that "The Asiaticks are born to be slaves," yet the Athenian poet seems perfectly in the right, when he represents Europe as a Sovereign Princess, and Asia as her Handmaid:
- ('The Second Anniversary Discourse, Delivered 24 February, 1785'. Asiatick Researches I (1788), p.406.)
3. JASB, 1836, op. cit. p.513.

Thus, although curious, it is not at all surprising that Kittoe's¹ appointment as the Archaeological Enquirer in 1847, mainly as a result of the advocacy of the Royal Asiatic Society,² failed to draw any applauding comment from the Bengal Society. In its Proceedings at least the appointment went unnoticed. Cunningham's own scheme, which was submitted as a communication to the Society, was published without any observation.³

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1. On Kittoe the following information from Cunningham, Report I, pp.xxiv-xxvii is relevant:

Markham Kittoe, who was already known for his architectural taste by his design for 'the little church at Jonpur', and his drawings of Muslim architecture, met James Prinsep in 1836. He was then engaged in the preparation of his Illustrations of Indian Architecture. In 1837 Kittoe was temporarily removed from the army for bringing indirect charges of oppression against his commanding officer. Through Prinsep's influence he was appointed Secretary of the Coal Committee, which led to his extended tour through Orissa. He was afterwards restored to his position in the army, and appointed to the charge of one of the Divisions of the High Road from Calcutta to Bombay, leading through Chhota Nagpur. Appointed Archaeological Enquirer 1847. Designed the Sanskrit College at Banaras and was given the charge of its construction. Excavated at Sarnath. In 1853 Health completely broken down. Died June 1853. On his arrival in England he ~~was~~ was so ill that he saw no one, and, as one of his friends informed Cunningham, "he went straight to his home and died." He prepared a valuable collection of about one hundred and fifty drawings at present in the India Office Library. Like Prinsep he sank from overwork, and at about the same age. On the 19th May, 1852 he wrote to Cunningham: 'Let me not lead you to suppose that I claim knowledge. I am usefully deficient. I am a self-educated man, and no Classic or Sanskrit scholar; I merely claim a searching eye and mind'

2. The Council of the Society became interested in the question through Fergusson's paper (his very first) on The Rock-cut Temples of India which was read at the close of 1843.

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2. The Court of Directors were moved and in due course this led to Kittoe's and Messy's appointment. This led Fergusson to note jubilantly in a reprint of his paper:

'We may thus escape the hitherto too-well merited reproach of having so long possessed that noble country and done so little to illustrate its history or antiquities'.

For the above information See JRAS, 1886. Annual Report pp. xxv-xxvi.

3. Supra p. 54 It was however taken note of in the Proceedings. See Proceedings of June, 1848.

The background of the establishment of the Survey: The Survey of Buchanan - who can in a sense be called the first archaeological surveyor - had only recently been made widely known through the digest prepared by Martin.¹ The impressive results of the efforts of Mackenzie and Tod in collecting antiquities in the course of their official duties had been known for a long time. This was the time when the archaeological tours² - the first tours ever undertaken in India solely for archaeological purposes - of the Scottish indigo-planter Fergusson (1808-1886)³ had just been completed (1835-42), and their lesson could not have been lost on Cunningham.

1. Montgomery Martin, The history, antiquities, topography and statistics of Eastern India... collated from the original documents at the E.I. House, 3 vols., London, 1838.

2. It is a measure of Prinsep's greatness that he was in fact also the inspiration behind Fergusson's tour although apparently they did not correspond with each other. At least Prinsep does not refer to Fergusson anywhere.

'At that time, thanks to the learning and enthusiasm of Mr. James Prinsep, great progress was being made in the decipherment of Indian inscriptions, and the study of the antiquities of the country, and I determined to try if the architecture could not be brought within the domain of science. For several years I pursued the study almost unremittingly, and bit by bit the mystery unravelled itself'. James Fergusson, On the Study of Indian Architecture. Read at a meeting of the Society of Arts on 19th December, 1866. London, 1867, p.5.

3. Second son of Dr. William Fergusson (1773-1846). Born at Ayr in Scotland. Arrived in Calcutta in 1835. Started an Indigo Factory. Between 1835 and 1842 he had made, with remarkable energy, the lengthened tours in India, which are shown in the map in his Picturesque Illustrations

Footnotes continued from p.67.

3. Of Ancient Architecture in Hindustan[#], and in the course of which he prepared the laborious and accurate measurements and drawings of Indian buildings which formed the material of his best-known works[#]. 1840 - elected a member of the Royal Asiatic Society to which at the close of 1843 he read 'The Rock-cut Temples of India'. Best known for his The History of Indian and Eastern Architecture (1876). Schliemann dedicated his great work Tiryns to Fergusson, as 'the historian of architecture, eminent alike for his knowledge of art and for the original genius which he has applied to the solution of some of its most difficult problems.'

Csoma's Tibetan expeditions and the examples of Hornigberger, Court, Ventura and Masson set in the early thirties were fresh in the memory to inspire one who aspired to be the archaeologist of Buddhism. Kittoe also had blazed the trail by carrying on archaeological explorations while commissioned to search for coal in Orissa. As we have seen before, Cunningham himself already had had experience of arduous geographical explorations, with which he had combined field-archaeology. Moreover the idea of collecting facts about India by systematic, government-sponsored effort was not, after all, unknown. There was no reason why what had already been done for geology, topography and cartography could not be done for archaeology as well.

Colonel Sykes too had recommended¹ that 'the example of Lieut. Cunningham may be followed throughout India, wherever mounds or ruins are to be met with ... and I have little doubt the investigators would be amply rewarded by discoveries, auxiliary to the fixing of historic truths'. And, had not Prinsep, his master, urged the need of 'travelling antiquarians'?

By then, Lassen's (1800-76) Pentapotamia Indica, an attempt at fixing the ancient sites in Panjab, had been out for some fifteen years. But the most decisive role in

1. In his note to Cunningham's communication regarding the discovery of Sankissa, JRAS, 1843, p.247.

determining the future course of Cunningham's career was played by the epoch-making publication of the decade - the translation of Fa-hsien's account of his travels in India.¹

The impact of its publication on the world of Indology is difficult to realise today, when the main outline of Indian history has become commonplace.² For the first time, with its publication, Indian history was invested with a kind of reality that it had hitherto lacked. Also for the first time, this translation of Fa-hsien, however imperfect it may have been, provided some means of finding the traces of the lost

1. Abel Rémusat, Klaproth et Landresse, Foë Kouë Ki ou Relation Des Royaumes Bouddhiques. Paris, 1836. The impending publication of this work was being rumoured in 1830 and it was eventually completed and published in 1836 by Landresse, after it had survived the deaths of two of its authors, Rémusat, who started the translation, and then Klaproth who had taken over after Rémusat.

2. An echo of the contemporary reaction to its publication is recorded in Wilson: (Infra p.71 f.n.1. pp.108-9) 'To all those who take an interest in the early condition of India, and who are anxious to see that obscurity which hangs over the periods of its history prior to the Muhammadan invasion dissipated, in however partial a degree, some most acceptable glimmerings of light have been presented in a recent continental publication. This work is derived from Chinese literature, and has been made accessible to European readers, by the talents and industry of some of the most eminent of those who have rendered Paris illustrious as a school for the cultivation of the language and literature of China. Besides, however, their special subservience to an authentic history of the religion of Buddha, the travels of Fa Hian are of great value, as offering living testimony of the geographical and political divisions of India at an early date, and one at which we have no other guide on whom we can rely'

cities of India, if only someone had enough leisure to go out on the quest with the translation in hand. It provided the same kind of guide for India as Pausaniás had done for the Classical world, and Cunningham as well as others quickly realised that fact.

The translators of Fa-hsien had added geographical notes to their text, admittedly not very successfully. But its publication was followed by a discussion by Wilson ~~in~~ the JRAS.¹ In this remarkable article he ^{pin}/pointed almost all the sites mentioned in the Chinese text.

Cunningham's imagination must have caught fire from reading the itinerary of Fa-hsien and the identifications proposed by Wilson. By a stroke of luck, as we have seen, he was able ~~in~~ 1842 to discover the exact site of Sankissa which had been vaguely placed in that region by Wilson. We have seen how deeply this had impressed Cunningham with the possibilities of a survey of the sites by actual field tours.

Circumstances indeed had gradually become most favourable for setting up a survey. Something of the type of what Cunningham had in mind had almost come into existence with the appointment of Kittoe as the Archaeological Enquirer.² Kittoe was unfortunately but poorly equipped for a duty of

1. H.H. Wilson, 'Account of the foe Kúe Ki; or Travels of Fa Hian in India, translated from the Chinese by Remusat', JRAS, 1839. pp.108-140.

2. History of the Provinces of Bihar, p. 65

2. Supra p.65

this kind, as is apparent from the pathetic muddle of his attempt to follow the route of Fa-hsien in Bihar.¹

Meanwhile in the year 1851 Cunningham's Bhilsa explorations had again demonstrated the immense possibilities of field work. The question of setting up a survey was given a new dimension in 1858 by the publication of another important work, equally far-reaching in its implications, and which was moreover far superior as a guide to the history and archaeology of India - Stanislas Julien's translation of Hsüan Tsang.² The value of the translation was further enhanced by the addition of a geographical discussion of the first rate quality by V. de St. Martin.³

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1. 'Notes on the places in the Province of Behar, supposed to be those described by Chy Fa Hian', JASB, 1847, pp.953 ff.
 2. Mémoires sur Les Contrées Occidentales. Paris, Tome I, 1857. Tome II, 1858. Julien devoted no less than 20 years to the study of both Chinese and Sanskrit in order to be able to write this book. To Cunningham it seemed 'almost impossible to exaggerate the importance of these travels'. Before their publication 'all ... attempts to fathom the mysteries of Buddhist antiquities were but mere conjectures. ... one stupa then only differed from another stupa by its size, while the special purpose of each particular monument was utterly unknown' But it was now possible 'to distinguish one monument from another, and say with certainty for what purpose each one of the greater stupas was originally designed'. Report II pp.84-85.
 3. Cunningham thought of St. Martin's labours: 'His identifications have been made with so much care and success that few places have escaped his research, and most of these have escaped only because the imperfection or want of fullness in our maps rendered actual identification quite impossible'. Report II p.85.

This book came at the right time. The outline of Indian history was clearer than ever before, - the success achieved in Cunningham's own attempt at sketching it in his Bhilsa Topes is the proof of this, not to speak of the monumental work of Lassen.¹ Much reliable material on Buddhism was now at the scholar's disposal. Something of the history of Indian art had in the meanwhile been learnt. Both Kharoṣṭhī and Brāhmī had been read. Politically India was united under British Paramountcy. Corners hitherto not easy of access were now accessible. The Pax Britannica was reigning supreme after the holocaust of the Mutiny. Cunningham himself was approaching retirement after distinguished service. He would then be the master of his entire time, which he would be able to employ in the pursuit of his favourite study. The Viceroy himself was known to have an enlightened interest in things of this nature. He had only recently (1856) placed the geological Survey on a proper footing.²

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1. Indische Alterthumskunde. Four volumes, Published between 1847 and 1861.
 2. C.R. Markham, A Memoir on the Indian Surveys. London, 1878, 2nd Edition, p.217.

The establishment of the Survey: In November 1861 Cunningham addressed a memorandum to Lord Canning,¹ in which he complained of the apathy of the Government towards the antiquities of India.² It was understandable that hitherto the Government had been 'occupied with the extension and consolidation of empire', but the time had come when (it would redound equally to the honour of the British Government to institute a careful and systematic investigation of all the existing monuments of ancient India'. And the task when finished, 'would furnish a detailed and accurate account of the archaeological remains of Upper India'. The Government in its post-mutiny mood at once fell in with the idea coming from a man whose abilities they had learnt to respect,³ and Lord Canning issued orders for the immediate appointment, as the Director of the Survey, of Cunningham, the man who had 'more than any other officer on this side of India, made the antiquities of the country his study'

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1. For this and related matters the most handy reference is Volume I of Cunningham's Reports.
 2. As early as 1838, in his letter to Prinsep, Burnouf had written:
'It is scarcely comprehensible that the ancient monuments of a country so entirely subject to your government should have been so much neglected'.
JASB, 1838, p.985. Proceedings of December.
 3. Supra p.15 ~~f.~~ note 3. ~~the~~.

CHAPTER IIIn Search of Ancient India.

Cunningham began his career as the Archaeological Surveyor in December 1861 with a visit to Gaya and Bodh-Gaya. From there, during the rest of the season, he gradually made his way towards Banaras after exploring sites in other parts of the districts of Tirhut, Bihar, Champaran and then through Gorakhpur, Azimgarh and Jaunpur. He closed the season on April the 3rd at Banaras.¹

A touring season would normally begin each year in November-December and end in March-April. The report of each season's work was written during the following hot weather and rains. But sometimes delays occurred, presumably because he thought this time 'was too short a period to admit of reading and reflections for the preparation of a well considered account of all the interesting places visited.'² The printing of the reports also was sometimes delayed by as many as 4 or 5 years.³

In his second season, in the winter of 1862-63, his activities were 'confined to Delhi, Mathura and Khâlsi, on the line of the Jumna and to the ancient cities lying north

1. Report I. p.1.

2. Ibid, p. viii.

3. ~~Infra~~, p. 272.

of that river in the Gangetic Doab, Oudh and Rohilkhand.'

It is to be remembered that in following this programme he was carrying out his commitments in the Memorandum submitted to Lord Canning. Gunningham had proposed that 'the first season might be devoted to a survey of Gaya and Rajagriha, and of all the remains in Tirhut to the eastward of Banâras and Gorakhpur, while the survey of all to the westward of Banâras would occupy the second season.'¹

He also suggested that 'the ancient cities of the Panjâb, such as Taxila, Sâkala, and Jâlandhar on the west, the caves and inscribed rocks of Cuttack and Orissa on the east, and the topes and other remains of Ujain and Bhilsa, with the caves of Dhamnar and Kholvi in Central India should be examined.'² The antiquities of Khâjurâho and Mahobâ also required examination 'to make this account of Indian archaeological remains more complete'.³

The only notable exception in this list of predominantly northern Indian Buddhist sites was Nâlandâ in Bihar.⁴

1. Report I. p.vii.

In the same document he had also set himself the task of visiting and exploring, and discovering where necessary, the following sites: Khâlsi, Haridwar, Mandawâr, Karsâna, Sankissa, Mathurâ, Delhi, Kanauj, Kauśâmbî, Allahabad, Banaras, Bhitari, Jaunpur, Ajodhyâ, Śrāvastî, Kapilâvastu, Kuśinagara, Mâthiâ, Râdhiâ and Bâkhrâ, Vaiśâlî, Patna, Gaya and Râjagriha.

2. Ibid.

3. Ibid.

4. In fact however he visited Nâlandâ in his very first season of 1861-62.

Also apparently he was not yet impressed by the possibilities of Bengal and Chhota Nagpur - to which region he was to pay brief visits much later. The province of Sind remained neglected till the end. Kashmir, Baluchistan and Assam also never came within his Survey. He confined himself mainly to the then North-Western Province (modern U.P.) and Bihar, as these parts contained 'most of the cities celebrated in the ancient history of India.' ¹

The Survey was initially sanctioned ² for two years as Cunningham had hoped to complete the exploration of Bihar and N.W.P. in two seasons. ³ Accordingly during the first two seasons he covered as much of the area as he could. However the Survey continued for another two seasons and he took the opportunity to complete his programme by visiting Panjab in the season of 1863-64 and the sites in the Central Provinces in 1864-65. ⁴ The first Survey was disbanded in 1865.

1. Report I *loc.cit.*

2. Canning's Minute of 22nd January, 1862.

'I propose that the work be entrusted to Colonel Cunningham, with the understanding that it continue during the present and the following cold season, by which time a fair judgement of its utility and interest may be formed. It may then be persevered in, and expanded, or otherwise dealt with as may seem good at the time!'

3. Report I. *loc.cit.*

4. The reports of his first four seasons' activities were published at first without any maps, plans or drawings, in the succeeding members of the JASB. Separate copies were printed for official circulation. The demand for these reports remained high and immediately after his re-assumption of office in 1871 as the Director-General of the new Survey, he re-published the four reports in two volumes in a much enlarged

Footnote 4 cont...

and revised form also adding many illustrations - all drawn by his own hand. For the first volume he wrote an interesting Introduction of over forty pages, narrating the progress of Indian archaeology, in compliance with the instructions from the Government which required him to prepare 'a brief summary of the labours of former inquirers, and of the results which have been already obtained' (Resolution No.649-650, dated the 2nd February, 1871). He was also instructed to prepare 'a general scheme of systematic inquiry for the guidance of a staff of Assistants in present and future researches' This he included in the third volume of his Report.

In the intervening years between 1866 and 1870, archaeology was not completely forgotten by the Government, although the department remained in abeyance. Sporadic and haphazard activities went on under official patronage - although the efforts were mainly spent on obtaining casts and photographs of monuments. The two notable expeditions of this kind of the period were that of Cole to Sāñchī to get a cast of one of the gateways and that of Rajendra Lal Bahadur Orissa for casts of the famous caves. The bulk of correspondence on these two expeditions in the government files is indeed voluminous.

However, need was soon felt for more systematic and organised exploratory activities and these were urged by Fergusson and others. Such a need was particularly stressed by all the contributors in Forbes Watson's Report.¹ The Secretary of State for India (Duke of Argyll) thought that the time had arrived 'for directing these researches in a somewhat more systematic and deliberate manner' and he decided that the supervision of the whole should be concentrated in one department rather than be diffused under different local governments.² Mayo's government accepted the suggestion and recommended: 'We believe that there is no one

1. Dr. Forbes Watson, Report on the Illustration of the Archaic Architecture of India, etc., with Appendices by Fergusson, Cunningham and Colonel Meadows Taylor. London, India Museum, 1869.

2. Despatch to India, 11th January 1870. Public No.4 Ind. Off. No.13, 25-28.

at present so well qualified for the post as Major-General A Cunningham, late R.E.; and if, as we have reason to hope, he would accept the task for a few years, we trust that he would give an impulse to the study of Archaeology, which would make the future working of the scheme comparatively easy We should wish an early decision of the subject, as it is very desirable that General Cunningham, if he accepts, the offer, should leave England early in October, so that he may be in a position to commence work actively in the ensuing cold season.'¹ Cunningham's appointment was duly sanctioned by the Secretary of State, - curiously/^{enough}as 'Central Agent'.² Cunningham proceeded by steamer to Bombay on the 3rd December.

In the new Survey provision was made for two young officers to assist him. As nearly six years had elapsed since he left India in 1866 he gave fresh thought to the best method of exploration suited for the new Survey and 'after a long and careful consideration' it appeared to him 'that the most convenient plan would be to begin with those portions of the country where much had already been done by previous explorers, so as to complete, as early as possible, the examination of

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1. Govt. of India, Home Department. Public no.84. the 29th July, 1870. Ind. Off. no.14, 206. (Public, Post Office and Ecclesiastical Letters received for 1870).
 2. Despatch to India. 24th Nov. 1870. His salary was fixed at Rs.2,000 per mensem. The post was initially for five years. Ind.off. no.13. 322-323.

the better known provinces'.¹ In practical terms however the pattern of his visits did not change from that which he had followed between 1861 and 1865. However, to the four zones already marked out - Bihar, N.W.P. Panjab and the Central Provinces - were added Bengal including Chhota Nagpur and the South eastern region covering Orissa and Chhattisgarh. Each season Cunningham and his two Assistants, whose work we discuss below, would go out in three directions and try to cover as much ground as possible. Over this far-flung territory Cunningham paced again and again during the next fourteen years² not missing one single touring season.³

1. Report III, p.iii.

2. Cunningham communicated his desire to retire in his No.292, Delhi, 15th February 1885, 'at the end of the current official year, on the 31st March, or any other date which may suit the convenience of Government ----' (Home Department Proceedings, Ind.Off. no.2519).

While accepting his resignation the Government paid well-deserved tribute to a life-time's work:

'... the Governor General in Council has much pleasure in tendering to that officer the thanks of the Government of India for the distinguished service rendered by him during an unusually long career,' The Governor General also hoped 'that he may in the leisure of his retirement be able to bring together in a permanent shape the numerous and valuable archaeological notes which he is understood to have collected during his service as Director General of the Survey.'

(Notification No.196, dated Simla, the 30th September, 1885) During his retirement he partially carried out this hope by publishing a number of valuable papers on coins, eventually bringing them out in book forms and by writing the connected account of the Bodh Gaya excavations.

3. To Orissa however he never went himself.

Cunningham left Calcutta in the middle of February 1871 for Agra, visiting Jaunpur on the way for the purpose of making plans of all the larger mosques there.

In the beginning of March, at Agra, he met his two Assistants, - J.D. Beglar¹ and A.C.L. Carlleyle² and as the

1. J.D. Beglar was a Eurasian and was one of the early engineering graduates from the Engineering College at Sibpore near Calcutta. He passed out in 1863 and was appointed as Assistant Engineer grade III. He was promoted to 1st grade before he accepted the archaeological post in 1871. Beglar retired in 1880 only to take up later the special assignment of officer in charge of the Bodh-Gaya restoration. On Cunningham's retirement he became the Archaeological Surveyor of the Bengal Circle. He gave evidence before the special sub-Committee of the Public Service Commission in 1887. (Proceedings of the Sub-Committee, Public Service Commission, Scientific Departments, Part III. Simla, 1887, pp.31 and 36. Also Cunningham to Government. Home, Revenue and Agriculture Dept. No.125, Simla, 29th September, 1880. Home Proceedings. Surveys, 1880, Ind. Off. No.1501). On Beglar's retirement in 1880, he was replaced by H.B.W. Garrick, a very young man, the son of Mr. Garrick, sometime Principal at the Lahore School of Art. H.B.W. Garrick held a diploma in draughtsmanship from the South Kensington School of Art and had learnt photography well from his father - this latter qualification recommended him in the eyes of Cunningham out of the other candidates. Cunningham knew him personally as he had met him earlier at Lahore. (Cunningham to Government, Home, Revenue and Agriculture Department. Ibid. and letter from the Offg. Under Secretary to Director General of Archaeology. No.406. Simla, 17th Nov. 1880)
2. Carlleyle was a man of somewhat eccentric character. He was constantly in debt and sometimes his balance of mind was questioned. He was eventually to retire prematurely a few months before time, due to recalcitrating financial irregularities and embezzling practices. (Cunningham to Home Secretary. No.52. Simla, the 20th May 1885 and Home Secretary's reply dated 26th June, 1885 no.114. Also from the Govt. of India. Dept. of Finance and Commerce to the Secretary of State for India. No.205. Simla, the 1st August, 1885. Home Proceedings, 1885. Ind. Off. no.2519).

touring season was nearing its end at the time he set the Assistants to the task of surveying Agra and Delhi for their first taste of archaeological exploration. He chose these two sites as work here would be less hindered by the rains or heat, since the officers would not have to face the hardships of the mofussil.

Cunningham himself took the field in the season of 1871-72 and covered Bihar (as he did in his first season of 1861-62) and parts of N.W.P. and also managed a hurried visit to Bengal, while Carlleyle and Beglar were sent to survey the little explored regions of Rajputana and Bundelkhand respectively. From Bengal, Cunningham went to Koil, Etawa and Delhi. Another lot of mosque plans and inscription copies was prepared and he expressed satisfaction that he had 'now got a large mass of plans and drawings for the illustration of the Muhammadan architecture of Delhi and Jampur'. But these were never published in a suitable manner, excepting the few in his Reports. He also wanted to make over the Muhammadan inscriptions to Mr. Blochman for translation and the Sanskrit inscriptions to Babu Pratapa Chandra Ghosh. We do not know what happened to the Sanskrit inscriptions but Blochman died in the midst of his labours.

During the succeeding seasons Cunningham visited Bihar in 1875-76, 77,78, 79-80 and 80-81; N.W.P. (modern U.P.) in 1874-75, 75-76, 77-78, 81-82, 82-83, 84-85; Panjab

(including modern N.W.P.) in 1872-73, 78-79, 82-83, 83-84, 84-85; Central Provinces (modern Madhya Pradesh) including Rajputana and Malwa in 1873-74, 74-75, 76-77, 81-82, 82-83, 83-84 and 84-85; and Bengal in 1871-72 and 79-80.

Nālandā: In Bihar most of the more important sites Cunningham visited more than once. The only notable exception was Bargaon, the site of ancient Nālandā, where he did not return after his first visit in 1861-62 presumably because of the depredations meanwhile carried out to the main temple by Broadley¹ in 1871.

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1. A.M. Broadley was an Assistant Magistrate and collector posted in the sub-division of Bihar and while posted there he took an active interest in the antiquities of the area in his charge. He wrote an account of the antiquities of Bihar for the JASB ('The Buddhistic Remains of Bihār' JASB, 1872, pt.I, No.III pp.209-312) and also 'On the identification of various places in the Kingdom of Magadha etc'. (JA 1872 vol.I. pp.18-21, 69-74 and 106-110). His account of Nālandā was published as a pamphlet in 1872 called Ruins of the Nālandā Monasteries at Burgāon, sub-division Bihār, Zillah Patna (Calcutta).

He was in the habit of carrying away objects from sites and he gradually built up a museum which was taken care of after him by Bábú Bimola Charan Bhattāchārjya, who succeeded him in Bihar. Broadley wrote: 'Bábú Bimola Charan has succeeded me at Bihār, and devotes much time and care to the preservation of my large collection of Buddhistic sculptures. Owing to his zeal in the matter ... there is now every prospect of the Bihar Museum becoming a permanent local institution,' (JASB, 1872 article loc.cit.). No wonder while commenting (Report XV p.11) on the paucity of Buddhist statues at Apsār Cunningham said: 'Mr. Broadley had been there before, and had recovered five figures - a euphemism for removed'

Cunningham indeed never approved of his methods and could never resist the temptation of a mild dig at him. It would be interesting to reproduce a few specimens of such remarks, which incidentally illuminate one side of the

Footnote No.1 from page 84 cont...

personality of Cunningham. In Report XI p.183 f.n. he wrote: 'In reading Mr. Broadley's account, it is necessary to remember that he has by some oversight turned his map upside down' And in the same volume on p. 192: '.... In his account of "the Buddhistic remains of Bihar", Mr. Broadley mentions his removal of the old Gupta pillar. But Mr. Broadley has omitted to mention two facts, which, I believe, may be ascribed partly to his ignorance and partly to his modesty. To the first I should attribute his having fixed the pillar on its brick pedestal upside down, in spite of the two Gupta inscriptions, with their mâtras, or head lines, quite distinct. To the second I would ascribe his neglecting to mention that in his anxiety to leave evidence of his own rule in Bihâr, he had the whole of the uninscribed surface of the pillar covered with rudely-cut inscriptions, in which his own name figures twice' p.193 - 'How fortunate it is that Mr. Broadley did not remain long enough to leave more "evidence of his rule" in other parts of India'.

However, during this short visit he was able to recognise correctly the alignments of the ruins and the general lay out of the site. Thus he observed that the ruins consisted of a row of lofty conical mounds running north and south, representing the remains of gigantic temples among which the loftiest two were the mounds according to his numbering F and H (F= 60 ft. and H = 45 ft. high). Of these two, the mound H he identified with Hsuan Tsang's Balāditya Temple¹ following his bearings and directions. Parallel to this line of temple mounds ran a long line of square patches of cultivation amidst a long mass of brick ruins 1,600 ft. by 400 ft. which he correctly recognised as the monastery area.

It was during this visit that Cunningham put Kittoe's identification of Bargaon with Nālandā² on a surer footing by discovering an inscription on a Vāgeśvarī image in the hamlet of Kapatiya, only a few yards from the monastery site. The inscription mentioned Nalanda as the name of the place and was dated in the year I of the reign of Srī Gopāla Deva. He

1. There appears to be some confusion regarding this temple. For Broadley's excavations were not carried out in this temple but apparently from the position indicated it must be the mound F - the biggest of the mounds - which was Broadley's 'Tope No.4' and of the Marshall period excavations 'Chaitya Site no.12'. Broadley recovered in this temple a magnificent doorway in one of the slabs of which he found the inscription of a Baladitya of the time of Mahīpāla. This noble portal was dismantled by Broadley's workers as they thought that he wanted to remove it entire.

2. Infra p.

gave an eye-copy of the inscription in Report I, pl. XIII, no.1.

Kesariya, Bākhṛā, Bāsārh, Lauriyā Arārāj, Nandangarh and

Rāmpurvā: He also explored in his first season the interesting group of ruins in the Champaran district - the stūpa at Kesariya, the extensive remains at Lauriyā and Nandangarh¹ - and also the famous ruins of Bākhṛā - Bāsārh in the district of Muzaffarpur.

To these was later added Rāmpurvā (Champaran district) by Carlleyle, who discovered² an Asoka pillar with edict on the spot.³ The pillar unfortunately had lost its capital and from the traces of paws in the broken position of the column

1. Cunningham used to write the name as 'Navandgarh'. But Babu P.C. Mukherji informed Vincent Smith that the correct pronunciation was 'Nandangarh'. Smith had this verified later in 1962 by Mr. J.H. Bernard, Magistrate of Champaran. The local people had invented the curious story of a nanad (husband's sister) to account for the name and Smith remarked '... Philologists may find a difficulty in deriving Nandan from nanad, but popular etymologists are not troubled by philological scruples' JRAS, 1902, pp.153-490.

2. Report XXII, pp.51ff. Season of 1877-78.

3. After the discovery of the Rampurva pillar, the alignment of these pillars all along the route running through Bākhṛā, Arārāj, Nandangarh up to Rāmpurvā at the foot of the Nepal hills, had struck Carlleyle as well-planned and the idea had dawned on him that they perhaps marked an Aśokan highway from Pāṭaliputra to Nepal where he expected to discover another inscription of Aśoka (curiously enough the position of Lumbini was unknown at the time). Report XXII, pp. 54-55.

it was evident that it had been a lion capital. The capital was searched for in vain by Carlleyle.¹ Thirty years later² Pandit Daya Ram Sahni was able to recover from 7 feet below the ground the missing lion capital in an exceptionally well preserved condition 'retaining its polish as fresh as when it

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1. Cunningham sent Garrick to photograph the Rāmpurvā pillar in 1881. Garrick took it into his head to photograph the broken part of the Capital separately, and this could be achieved only by forcefully separating it from the shaft '.... by means of long poles which served as levers, and stout ropes brought by the villagers from Pipariya' (Report XVI p.113) In so doing however, he brought into light one of the most curious objects that have ever been found in India - the massive copper bolt that fastened the capital to the shaft. Cunningham noted: 'The bolt is of cast copper, 24½ inches in length, 13 1/4 inches in circumference in the middle, and 10 3/4 inches at each end. There are several marks chiselled and dotted on each flat end of the bolt. The fact that the bolt is of copper seems to me to point out very clearly that the Hindus had already discovered the destructive property of iron when used as a fastening for stones' (Report XXII, p.iv.)

These marks were later studied by K.P. Jayaswal who came to the conclusion that they were the symbols of the Mauryas (moon-on-hill, hollow cross, an eye and the taurine symbol or the Brāhmī m. 'Maurya Symbols', JRAS, 1936, pp.437-441).

This is the only bolt that has so far been found and, but for Garrick's misguided zeal, perhaps it would never have come to light.

2. 'Excavations at Rāmpurvā', ASJR 1907-08, pp.181-188. The excavation started in November 1907.

was set up'. Daya Ram also discovered the famous Rāmpurvā Bull near the stump of another pillar. that used to stand 300 yards to the south of the lion pillar.¹

Apart from Rāmpurvā, the ruins in the other sites had already been brought to notice by earlier British officers and factors. Renben Burrow, the mathematician in the employ of the East India Company, had visited the stūpa at Kesariya as early as 1790². John Marshall, the seventeenth century English

1. Near the original ground level of the pillar, i.e. at the spot where the polished and the unpolished sections of the pillar met, Daya Ram found traces of paved floor and a well. This reminds us of the wells that Aśoka dug at intervals on the highways. Daya Ram had also found underneath the base of the pillar a massive stone slab, nearly two feet thick, originally secured in position by heavy stakes of Śāl wood, which the subsoil water had wonderfully preserved. It is interesting to recall that Carlleyle had found exactly similar Śāl wood stakes at the base of the Lauriyā Nandangarh pillar and he also found a peacock etched near the base of the pillar which he naturally took for the symbol of the Mauryas (Report XXII pp.46-47.)
2. Supra. p.45. Thus it was one of the first stupas to be noticed in the Asiatick Researches. The account of his visit is interesting: It was an 'uncommonly' hot day and Burrow was feverish. While he sat under the shade of a large tree, some nearby villagers came and played there with Couries, on a diagram that was formed by placing five points in a circular order, and joining every pair of alternate points by a line, which formed a kind of pentagon and Burrow concluded that 'the Hindoos had mechanical methods of reasoning geometrically, ... and that even their games were deduced from, and intended perhaps to be examples of them' ('Memorandum concerning an old building, in the Hadjipore District near the Gunduck River, etc.' Asiatick Researches, Appendix III, pp.477-481). Renben Burrow contributed eleven learned papers on the mathematics and astronomy of the Hindus to the Asiatick Researches. On almost all the monuments in Bihar Cunningham found the name of Renben Burrow inscribed in neat, small hand. He was one of the founding members of the Asiatic Society of Bengal. It is also possible that Colonel Mackenzie visited Kesariya and an excavation was carried out, at his orders, by his Bengali 'servant'. (Report I. p.66).

Factor, visited the Bākhrā lāṭh and left an interesting account of the visit.¹ Much later, Stephenson and Hōdgson noticed the ruins at Bākhrā-Basāṛh, Lauriyā Arārāj and Nandangarh.²

But here again, as in most other sites, the first systematic study was done, and the real nature of the ruins understood, by Cunningham.

In the course of his first season's tour (1861-62) he identified Kesariya with the memorial stūpa that was built over the spot where Buddha had announced that in one of his former existences he had been a Bodhisattvā and had reigned over that town as a Cakravartti Rājā named Mahādeva. He also verified ~~at~~ Wilson's suggestion³ of Basāṛh being Vaiśālī and made the sensational disclosure that at Lauriyā Nandangarh there were stūpas which were not only pre-Aśokan but might well be pre-Buddhist.

'I believe', he wrote, 'that they are the sepulchral mounds of the early kings of the country, prior to the rise

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1. Shafaat Ahmad Khan, John Marshall in India (1668-1672) (Allahabad University Studies in History, Vol.V, 1927).
 p.80 - 30 July, 1670, - 'Went to ? Brinkalattee or Brin's [Bhīma's] club At the top of this pillar or Lattee is placed a Tyger ingraven, the neatliest that I have seene in India.
 p.82 - 'Neare this Piller or Lattee are two little Hills about 1/4 mile distant neare each other,'
 (Referring to the stupas.)
2. Supra, pp.32 & 33.
 3. Infra, p.319.

and spread of Buddhism, and that their date may, therefore, be assumed as ranging from about 600 to 1500 B.C.¹

He also suggested that the Bākhrā pillar and the associated ruin complex represented the remains connected with the legend of the Bodhisattvā's birth as a monkey as he found that 'the correspondence between the several objects so minutely detailed by Hwen Thsang and the existing remains is complete'.²

It was also during this tour that he changed the names of the so-called Rādhiā and Māthiāh pillars of Hodgson to Lauriyā-Arārāj and Lauriyā-Navandgarh (Nandangarh), - names which have been used for these pillars since.

Nineteen years later (1880-81) he made a second visit to Bākhrā-Basārḥ and Kesariya - rather hurriedly - and the outcome naturally was insignificant except for the unearthing of remains of thick walls of a building on the bank of a tank. This he thought was in all probability the Kūṭāgāra Hall.³ 720 feet to the north of the pillar he found the remains of a temple in which there was a statue of Buddha with the Buddhist creed inscribed on the pedestal in letters - as he thought - of the tenth century.⁴

1. Report I. p.69.

2. Ibid. p.62.

3. Report XVI p.15.

4. Report XVI p.16.

His identification of Vaiśālī, however, was challenged by many.

Rhys Davids, for instance, thought as late as in 1901 that nobody in fact knew the actual site of Vaiśālī although different 'guesses' had been made.¹ Dr. Hoey had suggested in 1900 another site, Cherand in the Sāran district, - as the possible representative of Vaiśālī.² Smith however, for once at least, stoutly supported Cunningham³ and in any case the controversy was brought to rest by Bloch's discovery of Gupta seals bearing the name Vaiśālī.⁴

Cunningham's identification of the Bākhrā group with the Monkey-legend establishment however was not challenged and it was here that Waddell later found the sculptured representation of the legend on the pedestal of a Buddha statue.⁵

His Kesariya identification too has remained unchallenged, receiving support from authorities like Smith, Bloch and Spooner.

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1. 'Some Notes on Political Divisions of India when Buddhism arose', Journal of the Pāli Text Society 1897-1901 (London, 1901). p.79. He himself correctly 'guessed' however that (it was somewhere in Tirhut'. It reminds one of the frequent mention of Tīraṅbhukti' in the Vaiśālī seals.
 2. W. Hoey, 'On the identification of Kusinara, Vaisāli, and other places mentioned by the Chinese pilgrims', JASB, 1900 pt.I pp.78 and 83.
 3. V.A. Smith, 'Vaisāli', JRAS, 1902, pp.267-288.
 4. ASJR, 1903-04, pp.101 ff. Later in the 1912 excavations of Spooner the seal that had the name 'Vesāli' inscribed in Mauryan characters was found.
 5. Smith, ('Vaisāli', op.cit. p.276.). Smith adds in a f.n. on p.277 that Waddell's observation was communicated to him by letter.

Cunningham's predictions regarding the Lauriyā and Nandangarh groups of mounds appeared to be sensationally vindicated by the somewhat startling revelations made by Bloch's excavations in March 1905¹. Although N.G. Majumdar² tried to play down their dramatic effect by pointing out new facts, and was successful to a great extent, yet we feel that nothing has really been proved that may discredit Cunningham (always remembering that not all the stūpas in this group are meant).

Indeed from what we can gather from Majumdar it appears that the two most important of his conclusions were: first, that some of these stūpas are indeed very old, some may very well be pre-Mauryan, even if there is no positive ground for their being Vedic (and indeed Bloch never asserted that they dated to the Vedic times); and, Second, that they are not necessarily Buddhist. This is near enough to what Cunningham had assumed.

Indeed, Majumdar in his zeal to prove the non-Vedic date of these stūpas, has to some extent ignored some of their peculiar features, the most important being the feature that

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1. 'Excavations at Lauriya', ASJR 1906-1907, pp.119-126.
 2. 'Explorations at Lauriya-Nandangarh', ASJR 1935-36, pp.55-60. Also his posthumously published report in Ibid. 1936-37. pp.47-50.

both Carlleyle and Bloch had noticed, - that they appear as if they grew up layer after layer over a long stretch of time. The nature of the interments found in them also perhaps points to this conclusion. Carlleyle found in Cunningham's E, traces of successive interments, consisting of charcoal fragments and ashes of bone at different levels.¹ All the excavators complained about the extreme compactness and hardness of the earth in these mounds and they also noted the peculiar tint of the earth.

Thus we have only scraps of uncertain evidence to guide us even to a remote idea of the dates of at least some of these mounds: Carlleyle found bits of iron in the interior of E;² Garrick found at a depth of seven feet in Cunningham's B a vessel containing 67 Cowrie shells;³ and in the great stupa at Nandangarh Garrick found at a depth of about five feet an earthenware lamp bearing traces of an inscription in early Brāhmī characters.⁴ Batu P.C. Mukherji found that some of the bricks there, which were two inches in thickness contained 'inscriptions in ancient Pālī characters' and Smith from an eye-copy of these thought the observation was correct.⁵

1. Report XXII, pp.39-40.

2. Ibid.

3. Report XVI, p.105.

4. Ibid. p.106.

5. V. Smith 'Kusinara etc.' op.cit. JRAS, 1902, p.155.

Cunningham pointed out in his Report I that 'Major Pearse, of the Madras Artillery, found one of the small punch-marked silver coins in his excavations amongst them' (p.70). N.G. Majumdar found a punch-marked coin on top of the Nandangarh stūpa,-mound A.¹ Since Cunningham's departure for England in 1866, the government it appears had conducted certain excavations in these mounds. The result of these operations was published in the Bengal Administration Report for 1868-69 in the form of two short, vague paragraphs, and nothing more has been known about the whole affair since. Para 273 said: ' A short time ago, close by it, (i.e. the Lauriya Pillar) were found some leaden coffins containing unusually long human skeletons' and in another paragraph: '... from one of which (i.e. the mounds) two iron coins were obtained, and from another an iron coffin 9 feet or so in length; in these were human bones. The coffin was greatly corroded and fell to pieces'.

Pāṭaliputra: In comparison his researches in Pāṭaliputra were astonishingly slight. This is the more surprising since we know that already in 1876 - long before Spooner's excavation of 1915 parts of the wooden palisade of Pāṭaliputra were discovered and were recognised as such.

McCrindle in his Ancient India as described by Megasthenes and Arrian etc (1877), gave an account of this discovery.

1. op.cit. 1935-6 p.57.

The account runs thus (pp.207-208 f.n.):

'During the cold season of 1876, whilst digging a tank in Sheikh Mithia Ghari, a part of Pâṭnâ, almost equally distant from the Qhauk ... and the railway-station, the excavators, at a depth of some 12 or 15 feet below the swampy surface, discovered the remains of a long brick-work running from north-west to south-east. How far this well extended beyond the limits of the excavation - probably more than a hundred yards - it is impossible to say. Not far from the wall, almost parallel to it, was found a line of palisades. The strong timber of which it was composed inclined slightly towards the wall. In one place there appeared to have been some sort of outlet; A number of wells and sinks were also found, their mouths being in each case indicated by heaps of fragments of broken mud vessels. From the best preserved specimens of these, it appeared that their shape must have differed from that of those now in use. One of the wells having been cleared out, it was found to yield capital drinking water, and among the rubbish taken out of it were discovered several iron spear-heads, a fragment of a large vessel, etc. * 1

Cunningham visited the site in 1875-76¹ and examined the continuous line of brick mounds half a mile south outside the city, known as Panch Pahâri. As against the general belief

1. Report XI

that the city of Pāṭaliputra had long before been washed away by the Ganges, Cunningham now put forward the theory that the remains of the city would be found in the vicinity of these mounds and the mounds themselves were the remains of Asoka's relic Stupa and the connected buildings.¹

Waddell² by his excavations vindicated Cunningham's theory and indeed extended its scope much further by tracing remains within the limits of the city, digging up further portions and above all by discovering the potentialities of the village of Kumrahar. (Which, he claimed, covered the site of the Mauryan palace.) C.A. Mills of the Public Works Department continued the excavations in Waddell's absence and discovered the Ionic capital in the Bulandi mango grove - at a spot already pointed out by Waddell as promising.

In the Barā Pahāri mound of the Panch Pahāri Group Spooner³ exhumed in 1915 undoubted relics of Mauryan origin and he also found an empty relic chamber.

On his second visit to Patna in the season of 1879-80 Cunningham discovered a third Yakṣha statue in the Āgam Kuā just outside Patna, identical with the other two in the Indian Museum, Calcutta, which had been discovered by Dr. Tytler

1. Report XI p.157.

2. L.A. Waddell, Report on the Excavations at Pāṭaliputra (Patna). Calcutta, 1903, pp.11, 15, 17, 18 etc.

3. Fragments of chunar stone bearing Mauryan polish and bricks of the size that is usually considered as Mauryan. ARASI (Eastern Circle), 1915-16. pt.II. pp.31, 32 and 33.

long before and had since been forgotten. J.D. Beglar rediscovered them in the museum and realised their importance. Cunningham had drawings of the two statues made by H.B.W. Garrick and reproduced in Plate II, Report XV.

Cunningham recognised them as Yakshas from their inscriptions - the one on the headless statue he read as Yakhe Santananda and the other as Yakhe Achusatigika. At first he was inclined to think of the statues as Aśokan because of their high polish but the characters of the inscriptions convinced him that they were of a slightly later date', somewhere about the beginning of the Christian era'. He thought them to be worthy of 'a high place amongst the best specimens of early Indian art'.¹

Rājgir: The older capitals of Magadha - the two Rājagrhas - however, received greater attention.

He devoted two long tours (1861-62 and 1871-72) to their exploration and tried to identify the celebrated landmarks, that were noticed by the Chinese pilgrims, in and around the cities, - the stone cell where Buddha used to meditate after midday meals and the Asura's Cave behind it; the hot springs of Tapovana; the Pattapañi Hall where the First Buddhist Council was held, the Kukkuṭa-Pāda-Giri or the Cook's Foot Mountain and the Indra-Saila-Guhā where Indra asked

1. Report XV. p.2.

Buddha 43 questions; and so on. And, of course, it was interesting in itself to trace the remains of the rampants of the cities.

During his first visit, he found two artificial caves on the southern face of the Baibhār Hill of which the one to the west was called the Son Bhāṇḍār, which had been identified by Kittoe with the Sattapaṇṇi Hall.¹ Cunningham took it to be the Pi-po-lo cave or the cell where Buddha used to meditate after midday meals. He also gave thought to the question of the location of the Sattapaṇṇi Hall but did not search for it thoroughly on this occasion and satisfied himself by merely noting that it 'must be looked for in the northern face of the south-west end of the mountain [i.e. Baibhār Hill], at above one mile from the Son-Bhāṇḍār Cave'.²

Ten years later, however, when publishing his Geography he casually suggested that 'this cave, [i.e. the Sattapaṇṇi] ... still exists under the name of Son Bhāṇḍār, or "Treasury of Gold", in the southern face of the mountain'³

But he still had doubts in his mind⁴ and this hesitation caused him to add: ' ... but following Hwen Thsang's description, it

1. Thus Cunningham was not the first to suggest this identification as is commonly believed. See Kittoe, 'Sanskrit Inscriptions from Behar', JASB, 1848, Pt. I pp. 234 ff.

2. Report I, p. 22.

3. Geography, op.cit. p. 463.

4. Stein's implication that he had already made up his mind is wrong. Infra, p. 102 note 3.

should rather be looked for in the northern face' ¹

However, by the time his Report no.III was out ², he was no longer hesitant. He had meanwhile persuaded himself to accept the identification of Son Bhāṇḍār with the Sattapaṇṇi Hall. He made this visit 'with a determination of settling the question', because Deal had objected to his identification.

No doubt he was helped in his conviction by his discovery (January 1872) of the real Pi-po-lo cave behind the Pi-po-lo stone house. He needed to find out the second cave mentioned by the Chinese pilgrims in order to make his identification appear more plausible. In a curious paragraph he gives us an account of his own peculiar way of setting about this task:

'Two points in this description led me to the discovery of the cave I was in search of, which was quite unknown to the people. Close to the hot-springs, on the north-east slope of the Baihbâr hill, there is a massive foundation of a stone house, 85 feet square, called Jarasandh-Ki-Baithak or "Jarâsandha's throne". Now as Jarasandha was an Asura, it struck me that the cave should be looked for in the immediate vicinity of the stone foundation Seated on the baithak itself, I looked around, but could see no trace of any cave;

1. Geography, op.cit.

2. Visited in January 1872. Published 1873, p.143.

and neither the officiating Brahmans at the hot-springs, nor the people of the village, had ever heard of one. After a short time my eye caught a large mass of green immediately behind the stone basement. On pushing aside some of the branches with a stick, I found that they belonged to trees growing in a hole, and not mere surface brushwood: I then set men to cut down the trees and clear out the hollow. A flight of steps was first uncovered, then a portion of the roof, which was still unbroken, and before the evening we had partially cleared out a large cave, 40 feet in length by 30 feet in width. This, then, was the Pippal cave, or Vaibhara cave, of the Chinese pilgrims, in which Buddha had actually dwelt and taken his meals. This identification is fully confirmed by the relative position of the other cave called Son-Bhândâr, which corresponds exactly with the account given by Fa-Hian....¹

Thus obviously the Son Bhāṇḍār could not be the Pi-po-lo cave. Any possible objection that might be raised on account of its smallness was removed, as pointed out by Kittoe,² by the existence of holes on the front wall which showed that the cave once had some kind of a porch in front, - the members of the Council could have taken their seats under its cover when the Hall itself was full. But could the cave date from such early times? Cunningham thought that it could,

1. Report III pp.141-142.)

2. M. Kittoe, 'Notes on places in the Province of Behar, supposed to be those described by Chy-Fa-Hian, etc.' JASB, 1847 (II) P.958.

because he detected a similarity between this cave and the caves of the Barābār group.

Once his mind was made up he did not hesitate to declare that the bearings given by the Chinese pilgrims were wrong. He even began to see in his survey of the city that 'the Son-bhāṅḍār cave was actually situated in the northern half, or end, of the mountain,'¹.

But the discrepancies with the Chinese travellers were too patent for his assistant Beglar, who differed 'in toto from General Cunningham's identifications here'² He declared instead that he had found some rock caverns in the direction mentioned by Hsüan Tsang, and offered these as the possible remains of the Sattapaṇṇi Hall.

These caverns, however, have not been seen by any one since. ~~Stein~~ Aurel Stein made a determined search for them in 1896 but he failed. Sylvain Lévi and Grierson informed him that they too had failed.³

Cunningham however did not agree with Beglar, and Beglar had to add a note to his Report withdrawing his objections to Cunningham's identification.

1. Report III, p.140.

2. Report VIII, p.89.

3. Stein was informed through personal communication. See his 'Notes on an Archaeological Tour in south Bihār and Hazāribāgh' in JA vol.30 [1901] p.59 and for Lévi also see Rapport de M. Sylvain Lévi sur sa mission dans l'Inde et Japon, (Comptes-Rendus de l'Académie des Inscriptions et Belle-Lettres), 1899 p.73.)

The question received fruitless attention from Stein, as we have already seen. His preference for another cave did not find any general acceptance from others. The problem remains unsolved today if Marshall is not correct in his contention (following Burgess and Fergusson) that the Sattapanni Hall of the Chinese is not a hill cave but a structural building. The traces of foundations composed of the same kind of masonry as that of the Jarāsandha-Ka-Baiṭhāk that Marshall found may very well turn out to be the remains of the Sattapanni Hall.¹

As regards the Son Bhāṇḍār Cave itself, the modern tendency is to ascribe it to a late date and a Jain origin, - as proved by the Vaira Deva Inscription. Cunningham of course was aware of the inscription, although his interpretation was slightly wrong. What, however, he understood of it, tended rather to support his theory of an early date for the cave.² In fairness to him, however, it should be pointed out that - in spite of Bloch³ - it is by no means certain from the Vaira Deva Inscription that the caves also were excavated by Vaira Deva. Akārayaḍ can, perhaps, more plausibly apply to the Pratimās only.

Cunningham carried out some excavations in the Maniyār Maṭh, which he thought to be a Buddhist stūpa. This comes

1. 'Rājagṛha and its Remains', ASIR, 1905-06, p.100.

2. Report I, p.25.

3. ASIR 1905-06, p.98.

rather as a surprise since he found at the depth of 19 feet 'a naked standing figure, with a seven headed snake forming a canopy over the head'¹ and commented that 'this is clearly not a Buddhsit, but a Jain sculpture'.² It is also interesting to reflect that this was the first of the innumerable snake figures that this ancient seat of the snake-cult was to yield later.

What is more interesting is that Cunningham found doorways and passages inside. Indeed ~~their~~ presence led him to conclude that '... the Euddhist Monks had easy access to the interior of the building it must have contained some relic that was occasionally shown to the visitors, and to the public generally, on certain fixed days.'³ It is important to recall that it was precisely the absence of any inlet that led Marshall to think, at the close of Bloch's excavations, that the building was but a colossal lingam.⁴ Both Marshall and Bloch were unaware of Cunningham's passages. Apparently he had chanced to discover some portions of the earlier ('prior to the Christian era') temple that was uncovered by G.C.Chandra (in 1935-36) below Bloch's building.⁵ Of Cunningham's other

1. Report I, p.26.

2. Ibid.

3. Report I, p.27.

4. 'Rājagrha and its Remains', op.cit. p.105.

5. 'Excavations at Rajgir', ASJR 1935-36, p.53.

identifications, the suggestion that Giriyeḥ represented the Indraśāila Cave and Jethiān, Yashtivana was accepted by others.¹ However his identifications for Gr̥dhrakūṭa and Kukkuṭapādagiri (= Kurkihar or Kukkuṭapādavihāra) were rejected by all. Broadley's² Chhāṭhāgiri (for Gr̥dhrakūṭa) was preferred. In fact Marshall came to the same conclusion independently without any knowledge of Broadley's suggestion.³ Aurel Stein proposed Sobnāth Hill for Kukkuṭapāda-giri. Waddell supported Stein and the identification has been generally accepted since.⁴

Cunningham was also at serious fault regarding the ramparts of the two cities. According to Marshall⁵ Cunningham 'distorted' the plan of the innermost line of walls in his maps and as regards the outer line of fortifications 'he omits altogether the outer wall which stretches from Vaibhāra-giri to Sonā-giri, a second one which lies between Ratna-giri and Chhāṭhā-giri, and a third between the latter peak and the Nākve (i.e. Cunningham's Nekpāi) embankment;

1. Stein, however, wrongly accuses Cunningham of referring to the place as Jakhtiban. (cf. op.cit. J.A. Vol.30 [1901]). He certainly used Jethian also.

2. 'The Geography of Magadha', J.A. 1872.

3. 'Rājagṛha and its Remains', p.90.

4. Stein op.cit. p.89

5. 'Rājagṛha and its Remains; op.cit. p.87.

nor does he indicate in any way the long line of ramparts which starts at Udaya-giri and extends, in a practically unbroken line, to the eastern limit of the southern range of mountains'

Jaynagar, Nongarh, Birdāban, Rājāonā, Indpā:

The most interesting feature of his second season's tour in 1871-72 was the exploration of the archaeologically unknown tract along the Kiyul river, where his sagacity was richly rewarded.

A number of sites were discovered and in each of them ruins of extensive Buddhist establishments were found. Of particular interest were the arched chambers that he uncovered in the Birdāban stūpa dating according to him from the 8th or 9th Century and a broken statue of Nongarh of the familiar red-spotted stone belonging to the Kuṣāṇa-Mathurā school, which bore fragments of an inscription in Kuṣāṇa characters.

Also noteworthy was the perfectly preserved relic casket from the Stupa at Birdāban. The outer casket of the reliquary was of pale yellow steatite in the shape of a stūpa; inside it he found a small golden box containing a fragment of bone, and a broken silver box of the same shape and size with a green glass bead. Beside the casket there were other fragments of bone and a single tooth. He concluded from the

elongation of the stūpa as compared to its diameter, that the building was of late date, not earlier than the 9th or 10th century.¹

Later in 1872-3 Beglar collected more evidence of the Hindu arch, when at Nongarh, he found, below the stūpa, the ruins of an earlier temple which had a vaulted roof meeting in a ridge as at Bodh-Gaya.²

and
Konch, Deo Barnārak, Mārkaṇḍā, Mahādeo/Chhota Nagpur:

Cunningham also drew attention to the interesting architecture of the temples at Konch, Deo Barnārak, Mahādeo and Deo Mārkaṇḍā and sent Beglar to explore the hilly regions of Chhota Nagpur. Here he discovered many remains of temples, particularly at Pārā and Telkuppi.

Bihar and Dhārāwāt:

Meanwhile Beglar had made two little discoveries by himself in his second tour in 1872-73.

The first was his identification of Bihar with the Odantapuri Vihāra, which, according to Cunningham was represented by Bishanpur Tāndwā. Beglar was led to this conclusion by the full name of the place, which was Daṇḍpur or Daṇḍ Bihar. The second was the identification of the ruins at Dhārāwāt with

1 Report III, p.157.

2 Report VIII, pp.118-120.

the monastery of Gunamati of Hsuan Tsang.

Both these suggestions were accepted by Cunningham, although he himself had failed to recognise their possibilities when he had visited the places earlier. Stein was wrong when he implied that Cunningham took no note of Beglar's discovery except on the margin of his personal copy of Beal's Si-yu-ki¹. Indeed Cunningham had publicly acknowledged it on as many as three occasions. (e.g. Preface, Report XV; Preface, Report XVI and text, Report XVI.) He said unequivocally that '... Dharawat ... was beyond all doubt the site of the Gunamati monastery described by Hwen Thsang'

1. Stein, op.cit. JA Vol.30, 1901, p.96.

'A Brief marginal note from General Cunningham's hand in the copy of Beal's Si-yu-Ki, which I obtained on the sale of his library, shows that the veteran scholar had accepted this identification'.

This incidentally gives us the interesting information that Stein came to hold at least a part of Cunningham's personal library which must have amounted to a very valuable collection. Already in 1847 we come to know about his library, which was housed partly at Simla and partly at Kalkā. In order to write his report and compile the map, after his Himalayan expedition in 1847, he asked permission of the government to stay at Simla because he wanted to consult his library and also because he had already rented a house at Simla. ('Correspondence of the Commissioners deputed to the Tibetan Frontier', JASB, 1848. pt.I, pp.100-101.)

It was difficult to procure books from Europe in those days. We have stray references to important books that he added to his library after long waiting. It was in 1843 that he first procured a copy of Rémusat's Fa Hsien and in January 1847 he received Reinand's Fragments Arabes et Persanes etc. ('Verification of the Itinerary of Hwen Thsang etc.' JASB, 1848, pt.II, p.37.)

2. Report XVI p.V.

Barābār: Cunningham visited the famous group of artificial caves in the hills of Barābār and Nāgārjuni only 15 miles from Gaya, and the first full and detailed account of the caves and their inscriptions appeared in his first Report. Their detailed measurements, plans, and architectural features and the peculiar polish were noted and section drawings made. From the study of their inscriptions certain historical deductions were drawn outlining the changing fortunes of the caves. Although these beautiful caves had excited the wonder of antiquarians from early days¹ such a full study had been hitherto lacking.

Cunningham's ~~only~~ study of the Barābār-Nāgārjuni caves is still unrivalled for its comprehensiveness. This was also the first attempt to study the inscriptions in their totality. Buchanan, who had visited the site earlier, did not have the specialist understanding that Cunningham had, and Kittoe, who was there next, was equally untrained. Thus the first significant research on these caves was Cunningham's, in spite of its obvious shortcomings.

His greatest drawback was that he did not realise the use of some of the caves by the Ājīvikas:

As we have already seen,
1/ One of the first inscriptions ever to be translated and published by that first decipherer of inscriptions in India - Charles Wilkins - was from Nāgārjuni. It was published in the first volume of the Asiatick Researches.

Supra p.19, n.2.

'They were originally excavated for the occupation of Buddhist monks by the kings Asoka and Dasaratha' he wrote.¹

But the interesting fact remains that the transcripts that he prepared of these inscriptions clearly show the word - though slightly mistakenly - as Ādivikehi.² He even commented that some portions of the inscriptions were deliberately obliterated³ but he did not fully realise the significance of the attempt. No doubt the state of knowledge of the Indian religions at the time was responsible for such a serious lapse.

The façade of the Lomaś Rīṣi cave Cunningham ascribed to the time of the Guptas on the ground of its inscriptions in Gupta characters. It is an open question even today, although the general belief now is in the Aśokan origin for both the cave and the façade.

1. Report I, p.51.

2. Ibid, pl. XIII

3. In spite of deliberate obliteration enough remained in his time for tracing out these words. Indeed one suspects that Hultzsch got this reading of the word from Cunningham's transcripts, for Hultzsch's plates do not show these words, as apparently the obliterated portions had become too blurred by the time his photographs were taken.

Bodh-Gaya: But the main centre of Cunningham's activities in Bihar was the temple at Bodh-Gaya which had attracted the attention of antiquarians as early as 1788 when Wilkins published his translation of the so-called Amara Deva inscription in the Asiatick Researches Vol.I. This inscription, however, was proved later to be spurious by Rajendra Lala Mitra in his Buddha Gaya.

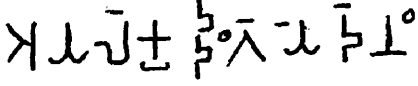
Buchanan visited the temple in 1809 in the course of his famous Survey and in 1832 came a Burmese mission to carry out repairs; they discovered a Burmese inscription of nineteen lines on a stone fixed in one of the walls of the residence of the Mahant of the temple. Prinsep had the inscription translated by Katna Pāla, the Ceylonese monk and published in the third volume of the JASB (1834).¹ But its exact purport and the two dates mentioned in it remained a matter of controversy until 1913.²

In 1836 Prinsep requested Mr. Hathorne, the Magistrate of Gaya, to take another copy of this inscription. Along with the copy Hathorne also sent facsimiles of some other inscriptions of which No.5 happened to be the Kuragi inscription about

1. 'Translation of an Inscription in the Pālī character and Burmese Language, on a stone at Buddha Gya, in Behar'. pp.214-215. Another translation appeared in the Asiatic Researches XX (1836), pp.161-189: Col. H. Burney, 'Translation of an Inscription in the Burmese language, discovered at Buddha Gaya in 1833'.
2. J.F. Fleet, 'The Dates in the Burmese Inscription at Bodh-Gaya' JRAS, 1913, pt.I. pp.378-384.

which he wrote in his forwarding note:

'... No.5 is a word engraved on a pillar which now forms one of the stanchions to an upper story (sic.) in the convent'. He pointed out: 'The characters you will observe assimilate to the ancient inscriptions'. Prinsep printed a lithograph copy of the inscription and confessed his failure 'to make any thing of it' and thought 'perhaps it formed part of a longer inscription in the oldest lāth character' ¹

By the time the next volume of the Journal was out Prinsep had made his famous discovery of 'dānam'. He remembered the unread inscription from Bodh-Gaya ² and applied his newly acquired key to its unlocking. In so doing however he distorted it into Ayalekuddangaye dānam  - why, of course is not clear because his plate in the JASB Vol.5 clearly shows the correct transcript of this now famous inscription. He made this distorted reading to mean 'The gift of Ayaleku Dangá' and added a note that 'if the ill-defined

1. James Prinsep, 'Facsimiles of various Ancient Inscriptions, lithographed by James Prinsep', JASB, 1836, pp.657-661 Plate XXXIII.

2. Ibid.

2. They used to call it 'Buddha-Gaya' at the time. Bloch pointed out as late as 1908 that the correct form was 'Bodh-Gaya'. (cf. J.H. Marshall, 'Archaeological Exploration in India, 1907-8,' JRAS, 1908 pt II, p.1095 note 1.)

But it is to be noted that Kittoe had already used the word as 'Bodh-Gya'.

mark below the + be a □ , the reading may be Buddagaye dānam,
'Gift to Buddha-Gaya'¹(!)

Kittoe, as the newly appointed Archaeological Enquirer,² visited the site in 1847, and the result of his tour was a lecture delivered to the Asiatic Society. In the illustrations of this lecture he exhibited drawings of the sculptures made by him on the site. It was on this visit that he discovered in the Mahant's house the famous bas-relief showing a figure in a four-horsed chariot which he correctly identified as Sūrya. He also noticed many other pillars in the temple-quadrangle bearing - as it appears from his transcript-inscriptions identical with the Kuragi inscription, which he read correctly but wrongly translated as 'The gift to Gyah of Ajaya The ?' He further added that he could not make out the meaning of the word '†' : 'it may be Kúrú, and if so, it will read 'of the invincible Kúrú.'³ The occurrence of 'gye' as the ending of the word 'Kuragye' appears to have proved fatal to a correct interpretation as both Prinsep and Kittoe were misled into thinking that it had perhaps something to do with the name of the place.

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1. James Prinsep, 'Note on the Facsimiles of Inscriptions from Sanchi near Bhilsa, taken for the Society by Captain Ed. Smith Engineers; and on the drawings of the Buddhist monuments presented by Captain W. Murray, at the meeting of the 7th June'. JASB, 1837, pt.I. p.468.
 2. *Supra*, p.65
 3. Capt. M. Kittoe, 'Note on the Sculpture of Bôdh Gyah', JASB, 1847, pt.I. p.337 and 339.

It will have been noticed that the temple itself had not as yet been the subject of the antiquarians' attention. That began with Sir Alexander Cunningham's visit in the autumn of 1861 and since then many heated battles have raged among scholars over the numerous problems posed by the temple. Answers were to be found to such questions as: Who built it? Could it be the same temple as that seen by Hsuan Tsang? How was the presence of the arches and vaults in the temple to be explained? Were they added after the Muslims had established their rule in India? And so on. The controversy did not end with the publication of the two large monographs; one by Rajendra Lal Mitra in 1878 and the other by Cunningham himself in 1892. Nor was Egler's restoration in the early eighties accepted by all as true to facts. But by then, however, many of the more important problems had been solved.

The main controversy centred round the arches and vaults. Their existence in this temple was a challenge to those who wanted to ascribe the introduction of arches to India to the Muslims. Indeed these arches had already induced Fergusson to date the temple to the 14th Century and had kept Cunningham wondering whether they were not added by the Burmese. Cunningham consulted Colonel Yule on this possibility. It was Rajendra Lal who brought the issue in the open and asserted their genuine Indian origin.

Major Mead, who was excavating at Bodh-Gaya in 1863 on Cunningham's recommendation,¹ invited Rajendra Lala to see the antiquities he had brought to light and it was then that the arches attracted Rajendra Lala's attention. He published a note on them² and complained that they had escaped Cunningham's notice. Cunningham however retorted that 'the Bâbu' was wrong. Indeed, he had made a large drawing of the arches in December 1861, and had consulted Colonel Yule in the same month as to whether they were of Burmese origin.³

Also on that visit (Dec. 1861) Cunningham had noticed the pillars bearing the Kuragi inscription 'in the ancient Pali characters of Asoka's well known records' and had thus given currency to the idea of the pillars being *Asókan*, a misconception which took a long time to cure. He translated the inscription as 'gift to the holy Kuragi' meaning by 'holy Kuragi', Buddha himself. This meaning he derived from a fanciful construction of 'Kura' (or Kura = boiled rice) added to 'gi' (= to swallow), thus obtaining 'Kuragi' = one who eats boiled rice i.e. Buddha. In this he alluded to the story of

1. His report was never published, but Cunningham gives an account of his finds in the ~~1871 edition~~ of his Report III, P.p.86-88.

2. In the Journal of the Asiatic Society of Bengal for 1864.

3. Report III, p.85 f.n.

the rice-milk offering of Sujātā.¹

He dated the temple to 500 A.D. by putting his faith in the so-called Amara Deva inscription which he did not suspect to have been forged. This Amara he took to be the Amara Sinha of the Kosa. His idea that Fa-Hsien did not see the temple further strengthened him in his belief in its late date.² In searching for inscriptions, however, he rediscovered the inscription in the pavement of the gateway of the Mahant's residence, which had already been seen before by Kittoe.³ The tenon hinge of the gate worked in a socket formed in the very middle of the inscription. There were two socket holes, the second one having belonged to an older gate, or having been cut in the wrong position. The inscription opened with an invocation to Buddha.⁴

But on his second visit, after ten years in 1871-2, he changed his position regarding the date of the temple, - presumably because of his revised date for the so-called Bālāditya temple at Nālandā, which he now assigned to the 1st Century A.D. He took the two temples to be of the same

1. Report I pp.10 and 11.

2. Report I, pp.6-7.

3. 'Extract of a letter from Capt. Kittoe', JASB, 1848, pt.I p. 540. '... The day before leaving Gaya I went to Buddha Gaya to return the visit paid me by my friend the Mohunt; I here saw the inscribed slab which is used as a door site; it is uninjured and the Mohunt has promised to remove it and send it to me'.

4. Report I p.12. A transcript and translation was published later by Rajendra Lala in his Buddha Gaya.

type architecturally and therefore he thought they could not be far removed in time.¹ However, he agreed with Horne that the arches and vaults were subsequent additions. As regards the ruined walls and staircases to the eastern side he hesitantly invoked the Amara Deva inscription once more as a clue to their date.²

He examined the arches again on his third visit in 1875-76 and once more came to the same conclusion. Both arches and vaults were subsequent additions. He also made two interesting discoveries during this visit: first, he found the village of Urel near Bodh-Gaya in which he correctly recognised the echo of the ancient Uruvilvā³ and second, he found that the real name of the temple was Mahābodhi - a name by which it was known to the people around the countryside.⁴

Meanwhile in January 1877 the Burmese Government sent another mission to carry out further repairs to the temple. The government, however, did not wholly approve of the way they were changing the character of the building in the course

1. Report III, p.95.

2. Ibid. p.84.

3. Thus it was Cunningham and not Bloch, who first discovered the equivalence of Urel and Uruvilvā - but from reading Bloch one would not know this. Cf. T. Eloch, 'Notes on Bodh Gayā', ASIR 1908-9 p.144.

4. Report XI. Introduction and p.141. However Eloch later doubted the correctness of Cunningham's use of the term Mahābodhi (ASIR 1908-9 op.cit. p.139 note 1). However, Cunningham was proved right later by the discovery of an inscription of the time of Dharmapala naming the plate as 'Mahābodhi'. (Bloch, loc. cit. p.150). It is interesting to note that Prinsep in his introduction to Ratna Pala's translation of the Burmese inscription, mentioned above, referred to the Holy Pipal tree at Bodh Gaya as the Maha Bodhi gāch [ile.tree]. (JASB, 1834, op.cit. p.214.).

of these repairs. Sir Stuart Bayley, the Secretary of the Government, wrote to Babu Rajendra Lala Mitra, at the instance of the Lieutenant Governor: 'It is not desired to interfere with the Burmese gentlemen beyond giving them such guidance as may prevent any serious injury being done to the temple They are at present building . . . walls, and sticking foolish heads on to ancient torsos etc. . . .'. Mr. Eden (the Lieutenant-Governor) wished to know if Rajendra Lala could 'make it convenient to pay a visit to Buddha Gaya to inspect the work and the remains collected, and to give advice as to their value and to their disposition, . . . and generally to advise the government in regard to the manner in which the operations of the Burmese excavators should be controlled'.¹

Rajendra Lala accordingly visited Bodh-Gaya in the autumn of 1877 and the first monograph on the site followed in 1878. In this work Rajendra Lala vigorously contested the theory of the Grecian origin of Indian art and he was supported in this by his belief that the so-called Sūrya Pillar did not really depict the sun-god at all - much less did it resemble Apollo. He followed Kittoe, however, in thinking that the two attendant figures represented Amazons. He also convincingly proved that the so-called Amara Deva inscription was a forgery; gave another translation of the Burmese inscription, made by U Hla Aung, a Burmese resident in Calcutta, as well as a transla-

1. Rajendra Lala Mitra, Buddha Gaya The Hermitage of Śākyā Muni, Calcutta, 1878. Preface, P.iii.

tion of the door-hinge slab inscription (discovered earlier by Cunningham. He followed Cunningham in his translation of the Kuragi inscription. Photographs of a model of the conjectured restoration of the temple and of the different views of the temple as it was at the time were provided. These latter photographs have assumed rare value after Heglar's restoration. There was, also published in this book a beautiful photograph of the Sūrya-pillar¹ and of course in this work again he took up with enthusiasm the question of the Hindu knowledge of arches and vaults.

Meanwhile the condition of the temple further deteriorated and a description of its ruinous state in the Calcutta Englishman shook the Government out of its apathy. It was again Sir Ashley Eden who took a personal interest in it and appointed J.D. Beglar in 1880 to make a thorough repair of the whole building.

During Beglar's restoration, the old floor of the temple was taken out to be relaid, and this led to some startling discoveries. The polished Vajrāsana throne of the original temple of Aśoka and a gold coin of Huviṣka along with some punch-marked

1. Marshall commented on the photograph in his article 'Archaeological Exploration in India, 1907-8' in the JRAS 1908 (2) pp.1088-1120. While announcing the restoration of this pillar [along with others] to its original site from the Mahant's residence - a task, incidentally, in which Lord Curzon himself took interest - pointed out that such a photograph was possible at that time only because it was taken from the plaster cast made for the museum of the Asiatic Society.

coins among the relics deposited in front of the throne were found.¹ More interesting and significant discoveries followed. The Caṅkrāma or the cloistered walk of the Buddha, with its 22 pillar bases, was found on the north side of the temple. Also were discovered the colossal Buddha statue bearing the inscription of Trikamala and the outer Vajrāsana throne bearing the inscription in characters belonging to the Kusana period.

Misled by the early Brāhmī masons' marks on the Caṅkrāma pillar bases, Cunningham carried out excavations at his own expense, to probe the Mauryan enclosure of the original temple. He succeeded in tracing the remains of a wall which he supposed to be Aśokan and there are perhaps grounds for taking them as such.

These fresh discoveries made Cunningham revise his entire scheme of the dating of the temple. He dated it now to the time of Huviska whose date according to him covered 'a large portion of the first half of the 2nd Century A.D.'² He also held that the present temple was built exactly over the spot where Aśoka's temple stood. The Caṅkrāma, built by Aśoka, had fallen down by the time Hsüan Tsang visited the place, because he does not mention it.

1. For information regarding these excavations and the allied matters see Cunningham's Mahâbodhi, London, 1892.

2. Ibid, p.vii.

A number of smaller stūpas were found all over the courtyard and a Torana gateway of a late date over the main approach to the temple. Cunningham and Egglar traced the remains of a great monastery in the so-called Amara Siṃha's fort. Among other interesting finds were a Burmese inscription on a copper gilt umbrella, some inscriptions of Ceylonese monks and above all a unique collection of Chinese inscriptions - the only ones ever to be found in India.¹ These were the inscriptions of pilgrims who had visited the holy spot in the seventh and eleventh centuries A.D., - the former immediately after Harsha's reign and the latter during the reign of Mahipala of Bengal.² Among the Ceylonese inscriptions there was one of a Mahānāman in Gupta characters commemorating the building of a temple of Buddha in A.D. 588-89. There is a probability that the second Mahānāman mentioned in this inscription may be the famous composer of the ancient part of the Mahāvāṇisa.³

More inscriptions of Kuragi were found giving more information about her status and relations. Thus some of the

1. Chinese coins have been found at a few places in India. Führer (The Monumental Antiquities and Inscriptions in the North-Western Provinces and Oudh. Allahabad, 1891, p.271) informs that in 1876 several rectangular Chinese silver coins were found about six miles west of Bāngarmān in the Unao district of Lucknow division. Waddell found one in the Bulandi grove excavations. Cf. His Excavations at Pātaliputra, p.40. For Führer infra p. 145 n. 2.

2. Mahābodhi op.cit. p.68.

3. Ibid. ~~p.~~ and Fleet, C.I.I. III pp.274-275.

mystery about her was solved, though not yet fully, since Cunningham translated it as 'Gift of Kurangi, daughter of Jivâ, the sister-in-law of Indrâgni-Mitra son of -Ka'.¹ However, as is apparent, he had already given up all the fanciful interpretations of the word 'Kuragi' and had recognised it as a feminine name. Indeed he claimed to have recognised its real meaning as far back as in November 1879, when he first saw the above inscription, and he was glad to find in the JA, 1880 that Bhagwanlal had given the same interpretation.²

Beglar's restoration of the temple however was severely criticised by many - Fergusson, as usual being the severest.³ While supporting Beglar Cunningham pointed out that he had nothing to do with the restoration - it was Beglar's own work. However he thought that Beglar's restoration was quite truthful since it was done on the authority of a model that Beglar was fortunate enough to dig up in the courtyard of the temple.⁴

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1. Mahâbodhi, op.cit. p.15. This interpretation has been proved to be wrong by Bloch and B.M. Barua.
 2. Ibid. He added in a footnote '... I have since learned that Kurangi is still used as a girl's name, "the fawn-eyed".'
 3. James Fergusson, Archeology in India, London, 1884. pp.76 ff. and his History of Indian and Eastern Architecture, London, 1910 Edition, p.79. Fergusson also informs that the restoration cost the government nearly 200,000 rupees. (Ibid, note 2).
 4. For two tablets of a much later date found at Pagan (Burma) showing the temple see ASJR 1905-6 p.132, pl. Liii figs. 1 and 4. Taw Sein Ko, 'Some excavations at Pagan'. Cunningham discovered a second model of the temple in the Calcutta Museum which was found at Mroboung, the ancient capital of Arakan. (Mahâbodhi, p.ix, note 1.) We feel however that doubts can be justifiably entertained regarding the authenticity of the four corner towers that Beglar added to the temple.

Sir Richard Temple however defended Cunningham and Beglar on the ground that he had seen several ancient temples in Burma which had four corners towers which were evidently built after the model of the temple at Bodh Gaya.¹

Kasiā:

Cunningham opened his first season's tour (1861-62) in the N.W.P. with a visit to Kasiā. This visit convinced him once again of the correctness of Wilson's identification of the site with Kuśinagara - the scene of Buddha's death.²

He identified the mound and the village of Anrudhwā as the actual city-site and the mound of Rāmā bhār as the Mukuṭa - Bandhana Vihāra. The most important, however, was the mound of Mātā Kuār, which - again following Wilson - he translated as 'the mound of the Dead Prince', by which, of course, Wilson understood the Dead Buddha. This he identified with the spot where the Buddha died and where was later 'erected a great brick Vihâr or temple monastery, in which was enshrined a statue of Buddha in a recumbent posture as he appeared when about to enter Nirvâṇa'.³ The exact spot of this establishment he thought was 'the extensive mass of ruin' marked K at the western end of the mound.⁴

1. JRAS, 1893, pp.157-179. Sir R. Temple's letter to the Academy of October 29th reproduced.

2. *Infra* p.319. The site had been visited earlier by Buchanan (Eastern India II p.357) and Liston (JASB, 1837, *supra* p.33.) without any knowledge of its being the same as Kusinagara.

3. Report I. p.82.

4. *Ibid.*

However, this identification was nothing more than a tentative conclusion reached in the course of a hurried visit when he was unable to undertake any extensive excavations. He still had no concrete proof to demonstrate the correctness of his suggestion. He wished very much to verify his contention by excavating the mound of the Mātā Kuār.

This, however, he could not do until 14 years later when in 1875 he sent Carlleyle to the site with the express instruction '... to obtain some actual or more certain or conclusive proofs that this was really the site of Kusinagara, which up to that time could not be said to be absolutely certain'¹

Carlleyle followed the clue provided by Cunningham. He selected a spot, which looked to him promising, near the east end of the mound, and dug into it in the hope of discovering some proof. And indeed he was hoping to find the Nirvāṇa statue itself.

He must have felt a thrill of excitement when in fact he did discover the statue he was looking for. The story is perhaps best told in his own language: '.... After digging to the depth of about 10 feet, I came upon what appeared to be the upper part of the thigh of a colossal recumbent statue of stone, but which had apparently been repaired with plaster. I then hurried on the excavations, until I had uncovered the entire

1. Report XVIII p.55.

length of a colossal recumbent statue of Buddha, lying in a ruined chamber which was about 30 feet in length by nearly 12 feet in breadth. The statue was lying in a broken Singhâsan. But I found that the statue itself was very much shattered and broken, and that many portions of it were entirely wanting or lost. The upper part of the left leg, and both feet, and the left hand, and a portion of the body about the waist, and a portion of the upper part of the head and face, were entirely gone; and a portion of the left arm, which had been broken and removed at some former period, had been replaced by stucco or brick covered with a coating of strong plaster. The right arm and hand were placed under the head; and the figure was reclining on its right side, with the face turned towards the west. The stone of which the statue was formed was sandstone of a mixed colour, mostly dark red and clay colour; probably from the Chunâr hills. The total length of the statue was about 20 feet; and the length of the pedestal, or singhâsan, was about 24 feet, breadth $5\frac{1}{2}$ feet. The length of the temple chamber inside was 30 feet 8 inches, breadth nearly 12 feet....¹

Nothing more convincing, perhaps, than this could be produced in support of Cunningham's identification and the question to all appearance was closed. Cunningham announced with apparent satisfaction that '.... By his patient and methodical

1. Report XVIII, pp.57-58.

explorations at Kasia, Mr. Carlleyle has fixed its identification beyond all doubt. On the west side of the Great Stūpa he discovered the famous Nisvāna statue of Buddha, just as it was described by the Chinese pilgrim Hwen Thsang. It is quite certain that the statue is the same that was seen by the pilgrim, as there is an inscription on the pedestal of the mourning figure, beside the couch, of two lines in characters of the Gupta period.' ¹

From this time onwards Buddhists from Burma and Ceylon once again began to perform pilgrimage in the site.

However, nearly forty years later, in 1896 Vincent Smith attacked the complacent belief that this was the site of Kusinārā ². He '... made a special inquiry on the spot, and found the existing facts at Kasiā to be at variance with Cunningham's description and irreconcilable with the accounts of Kuśīngara given by the Chinese pilgrims' ³. He was further confirmed in his belief by the discovery in 1896 of the Rumhindei Pillar of Aśoka in Nepal which thus fixed the site of the Lumbini Grove.

1. Report XVIII, Preface, p.iii.

2. The remains near Kasia, in the Gorakhpur District, the reputed site of Kuṣanagara or Kuṣinagara, the scene of Buddha's Death. Allahabad, 1896.

3. Vincent A. Smith, 'Kusinārā, or Kuśīnagara, and other Buddhist Holy Places, JRAS, 1902, p.139.

To Smith, the discovery of 'the true site of the Lumbini Garden proved that Kuśinagara could not possibly be represented by the remains near Kasiā, which are neither at the right distance, nor in the right direction.'¹ Instead he believed that 'the site of Kusinārā, or Kuśinagara, must lie a few miles beyond Gurunggaon in the valley of the Little Rāptī, which constituted the Kingdom of Kuśinagara, The spot thus indicated is about 30 miles in a direct line from Kāthmāndu,,'² This proposed site was about 20 miles from the Bhiknā Thori Pass on the Nepal border and was about 30 miles from Rāmpurvā.

Cunningham, of course, was not alive to defend his position. Others seemed eagerly to accept Smith's doubt while disagreeing with him regarding the proposed site. Dr. Hoey indeed had as early as in 1896 tried to locate Kuśinagara in the Sāran District in Bihar and Dr. Waddell had wrongly observed that the Nirvāṇa statue did not prove anything since 'such images were usual at great relic shrines'.

The whole question was thus reopened again and with the reorganisation of the Archaeological Department under John Marshall the problem was taken up at the earliest opportunity. Its solution was the most important purpose of Vogel's 1904-05 excavation at Kasiā.³

1. JRAS, 1902.op.cit. p.140.

2. Ibid, pp.144 and 158

3. ASIR 1904-05 pp.43 ff.

Vogel was, however, disappointed in his first dig and resumed his excavation in 1905-06 when he was more successful, as he discovered specimens of an interesting variety of seal, which depicted what was presumably the bier of the Buddha between the twin sāl trees and under it the legend Mahāparinirvāna bhikṣu Saṅghasya. Along with these he also found two seals which from this legend appeared to have belonged to the Mukuṭa-Bandhana Convent, which was raised on the spot where Buddha was cremated, a place not far from the town of Uśinārā.¹

All this evidence, perhaps, should have been enough to rehabilitate Cunningham. The archaeologists in India, - Konow, Marshall and the vacillating Vogel - however chose to be overcautious.² The almost exclusive occurrence of the Pari-nirvāṇa seals was explained by a supposed frequent communication between the Convent at Kasiā and that at Kuśinagara. It was argued that since these seals were presumed to be attached to outgoing letters it was not reasonable to expect Mahāpari-nirvāṇa seals to turn up in any great number from Kasiā, had it really been the site of Kuśinagara. Smith's authority was indeed too much to overcome! Thus Marshall declared at the close of the excavations: 'The question of the identity of the sacred site remains open'³

1. J. Ph. Vogel, 'Excavations at Kasia', ASJR, 1905-06 p.82.

2. Ibid, pp.82 and 167.

3. ASJR 1905-06 p.58.

However, Hiranadna Sastri's 1910-11 excavations conclusively settled the issue by the fortunate discovery of a copper-plate from inside the Great Stūpa attached to the temple of the Nirvāṇa Statue. It is recorded that the plate was deposited in the Nirvāṇa-Chaitya and ironically the donor was Haribala, whose name was already known from the inscription on the Nirvāṇa Statue of Carlleyle. ¹

Śrāvastī:

In 1862-63 Cunningham visited the site of Sāhet-Māhet,
- 'the great ruined city on the south bank of the Rapti' - ²

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1. Hīrānanda Śāstrī, 'Excavations at Kasia', ASJR 1910-11, pp.63-72. pp.65-65: 'This chamber (i.e. inside the Nirvāṇa-Stūpa, at a depth of 14 feet) was found to contain a copper vessel in the shape of a lōṭa, on the mouth of which a copper-plate had been placed. A small reversed cowrie ... lay on the plate, while the copper vessel was embedded in 'a heap of sand containing innumerable small cowries For a full account of the copper-plate I may refer to the special note contributed to this report by Dr. Hoernle and Mr. Pargiter. Here it will suffice to state that the Copper-plate contains a Nidāna-Sūtra in Sanskrit, only the first line being engraved and the remainder written in black enamel. At the end of the document it is recorded that the plate was deposited in the "Nirvāṇa-Chaitya" and that Haribala was the donor' . The plate is of some further significance in that it is one of the few surviving documents from Ancient India written in ink.
 2. Report I. pp.330-331.

extending in the two districts of Gonda and Bahraich and made the sensational announcement of the double discovery of the sites of the city of Śrāvastī - which he identified with the mound of Māhet- and of the famous Jetavana, which he identified with the mound of Sāhet. He believed that he had found conclusive proof of this identification in the inscription mentioning Sravasti on the pedestal of a colossal Bodhisattvā¹ which he discovered.

On his second visit nearly 13 years later in early 1876, he identified this temple with the Kosamba Kuṭi because of the statue and identified his temple No.2 with Gandha Kuṭi because of its position in relation to Kosamba Kuṭi as shown in the relief from his newly discovered stupa at Bhārhut. Nothing happened in later years to disprove his identification of the Kosamba Kuṭi and indeed Marshall was able to write in 1911 that ' ... General Cunningham ... identified temple 3 as

1. The now famous Friar Bala Bodhisattvā. Report I, p.338. The account of this important discovery is worth quoting in full:

'A third mound near the north end of the central line of the enclosure gave promise of a better result than the others, as a previous excavation had disclosed the head and shoulders of a colossal figure, which from its curly hair and long split ears I knew to be that of Buddha After a few hours' work the four walls of the temple were brought to light, and the figure was seen to be leaning against the back wall. The interior was only $7 \frac{3}{4}$ feet square, but the walls were upwards of 4 feet thick, As the excavation proceeded it was seen that the statue was a standing figure which had been broken off a few inches above the ankles by the fall of the temple'

the site of the Kōsambakuṭī, in which the Buddha resided after his return from the Trāyastriṃśa heaven. All available evidence favours the identification, and each excavation has made it more and more evident that the temple was one of peculiar sanctity....' ¹

During this visit Cunningham also made excavations in about twenty mounds in the Jetavana area, of which the most important were his excavations in the mounds D and E - better known later as Kachhi Kuti and Pakki Kuti respectively. Of these, D he identified with the stupa of Sudatta and E with that of Aṅgulimāla. Vogel's excavations of 1907-08 revealed that Cunningham was right in considering Pakki Kuti to be a stūpa. Kachhi Kuti however turned out to be the remains of several temples dating back to the Kuṣāṇa and early Gupta times. Vogel found two circular basements of small stupas in the lowest levels, but the upper levels tended to show the existence of a Brahmanical temple.²

In his article 'Kauśāmbi and Srāvastī', ³ Smith questioned the identification of all three sites - Kauśāmbī,

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1. J.H. Marshall, 'Excavations of Sahēṭh-Mahēṭh', ASIR, 1910-11, p.12.
 2. J. Ph. Vogel, 'Excavations at Sahēṭh-Mahēṭh', ASIR, 1907-08, p.96. Among others excavating at Srāvastī were W.C. Benet and Dr. W. Hoey, I.C.S. who excavated in 1875-76 and again from 15th December 1884 till 15th May 1885. As to the nature of his excavations Vogel commented that '... not a single one of the monuments was completely excavated, and both the descriptions and plans subsequently published are inadequate to convey an accurate idea of the remains discovered' Ibid, p.82.
 3. JRAS, 1898, pp.503-531.

Sankissa¹ and Śrāvastī: He was of the opinion that 'the site of Kapilavastu being now known with certainty, Śrāvastī must be looked for at a distance of about 84-90 miles from Kapilavastu in a north-westerly direction'² Sāheth-Māheth was too near Kapilāvastu and was, moreover, in the wrong direction. He was convinced that the real site must be somewhere not far from Nepālganj - thus arriving again at Nepal as he had done previously in his quest of Kuśinagara.³

1. About Kausāmbī indeed he had already expressed his doubts in the July 1897 number of the JRAS. ('The Birth place of Gautama Buddha', p.615.)

About Sankissa (in the Farrukhabad district) Smith said: '.... Like so many of Cunningham's identifications, this has been accepted without criticism, though quite at variance with the facts. By this allegation I mean that the details given by Hiuen Tsiang are irreconcilable with the local facts of Sankisa. The Sankāśya of Fa-hian is the same as the capital of Kapitha. The sacred buildings of the "heavenly ladder" were situated 20 li, or about three miles, east of the city of Sankāśya. No city is shown to be traceable three miles west of the Sankisa ruins. Moreover, the standing elephant on the pillar at Sankisa cannot be the sitting or couchant lion seen by Hiuen Tsiang at the capital of Kapitha'

(JRAS, 1898, op.cit. p.508, f.n.1.)

Cunningham of course was aware of the difficulty about the elephant capital and tried to get round it by maintaining that the elephant lost its trunk before the Chinese pilgrims saw it and this mistook it for a lion when seen from 50 feet below.

(Report I, pp.271-279).

2. JRAS, 1898, loc.cit. p.523.
3. Supra p.126

Full of enthusiasm for his theory, Smith wanted to verify it by exploring the region he had suspected. With the permission of the Nepal government, he and Dr. Vost visited the area at the end of October 1897, and to their great delight they found ruins and extensive mounds over a large area near Balapur and Intawa, near the place where the Rāptī leaves the hills, nearly 12 miles inside the Nepalese territory.¹ Smith at least did not have any doubts now that he had at last found the lost city of Sravasti.

However, he failed to convince others who preferred to pin their faith in Cunningham's theory. When Bloch wrote in support of Cunningham, Smith hastened to send him a copy of his 'Kauśāmbi and Srāvastī'. Bloch however remained unconvinced and Smith wrote another article on the matter.²

Now his attempts were directed against the foundation on which Cunningham's identification rested - the statue mentioning the name of the place. He put forward the ingenious theory that the statue did not prove anything, since such images could be and in fact were transported to distant places. As a matter of fact, he argued, this particular statue was removed in the eleventh or twelfth century from the site of Śrāvastī that he had proposed. Conveyance of such a huge statue, he pointed out, was no problem since a ready means was offered by the river - the Rapti - which washed both the sites.

1. JRAS, 1898, op.cit. pp.527 ff. This strip was at one time British territory, and was subsequently ceded to Nepal.

2. 'Srāvastī', JRAS, 1900, pp.1-24.

His reasoning had a semblance of considerable strength since there were indeed obvious indications that the statue had at some time been removed from its original position and Cunningham was at least wrong in thinking that he had found the statue in situ. Smith further bolstered up his argument by collecting instances of large images being moved in recent times from place to place.¹

Thus Vogel's 1907-08 excavations at Sāheth-Māheth² started with high hopes of being able to settle this problem once and for all. Vogel, however, was disappointed in his expectations as nothing conclusive turned up. At the close of the excavations he visited the Lucknow museum with the determination to find some little thing that might give him a clue. He was fortunate enough to find what was in all probability the missing parasol post of the Friar Bala Statue.³ Also on the post he found traces of an obliterated inscription with one only word - 'Śāvas[t]iye' - legible and identical in character with that on the Bodhisattvā Statue. However, nothing was on

1. JRAS, 1900 op.cit. p.10 and 24. Also p.143 for a letter dated Dec.6, 1899 referring to two instances of such removals that he came across in Growse's Mathura.

2. ASJR, 1907-08 op.cit.

3. The inscription on the base of the Friar Bala Statue records that this Bodhisattva, together with a parasol and post (Chātraṃ Dandaśca) was set up by Friar Bala 'at Srāvastī in the Kosambakuṭī at the Lord's walking place'. And Daya Ram did, in fact, uncover the remains of a Caṅkrāma in the neighbourhood of temple no.3, i.e. Cunningham's Kosambakuṭī. Although this Caṅkrāma was of a late date, there were grounds to believe that it was built on the ground where the old Caṅkrāma lay (ASJR, 1907-08, Daya Ram's Report, p.122.)

record in the museum about the post and the evidence was admittedly too slender to hang a theory on.¹

Thus this little discovery of his certainly would not have helped him much, had it not been for an important discovery which Pandit Daya Ram Sahni made in the meanwhile. Pandit Sahni, who had been continuing with the excavations, found a copper-plate (18x14 inches) in the foundation of a cell in the large monastery no. 19 which occupied the south-west corner of the Saheth mound - carefully preserved in an earthenware case. It recorded the grant of six villages to 'the community of Buddhist friars, of which Buddhahaṭṭāraka is the chief and foremost, residing in the great convent of Holy Jetavana'. The donor was Govindachandra Gāhaḍavāla of Kanauj, who issued it from Banaras in the year 1186, Āṣāḍha fullmoon (Monday, 23rd June, A.D.1130).²

With the discovery of this copper-plate everybody - Vogel, Marshall and Daya Ram - thought that the question was settled once and for all. But not so Smith.

Faced with what appeared to be an incontrovertible proof he once more took refuge in his removal theory³ and wrote:

1. Vogel's idea was that if he could prove that the post really belonged to the Friar Bala Statue he would be able to meet Smith's removal theory. It was improbable that the Statue could be removed from such a long distance parasol, post and all.

J. Ph. Vogel, 'The Site of Sravasti', JRAS, 1908, pt.2. pp.971-975.

2. JRAS, 1908 pt.2 Vogel, op.cit. pp.973-974 and ASJR 1907-08, p.120.

3. On seeing the advance notice of the discovery published in the Pioneer Mail of the 15th May, 1908.

'... Seṭ-Maheṭ, I may note, certainly is not śrāvastī, My opinion is not altered by the recent discovery of a well-preserved copper-plate inscription "in the foundations of a cell of the large monastery which occupies the south-western position of the Sahet mound", recording ... etc. The writer of the article assumes that this find is "conclusive proof" of the identity of Sahet-Maheṭ with śrāvastī, but I need hardly say that such a plate may have come from elsewhere. Its presence probably indicates official connexion between the Sahet-Maheṭ monastery and the Jetavana, but nothing more'.¹

Marshall pleaded and urged that 'When, ... every fresh monumental record proves them [i.e. the Chinese pilgrims] to be at fault, it is surely going too far to set the evidence of these monuments aside on the assumption that one and all of them have been transported from elsewhere.'² At the same time however, Marshall disclosed that '... it is as well, therefore, that I should state here that, since Dr. Vogel wrote his report, the operations at Saheth have been resumed again under my own supervision, and that still another statue of Kushana date has been brought to light bearing the name of the Jētavana at śrāvastī'³ (The italics are mine). The account of this excavation in the winter of 1908-09 came out in the ASJR for 1910-11.⁴ He discovered this broken Bodhisattva

1. Vincent A. Smith, 'The History of the city of Kanauj and King Yasovarman,' JRAS, pp.765-793. f.n.3 p.792.

2. ASJR 1907-08 p.39.

3. Ibid p.38.

4. J.H. Marshall, 'Excavations at Sahēṭh-Mahēṭh', pp.1-24.

Statue from the Jetavana area from inside the stupa 8. ¹

Kausāmbī:

One of the most interesting results of Cunningham's second visit (1862-63) to the N.W.P. was the discovery of the site of the ancient city of Kausāmbī in the village of Kosām which was in modern times considered as a place of some celebrity among the Jains. He has left an interesting account of the circumstances of its discovery which may be quoted in

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1. This seated Statue was broken but for the legs below the waist and the pedestal with its inscriptions: 'The front of the pedestal is divided into faciae, in three of which inscriptions are incised. The three uppermost lines of writing are of the early Kushāya period and contemporary with the sculpture. They inform us that two Kshatriya brothers, one of whom was Śivadhara, set up the Bodhisattva statue in the Jetavana of Śrāvastī and that the Bodhisattva was executed by a sculptor of Mathurā'. (ASJR 1910-11 op.cit. p.11.)

Smith wrote on p.531 in his 'Kausambi and Śrāvastī' JRAS 1898 that 'The Dighwā - Dubauli copper-plate inscription of the Mahārāja Mahendrapāla, dated in (Harsha) Samvat 155 (A.D. 761), from the Sāran District, records that the village of Pānīyakagrāma (1.8) in the Śrāvastī Bhukti and belonging to the Vālayikā Viṣaya, which lay in the Śrāvastī Mandala, was given by Mahendrapāla (Smith's f.n. 'Weber, "Ueber das Daçakumāra-Capitam", in Indische Streifen, Berlin, 1869. I am indebted to Dr. Hoey for this reference'.) The local names here mentioned may possibly be at some time identified. Pānīyakagrāma should now be represented by Paniyaon or some similar form. The exact meanings of the technical terms Bhukti, Viṣaya and Mandala are, I believe not known.' It should be remembered that he was here thinking in terms of his own Śrāvastī which was in Nepal. However, it may be pointed out here, not noticed so far, that the mound of Panahiyā Jhār near the true site of Śrāvastī (i.e. Sahet-Maḥet) reminds one of Pānīyakagrāma.

full¹

"The site of this great city, ... has long been sought in vain. The Brahmans generally asserted that it stood either on the Ganges, or close to it, and the discovery of the name of Kosâmbi mandala in "Kingdom of Kosâmbi", in an inscription over the gateway of the fort of Khara, seemed to confirm the general belief, although the south-west bearing from Prayâga or Allahabad, as recorded by Hwen Thsang, points unmistakably to the line of the Jumna. In January 1861 Mr. E.C. Bayley informed me that he believed the ancient Kosâmbi would be found in the old village of Kosam, on the Jumna, about 30 miles above Allahabad. In the following month I met Babu Siva Prasâd, of the Educational Department, who takes a deep and intelligent interest in all archaeological subjects, and from him I learned that Kosam is still known as Kosâmbi-nagar, that it is even now a great resort of the Jains, and that only one century ago it was a large and flourishing town. This information was quite sufficient to satisfy me that Kosam was the actual site of the once famous Kosâmbi. Still, however, there was no direct evidence to show that the city was situated on the Jumna; but the missing link in the chain of evidence I shortly afterwards found in the curious legend of Bakkula. The infant Bakkula

1. Führer mentions (The Monumental Antiquities etc. op.cit. p.142 that in one of the late mediaeval (16th Century) inscriptions on the Kausâmbî pillar the name of Kausâmbîpura occurs.

was born at Kosâmbi; and while his mother was bathing in the Jumna, he accidentally fell into the river, and being swallowed by a fish was carried to Banâras'.

'Viewed from the outside, the ruins of Kosâmbi present a most striking appearance. My previous enquiries had led me to expect only a ruined mound some 20 or 30 feet in height covered with broken bricks. What was my surprise, therefore when still at some distance from the place on the north-east side, to behold extending for about 2 miles a long line of lofty earthen mounds as high as most of the trees. I felt at once that this was the celebrated Kosâmbi, the Capital of the far-famed Raja Udâyana. On reaching the place I mounted one of the huge earthen bastions, from whence I had a clear view of the interior. This was very uneven but free from the whole surface being thickly covered with broken bricks. In many places the bricks were partially cleared away to form fields but in others the broken bricks were so thickly strewn that the earth beneath was scarcely discernible. But I was disappointed to find that there were no prominent masses of ruin, - the only object that caught the eye being a modern Jain temple. I recognized the positions of six gates by the deep depressions in the lines of rampart. There are two of these openings on each of the three land faces of the fortress.' ¹

1. Report I. pp.303 and 307.

About ten years later he visited the site twice,¹ in 1874-75 and 1876-77, and made a large collection of sculptures. During these visits he made excavations close to the Jain temple, which was the highest point in the old city, and which he had 'little doubt was the site of the Buddhist temple which enshrined the famous sandalwood statue of the Great Teacher.'²

His last visit was towards the end of his stay in India in the season of 1884-85 when his purpose was to find out the rock-cave of the venomous serpent and the brick-chamber in which Vasubandhu composed his treatise named the Vidyā-mātra-Siddhi-Sāstra, for the refutation of the doctrine of the Hīnayāna - both mentioned by Hsüan Tsang. Both of them he identified to his own satisfaction. The cave of the Nāga³ he identified with the cave in the Pabhosā Hill.⁴

As in the other cases Smith questioned this identification in 1897 in his paper on 'The Birth place of Gautama Buddha'⁵ and followed this up with another article on 'Kāśāmbi and Srāvastī'⁶ in which he emphatically declared that although there were certain factors that tended to support

1. Report X. p.1.

2. Report X. p.1.

3. The cave was later explored by Führer in 1887. (The Monumental Antiquities etc. op.cit. p.144). He also suggested the same identification.

4. Report XXI, pp.1-3.

5. JRAS, op.cit., p.615.

6. JRAS op.cit.

Cunningham's identification 'the position by no means agrees with the indication given by either of the Chinese pilgrims ...' Following the evidence of the pilgrims he came to the conclusion that '.... Kausāmbī ... is the looked for, and, when looked for, will be found, in one of the Native States of the Baghelkhand Agency, in the valley of the Tons River, and not very far from the East Indian Railway, which connects Allahabad with Jabalpur. In short, the Satnā railway station marks the approximate position of Kausāmbī' and elsewhere that 'although identified with Kausāmbī by the Jains in modern times, the Kingdom of Kausāmbī was roughly equivalent to Rēwā and marched with the Kingdom of Prayāga, Jijhoti and Ujjain.'¹ He also brought in geographical and topographical arguments in his support.

Not^{un}mindful of the potential strength of the evidence of the Kara stone inscription,² which was one of Cunningham's grounds for identification, Smith contended that the statement, when correctly translated, only proved that the village of Payahāsa, wherever that may have been, was included in the kingdom of Kausāmbī.

Archaeology had to wait another twenty three years before Smith could be proved wrong. In the meanwhile however Cunningham's identification seemed to have been quietly accepted,

1. 'Kausāmbī and Srāvastī' op.cit. pp.505, 511, 512, 513 and 514 respectively.
2. This inscription was first noticed by Capt. C. Stewart, a member of the Asiatic Society of Bengal, in the gateway of the ancient fort at Kara. Before Prinsep (i.e. JASB v. 731) it was published by Colebrooke in the Asiatick Researches Vol.IX 1809 pp.440-41). Also included in Kielhorn's North Indian List No. 62. It states that "in Samvat 1092 (A.D.1035), on the 1st of the light half of Ashāḍha, the paramount sovereign Yaso-Pāla of Kāte, at the village of Payahāsa, in the Kingdom of Kausāmbī, issues commands to the principal persons'

- scholars went on referring to Kosām as the site of Kausāmbī.¹

In the 1921-22 season Pandit Daya Ram succeeded in discovering a number of inscriptions in the villages around Kosām and among them was one very valuable inscription, - engraved on a door jamb, which was lying in front of a ruined temple in the village of Meohar, 7 miles from Kosām. This inscription stated that in the year Samvat 1245 (1189 A.D.) in the reign of king Jayachchandra of Kanauj a certain Sir-vāstavya Thakkura caused a temple of Siddheśvara to be built at the village of Mehavada in the district of Kausāmbī. Pandit Daya Ram regarded this inscription as affording incontestable evidence of the identity of Kosām and Kausāmbī since the name Mehavada was still preserved in the name of the village -Meohar - which was situated within 7 miles of Kosām.²

However this was not all. In the years following, Daya Ram discovered the existence of a place called Paras, five miles north-north-west of Kara and on reexamination of the Kara inscription, discredited by Smith, he found that the name of the village should be actually read as Payalasa and not Payahasa. He argued that Paras represented the changed form of the ancient Payalasa and although he agreed with Smith in asserting that the inscription merely defined the position of Payahasa - Payalasa as being situated in the Kingdom of

1. For instance in the Cambridge History of India Vol.I.

2. ASJR, 1921-22 pp.120-121.

Kauśāmbī and not in Kara as General Cunningham had supposed. Yet he agreed that Cunningham was right in thinking that the Kara inscription had a direct bearing on the question of the identity of Kosām.¹

Mathurā?

During the period of Cunningham's archaeological career Mathurā was attracting much attention because of its rich yield of new types of sculpture and of coins and inscriptions that disclosed the existence of a great religious and possibly political centre there at the time of the Kuṣāṇas. Particularly striking were the scattered remains of a great monastery of Muviṣka. Cunningham counted at least fifty bases of pillars of Kuṣāṇa style - not all of them at Mathurā then, as many were taken to Calcutta, Agra and Allahabad - which had once belonged to this enormous monastery.² Mathurā also supplied the first real proof of the existence of Jainism in the early centuries A.D. and thus filled a great gap in Indian religious history. Growse commented that the Jain figures from the Kankāli Ṭilā, bearing inscriptions of the time of the Kuṣāṇa monarchs were the most ancient memorial of the Jains and that had 'yet been discovered in any part of India. The oldest known to Professor Wilson dated only from the end of the 9th century, A.D., and thus he inferred that,

1. Bai Mahādar Daya Ram Sahni 'Kara stone Inscription and its bearing on the identification of Kausambi', ASIR, 1923-24 pp.122-124.

2. Report XVII pp.107-08.

though the Tirthankara Mahāvīra flourished some centuries before the Christian era, his disciples were not formed into a separate body till more than as many centuries after that epoch. But in explanation of so strange a circumstance, he adds that the Jainis may have existed in earlier times as a division of the Buddhists'.¹

We have already seen that as far back as in 1836 Colonel Stacy had created some stir in archaeological circles by the discovery of the Silenus from this site.² This had led to some speculation regarding the possible influence of Greek art in India.

Nothing more seems to have turned up from Mathurā until 1853, when Cunningham noticed some capitals and pillars lying about within the enclosure of Kāṭrā, the original site of the Hindu temple of Śeava Deva. A subsequent search, according to Growse, 'revealed the architecture of a gateway and other sculptures, including in particular a standing figure of Buddha three and-a-half feet high, which was found at the bottom of a well, with an inscription at its base recording the gift of the statue of the 'Yasa Vihara', or 'Convent of Glory' which may be taken as the name of one of the Buddhist establishments that had existed on the spot'.³

1. F. S. Growse, Mathurā: A District Memoir (1874) pt.IIp.174, (3rd Edition 1883.)

2. Supra, p.33 ~~and 102~~.

3. Mathurā, op.cit. Pt. I p.72.

But the real potentiality of the site was revealed in 1860, when, in digging the foundation of the new Court house, a number of Buddhist statues, pillars and bas-reliefs, were exhumed; and from the inscriptions which were partially deciphered at the time, it appeared that the mound was occupied by at least four monasteries of Kuṣāṇa times. The site was so vast that Growse at the close of his 1873-74 excavations concluded that '... the number of mounds is so very great, extending as they do in close proximity to one another over an area of some two or three square miles, that they cannot, I think, be sufficiently explained by supposing them to be the remains of merely suburban temples and monasteries, but they must rather be taken to indicate the actual centre of the old Buddhist city'.¹

Thus Mathurā was gradually recognised as a veritable mine of antiquities and until nearly the end of the 19th century excavations were carried out in its different mounds almost every year, hauling out unbelievable quantities of valuable antiquities. Führer² in the course of one season's work in 1890-91 was able to send in to his museum as many as

1. Mathurā, op.cit. Pt. II, p.177.

2. The Archaeological Surveyor of the N.W.P. and the Curator of the Lucknow Provincial Museum.

'737 fine pieces of sculpture' ! ¹

It is no wonder therefore that Cunningham visited the site as many as five times ² and every time he collected rich treasures of inscriptions and sculptures.

1. Dr. Führer's Museum Report for the year 1891.

Führer's principal explorations of the Kankāli mound were effected in the three seasons 1888-89, 1889-90 and 1890-91.

Burgess excavated in 1887.

Führer from time to time sent to Bühler impressions and photographs, a selection from which was published by Bühler in the Epigraphia Indica, Vols. I and II.

Bühler also wrote on Mathurā sculptures in Vol. II of the same Journal. 'Specimens of Jaina sculptures from Mathura'. pp.311-323.

Führer himself was planning to write a monograph on these finds when he had to leave the country suddenly. The unfinished task fell on V. Smith leading to the production of his The Jain Stūpa and other Antiquities of Mathura, Allahabad 1901.

2. Respectively in 1862-63, 1871-72 (twice), 1881-82 and 1882-83. In his first Report however he did not describe any excavation at Mathurā. He included a lengthy discussion of the sculptures found there and as usual attempted to identify the different mounds with Hsüan Tsang's description.

As we have noticed before, some of the district officers of Mathurā directed their attention to these mounds, impressed by the possibilities of the site as they were. Harding was one such officer, who in 1870 made some excavations in a mound that was to become celebrated later as one of the most famous Jain sites.

Among Harding's successors, the most famous was Mr. F.S. Growse who, often fortified with special grants from the Government, carried out several excavations in 1873, 1874 and 1875 and published the account of their results in his District Memoir.¹ Among the objects dug out by him were a large number of Buddhist railings, some of the famous Mathurā nudes, and inscriptions including the Tripitaka inscription of Huviṣka.² The most interesting, however, was the new Bachchanalian group that he discovered in the Pāli Kherā mound.³

1. op.cit.

2. Ibid, Pt.II, p.175.

3. Mathurā etc. op.cit. Pt.II pp.;176-177.

'The stone measures four feet in height by three feet four inches in breadth, and is carved on both sides. On the one face is a seated figure holding a drinking cup in his right hand, with two attendants at his back, one on either side, and a little child at his knee. Two female figures, draped down to the feet, with their hair confined by a fillet across the forehead, but flowing in curls over the back of the neck, are advancing the one with a drinking cup, the other with apparently some fruit. The group on the other face of the block is more mutilated. The principal figure has, it would seem, drained the cup and is unable to keep himself straight but for the help of two attendants, who on either side support his outstretched arms'

Meanwhile an important step had been taken towards systematising the Mathurā materials by Rajendra Lala Mitra. He made transcripts and translations of many of the inscriptions and published them in the JASB for 1870.¹

In 1871, Cunningham visited Mathura twice, once in March and again in November and spent six and twelve days there respectively. He made excavations in the different mounds and also searched thoroughly in the fields and gardens outside the city. This extensive search led to the discovery of important Kuṣāṇa inscriptions and sculptures.² In the mound A of the Chaubara group, which turned out to be a stupa, he discovered a 'steatite relic-casket of the usual shape', but the contents of the casket were missing. The Chaubara mound marked B disappointed him. He intended to explore the Chaurāsi mounds also but 'as the people reported that no stones were found in these mounds', he gave up the idea.³ In November he began excavations along the whole of the western end of the Kankāli mound.

Towards the end of March 1882 he again visited Mathurā 'to see if any fresh discoveries had been made during the past two or three years, and to examine the collection of sculptures and antiquities ... brought together in the Mathura Museum'.⁴ He discovered a few new inscriptions.

1. 'Notes on Sanskrit Inscriptions from Mathurā', JASB, 1870, pt.I, pp.117-130. Four Plates.

2. Report III pp.13-14.

3. Ibid. p.19.

4. Report XVII, p.107.

This visit however is memorable for his discovery of the famous frieze of Herakles and the Nemaean lion. This is how he described the circumstances of its discovery:

'During one of my searches amongst the heaps of fragments lying about, my notice was attracted to a half life-size figure, which, with the aid of some bricks and mud, formed one side of a trough for watering cattle. On removing the bricks and mud, and washing the stone I found, to my surprise and delight, that the figure was that of Herakles strangling the Nemaean lion' ¹ He also concluded that 'as this group could not have been made for the use of the Hindus, whether Brahmans or Buddhists, ... it must have been sculptured by some foreign artist for the use of the Greeks resident in Mathura'. As regards its material he suggested that the light-coloured fine-grained sandstone came from 'the well-known quarries of Rupbas'.²

During his last visit in the season of 1882-83 he carried out explorations not only in Mathurā but also in various places within several miles of it.³ It was during this visit that he discovered the famous Parkham⁴ Yakṣha. He recognised it as an Yakṣha and suggested, on the basis of the characters used in the inscription, that it dated from the time of Aśoka.⁵

1. He sent the frieze to the Indian Museum, Calcutta.

2. Report XVII pp.109-110.

3. Such as Mahaban, Lohban, Pali-Khera, Mora, Anyor, Kota, Chaumuha, Tumaula etc.

4. An old village on a low mound 14 miles from Mathura.

5. Report XX pp.40-41.

Kapilāvastu:

In the season of 1874-75¹ occurred the Kapilāvastu fiasco. In the hot season of 1875, instead of repairing to headquarters, Carlleyle remained in camp and discovered in Bhuila² what he thought to be the ruins of the long sought for city of Kapilāvastu;— this in defiance of Cunningham's opinion as expressed in his Geography that Kapilāvastu was to be found in Nagar Khās.³

The discovery claimed, if true, was important enough, and Cunningham felt it necessary to visit the place personally to verify it. The examination on the spot convinced him of the accuracy of the identification.⁴

In the next season (1875-76) Carlleyle found all the other associated ruins that one would expect to find near about Kapilāvastu - Rāmagrāma and Anoma river and the stūpas of 'Chaṇḍaka's Return', 'Cut Hair' and 'Changed Garments'. Everything fitted beautifully and Cunningham gave his blessing to these identifications also.⁵ But they failed to impress others. After all, nothing concrete had yet been produced in support

1. Report XII.
2. On the bank of the Bhuila lake in the Pargana Mansurnagar in the north-western part of the Basti district, U.P.
3. Also in the Basti district, but in the southern part.
4. Report XII, pp.iii-iv.
5. Report XVIII. p.iii.

of the identification.

With Führer's well-argued rejection of the identification,¹ disbelief in the theory became general. Carlley's failure however was only replaced by Führer's own fraudulent discovery of the site of the city - a curious episode in the story of Indian archaeology.

Führer led an expedition to Nepal in 1896 and claimed to have discovered 'extensive ruins about eighteen miles north-west of the Lumbini Pillar, and about six miles north-west of the Nigali Sagar'² which he identified with the site of Kapilāvastu. He also claimed to have found the remains of the stupa of Konagamana, and another pillar of Aśoka and various inscriptions. Later investigation by both V. Smith and Babu Purna Chandra Mukherji showed that the entire description was imaginary and no remains existed in fact on the spot mentioned by Führer.³ 'These fictions about the Konagamana stupa and pillar', Smith commented, 'do not stand alone. The inscriptions of the Sakyas alleged to have been found in the small stupas Sagarwā are impudent forgeries, and when Dr. Führer supplied

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1. His Archaeological Reports, New Series, Vol.I. p.69 and The Monumental Antiquities etc. op.cit. pp.222-223.
 2. A Führer, Monograph on Buddha Sakya-muni's Birth-place in the Nepalese Tarai, Allahabad, 1897, p.44.
This work was later drawn from circulation by the Government of India. with
 3. Babu Purna Chandra Mukherji, A Report on a tour of Exploration of the Antiquities in the Tarai, Nepal the Region of Kapilavastu during February and March, 1899. With a Prefatory Note by Mr. Vincent A. Smith, Calcutta, 1901, pp.3-4.

the Burmese priest U Ma with Sham relics of Buddha, he endeavoured to support the imposition by a forged inscription of UpaGupta, the guru of Asoka. In the course of my official duty the whole case was investigated by me, and no doubt as to the facts is possible. I find that the reserved language used in previous official documents has been sometimes misinterpreted, and ~~it~~ it is now necessary in the interests of truth to speak out plainly.¹

Panjab:

Cunningham's examination of Panjab and the N.W. Frontier Province was not as intensive as that of some of the other regions - although most of the sites were visited at least once by him and then by his Assistants.

In the season of 1878-79, he brought to notice² the antiquities of that rather out of the way place the State of Chamba, which he had first visited in 1839³ He followed it by another visit in the season of 1883-84.⁴

The watershed area of Sarhind, Thanesar, Kurukshetra etc. - the area that has proved time and again to be of vital geographical and strategical importance in Indian history - did

1. Op.cit. p.4

2. Report XIV

3. Supra p.5.

4. Report XXI. His pioneering work in this region was completed by Vogel, Antiquities of Chamba State, Part I. (Arch. Surv. Ind. New Imperial Series, vol. XXXVI), Calcutta, 1911, and Br. B. Ch. Chhabra, Antiquities of Chamba State, Part II. (Mem. Arch. Surv. Ind. No.72), Delhi, 1957.

not escape his attention. As early as his first tour in 1863-64 he had visited the region. He visited it again in 1878-79.¹

In the season of 1872-73 he paid his attention to the famous group of sites in Yusufzai - Shahbazgarhi, Takht-i-Bahi, Sahri-Bahlol² and Jamal Garhi. These sites had lately been brought into prominence by the researches of Dr. Bellew who lived in Mardan for many years and had great mastery of Pashtu. Cunningham depended, for much of his information, on personal communications from Dr. Bellew.³

Among the objects recovered from these sites by Cunningham were the sculptures - now referred to as of the Gandhāra school - which were then only beginning to excite an interest in Europe as a result of the arrival of a few specimens brought to England by Dr. Leitner.⁴

Later the Panjab Government sanctioned on Cunningham's recommendation the employment of a Company of Sappers for the exploration of these sites more completely and systematically.⁵

1. Report XIV.

2. A very interesting point about his visit to this site was that here he picked up several pieces of potsherds which were 'covered with a black shiny glaze both inside and outside, ...' (Report V, p.44) These were certainly pieces of N.B.P.ware. Earlier in Report III.

(p.51) He had mentioned about similar potsherds picked up at Bhitā and had commented: '... I found pieces of pottery covered with a thin black glaze of metallic lustre. This kind of glazed pottery I have found in all the more ancient sites, and a complete specimen of it was exhumed in one of the Bhitā tope as the receptacle of the relics'.

3. Report V p.V.

4. Ibid.

5. Report V. p.6 and Report XIX p. iii

Cunningham deputed his new assistant Garrick to superintend the excavations, at the same time asking him to examine the mounds of Charsada and to obtain photographs of the Aśoka inscription at Shahbaz-garhi.¹

Cunningham visited Harappa in 1872-73. He had already visited the place in 1853 and 1856 when he had made some excavations.² He believed the site to be Hsüan Tsang's Po-fa-to and since he did not find any coins belonging to a date prior to the Kuṣāṇas, he ascribed the origin of the city to their time! However, the vastness of the ruins did, in fact, strike him and he also records that he found stone implements and 'numerous remains of ancient pottery' - evidently without understanding their significance. It is curious to find in one of his reports the description and illustration of a specimen of the now familiar Harappan seals: This he found in the collection of the Major Clark.³ Cunningham thought that the seal came to India from outside because the characters of the inscription were 'certainly not Indian' and the bull was without a hump.⁴

1. Report V. op.cit.

2. Supra p.42. Burnes and Masson visited it before him.

3. And not discovered by Cunningham himself, as has been erroneously supposed by Mr. Sourindranath Ray. cf. 'Indian Archaeology from Jones to Marshall (1784-1902)'; Ancient India No.9 (1953) p.18. He is also wrong in thinking that Cunningham 'scarcely understood that they were the fragments of a great past civilization.' (Ibid.) See infra p.225.

4. Report V. p.108. But he later changed his opinion. See infra p.225.

His visit to Pathānkot in 1872-73 proved significant, as it was here that he first came across the Audumbara coins¹.

In 1878-79 he made the important identification of Topra as the place from where Firoz Shah had removed the Aśoka pillar.² In the same season he was in Sialkot, where he was told by a Brahman that according to ancient texts the place was originally called Sākala which was situated on the Ayaka river.³ But Cunningham held to his original theory that 'Sākala' was but Alexander's 'Sangala', which was in fact to be found in Sanglawala Tiba.⁴

Taxila and Manikyala received the major share of Cunningham's attention in Panjab. Both places were visited by him personally three times, in 1863-64, 72-73 and 78-79, and fairly extensive excavations - by Cunningham's standards - were carried out. At Manikyala he excavated the mound called Sonāla Pind, which turned out to be a stūpa. The deposits recovered included an interesting relic casket of the shape of the Great Manikyala stūpa itself; a piece of bone wrapped in a gold leaf; two copper coins and one silver coin. He dated the

1. Report V, pp. 153-155 and infra, p.

2. Report XIV, pp.78-79.

3. This was the beginning of the theory of the identify of Sākala and Sialkot that has intrigued Col. Gordon so much: 'Sakala the capital of the Indo-Greek King Menander should well repay excavation if only we could decide where it was. In most works dealing with this period we find "Sakala (Sialkot?)", but just how this strange choice is to be justified has never clearly emerged'. (Col. D.H. Gordon, Prehistoric Background of Indian Culture, Bombay, 1958, p.139.) The theory was further elaborated later by Fleet in his, 'Sagala, Sakala, The City of Milinda and Mihirakula'. Actes du XI^{ve} Congres International des Orientalistes, Algier, 1905. Paris, 1906, pp.164-76.

4. Report XIV pp.44-46 and Report II pp.192-200.

stūpa on the basis of the two copper coins - one of the Satrap Jihonika and the other of his suzerain Kujula Kārā Kadphises, both of whom he dated shortly after Azes or, according to him, about 70 B.C.¹

Taxila or Shah Dheri he found to consist of 'extensive ruins of a fortified city', around which he was 'able to trace no less than 55 stupas, of which two ... as large as the Great Mānikyāla Tope, 28 monasteries, and 9 temples' ²

In his first Report on Panjab (Report II) he described different groups of ruins which have since then become famous such as Ehir Mound, Hatial, Sir-Kap, Sir Sukh, Kacha-Kot, Babar-Khana etc. He carried out some excavations in the Hatial fortifications and exposed the 'remains of a large quadrangle which he at first thought to be a monastery; but later, on the discovery of clay pellets, he changed his view and took it for a guard house.'³ The most interesting outcome of his second visit (1872-73) was the discovery of the bases and capitals of Ionic columns at Mohra Maliar outside the walls of Sir-Kap - 'the only specimens of the style that have yet been found in India, as the whole of the buildings exhumed in the Yusufzai district are ornamented with pilasters of the Corinthian style'.⁴ - which formed the remains of a Buddhist temple of

1. Report I pp.166-168.

2. Report II, p.112. On p.111 he identifies the site with Taxila.

3. Report II, p.118.

4. Report V. p.68.

the Ionic order of architecture'.¹ He was of the opinion that this was the temple outside the city that was seen by Apollonius. He dated the temple to 'about 80 B.C.' on the basis of twelve large copper coins of Azes found in an undisturbed state under the foundations of the building. During his third visit (1878-1879) he discovered some more fragments of Ionic pillars - this time inside the city - and although he failed to trace any further remains on the spot he concluded that another Ionic temple had stood there. This one he wanted to identify with the temple of the Sun seen by Apollonius.² In the Little Jhandiala Mound he traced the foundation walls of what he thought to be a Vihāra³ and also explored the Meri Hill on the crest of which he traced four distinct groups of Buddhist establishments.⁴

Central India:

Numerous remains of human occupation - temples, caves stūpas and ruined cities - were discovered in the hill-girt jungle tracts of Malwa-Rajputana, Gondwana and Chhattisgarh thanks to the patience and sagacity of Cunningham. His long stay in Malwa and Gwalior earlier in his career had made him aware of the wealth of antiquities concealed in these areas.

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1. Report IV, p.69
 2. Report XIV, p.11.
 3. Ibid
 4. Ibid, p.12.

'.... 'here are other places in Central India', he wrote in his 'Proposed Archaeological Investigation', 'that should be carefully examined, The whole of Malwa ... is full of ruins, both Bráhmanical and Buddhistical'.¹

But the archaeology revealed in this region was of a varied kind and was also of a different nature from that of the Indo-Gangetic Provinces. Here Kuṣāṇa and Mauryan remains became rare and, besides Buddhist Antiquities, important Brahmanical and Jain sculputres and buildings were found. Indeed the earliest Brahmanical remains, going back to Gupta times, are to be found at several places in this region, - notably at Eran (Saugor district) with its group of pillars, temples, statues and important inscriptions.²

Also in this region was discovered antiquities of various hitherto unknown and rare types - particularly in temple architecture- ranging over a number of periods including examples as varied as the beautiful Lakṣhāna temple at Sirpur³ dating

1. JASE, 1848 op.cit. pp.535-536.

2. Cunningham visited Eran in 1874-75 (Report X) and before him Beglar in 1873-74 (Report VII).

3. The remains of an ancient city of considerable size situated on the right bank of the Mahanadi river, about 37nmiles east by north of Raipur town in the Raipur district of the Madhya Pradesh. Cunningham visited it in 1881-82 (Report XVII) He thought that the carvings on the temple showed Gupta style and from the inscriptions found there, which mentioned a Śiva Gupta, Cunningham dated the temple to the last quarter of the 5th century. This date is no longer accepted today. On purely architectural grounds, Vogel and Longhurst were inclined to assign it to the 7th or 8th century A.D. (A.H. Longhurst, 'Ancient Brick Temples in the Central Provinces', ASIR, 1909-11, p.14 and f.n. by the editor, Vogel). Fleet, on palaeographical grounds, prefers a date in the 8th or 9th century.

from the 7th century, the temples at Khājurāho and Mārkaṇḍī¹
and the temples at Chandreh² with characteristic circular towers.

1. Cunningham visited Khājurāho at least three times (1864-65, 1876-77 and 1883-84) and the first detailed and comprehensive description of the site appeared in his Report II. He sent Beglar to Khājurāho in 1873-74 to obtain photographs of the 'magnificent temples'. (Report VII p.v.). These photographs however were never published. About the Mārkaṇḍī Group of Śaiva temples (on a rocky point on the left bank of the Wen Ganga, Chanda district, Nagpur division) which Cunningham visited in 1873-74-75, he observed: '... the whole taken together forms, perhaps, the most picturesque group of temples that I have seen. They are neither so large nor so many in number as the Khajurāha temples, but they are equally rich and elaborate, both in their ornament and in their sculptures. There are no inscriptions to tell their age; **but** their style is so similar to that of the Chandel temples of Khajurāha and other places, there can be little doubt that they belong to the same period of the 10th and 11th Centuries A.D.' (Report IX. p.143). A similarly rich and numerous group belonging to the same period was later discovered by R. D. Banerji at Un (Southern part of Indor State) (Progress Report of the Arch. Surv. of India, Western Circle for the year ending 31st March, 1919. Bombay, 1920, pp.61-62.)
2. Chandrehe in Rewa state: The temples with circular towers which were ascribed by Cunningham to the Chedis (Report XIII, p.iii) were discovered by Beglar in 1874-75. (Report XIII). Later R.D. Banerji discovered another temple of the same type at Gurgi Masaun which had escaped Cunningham's notice. (ASIR, 1920-21. Sir John Marshall's reference to R.D. Banerji's 'extensive tour' in the Rewa State, pp.31-32). R.D. Banerji was also able to fix the date of the Chandrehe temple by the discovery of a pilgrim's record on it dated in the year 700 K.C.S. (This dating is very uncertain. This 'pilgrim's record ... dated in the year 700 K.C.S.' reminds one very much of one 'Magaradhwaḷa Jogi, 700' whose records were found by Cunningham in many of the temples of North-eastern and Central India. This 700 Cunningham thought to be the date, but he was not sure which era it referred to. Sometimes he thought it referred to the Kalachuri Samvat and sometimes he preferred the Harsha era. This uncertainty of the era used in this inscriptions ~~makes~~ Banerji's dating of the temple doubtful. Cf. Cunningham Report IX p.146; XVII, pp.36-37 and 44-45; XX, pp.108-109.) Therefore the temple was erected sometime before 949 A.D. Another inscription informed that the temple was erected by a Śaiva Abbot named Praśāntaśiva. (ASIR, loc.cit.)

Of the few ancient brick temples surviving in India the majority were found in the Central Provinces.

Also among the most important of Cunningham's discoveries in this region were a number of Gupta temples - at Patāini Devi (Eastern Part of the Nāgod State), Tigowa (Jabalpore district), Bhārhut (Nāgod), Sāñchī, Eran and Nāchnā.¹

Rare examples of Hindu (Śaiva) monasteries of the 9th - 10th Centuries were discovered in places like Ranod (1864-65) in Gwalior, and Chandreh (1874-75), both of which unfortunately were erroneously supposed by Cunningham and Beglar to be remains of palaces.²

1. In the eastern part of the Nāgod state. The Nāchnā (or Nachna-Kuthara) temple (Pārvatī) is particularly noteworthy because of its peculiar imitation of rock-work on the outer faces of its walls. The temple was in a secluded position in a jungly valley, far from the main road. It was from the Raja of Nagod himself that Cunningham first heard about it. (Report XXI, pp.95 and 98-99). R.D. Banerji later discovered the remains of four more temples concealed in the jungle in its vicinity. (Progress Report etc. op.cit. 1919, pp.60-61). In this eastern region of the Nagod state, two more Gupta temples - one at Bhumara (only the Garbhagriha) and the other ~~the~~ Sankargarh - which had escaped Cunningham's notice were discovered later in 1919-20. (ASJR, 1919-20. John Marshall. p.43.)

2. The two-storied monastery at Ranod was built of huge blocks of sandstone without mortar. The three-storied tower sheltering the staircase at the north-west corner of the main building, is covered by a single slab measuring about 14 ft. wide by 8 inches thick, which excites everybody's admiration. It has once again become a religious centre. There was an inscription on one of the walls of the building, which when translated by Kielhorn (Ep.Ind. I. 1892 pp.351 ff, 'A stone inscription from Ranod (Narod)') revealed the real purpose of the building. Cunningham had correctly dated the

Footnote No.2 p.160 cont...

building to the 10th Century A.D. (Report II) on the basis of the palaeography of the inscription but had failed to understand its contents. The original name of the place as given in the inscription is Ranipadra. Other very interesting examples of early mediaeval Hindu monasteries have been found at other places in Gwalior (Surwaya, Terahi, Kadwaha, Kundalpur) and Central India - Chandreh being one - and also perhaps at certain places in U.P. (See ASIR, 1922-23, p.184 and ASIR, 1921-22, p.42. Also ASIR, 1920-21 p.32).

More interesting however were the rare examples of temples dedicated to the Tantric cult of the Yoginis - where perhaps human sacrifices used to be offered. Only a few of these have come down to us from the early mediaeval period & two of which were discovered by Cunningham (Khājūrāho 1864-65 and Bherāghat in Jabbalpore 1873-74), one by Beglar (Rānipur Jhariāl in the Karund state, Chhattisgarh, 1874-75) and two others (one at Surādā, Orissa and the other at Coimbatore) by two British officers.¹ They were all -with the exception of that at

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1. Surada in the district of Kalahandi in Orissa by Colonel (later Major-General Sir John) Campbell, Agent for the Suppression of Human Sacrifices and Female infanticide in Orissa. In January 1853. (Sir Walter Elliot, 'Notice of a Remarkable Hypaethral Temple in the Hill Tracts of Orissa; with Remarks on the Identification of Ancient Sites', JA. 7. 1878 pp.19 ff). In the same journal on p.137 M.J. Walhouse (Letter 'Hypaethral Temples') pointed out the striking resemblance between this temple and 'the Trimurti Kovil at the foot of the Anaimalai Hills in Koimbatour, noticed at page 35, Vol.III It had all the look of extreme antiquity, was regarded with awe by the natives, who generally disliked approaching it,' Sir Walter Elliot followed up his article with a further note in the October issue (Ibid p.268, 'Note on the Orissa Hypaethral Temple') in which he referred to Cunningham's discovery at Khajuraho and announced: 'A late letter from General Cunningham states he has discovered a third example of the same kind of structure, which he is now engaged in 'describing, - viz. a circular (sic. the Khajuraho enclosure is oblong in fact) cloister containing the 64 Yoginis, with several other statues, most of them accompanied by inscriptions, which will doubtless indicate their precise character'.

Towards the end of the 19th century some one repaired the Bheraghat enclosure and unfortunately rearranged many of the images, thus altering the original sequence as recorded by Cunningham in his Report IX. When it was repaired again at the instance of the government, 'the sub-Divisional officer, in his enthusiasm to do the work thoroughly, included the carving of entirely fresh images to take the place of the missing ones!' (Henry Cousens 'Conservation in the Central Provinces', ASIR, 1903-04, p.59)

F/note cont....

Footnote 1 continued from p.162.

According to V. Venkayya 'the date of the statues [i.e. at Eherāghat] can be determined by an inscription placed to the proper left of the door leading into the temple, which stands in the centre of the Court. It refers to the erection of the temple to the time of Vijayasimha and Ajayasimha, two princes of the Kalachuris of Tripuri, who ruled over portions of Central India in the 12th century A.D. The alphabet of the labels engraved on the pedestals of the statues points to the same period.' (ASJR, 1907-08, p.234 Section on 'Epigraphy')

Khājurāho - circular and were merely enclosures open to the sky with a platform or a temple in the centre. The inside walls of the enclosures had 64 or more niches for receiving the Yogini statues. For the reason of their being open to the sky Elliot called them Hypaethral after the Greek analogy and Cunningham accepted the designation.¹

Also in this region Cunningham and his Assistants discovered various new types of coins previously unknown or little known - like the coins of the Śibis and the Mālavans.² A rich collection of valuable inscriptions were made here which threw new light on the history of the Kalachuris and other Rajput dynasties and also on that of the Guptas.³

Quite in keeping with the wildness of the tract, some prehistoric remains of cairns and dolmens were found at Satmas and Khera in the Fatehpur Sikri range of hills to the West of Agra.⁴ All the celebrated hill forts of India - Gwalior, Narwar, Asirgarh, Kalanjar and Ajaygarh are found in this region and were duly noticed by Cunningham in his Reports. Also notable were the Brahmanical and Buddhist rock excavations of Dhāmnār, Kholvi, Binaika and Wijasana. Another interesting

1. Report IX p.74.

2. For details see Infra, pp.201 ff.

3. For details see Infra p.222.

4. Report VI (1871-73). Carlleyle.

feature of the archaeology of this region is the numerous sati pillars that Cunningham found. Over forty of them, mostly dating between the 9th and 18th centuries (remembering however that most of the early sati pillars were uninscribed and hence difficult to date) - are in record in his Reports. Indeed the oldest Sati inscription - that of Goparāja - Cunningham discovered at Eran.¹ Of these - excepting three or four which were from Rajputana - the majority were from the different parts of the Central Provinces, the greatest concentration being in Jabalpure and the Chhattisgarh divisions.²

Bengal:

In 1879-80 Cunningham visited many of the sites in Bengal - his only tour devoted entirely to that area. His only other tour in Bengal was in 1871-72, when he managed a hurried visit. The account of this trip was relegated to a postscript in the Report III.³

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1. Report X. pp.89 ff. Actually discovered in 1874-75 or 1876-77. First published in Fleet, CII, III, pp.91 ff.
 2. One curious discovery in the central region was a Roman Catholic Chapel with a burial ground with about 50 tombs, in the great fort of Narwar. An inscription in Portuguese and Persian recorded the death of a German - one Cornelius Oliver. ~~In~~ 1747, Cunningham was of the opinion that in this fort, there was a colony of European gunners who were in the employ of the Mughals (Report I. p.244).
 3. pp.163-164.

'... I started by rail and steamer for Dhaka', he wrote, 'for the purpose of visiting the ruins of Sunârgaon, the old capital of Eastern Bengal. This trip, which might have been very trying to health, as well as meagre in its results, was made both pleasant and fruitful by the kind thoughtfulness of my friend Dr. James Wise.¹ He not only made all the necessary arrangements for boats and elephants, but accompanied me himself to Sunârgaon and Bikrampur,' In Dacca he visited the Tomb of Bibi Pari and in Bikrampur Ballal-bari, the place of Ballal Sen and the tomb of Baha Adam and collected 10 muslim inscriptions including those from Sunargaon. He also visited Pandua, Hazrat Pandua, and Gaur where he stopped for several days, making plans and copying inscriptions. The Adina mosque, in Hazrat Pandua, he thought was 'heavy in design, and petty in ... ornamental details, like most of the Muham-madan architecture of Bengal' Yet its 'vast size' gave it a dignity-it was 'a great building in a vast solitude'.

The chief aim of his second visit (1879-80) was to obtain the plans and detailed accounts of the buildings at Gaur and Hazrat Pāndua, the two western Capitals of Bengal - particularly as an addition to Ravenshaw's work.² His other aim was to try and find the ancient capital of Bengal - Puṇḍra-varddhana - which had been unconvincingly located by Westmacott

1. The Civil Surgeon of Dacca.

2. Report XV p.iv.

at Barādhankuti (in Dinajpur) in 1874.¹ Cunningham was singularly successful in his quest and found the remains of the city in Mahāsthān - a brilliant identification. He also visited Pāhārpur where his attempts at excavation were foiled by the zamindar who owned the site.² Among the other important ancient or mediaeval sites of Bengal visited by him the most noteworthy were Devikoṭ, Dacca, Malda and Sunargaon.

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1. E. Vesey Westmacott, 'Note on Paundra-Varddhana', JA, 3 (1874) p.62 and S. Beal, Si-Yu-ki: Buddhist Records of the Western World, London, 1906, Vol.II, p.194 note 18, mentions identifications made by several other scholars.
 2. *Infra* p.237.

CHAPTER IIIInterpretation of the Remains.Coins:

Unlike some of the other branches of Indian archaeology, very little attention was paid to coins in the period when Sir William Jones and his colleagues were researching. Only a casual notice appeared in the Asiatick Researches for 1790¹ of the find of a small hoard of Roman coins in Nellore by a peasant while ploughing his field.

Numismatics in the eighteenth century however was already a very developed science in Europe and scholars in India also had not failed to perceive the importance of its application to the reconstruction of Indian history.² Some of the officers had already turned their attention to collection - Mackenzie³ is the earliest example of such an officer. A large part of his collection went to the cabinet of the Asiatic Society of Bengal. But the greatest collector of this period, as we have seen, was Tod,⁴ who, however, did not attempt to make a study of his coins until 1825, sometime after his retirement to England. His paper⁵ first brought to notice, as we have seen, what we now

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1. Volume II. Alexander Davidson (late Governor of Madras), 'On some Roman coins found at Nellore'. pp.331 ff.
 2. Supra p.18.
 3. Supra p.21 n.3.
 4. Supra p.20 n.2. All his collections were made in the region of Agra, Mathura, Ujjayini and Ajmer.
 5. Transactions of the Royal Asiatic Society, Vol.I 1827. op.cit. The paper however was read on June 18, 1825.

know as Graeco-Bactrian, Kuṣāṇa, Western Kṣatrapa and Gupta coins and Tod concluded: 'I trust I have provided matters for others to expatiate on, who may by these aids throw new light on Indian history. The field is ample, and much yet remains to reward patience and industry;' ¹ Thus Indian numismatics was born. Only Marsden² before him had illustrated a few Gupta coins in his Numismata Orientalia, Volume II.

Indian numismatics now began to attract the attention of scholars in Europe, particularly of Schlegel, who wrote in the Journal Asiatique ³ on Tod's coins. Wilson ⁴ (who was then the Secretary of the Asiatic Society of Bengal) read Schlegel's paper and thought it worth his while to try and arrange the modes collection that was lying in the Society's cabinet. His analysis⁵ brought into prominence the classes of coins that are known today as belonging to the Kuṣāṇas and Guptas.

In the meanwhile however Ventura's excavations ⁶

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1. Tod. op.cit. p.342.
 2. William Marsden (1754-1836). Lived many years in Sumatra in the Company's service. Wrote History of Sumatra (1783). Numismata Orientalia (1823-25). Marsden's collection of Oriental coins was unique in England at that time.
 3. M.A.W. De Schlegel, 'Observations sur quelques médailles bactriennes et indo-Scythiques nouvellement découvertes', Journal Asiatique, 1828, Tome II, pp.321-349.
 4. Supra p.24 n.3.
 5. Asiatic Researches XVII 1832. op.cit. With 5 plates. As we have seen before (Supra p.25.) these plates were delineated by Prinsep. They were lithographed by Kasinath, whose name appears on many plates of the time.
 6. Supra p.23.

radically changed the situation; Prinsep took over from Wilson, and a very fruitful period followed. Before the decade was out, the hope and prophecy of Tod was fulfilled. Thus in the thirties of the nineteenth century, the joint labours of a number of collectors and interpreters gave to the world a new branch of numismatics - the Indian. In fact, for several years Indian archaeology remained preoccupied with the study of coins, thus representing a reversal of the trend of the earlier period. It was only with the reading of Aśokan Brāhmī that epigraphy assumed importance. The writings of Cunningham's own early period were almost exclusively on coins.

However, although there were many collectors, interpreters were understandably few. The result was that interpretation remained largely the business of Prinsep, fortunately aided by his young friend Cunningham, as we have seen. Among the collectors Masson alone made some respectable contribution¹ towards understanding the story that these coins told. After Prinsep's departure, writing on Indian coins for many years was almost monopolized by Cunningham. But there were others also whose names are connected with the early years of development

1. Through his three 'Memoirs' in the JASB. The first 'Mémorial on the Ancient coins found at Beghram, in the Kohistán of Kábul' was published in the JASB, 1834, pp.153-175. Two others followed respectively in 1836, pp.1 ff and 537 ff. Graeco-Bactrian numismatics was indeed the creation of Masson - both as regards collection and the main approaches to interpretation - to a much greater extent than is usually realized.

of Indian numismatics, - Lassen¹ for instance and E. Thomas² and Indrajī.³ Indeed Lassen's 'Points in the History of the Greek and Indo-Scythian Kings /etc.!', Wilson's Ariana Antiqua (1841) and E. Thomas's writings, particularly his annotated edition of Prinsep⁴ are real milestones in the progress of Indian numismatics.

It is indeed exciting to follow the development of Indian numismatics from the slow beginnings when Prinsep was

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1. Zur Geschichte der griechischen und indo-Skythischen Könige in Baktrien, Kabul und Indien. Bonn, 1838. Trans. by Dr. Roer, in JASB, 1840, pp.251 ff., 339 ff., 449 ff., 627 ff., and 733 ff. as 'Points in the History of the Greek and Indo-Scythian Kings in Bactria, Cabul and India, as illustrated by Deciphering the Ancient Legends on their Coins'.
 2. Of Edward Thomas's numismatic papers particular mention should be made of -
 - 1) 'On the Coins of the Gupta Dynasty', JASB, 1855, pp. 483-518 and
 - 2) The series 'On ancient Indian Weights', JASB, 1864, pp.251-266; 1865 pt I. pp.14-27 and 51-70.
 3. Bhagwanlal Indrajī. One of the early Indian archaeologists - mainly an epigraphist. Hailed from Junāgaḥ. Collaborated with Dr. Bhau Daji, the doctor-antiquarian from Bombay and indeed depended on Daji for the English translations of his writings since his knowledge of English was imperfect. Died in 1898.
 - c.f. V.D. Mazumdar, A narrative of the Development of Achievement of the Bombay Branch Royal Asiatic Society: 150th Anniversary Celebrations. Bombay, 26th November, 1954.
 4. Edward Thomas (Ed.), Essays on Indian Antiquities etc. of the late James Prinsep, 2 vols. London, 1858.

at a loss as to where to place the new King 'Kanerko' (as the name was read at the time. Also KANHΘKOY) in the Bactrian list;¹ When one by one new Bactrian names appeared, when the Gupta coins were thought, following the suggestion of Col. Tod, to belong to the 'Pāṇḍu' dynasty, when they were baffled by the coins of Azes and Gondophares, as no trace of them could be found in the meagre written sources that they possessed, to the time when, even before Prinsep had left the shores of India, the outlines of a genuine history - a history very different from the one learned from the Hindu traditional lore - had begun to be dimly discernible.

It is to be remembered, however, that Prinsep, desperately ill as he became, had to leave unexpectedly in the midst of his labours and hence much of his work remained unfinished. Yet before he had taken leave he had managed to point out the main lines of research.

It was with the arrival of the Burnes collection in 1833 that Prinsep's real involvement with Bactrian and Kusana history began.² Burnes brought a new Euthydemus, which was a valuable addition to the only other Euthydemus known in Europe in

1. 'Note on Lieutenant Burnes Collection etc.', JASB, 1833, p.314.

2. He had written only two numismatic papers before, both on coins of countries outside India.

1) 'On the Ancient Roman Coins in the Cabinet of the Asiatic Society, JASB, 1832, pp.392-408.

2) 'On the Greek coins in the Cabinet of the Asiatic Society, JASB, 1833. pp.27-41.

in Mionnet's Description.¹ This collection also yielded the copper Kaniska on which the legend could be read for the first time.

Although mystified by the name, Prinsep had Csoma de Körös at hand for assistance, and Wilson fortunately had already written his paper on Kashmir history in the Asiatic Researches.² The name of the Tartar prince Kaniska in Wilson's chronological table caught Prinsep's attention and Csoma informed him of the existence in the Tibetan works of a Kaniska, a celebrated King in the north of India, who was said to have ruled about 400 years after Buddha. Thus it occurred to Prinsep that this 'Kanerko' of the coins was perhaps Kaniska, the 'Tartar or Scythic conqueror of Bactria'. No wonder then, that he considered the discovery of the coin 'as ^{of} the greatest value'.³

This identification was later objected to by Lassen because he thought that the Kanerki⁴ coins indicated belief in a religion other than Buddhism, whereas the 'Kaniska' of the traditions was a Buddhist. Cunningham later in his paper

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1. Théodore Edmé Mionnet, Description de médailles antiques, Grecques et romaines, avec leur degré de rareté et leur estimation, etc., Paris, 1806-1837.
 2. H.H. Wilson, 'An Essay on the Hindu History of Cashmīr' As. Res., (XV), 1825, pp.1-119.
 3. James Prinsep, 'Note on Lieutenant Burnes' collection of Ancient Coins', JASB, 1833, p.315.
 4. As the name was read at the time because of the peculiar Greek letter used for Σ. For details infra pp.177 ff.

'Notice of some unpublished coins of the Indo-Scythians',¹ met Lassen's objections by proving that the figures and symbols on some of the newly discovered Kanerki coins were certainly Buddhist and thus these coins afforded 'the last links in the chain of evidence to prove the identity of the Indo-Scythian Kanerki, with the Buddhist prince Kanishka of Kashmir, as was conjectured by Mr. James Prinsep, so far back as 1833.'²

With the publication of Masson's first Memoir in 1834³ developments in the Bactrian field were rapid and indeed the whole concept of Bactrian history was revolutionised.

In his 1834 paper, besides the known names of Menander, Apollodotus and Eucratides, Masson disclosed as many as five new names - Antialcidas, Agathocles, Pantaleon, Lysias⁴ and Hermaeus.

Besides these Graeco-Bactrians, Masson discovered the coin of one YNAΔΦEΠΠOΞ - later recognised as the Gondophares of Christian tradition - and another of one 'Soter Megas',⁵

1. JASB, 1845, Pt.I pp.430-441.

2. Ibid. p.430.

3. Charles Masson, op.cit. JASB, 1834, pp.153-175.

4. Masson read it as Ausius. However he mentioned the possibility of the first letter being an Λ. (Memoir, op.cit. p.165.)

5. This title was not correctly read at the time. His coins had appeared, although unrecognized, in Wilson's Asiatic Researches Vol. XVII, op.cit. paper (Figs. 23-25 Pl. II). Also Tod's 2nd series. op.cit.

the 'Great Saviour' - the so-called 'nameless King', who was to remain an enigma. Yet another Indo-Scythic group, - besides the already known Kaniska group - that of $\text{KAD}\Phi$ ICHC - was also discovered, and Masson rightly placed this series before that of Kaniska.¹

Thus with this one paper a good deal of complication was introduced into Indian numismatics. It was also realised that much potential material was now at hand to fill in the many chasms in Indian history. Thus Schlegel's Bactrian list prepared in 1828 after ransacking all the sources was no longer sufficient - it appeared too simplified and too short in the face of Masson's discoveries.

The first name of Kadphises was variously read² as OOX, OKMO, OOKMO, OOHN, OOMO and of course the correct reading OOHMO - particularly on the gold piece found by Honigberger.³ But on examining the same coin in Paris, M. Jacquet expressed his conviction that the name really was $\text{MOKA}\Delta\Phi\text{I}\Sigma\text{H}\Sigma$ which he supposed to be the equivalent of the Sanskrit Mahatrisi.⁴ Jacquet however did not explain OOH and long afterwards

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1. There were unrecognized Wema Kadphises coins on Tod's (op.cit. pl. XII no.10) and Wilson's plates (op.cit. plate II nos. 28 and 30.).
 2. The Kharoṣṭhī legend of course had not yet been read.
 3. James Prinsep, 'Continuation of observations on the Coins and Relics, discovered by General Ventura, in the Tope of Mánikyála', JASB, 1834, pp.443-444.
 4. James Prinsep, 'New Varieties of Bactrian coins, engraved as Plate XXXV from Mr. Masson's drawings and other sources', JASB, 1836, p.553.

Cunningham wrote sarcastically ' ... OOHMO... a name which the French savans M.R. Rochette and Jacquet curiously divided giving one-half to Kadphises, whom they called MoKadphises, and leaving the other half to stand upon its own responsibility'.¹ Jacquet's explanation however failed to misguide Prinsep and others at Calcutta who had already recognized Kadphises as a family name.

In the 1836 Collection of Masson another Kadphises - Kozola - was discovered² and from Ventura's coins from Manikyala OOHPKI KOPANO³ was introduced to history.⁴ Later Cunningham was able to read another name - Kujula - Kārā - Kadphises.⁵ Cunningham also claimed to have first read correctly the name BAZO AHO (for Vāsudeva), which was read by Wilson⁶ as Baraoro. Cunningham added, 'Thomas at first disputed my reading, but he eventually gave in.'⁷

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1. Lieutenant Alexander Cunningham, 'Notice of some unpublished coins of the Indo-Scythians', JASB, 1845, pt.I p.433.
 2. Prinsep, 'New Varieties etc.' JASB, 1836 op.cit.
 3. i.e. Huviṣka.
 4. Prinsep, 'Continuation of observations etc.' JASB, 1834, op.cit. p.445. Wilson's pl. no.1 fig. 1 (op.cit. 1832) shows a Huviṣka.
 5. A. Cunningham, Coins of the Indo-Scythians, pt. III pp.7-8.
 6. Ariana Antiqua, 1841, p.377.
 7. A. Cunningham, Later Indo-Scythians, p.22, f.n. 14.

The many curious religious symbols and deities on the Kuṣāṇa coins had already attracted attention, although they were held, at this stage, to be mainly Mithraic in nature. Masson in his first Memoir made the brilliant observation that the Kuṣāṇa goddess NANAIA must have had some connexion with Bibi Nānī whose shrine he had observed in many parts of the Frontier region.¹

But the real trouble-maker was the unusual Kuṣāṇa-Greek letter for Ṣ i.e. ϐ. This letter quite naturally they had taken for Greek 'rho' and therefore 'Koṣāṇd' became 'Korāno' and Ṣāo Nāno Ṣāo became Rāo Nāno Rāo. The numismatists tried to explain these strange forms in all sorts of ways: perhaps 'Korāno' was in some way connected with the later Muslim epithet 'Zul Qarnain' and 'Sahib-i-quiran?' and Rāo Nāno Rāo of course was derived from the Hindi word Rāo or Rāy!²

KOPANO however persisted in giving trouble for a long time afterwards, even when the Kharoṣṭhī legends were read, simply because the unusual ϐ had not yet been recognized. Similarly the names of the Kings themselves long remained Oerki and Kanerki. As late as 1843 Cunningham further elaborated the Zul Qarnain theory in his paper on the coinage of Kashmir³ and suggested that it was derived from the Greek ΚΟΡΩΝΙΣ with curling horns, and that in this sense 'Korān'

1. Masson, 'Memoir etc.' JASB, 1834, op.cit. p.172.

2. James Prinsep, 'Continuation of observations etc.' JASB 1834, op.cit. pp.447-449.

3. 'The Ancient Coinage of Kashmir', Num. Chron. (vi), 1843-44, pp.1-38.

would mean Alexander the Great himself; and the princes who took that title would claim descent from Zul Qarnain!

It was not until 1887 that the real nature of β was understood with the publication of Stein's paper in the Babylonian and Oriental Record.¹ Now it seems rather strange that the letter β might represent a $\$$ did not occur earlier even after the Kharoṣṭhī legends had been read. Instead it was believed that Kanerki and Oerki were the numismatic versions of the names of these monarchs.

Among the other gods $\beta\alpha\alpha\beta$, $\alpha\kappa\beta\alpha$ (as read at the time) and $\alpha\alpha\beta\alpha$ however were recognised early. $\beta\alpha\beta\beta$ of course was Buddha; and, misled by the letter β , Lassen saw in $\alpha\kappa\beta\alpha$, Ugra - another name of Śiva. The identification of the quickly running figure labelled $\alpha\alpha\beta\alpha$ as Vado, Sanskrit Vāta, Zend Vato and modern Persian Eād, or 'the wind', by Lassen was indeed brilliant.

In the meanwhile, as more collections poured in, Prinsep discovered new names and even new dynasties and now, he thought, the time had come to build up a corpus of coins by putting together all the known classes, types and varieties in a series of plates delineated by himself.

All those who had examined the Burnes collection and had seen Masson's plates were familiar with a type of

1. Vol. I. p55.

coin on which unfortunately the legends were not sufficiently legible to tell the name of the prince to whom the coins belonged. It was from a coin presented by Munshi Mohan Lal to Dr. J. Grant, that Prinsep first recognized the name of the King - Azos (sic. as it was written at the time) - Basileus Basileon Megalou Azouu.

Later many clear legends were found in Ventura's collection.¹ Azilises also was found in the same collection.²

But the most important discovery in this collection of Ventura was of another name which also was to remain rather enigmatic for a long time - the name of Maues - read at the time 'Mayus or Nayus'³. On this Prinsep could only comment: 'This is an entirely new name, nor can it be read as a Greek word in its present shape, although the characters are perfectly distinct'⁴

Another new name introduced was that of 'Nonus',⁵ Also recognized was the coin of one 'Kodus' i.e. the Hyrkodes of later days.⁶

1. James Prinsep, 'Further Notes and Drawings of Bactrian and Indo-Scythic coins; JASB, 1835. p.343.

2. Ibid. p.345.

'The name itself is quite new, and we can only venture to assign his position in proximity to his prototype, Azos'.

3. Also written as Mayes later. Cf. JASB, 1838, pt.II p.651.

4. JASB, 1835. loc.cit. p.338.

5. JASB, 1835, loc.cit. p.341.

5. Or 'Ononus' i.e. Vonones. Although read as 'Nonus' at first it was soon recognised as 'Vonones'. JASB, 1835 op.cit. pp.341-342 and JASB, 1838, pt.II op.cit. p.645.

6. JASB, 1835, loc.cit. p.340

H. Torrens later put forward the theory that the 'hitherto obscure' coin of 'Mayus' was but that of Demetrius because Torrens found that the 'Mayus' coins and the copper Demetriuses were exactly similar except for the names of the Kings.¹ Indeed, K. Rochette had already pleaded to identify 'Mayus' with Apollodotus! Cunningham later, when the Kharoṣṭhī legend was read, corrected the reading of the name as Moā: 'The name of this King has hitherto been read as Mayes; which is in accordance with the Greek version: but the Pali gives Moasa unequivocally; and as the name is not a Greek one, we can have no hesitation in preferring the native reading; The Greek would more properly have been rendered ΜΩΥ'.² Another important step forward was his identification of this Moā with the epigraphic Moga.³

Gradually more Bactrian princes were discovered as more collections were sent in by Ventura and Masson. In the Masson collection of 1836 were found Archebius (read at the time as 'Archelius'), Diomedes⁴ and Spalyrises.⁵ From the

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1. 'Note' on Captain Hay's 'Account of coins found at Bameean', JASB, 1840, pt.I. pp.70-71.
 2. 'Second Notice of some Bactrian Coins', JASB, 1842, pt.I. p. 131.
 3. Taxila copper-plate inscription of King Moga. Cf. Cunningham, Coins of the Indo-Scythians, Pt. II p.2.
 4. James Prinsep, 'New Varieties of Bactrian Coins etc.' Op.cit. JASB, 1836, pp.548 and 549.
 5. JASB, 1836, p.437. Proceedings of August.

Ventura collection had been added earlier 'Philoxenus' and 'Antimachus'.¹ Stacy added 'Amyntas' - another new name.²

But more exciting discoveries, the names of Bactrian queens, were soon to follow. Dr. Swiney obtained a coin, thickly coated with rust, among Keramat Ali's collection that he had bought.³ At first not much notice was taken of the coin because from the helmeted head on the obverse it was considered to be a Menander. However, when the doctor cleaned it with a hard brush he noticed a variation of the legend and at once suspected that a new name was about to be discovered. However he had hardly realised the importance of the discovery until he had shown it to Cunningham who 'Immediately recognized with a feeling of intense curiosity the undoubted title of a female sovereign', that of Agathocleia.⁴ The first Graeco-Bactrian queen was thus discovered and it was soon followed by the discovery in 1838, among Dr. Lord's collection, of the Eucratides with Heliocles - Laodice reverse⁵ that has in later times given rise to so many controversies.

It is most curious that Prinsep, from the imperfect

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1. J. Prinsep, 'Further Notes and Drawings etc.' op.cit. JASB 1835. pp.341-342.
 2. J. Prinsep, 'New types etc' op.cit. JASB, 1836, p.720.
 3. A. Cunningham, Later Indo-Scythians, Varanasi, 1962, p.39.
 4. James Prinsep, 'New types etc.' loc. cit. JASB, 1836. p.721.
 5. James Prinsep, 'Additions to Bactrian Numismatics, and discovery of the Bactrian Alphabet', JASB, 1838, pt.II pp.636-655

engraving supplied to him, read the name as 'Kanlodice' (what he thought was the equivalent of Sanskrit Kamalādhikā!) and not 'Laodice', and propounded a whole theory about Greeks marrying Indians and about Eucratides being half-Indian.¹ But soon he was undeceived by the ~~time~~ reading, supplied by Cunningham on an examination of the coin itself.²

Thus by the time of Prinsep's departure the list of new names - names unknown before in history - had become impressively long, although the groupings and sub-divisions according to dynasties, races and family relations had not yet really begun.

Some of the names imperfectly understood before were more clearly read - 'Ononus - Vonones' for 'Nonus' and particularly Gondophares for Undopherros or Unadpherros. Prinsep also recognised the name of Spalahoras, and in the Venturani collection he recognised the name of Heliocles. On a thick copper piece sent by Gen. Allard he discovered the name of 'Abagases'.³

His last paper⁴ Prinsep concluded by saying that 'the perfect Greek medals of Bactria proper, however beautiful

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1. The idea being that Eucratides was the son of Heliocles and Laodice.
 2. JASB, 1838 loc.cit. Note appended to the text.
 3. For 'Abdagases'. However he pointed out: '... there may perhaps be another letter before the A'
'Additions to Dactrian Numismatics etc.' op.cit. JASB, 1838, Pt. II. pp.645, 647 and 654.
 4. Ibid.

as works of art, ought not to turn away our attention from these corrupted and "barbarous" specimens which mark the decadence of Greek dominion and Greek skill. These are the most precious to the student of Indian history:- through their native legend he may yet hope to throw light on the obscure age of Vikramaditya¹, - and the Scythian successors of the Greeks on the north of India. Hitherto these classes of rude coins, though very numerous, have been much disregarded, and on that account I now invite attention to them, and promise to return to the task myself² when I have fresh materials collected and arranged;'³ Here Prinsep was particularly referring to the Azes group about which he had commented: 'A great deal remains to be done ere we shall be able to clear the history of this numerous and interesting series of coins'⁴

A beginning in the study of the indigenous Indian coins was also made by Prinsep, although both Marsden and Wilson had illustrated Gupta coins and punch-marked coins were known from the Mackenzie collection.

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1. This question of Vikramāditya seems to have obsessed his mind at this time. At one point he had recognised the name Eueratides as being the Grecian form of Vikramāditya 'both in sound and signification' ('Further Notes and Drawings etc.' op.cit. JASB, 1835. p.339) and at another he took Gondophares for the father of Vikramāditya. ('Additions to Bactrian etc.' loc. cit. p.654.)
 2. This wish however was never fulfilled.
 3. 'Additions to Bactrian Numismatics etc.' op.cit. JASB, 1838. p.655.
 4. Ibid. p.652.

The first real interest in these coins was roused by the Behat discoveries of Cautley in 1834,¹ when several coins of various hitherto unknown dynasties were discovered.

From the plates we can now see that among Cautley's finds there were several Kuninda and Yaudheya coins which were, according to Prinsep, 'entirely new to Hindu numismatology,'² Their nature of course was not understood at the time and they were all lumped together as 'Buddhist coins'.³ He later read the letters $\omega\omega$ on the Yaudheya coins but thought that they stood for the word Ayodhyā.⁴

Prinsep also illustrated⁵ some coins procured by Lieut. A. Conolly⁶ at Kanauj, among which were some that we now know were Western Kṣatrapa coins and also a Gupta coin recognised to be of a 'Kacho' who in turn was identified on Rev. Mill's suggestion, with the Ghaṭotkaca of the Allahabad inscription.

To these were added later another series, first made known by Stacy and christened by him as the 'cock and bull coins.'

1. Supra p.33.

2. 'Note on the Coins found by Captain Cautley, at Behat', JASB, 1834. p.227.

3. A curious point is that already in 1834 (JASB, 1834, pp.228 and 229) Prinsep uses the term 'chaitya symbol' for the 'moon on hill' motif. It would be of interest to know how did he get this name and also the term Chaitya for a Buddhist cult object. Among the possible sources of his information were Csoma, Ratna Pāla, Hodgson and Kamalā Kānta.

4. James Prinsep, 'On the connection of various ancient Hindu coins with the Grecian or Indo-Scythic series', JASB, 1835, p.626.

5. 'Note on the coins found by Captain Cautley' op.cit. JASB, 1834.

6. Of the 6th Light Cavalry.

These are (known now) as the Ayodhyā coins. The legends on Stacy's coins were not legible. But Mr. Tregear of Jaunpur was fortunate enough to procure a considerable quantity with the inscriptions beautifully distinct, and the names now familiar in the Ayodhyā series, - 'Satya Mita', 'Vijaya Mita' and 'Suya Mita' were made known.¹

However, already in 1832 and 1833 Prinsep had incidentally discussed the question of indigenous Indian coins and had stated the central theme of all his subsequent discussions on Indian coins that no 'native coin, properly so called, had circulation in India anterior to the incursion of Alexander,² and that 'from the coins of Bactria a transition is easily traced through the dark period of the Indo-Scythian or Buddhist dynasty, ... to the coins of the Hindu Princes of Central India, Andhra, Rajputana, Kanouj [i.e. Gupta], Indraprestha, and perhaps Magadha or Behar'.³

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1. James Prinsep, 'Specimens of Hindu Coins descended from the Parthian type, and of the Ancient Coins of Ceylon', JASB, 1837, pt.I. pp.288-302. Mr. Tregear's coins 'were found in company with copper coins of the Gupta series,' (Ibid p.297).
 2. James Prinsep, 'On the Ancient Roman Coins in the Cabinet of the Asiatic Society', JASB, 1832. pp.392-408. 'Coinage is certainly one of the improvements which has travelled and is still travelling eastward'. (Ibid, p.394). When he later reverted to the subject he excepted the punch-marked pieces. (James Prinsep, 'On the Connection of various ancient Hindu coins with the Grecian or Indo-Scythic series', JASB, 1833, p.412.
 3. JASB, 1833 loc.cit. p.412.

This central theme, particularly the descent of the Gupta coins ('Kanouj') from their *puṣāṇa* ('Indo-Scythic') prototypes, was first elaborately developed in his 'On the connection of various ancient Hindu coins with the Grecian or Indo-Scythic series'¹ and this discussion of course also brought him to the question of the different stages in the technique of coin manufacturing in India. He recognised the three stages represented by the punch-marked, the die-struck and the cast coins. He did not distinguish, however, between the single-die and the double-die techniques.

It was on this occasion that he coined the word 'punch-marked' for describing this particular class of coins which he described in the following words: '... small flattened bits of silver or other metal ... either quite smooth, or bearing only a few punch-marks on one or both sides; and generally having a corner cut off, as may be conjectured, for the adjustment of the weight. They are all stamped on at random with punches and may naturally be interpreted as the insignia of successive dynasties authenticating their currency'.² He made a clear distinction between the stamps of a die and those of a punch and thought that from this original there 'descended two distinct families, of which one was produced by the hammer and die, the other by casting in a mould' - a variety 'easily

1. JASB, 1835. op.cit. pp.621-643.

2. Ibid. p.627. -

recognizable by the depth of relief, the projecting keel on the margin, shewing where the moulds were united, - and the greater corrosion due to the softness of the cast metal,¹.

The Gupta coins² had been known for a long time, as we have already seen. As early as 1783 a hoard was discovered at Kālighāt in Calcutta and was presented to Warren Hastings, by his famous munshi Naba Kishen. Hastings sent most of it to the Court of Directors in London.³ This source furnished the figures in both Wilson's and Marsden's plates.⁴ Allan after a thorough study came to the conclusion that the hoard contained coins of Chandra Gupta II of the Archer type, Narasimha Gupta, Kumāra Gupta II, and Viṣṇu Gupta of Allan's Class II.⁵ Tod informs us⁶ that Dr. Wilkins possessed some Gupta coins found elsewhere in Bengal, and that Wilkins thought, with the usual amazing deciphering power, that he could make out the word Chandra upon them.⁷ But Wilson later doubted ~~the~~ this reading and mistakenly thought that it could be read as Nara Gupta.⁸

1. JASB, 1835, op.cit. pp.621 and 627.

2. Although obviously they were not recognised as such at the time.

3. Marsden, op.cit. Vol.II. p.726.

4. James Prinsep, 'On the connection of various ancient Hindu Coins etc.' op.cit. JASB, 1835, p.633.

5. John Allan, Catalogue of the coins of the Gupta dynasties, London, 1914. P.cxxvi.

6. Tod, Transac. Roy. As. Soc. I. op.cit. p.340.

7. Confusion between this 'Chandra' and his Mauryan namesake was very common beginning with Tod until well into Prinsep's time.

8. Wilson, As.Res. XVII op.cit. p.571.

Marsden kept an open mind regarding these coins and said: 'Some learned antiquaries think they discover in these the evidences of a Greek origin; but on this point I do not see enough to justify an opinion, and shall refrain from conjecture; cherishing the hope that future discoveries of Indian medals may throw a light upon the subject, which is itself of the highest interest'.¹

Prinsep thought that these coins were 'decidedly the most ancient of Hindu type', then known and that they could 'only belong to the Maurya, the Sunga, the Kanwa or the Andhra dynasties of Mr. Wilson's catalogue (315 B.C. to 428 A.D.)'.²

In his 'On the connection of various ancient Hindu coins with the Grecian or Indo-Scythic series'³ Prinsep enriched the known Gupta types by two most interesting new types - the Aśvamedha and the Lyre⁴ - and for the first time used the appellation 'Gupta family' for the so-called 'Kanouj dynasty'.

The Lyre type, which Prinsep described as 'the most important acquisition',⁵ was a gift from Stacy. Of the two Aśvamedhas⁶ the first - not very clear - was given by Miss

1. Marsden, op.cit. p.725.

2. James Prinsep, 'Bactrian and Indo-Scythic coins **continued**', JASB, 1833. pp.413-414.

3. JASB 1835 op.cit.

4. Wilson (op.cit.) illustrated a Lyrical type before. Pl.I no.19. JASB, 1835;

5. loc.cit. p.637 and Pl. XXXIX 26.

6. Ibid pl.XXXIX 31, 32.

Watson; but the second one - much clearer - was Stacy's and this at once confirmed the reading that Prinsep had hesitated to pronounce before: 'although the image of a richly bedecked horse, unfettered by bridle or rider, had led [him] to imagine some allusion to the celebrated horse-sacrifice undertaken by one or two of the most powerful of the ancient sovereigns of India'.¹ Thus the second coin confirmed Prinsep's original reading of Aśvamedha Parākrama and he declared: 'History must be searched, if indeed any history can be found, ere we can determine who may lay claim to this fine and curious medal,....'²

It was not however traditional history but the joint testimonies of inscriptions and coins that helped to clear up much of the mystery surrounding the Gupta history. Between 1834 and 1836 much new information had been gathered by the reading of the Allahabad column inscription³ and the discovery of the Ehitari lāṭh.⁴ To the four original names known from the Allahabad pillar three more were added by the Ehitari inscription - Candra Gupta II, Kumāra Gupta I and Skanda Gupta.

1. JASB, 1835 op.cit. p.638.

2. Ibid.

3. Infra p.215.

4. Supra p. 38 and 41.

And coins could now be assigned to each one of these monarchs.¹ Prinsep claimed that these new discoveries would 'fill a space in Indian history or nearly two centuries, of which no written account can be met with; unless the passage in the Vishnu Purāna² that the Guptas, a Sudra family, reigned over a part of Magadha, at the time of its compilation, be regarded as alluding to our dynasty'³

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1. Lieut. Kittoe added a new name from a coin in the possession of an officer at Puri. The title of the King was correctly read as Bālāditya. The actual name was read as Nara but doubt was expressed regarding the correctness of the reading. However taking Nara to be correct they thought that the name Nārāyana Gupta was intended. (JASB, 1837. p.319. Proceedings of May).

This name, Cunningham later in 1854, confidently read as 'Nara-Gupta Balāditya' (Coins of Mediaeval India. p.11 Cunningham complained that this reading Mr. E. Thomas described as 'a very ancient myth' in JASE, xxiv. p.386 and at a later date, in 1883, adopted it without acknowledgment' Ibid. pp. 11-12. A few pages below he further accused Thomas of having described the gold coin of the E. Chedi King Prithvi Deva without having seen them but from memory of what Cunningham had told him about the coins but without acknowledging his debt. Cf. Ibid pp.74-75.)

In 1883 a Kumāra Gupta coin, unique at the time, was forwarded by H. Rivett-Carnac to the Society, which on its obverse had three standing figures, (i.e. the Prātāpa type of Kumāra Gupta I. It was unique even at the time of Allan's Catalogue, 1914. cf. p.87) which appeared to represent Buddha, worshipped by two women, on either side of him After studying the coin, Cunningham sent a note on it: 'I have not been able to make anything out of the marginal legend of Mr. Carnac's gold Gupta coin. But the name of the King is undoubtedly Kumāra Gupta' JASB, 1883 pp.143-144. Proceedings of November.

2. Which he came to know from Wilson's analysis in the JASB, 1832
3. JASE, 1835, op.cit. p.644.

In this paper he also noticed some Chandra Gupta copper coins

Footnotes continued from page 190.

and commented on their scarcity (p.650). He read the reverse legend of the Chandra Gupta - Kumāra Devī coin as 'Pachchavaya' and suggested that 'the upper prolongation of the P, perhaps, indicates an anusvara, and thus the reading may be Panch-Chhavayas, 'the five excellencies;' to wit, of a king' (p.647). He described the Chandra Gupta archer type as 'now became (sic.) celebrated as having opened the door to the understanding of the whole group'. (p.649)

Towards the end of his career, a year before he left India, Prinsep turned his attention 'to the promising field of Saurashtra,¹ made more promising by the accession of some fresh coins from Mr. Wathen² of Bombay, and Captain Burnes,'³ Prinsep was partially able to decipher the legends on these coins and read 'sāh' for 'Sena' and 'Simha'. He thus claimed to have added a new dynasty of 'Sāh Kings'. For many years the appellation 'Sāh coins' clung to the western Kṣatrapa coins.

After Prinsep the next phase of Indian numismatics started, with the writings of Cunningham.⁴ Now the time had come to delve deeper into the subject than Prinsep could possibly have done - the sort of study that Lassen had attempted.⁵

A great number of names, obviously belonging to different dynasties, had accumulated and a considerable number of plates had been prepared. But as yet they were little more than names, mostly jumbled up.

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1. Prinsep's designation for the western Kṣatrapa coins on the basis of their provenance.
 2. Persian Secretary to the Government of Bombay.
 3. James Prinsep, 'The Legends of the Saurashtra group of coins deciphered', JASB, 1837, pt.I. p.378.

In the JRAS, vi were published a couple of beautifully executed plates of a fine collection of these coins in the possession of Mr. Stuart. The plates appeared to have been executed in Italy. The same issue also contained a notice by Prof. Wilson of one coin of this group, but without decipherment.

4. A series of articles in the JASB, in 1842, 1845, 1854 and 1865. Two papers in the Numismatic Chronicle in ~~1843-44~~ and 1845-46.
5. Supra p.171.

The whole body of coins had to be brought into more precise order and the interrelations of the different potentates had to be sorted out more clearly than had hitherto been done, in short the real promise of coins - the revealing of history unknown from other sources - had to be realised now; a duty that was properly understood by Cunningham. '... We are compelled', he said, 'in the absence of historical aid, to examine the numismatology of Bactria, as Butler's philosophers examined the moon, by its own light. ... Thus a good cabinet of the coins of the Bactrian princes, is to an experienced numismatist

" -- A famous history ... enroll'd,

In everlasting monuments of brass -- "

from which he may draw the data for a chronological arrangement of those princes, many of whom are "of dynasties unknown to history". ... we must be content to see our way by the light of glimmering

"On narrow coins through Cerulean rust" ¹

Then again he pointed out that the religious history of the Kusana monarchs we owe entirely to their coins and that 'the numismatist may proudly point to it as one of the many useful rays which the beacon of his favourite study has thrown over the treacherous quicksands of history. So true are the

1. A. Cunningham, 'Some new Bactrian coins etc.' JASB, 1840 Pt. II pp.867-868.

words of the poet,

The medal, faithful to its charge of fame,

Through climes and ages bears each Prince's name'.¹

Thus Cunningham continued with the unfinished work of Prinsep and carried it to a stage where new generations took over. It is seldom realised over what an amazingly long period he maintained active interest in coins. The very first paper of his life ² -- in 1834, at the age of 20 -- was on coins. Exactly sixty years later, in 1894 his last book - also on coins - was published posthumously.³ He was an eye-witness of the birth of Indian numismatics and he was still alive when the second and modern phase of Indian numismatics began with the publication of the first of the British Museum catalogues. He bridged such a long span of time that he connected ages as remote as that of Prinsep and that of Allan and Rapson.

Indeed, he is perhaps chiefly known today as a numismatist, and what is remarkable is that most of his numismatic writings are of use even now - no writer on Indian coins can hope to produce a scholarly study without looking through Cunningham's works. In the study of coins he epitomises the whole

1. 'Notice of some Unpublished coins of the Indo-Scythians', JASB, 1845, pt.I, p.441.

2. 'Correction of a mistake regarding some of the Roman coins found in the Hoop at Manikyāla opened by M. Court'. JASB, 1834, pp.635 ff.

3. The Coins of Mediaeval India,
Also see *infra*, p.210.

age, the quintessence of 19th Century Indian numismatics - its norms, techniques and biases - is to be found in his writings - his five great books¹ and numerous papers. However, what proved to be particularly priceless in later days was his unique first-hand knowledge of the provenance of the various types and classes of Indian coins - information so very important in the study of coins. For this information today we have very largely - almost entirely - to depend on the information supplied by Cunningham. Allan in his Catalogue of the Coins of Ancient India² commented that as regards the provenance of the coins discussed the information was 'based on the authority of Cunningham, whose unequalled experience of such matters gives unusual weight to any pronouncements of his, even when detailed evidence of his reasons is not available'.³

One of his major early numismatic papers was on the coinage of Kashmir, written on the basis of 'upwards of one thousand coins' that he had collected there in 1839.⁴ Although some of these coins later became common, some are still rare

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1. (1) Coins of Alexander's Successors in the East, London, 1884.
 (2) Coins of Ancient India, London, 1891.
 (3) The Coins of the Indo-Scythians, London, 1892?
 (4) Later Indo-Scythians,
 (5) The Coins of Mediaeval India, London, 1894.
 2. London, 1936.
 3. Ibid. pp. xiii - xiv.
 4. Lieut. A. Cunningham, 'The Ancient Coinage of Kashmir', Num. Chron., 1843-44.

and a few remained unique until the turn of the Century.

This paper was preceded and followed by a number of papers on the coins of the Eactrians and the Indo-Scythians - coins that were attracting the major share of the interest of the antiquarians.

The large collection made by Captain Hay was placed at Cunningham's disposal and after a study of it he concluded that Lysias and Antialcidas belonged to the same dynasty - that of Eucratides - and that 'they succeeded him at no great interval' ¹ In his next paper in the same year ² Cunningham introduced a new prince, Zoilus, and conjectured that Zoilus was a son of Apollodotus and succeeded his father for a short time. ³ Apollodotus himself, on the other hand, according to Cunningham, was no other than the **parricide** son of Eucratides. ⁴ In 1842 he published his 'Second Notice of some New Bactrian Coins' ⁵ which was in importance almost equal to Masson's first 'Memoir', because in it he made known for the first time as many as five new Bactrian princes - Strato, Telephus, ⁶ Hippostratus, Dionysius, Nicias - and even a queen, Calliope. Only

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1. Captain Alexander Cunningham, 'Notes on Captain Hay's Bactrian Coins', JASE, 1840, pt.I. p.537. This view is no longer accepted today.
 2. 'Description of, and deductions from a consideration of some new Bactrian coins', JASE, 1840, pt.II. pp.867-889.
 3. Ibid. p.871, i.e. Zoilus II of later day. This view is accepted today.
 4. Ibid. pp.868-870. This view is no longer held today. This view was repeated later by Cunningham in his Coins of Alexander's Successors, pp.185 ff. Also p.218 and 230.
 5. JASE, 1842, pt.I. pp.130-137.
 6. A single silver piece that was obtained towards the close of the Afghan campaign in 1841. Alexander's Successors, p.296.

a year before Wilson while writing his Ariana Antiqua did not have any knowledge of these princes.¹ To this list of twenty-six princes and queens Cunningham was later able to add five more names - Artemidorus,² Epander,³ Theophilus and Apollonphanes⁴ and Straton II. In this same paper of 1842⁵ Cunningham had also suggested that Agathocleia was Strato's queen, which view he upheld later in Coins of Alexander's Successors in the East.⁶

Also in his JASB, 1840, pt.II,⁷ he tried to arrange the various Indo-Scythic series, and on numismatic evidence postulated that Vonones, Azes, Maues, Spalyrises and Spalahoras belonged to the same family; indeed he thought it was

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1. He was able to describe the coins of twenty kings.
 2. Until 1872 only seven specimens of his coins were known - all in Cunningham's possession. The first of these coins was obtained by him in Kashmir in 1848, and he since added four others from Peshawar and north-west Panjab. Coins of Alexander's Successors, p.294.
 3. However, E. Thomas claimed to have discovered Epander in 1859 before Cunningham. JASB, 1865, op.cit. p.63.
 4. Until 1872 only five coins were known to Cunningham - all five of them procured by him in Panjab. Coins of Alexander's Successors. p.295. J.G. Delmerick in 1872 discovered Plato and later Feukolaus and Polyxenus were added.
 5. JASB, 1842. op.cit. p.132.
 6. P.256. This is not accepted today.
 7. 'Some New Bactrian Coins' op.cit. pp.867-889.

'highly probable' that Azes was the son or brother of Spaly-rises and that Vonones must have been nearly contemporary with Azes - 'about 80 B.C.'¹ He also suggested that Gondophares and Abdagases - who claimed himself to be the nephew of Gondophares - were Parthian names; a brilliant suggestion but largely anticipated by Prinsep.² But Cunningham changed his opinion later and considered the family of Gondophares as being 'later Sakas'.³

The outlines of the family of Gondophares became clearer with Cunningham's subsequent discoveries of more names of this family. In 1842 he made known the coins of Pakores and Arsaces and announced that he had in his possession 'the coins of two or three other Princes of this dynasty', but the names were not clear. One appeared to him to be 'Orthamasdes' - certainly a misreading of Orthagnes.⁴ Later, on deciphering their Kharosthi legends, Cunningham discovered that Orthagnes styled himself as Gondophara Sagaba or 'the full brother of Gondophares' and that Vonones was the brother of Spalahoras: Mahārāja-bhrāta dhamiasa Spalahorasa.⁵ He also discovered that

1. 'Some New Bactrian Coins' op.cit. pp.884-885.

2. Prinsep, 'Further Notes and Drawings etc.' op.cit. JASB, 1835, p.346 and Cunningham, JASB, 1840 pt.II op.cit.pp.879,884 and 877.

3. Coins of the Indo-Scythians, Part II (1888), p.9.

4. A. Cunningham, 'Second Notice of some new Bactrian coins', JASB, 1842, pt.I pp.134-135.

5. Major A. Cunningham, 'Coins of Indian Buddhist Satraps, with Greek inscriptions', JASB, 1854 p.679.

Abdagases described himself as the nephew of Vonones and he conjectured that Sasa was a more distant relation.¹

This period of his early numismatic writings concluded with the important paper in 1854 on his discovery² of the coins of the satraps of Mathurā - Rañjubula (Cunningham - 'Rájabála'), Jihonika (Cunningham - 'Jivanisa') and Manigulā (Cunningham - Mahigula) - whom he called 'Indian Buddhist Satraps' because according to him these were 'pure Indian names' and they were apparently Buddhist by religion. He also suggested that 'Jivana's' imitation of the types of Azas indicates that he was not probably the satrap or tributary of that prince.'³

The next phase of Cunningham's numismatic writings opened in 1865⁴ with the breaking of fresh ground by discussing a class of coins - the coins of the Nāgas of Narwar,⁵ obtained mainly by Stacy at Gwalior and Gobād and published mostly for

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1. 'Coins of Indian Buddhist Satraps etc.' op.cit. pp.711-712.
 2. The coins were found in a hoard discovered in 1852 in one of the ruined mounds of Mathurā. The hoard consisted of 87 satrap coins along with 96 base hemi-drachms of straton. Coins of Ancient India, p.86 and Coins of the Indo-Scythians, Part II p.26.
 3. 'Coins of Indian Buddhist Satraps etc.' loc.cit. pp.681-689. That Soḍāsa was Rajubula's son was already anticipated by Cunningham before the discovery of the Satrap inscription at Mathura confirming his surmise. Coins of the Indo-Scythians, Pt. II p.27.
 4. 'Coins of the Nine Nāgas, and of two other Dynasties of Narwar and Gwalior,' JASB, 1865, Pt.I. pp.
 5. He began the paper with the brilliant identification of Narwar with ancient Padmāvati in refutation of Wilson's emplacement of it in Berar and Bhagalpur.

the first time¹ - and also by the very interesting discovery of what was most probably the coin of an Indian potentate of the time of Alexander - the coin of Sophytes - Saubhūti,² whom he identified - against some experienced numismatic opinion which was in favour of a Parthian date - with the Sopeithes of Strabo, Diodorus and Arrian.³ Of the two genuine coins of this prince known at the time one was in his cabinet and the other belonged to Major Pearse. A few casts made from the original with Cunningham, were also known.⁴

However, his main contribution during this period was a further series of valuable papers on Graeco-Bactrian numismatics entitled 'Coins of Alexander's Successors in the East' in the Numismatic Chronicle - a work that, in fact, he had planned to write long ago; as far back as 1842 he had announced his intention to write a large work on the subject.⁵ This collection of papers eventually came out in book form in

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1. A few were engraved before in Prinsep's plates. The coins of Canapati were extremely common.
 2. A. Cunningham, 'Coin of the Indian Prince Sophytes, a contemporary of Alexander the Great', Num. Chron., 1866. pp.220-231. Also JASB, 1865 Pt. I. 'Literary Intelligence', p.46. In 1881 Mr. C.H. Tawney discovered another Sophytes coin in a collection brought to him by Dr. Hoernle, precisely resembling the one described by Cunningham. JASB, 1881. Proceedings of June.
 3. Ibid. Num. Chron. p.222
 4. Ibid. p.220.
 5. Lieut. A. Cunningham, 'Second Notice etc.' op.cit. JASB, 1842 Pt. I. p.137.
'... I am engaged upon a large work on the "Coins of Alexander's Successors in the East",

1884.¹

Since the re-opening of the Archaeological Survey he wrote from time to time on the indigenous coins of India in his Reports. Indeed it may be said that with this series he laid the real foundation of the study of this branch of Indian numismatics. Often in his reports he brought into prominence the various classes of these coins - many of them for the first time² - and in one of these essays he coined the designation the 'Autonomous coins of ancient India'.³ 'Among the most interesting monuments of Ancient India,' he said, 'are the few autonomous coins of peoples, cities, and countries which have hitherto crowned our researches. It is true that they may be counted on the fingers, but few as they are they are of more interest and greater value than the numerous coins of Kings and Princes whose very names are unknown to history'.⁴

This essay was indeed a kind of draft outline of his later book the Coins of Ancient India (London, 1891).

For a long time this book and the account in the Report XIV

1. Coins of Alexander's Successors in the East, London, 1884.

2. Some of these coins however were illustrated in Prinsep's plates but without any understanding of their identity. For instance, Pl. XX, fig. 48 of Prinsep's Essays Vol. I shows a Kuninda coin. Pl. viii Ibid. figs. 12, 13, 14 and 15 and Pl. xiv Ibid. vol. II. fig. 6 show Kauśāmbī coins. Pl. xlv, fig. 22 Ibid. Vol. II and p. 24 for a rare Arjunāyana coin. Prinsep read the legend as Rajna Raghunām. For the description of its duplicate see CAI, p. 89 and Pl. viii, fig. 20. For Yaudheya, Rājanya Janapada and Ayodhyā coins in Prinsep's plates supra. pp. 184-5. Cunningham himself had already, as far back as ~~1843~~ 1843 in his paper on the Kashmir coinage, had disclosed the existence of the coins of the Yaudheyas in his possession on which he had promised to write soon in the JASB. (Num. Chron. 1843-44. op.cit. p. 4.)

3. Report XIV, pp. 135-151.

4. Ibid. p. 135.

remained the only basis for discussion of these coins. More than forty years after the publication of the book, John Allan, while preparing his Catalogue of the Coins of Ancient India (London, 1936), wrote that the scope of his book was the same as that of Cunningham's Coins of Ancient India, and that the coins described in the new catalogue were largely from Cunningham's collection.¹ He also coined some of the terminology connected with these coins - like the 'Taxila symbol'² and the not so accurate 'Ujjayini cross and balls'.³

In his Report XIV Essay on the autonomous coins,⁴ the coins described were all from his own cabinet,⁵ and^{most} of them were of extreme rarity, and were published for the first time. They included the coins of Audumbara,⁶ of Aparānta,⁷ Ujjayini,

1. Introduction, p.xiii.

2. Its first use can be traced in Report xiv. p.20 where he discusses the Taxila coins for the first time.

3. He first used it in Report X p.80.

4. op.cit.

5. Except for the coin bearing the inscription Ujeniya in early Brāhmī (Cunningham wrongly thought Aśokan) from Iran. He got this from a large collection that arrived just before Prinsep's last illness. Cunningham found two specimens in that collection and they were so rare that he never again found another. (Report XIV. p.148).

6. The Audumbara coins, as we have seen, he had discovered at Pathankot during his 1872-73 tour. (Report V p.154. Also Report XIV pp.116-117)

7. The Aparānta coins were obtained by him in Rajasthan, chiefly at the holy lake of Pokhar or Pushkar. Only two of these coins - although unrecognized - were known before, and were published in the JASB, 1838 (Pl. XXXII. figs. 25 and 26), just after James Prinsep had left India. (Report XIV pp. 136-137).

Kran and Rājanya Janapada ¹ and also of the Kunindas,² the Śibis,³ the Mālavans ⁴ and the Yaudheyas.

In his account of the Taxila coins in Report XIV ⁵ he made known for the first time some of the oldest and the most rare of ancient Indian inscribed coins - the Vatasvaka coin and the Negamā-dojaka coins.⁶ Later in CAI ⁷ he published

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1. These coins were very rare. But three of these coins - unrecognized - were published in the last plate drawn by Prinsep's own hand in 1838. He read the legend as Rajnapadasa. (Prinsep's Essays, II pl. XLIV, figs. 17-19. Also p.223).
 2. Cunningham claimed to have read the name Kuninda for the first time and this reading was published in the Academy of 21st Nov. 1874. He accused W. Thomas (CAI p.72) of adopting the reading in 1875 without acknowledgment. However it is to be remembered that in his editorial comment in Prinsep's Essays (Vol.I p.204. London, 1853) Thomas had suggested the reading 'Kunanda'. However, he later advocated the reading 'Krananda'. ('On Ancient Indian Weights', JASB, 1865, pp.63 ff.)
 3. The coins of the Śibis were virtually rediscovered in 1872 when Carlleyle obtained seven copper specimens at Tambavati Nagar in the neighbourhood of Chitor. (Report VI pp.200 ff. and Preface). Only two of these coins were known before, both procured by Stacy, also from Chitor. They were published - without their legend read - by Prinsep in 1834. (Prinsep's Essays. I. pl. VII figs. 2 and 3.)
 4. The coins of the Mālavans were discovered for the first time by Carlleyle in 1872. He obtained upwards of five thousand copper coins of this class at Karkota Nagari - also in the neighbourhood of Chitor. (Report VI p.165 and Preface).
 5. pp.20 ff.
 6. Ibid, p.20 and 23.
 7. p.64.

the Negamā-rālimata and negamā-antarotaka coins.¹ But perhaps even older than these coins - the large square copper coin from Eran bearing a Brāhmī inscription that reads from right to left - was also first made known by him.² In his report he read the legend almost correctly as dhāma Pālasa. However in his CAI³ he changed the reading to Dhama Pālasini - the actual legend as now read is Raño Dhanma Pālasa.⁴

In CAI he also first brought to notice some of the very interesting Mathurā coins - particularly the one bearing the early Brāhmī legend (which he called śōkan) Upātikya⁵ - and the coins of the Mathurā Satraps Hagamāṣa and Hagāṇa.⁶ The coins of Saudāsa he had already discussed in his Report III p.39.

Carlleyle, in the meanwhile, had brought into prominence the now famous Mitra coins of Pañcāla, by his paper on a large hoard found near Ahichhatra which was in the possession of H. Rivett-Carnac.⁷ And Clive Bayley added a very rich collection of Kauśāmbī coins.

1. This rālimata was later read by Bühler as tālimata. Allan However reads it as rālimasa. The revised reading of Antarotaka is Atakatakā.

2. Report X. p.80, no.5.

3. p.101.

4. D.R. Bhandarkar, Lectures on Ancient Indian Numismatics, Calcutta, 1921, p.198.

5. CAI p.86 and Pl. VIII fig. 1.

6. Ibid pp.86-87.

7. A.C. Carlleyle, 'Coins of the Sunga or Mitra Dynasty, found near Rāmanagar or Ahichhatra, the ancient Capital of North Panchāla, in Rohilkhand: the property of H. Rivett-Carnac, Esq.' JASB, 1880. pp.21-28.

Carlleyle's Pāñchāla Mitra coins, however, were by no means new. Cunningham had noticed a coin of these kings for the first time as far back as 1852.¹ Cunningham told Dr. Hoernle that the coins of this dynasty had since been found from time to time and that he possessed particularly a considerable number of coins of Indramitra.² At the meeting of the Asiatic Society in January 1880 Dr. Hoernle further stated that he had shown the Rivett-Carnac Collection to Cunningham and that Cunningham had agreed with Carlleyle except for two names, - instead of Carlleyle's 'Bṛayaṇ-mitra' and 'Anu-mitra', he thought the names were 'Sūrya-mitra' and 'Ayu-mitra'. On the other hand, Rajendra Lala Mitra thought 'Ayu-mitra' should be read as 'Bhānu-mitra'.³ They all made the mistake of thinking that these Mitra kings were identical with the Parānic Mitra kings belonging to the Śuṅga dynasty. Cunningham later doubted this ascription, but hesitantly.⁴

While discussing these 'autonomous' coins of India, Cunningham had also to turn his attention to the question of the systems and scales of currency and weights that prevailed

1. Mentioned by Dr. Hoernle in JASE, 1880. pp.8-9. Proceedings of January, on the authority of information in Lassen's Indian Antiquities, II. p.47.

2. Ibid.

3. Ibid.

4. Coins of Ancient India, pp.79-80.

in India in ancient times. The question of weights and measures had already been taken up by Sir William Jones, and also by Colebrooke in 1798.¹ Prinsep discussed it in his Useful Tables but the most important among the early contributions was a series of three papers written by Edward Thomas in the JASB.² Cunningham had been collecting material on the question for a long time and he corrected Thomas, who had blindly followed Sir William Jones in fixing the weight of the rati seed at 1 5/16 grain,³ which figure, according to Cunningham, was nothing but a misprint of Jones's manuscript for 1 5/6 or 1.833 grains which was 'as nearly as possible the average weight of thousands of seeds' he had tested.⁴ Later Cunningham discussed the whole question in greater detail in his Coins of Alexander's Successors in the East and Coins of Ancient India.

As regards the origin of Indian coinage Cunningham was most emphatically on the side of those who, according to Prinsep, maintained '... that the Hindus practised the art of coinage, and had a distinct currency of their own before the Greeks entered India'⁵ ('especially my friend Colonel Stacy'). This

1. H.T. Colebrooke, 'On Indian Weights and Measures', Asiatick Researches, V. (1798) pp.91 ff.

2. 'On Ancient Indian Weights', JASB, 1864 pp.251-266; 1865, pt.I pp.14-27, and 51-70.

3. 'The attention of archaeologists has recently been attracted to the weights and measures of ancient nations, by the elaborate work of H. Queipo, and the less voluminous, but more directly interesting article of Mr. R.S. Poole, on the Babylonian and other metrologies' (i.e. his article "Weights", in Smith's Dictionary of the Bible, London, 1863). Ibid. (1864), p.251.

Footnotes cont...

3. But Colebrook mentions the weight as fixed by Sir William Jones to be $1 \frac{3}{16}$ grains. Colebrook op.cit. p.92.
4. JASE, 1865, pt.I. p.46. (Literary Intelligence').
'Thomas's article on Indian weights promises to be interesting. - I have been collecting materials for the same subject for nearly 20 years, and I have made many curious discoveries
5. 'On the connection of various ancient Hindu coins with the Grecian or Indo-Scythic series', JASE, 1835. p.621.

view Cunningham shared with E. Thomas, who also believed that coined money was in use at the time of the compilation of the text of 'India's earliest law giver' Manu, the date of which he thought was sometime between 1200 B.C. and 800 B.C! Thomas was even inclined to hold that the Vedic Hiranya Piṇḍān actually referred to coined money.¹

Cunningham stated his belief in pre-Greek Indian coinage most forcefully in the concluding parts of his Alexander's Successors in the East² where he particularly drew attention of scholars to the passage in Quintus Curtius which mentions 80 talents of Signati Argenti as being among the presents of Āmbhī to Alexander. 'Signati Argenti', Cunningham pointed out, '... cannot possibly bear any other meaning than that of actual coin, as signatus was the special term used by the Romans to denote coined money.'

Soon after this paper he discovered the Bhārhut and Bodh-Gaya medallions showing the scene of the purchase of the Jetavana by the merchant Anāthapiṇḍika by covering the park with gold coins and he thought that incontrovertible **proof** had at last been found of his theory. He printed the two Jetavana scenes as the front^{is}piece of his Coins of Ancient India 'to catch the observation of all unbelievers in India's early coinage.'³

1. JASB, 1865 op.cit. p.14.

2. op.cit. i.e. equivalent to the article in Num.Chron., 1873, pp.187-219.

3. Cunningham's letter to Hapson dated 29th September 1891. Brit. Mus. Dept. of Coins.

The last phase of Cunningham's numismatic writings opened with his retirement in 1885. He wrote a long series ~~of~~ ^{the} Indo-Scythians in the Num. Chron. ¹, then appeared his Coins of Ancient India and another important series in the Num. Chron. on the Later Kuṣāṇas and the Epthalites.² The paper on the Epthalites was actually read at the Oriental Congress of 1892 and a portion of it appeared without illustrations or descriptions in the Transactions of the Congress.³

1. Which also was eventually published in book form.

'In the following account I have aimed at giving a description of all the known coins of the Indo-Scythians, together with such historical notices as I have been able to gather from various sources.' Coins of the Indo-Scythians, p.3.

2. Cunningham did not write much on Western Kṣatrapa/^{and} Gupta coins because 'both series had already been very fully described; the former by Pandit Bhagwan Lal, in the Royal Asiatic Society Journal, and the latter by Mr. Vincent Smith in the same journal'. (Coins of Mediaeval India, op.cit. p.1)

3. He started writing the paper in 1891. Only when it was finished that he intended to send it to the Congress. (Letter to Rapson dated 31st August 1891 and 24th June, 1892.)

31st August 1891 -

'... I have made good progress with the White Huns - Dr. Bühler still hesitates about the identification of the Toramāna shah Jaūvla with the Toramāna of Iran - But the identification seems to me to be quite certain.'

20th Sept. 1891 -

'... I am still working at the White Huns - and am now beginning to see some sort of light amidst the darkness.'

His last book - the Coins of Mediaeval India mainly covering the coinage of the Kashmirian dynasties and the various early mediaeval Rajput dynasties was published posthumously,¹ although he had the happiness of seeing an advance copy of the book, sent him by his friend Rapson, only a few hours before he died.²

1. London, 1894. Preface p.vi. - 'The author of this work died on 28th November, 1893, whilst it was passing through the press. The author's sons are indebted to Mr. E.J. Rapson, of the British Museum, for kindly reading and correcting the whole of the proofs.'

2. Cunningham's son Lt. Col. Allan Cunningham R.E.'s letter to Rapson dated 28.11.'93:

' my dear father passed away this evening at 1/4 to 8 p.m. I must thank you for your kind thought of sending him an advance copy of his 'Coins of Mediaeval India. I sent him your very kind letter last night, and he was satisfied with it, and pleased to know that his Pamphlet was printed.'

Only two days before on 26.11.93 he had written to Rapson that his father had caught cold during the snowstorm of Saturday the 18th and had become rapidly worse during the week, and at the time of his writing was so weak that the doctor held out but little hope.

It is somewhat ironical that Cunningham should have died of catching cold because he wrote to Rapson on 21.1.1890:

' I must manage to make a visit to the museum some fine day when the sun has finished standing still over the Southern Hemisphere. I manage to keep well in winter quarters, and am not to be tempted out even by the present mild weather.'

One also wonders how he managed to weather half a century of Indian hot seasons!

All these letters were written from: Cranley Mansion, Gloucester Road, South Kensington.

Inscriptions: Ancient Indian history was mainly built up on two foundations - coins and inscriptions. The study of the coin legends and monumental epigraphs led to the study of the ancient Indian alphabets, Kharoṣṭhī and Brāhmī, and their palaeography or gradual evolution from the oldest to the most modern form.¹ This principle of dating, already known to the Classicist and the European Mediaevalist, was now made available to scholars for application to Indian history. No less important was the information that these newly deciphered inscriptions supplied.

Indian epigraphy can be said to have been born with Wilkins - with his reading of the Pāla inscriptions on the Munger copper-plate,² and the Bādāl pillar³, and what is more

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1. By 1835 Prinsep was already talking of 'the Kuṭīla character' and Tod used the term 'nail-headed' (JASB, 1835 p.671)
 2. Cf. Devapāla Deva. Supra p.19, n.2. This copper-plate, found by Col. Watson, although published in 1788, was actually translated in 1781. The plate, according to the dating of Jones belonged to a period eighteen hundred years from his date, as he assumed that the date 33 was to be read according to the Vikrama Samvat. The plate got lost soon after, and was not found until 1925. While repairs were being made in Kenwood House, Hampstead the plate was found 'hidden away between a beam and the roof'. When brought to L.D. Barnett, he at once recognised it as 'the long-lost charter of Dēvapāladēva'. Mr. Plenderleith of the British Museum laboratory cleaned it. We have no means of knowing how it found its way to England. (Cf. L.D. Barnett, 'The Mungir Plate of Devapaladeva: Samvat 33', Ep. Ind. XVIII, 1925-26, p.304.)
 3. The Bādāl pillar was discovered in November, 1780 in a swamp in the vicinity of the town of Bādāl in Dinajpur, by Wilkins himself, who was then in charge of the Company's factory nearby. 'At a few feet above the ground is an inscription engraved in stone, from which I took two reversed impressions with printer's ink. I have lately been so fortunate as to decypher the character; and I have the honour to lay before the Society a transcript of the original in the modern writing, and a translation; and at the same time to exhibit the two impressions I took from the stone itself. The original character of

cont.....

important,

Footnote 1 from p.211 cont...

this inscription is very different from the modern form; but it so much resembles that on the plate found by Col. Watson at Mongueer, that I am induced to conclude it to be a work of the same period' (Cf. Charles Wilkins, 'An Inscription on a Pillar near Buddal', As. Res. I, 1788, pp.131 and 132). The introduction to the translation dated 14th July, 1785.

important, the inscriptions in Gupta script in the Nāgārjuni cave.¹

But the existence of Kharoṣṭhī remained unknown to these early enquirers and Aśokan Brāhmī (sometimes thought to be Greek² and sometimes Ethiopic,³) although known from a few sites and particularly from the Firoz Shah pillar at Delhi, had not yet given up its secret.

Jones had advised that it would 'require great attention and leisure to decypher' Brāhmī and had hoped that 'if the language be Sanscrit, the powers of the unknown letters may

1. Supra p.19, n.2.

John Herbert Harington (Secretary to the Asiatic Society) visited, sometime in 1785, the Nāgārjuni, Karna Chopār and the Lomas Risi caves - mainly urged by Warren Hastings - and with the help of his Munshi took copies of inscriptions in the Nāgārjunī Cave and sent them to Wilkins for decipherment. (Cf. John Herbert Harington, 'A Description of a Cave near Gyá', As. Res. I, 1788, pp.276 ff.)

The inscription was in fact of the Maukhari chieftain Anantavarman. Wilkins surprisingly was able to decipher it and his comment is interesting: 'The character is undoubtedly the most ancient of any that have hitherto come under my inspection. It is not only dissimilar to that which is now in use, but even very materially different from that we find in inscriptions of eighteen hundred years ago. But thought the writing be not modern, the language is pure Samskreet, written in a long verse, called Sārdōolā Vēēkrēēreētā,' He also mentioned that 'the metre was no small help in deciphering the vowels'. (Cf. Wilkins' letter to Harington, dated 17th March, 1785. As. Res. I, 1788, p.279). Wilkins later translated the other two inscriptions of Ananta Varman the Maukhari in the Barābār and Nāgārjuni caves (As. Res. II, 1790, pp.167 ff.)

2. JASB, 1834, p.433.

3. Sir William Jones, 'The Eighth Anniversary Discourse', Delivered 24th Feb. 1791. As. Res. III (1792) pp.4-5.

perhaps hereafter be discovered by the usual mode of decyphering; and that mode, carefully applied even at first, may lead to a discovery of the language.' ¹ Wilford claimed to have been 'so fortunate as to find at last an ancient sage, who gave [him] the key, and produced a book in Sanscrit, containing a great many ancient alphabets formerly in use in different parts of India' ² But this seems to be simply another imposition of the unscrupulous Pandits who exploited him. Prinsep however later remembered about this book when himself engaged in deciphering the script and asked: '.... what has become of the key to this and other ancient Sanskrit alphabets, which Wilford says he fortunately discovered in the possession of an ancient sage at Benares?' ³

However it was more than 40 years later that Jones's hope was realised, when Prinsep was able to produce the key with which to unlock all the remaining secrets of the Brāhmī script. However it is often forgotten that much of the Brāhmī script had already been deciphered before the final achievement of Prinsep.

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1. Sir William Jones, 'Inscriptions on the staff of Firuz Shah. Translated from the Sanscrit, as explained by Rādhācānta Sarman', As. Res. I, 1788, p.379.
 2. F. Wilford, 'Account of Some Ancient Inscriptions', As. Res. V 1797 p.135. It is usually forgotten that an alphabet very much like the Gupta -Śāradā - were in use in Mandi, Chamba and Kumaon region until very recent times and may be even now.
 3. James Prinsep, 'Note on Lieutenant Burnes' Collection etc.' op.cit. JASB, 1833, p.317 f.n.

There were many others who had contributed to its decipherment, particularly with the help of the newly learnt Tibetan alphabet. And, after all, once the Gupta alphabet had been tackled successfully,¹ it was only a question of time before the Aśokan Brāhmī would be read.

Capt. A. Troyer¹ with the help of Pandit Mādhava Rao, the head librarian of the Sanskrit College, attempted the first translation of the Allahabad inscription of Samudra Gupta in 1834.² Although the reading and the translation were very faulty, the paper carried with it a comparative table of most of the Allahabad pillar alphabets³ and modern Devanāgarī, which proved to be very valuable for future attempts at decipherment. Later Rev. W.H. Mill⁴ tried his hand at this inscription with the initial clue provided by Mādhava Rao and Troyer and produced a much more accurate translation.⁵

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1. Secretary, Sanskrit College, Calcutta.
 2. Captain A. Troyer, 'Remarks upon the second Inscription of the Allahabad Pillar', JASB, 1834, pp.118 ff.
 3. Troyer commented: 'The alphabet of the Allahabad inscription offers certainly a great apparent similarity to that of a part of the Gya (Sic.) inscription, examined by Dr. Wilkins, as pointed out by Lieut. Burt of the Engineers'. (Op.cit.p.119) And Prinsep noticed that many of the letters were identical with and of the same phonic value as Tibetan letters. (Cf. James Prinsep, 'Note on Inscription No. 1 of the Allahabad Column', JASB, 1834, p.115.)
 4. Principal of Bishop's College, Calcutta.
 5. Rev. W.H. Mill, 'Restoration of the Inscription, No.2 on the Allahabad Column', JASB, 1834, pp.257 ff.

Meanwhile, Prinsep subjected the Aśokan inscription on the same pillar to a minute scrutiny, prepared a table showing the frequency of occurrence of the individual letters, and came to certain important conclusions. He noticed that the inscription on the Allahabad pillar as well as the inscriptions on the Delhi Firoz pillar all had the same words at the commencement, which he thought formed some kind of an invocation. He also found that many of the letters resembled those of the Samudra Gupta inscription and also those of 'the Mahabalipur alphabet, decyphered by Dr. Babington'. He also discovered that 'each radical letter was subject to five principal inflections'. He was still undecided as to whether the language of this inscription was Sanskrit or not. But he had already begun to suspect that perhaps it was not Sanskrit, on the grounds of 'the rare recurrence of double letters, the omission of the initial Sri; the want of any symbol with a subjoined y to correspond with श्रि '.¹ However he was quite definite by now that the letters did not represent any kind of Greek.² He concluded this initial effort with the observation: 'It would require an accurate acquaintance with many of the learned languages of the East, as well as perfect leisure and abstraction from other pursuits, to engage upon the recovery of this lost language; but when its simplicity of vocablēs is compared with the difficulties of the Persepolitan, or Cuneiform

1. James Prinsep, 'Note on Inscription No. 1 of the Allahabad Column', JASB, 1834, p.116.

2. Ibid. p.117.

character, lately decyphered (sic.) by Grotefend and St. Martin, or more abstruse hieroglyphics of Egypt attempted by Young and Champollion, it seems almost a stigma on the learned of our country that this should have remained so long an enigma to scholars; and the object of the present notice is to invite fresh attention to the subject, lest the indefatigable students of Bonn or Berlin should run away with the honor (sic.) of first making it known to the learned world'.¹

Rev. J. Stevenson in the meanwhile was trying to read the Karli inscriptions. He first searched among the Pandits for a key to them, but 'he was', as he says, 'provokingly sent by the Marathā^a to the Kánarese, and by them again to the Támulians, and so on, without any result in an endless succ^ession.'² Then the comparative table of Pandit Mādhava Rāe was published, and with its help he was able partially to decipher some of the Karli inscriptions. The extent of his success can be measured from his reading of the few words that Prinsep had noticed to have occurred at the commencement of all the then known Aśokan inscriptions.³ Stevenson read them as Dvedhāram piye piya dvasobharjameddham and translated them as 'In the two ways (of wisdom and works?) with all speed do I approach the resplendent receptacle of the ever-moving luminous radiance'.⁴ He hoped

1. James Prinsep, 'Note on Inscription No.1 of the Allahabad Column', JASB, 1834, p.118.

2. Rev. J. Stevenson, 'Restoration and Translation' of some Inscriptions at the Caves of Carli', JASB, 1834, p.495.

3. i.e. Devānam piya piyadasina lājā evam āha.

4. Stevenson, loc. cit. p.495.

that if the people at Calcutta had not already found the key to these alphabets his reading would carry them 'several steps towards its attainment'.¹ His table² shows that he had correctly guessed the values of the letters ka, ga, ja, tha, ba, ya, ra and sa and had nearly found da (which he read as dva). But he had muddled up the other letters.

The reading of the Kharoṣṭhī inscription however was another story.³ Their decipherment was comparatively easy because the coins that bore them also had inscriptions in Greek, which, as the scholars were not long to understand, were the equivalents of the Kharoṣṭhī legends. Therefore the clue to the Kharoṣṭhī script⁴ could be obtained from the names of the monarchs written in Greek. The only coins which offered this prospect for the reading of Brāhmī were those of Agathocles and Pantaleon. Lassen rightly exploited the advantage and read the first name written in nearly Brāhmī nearly correctly.⁵

1. Stevenson, *op. cit.* p.495

2. *Ibid.* p.498.

3. Kharoṣṭhī was at one time thought to be decipherable through the medium of the Celtic (Cf. Dr. J. Swiney, 'On the explanation of the Indo-Scythic legends of the Bactrian coins, etc.' *JASB*, 1837, pt. I. pp.98 ff.).

4. This script has been variously called at different times by different scholars, Pehlevi, Bactro-Pehlevi, Bactro-Pali, Ariano-Pali, Kabulian, Arianian, Gandharian, Indo-Bactrian and Western Alphabet until Bühler introduced Kharoṣṭhī the original name by which it was known in ancient times.

5. 'But the most interesting and striking application of the alphabets to coins is certainly that, which has been already made (in anticipation, as it were, of my discovery) by Professor Lassen, of Bonn, to the very curious Bactrian coins of Agathocles'. (Prinsep, 'Note on the Facsimiles of Inscriptions from Sanchī etc'. *JASB*, 1837, p.465.)

F/n. continued

The reading was made in 1836 and was communicated to Prinsep. Prinsep announced this in a postscript to his 'New types of Bactrian and Indo-Scythic Coins etc.' (Op.cit. JASB 1836, pp.723): 'I cannot delay one moment announcing a very successful reading by Professor Lassen of Bonn, of the native legend on the coin of Agathocles The following is an extract from the Professor's letter this moment received: "The legend on the coin of Agathocles, is in my opinion, in another character, and I think we may recognize in $\chi\lambda\theta\kappa\lambda$ (sic) the letters Agathukla rája from the left to right. The first two letters are self-evident - the third is similar enough to the Tibetan and Páli forms of th with u below: The fourth letter expresses Kl quite in the Indian manner"

Prinsep suggested instead Agathukla-yej for the first name and Pantelewantá for the second. (JASB, 1837, loc. cit.)

A beginning in the reading of Kharoṣṭhī was made by Masson himself when he suggested the reading in Kharoṣṭhī of the names of Menander, Apollodotus and Hermaeus on their coins.¹

The clue was followed up by Prinsep and after some mistaken reading he was finally able, before his departure, to find the values of nineteen single letters and one compound.² After him the task was mainly taken up by Cunningham. Norris in England also discovered a few letters when he examined the

1. 'Mr. Masson first pointed out in a note addressed to myself [i.e. Prinsep], through the late Dr. Gerard, the Pehlevī signs, which he had found to stand for the words Menandrou, Apollodotou, Ermaiou, Basileos, and Soteris. When a supply of coins came into my own hands, sufficiently legible to pursue the inquiry, I soon verified the accuracy of his observation; found the same signs, with slight variation, constantly to recur; and extended the series of words thus authenticated, to the names of twelve Kings, and to six titles or epithets. It immediately struck me that if the genuine Greek names were faithfully expressed in the unknown character, a clue would through them be formed (Sic.) to unravel the value of a portion of the Alphabet, which might in its turn be applied to the translated epithets and titles, and thus lead to a knowledge of the language employed. Incompetent as I felt myself to this investigation, it was too seductive not to lead me to an humble attempt at its solution'.

(Prinsep, 'Further Notes and Drawings of Bactrian and Indo-Scythic Coins', op.cit. JASB, 1835, p.329).

2. a, i, e, ka, kha, ja, ta, da, dha, ḍa, na, pa, ma, ya,
ra, la, ha, sa, ṣa, spa.

transcript of the Shahbazgarhi inscription of Aśoka.¹ On several occasions Cunningham has himself taken care to put on record his own discoveries in the field.² He claimed to have discovered the single letters gha, tha, pha and bha. But his most important discovery was the compound letters, which were more difficult to recognise: rkha, rtha, rma, vri, sta and ska.

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1. The initial u and o; and ea, cha, ba, ta, śa and nya ga and va simultaneously with Cunningham.
E. Norris, 'On the Kapur-di-Giri Rock Inscription', JRAS, 1846, pp.301 ff. Read March 1, 1845.
 2. In a) 'Coins of Indian Buddhist Satraps etc.', op.cit. JASB 1854, p.714.
b) Coins of Alexander's Successors in the East, op.cit.pp.
c) Coins of the Indo-Scythians, op.cit.pp.3 ff. 30ff.

Indeed Cunningham always jealously guarded the proprietary rights of his discoveries, some examples of which we have seen before, particularly his accusations levelled at Thomas. In fact one such claim drew the following trenchant remarks from Thomas: 'It might have been necessary, in early days, to reclaim titles to discoveries made by Lieut. A. Cunningham, but surely the 'Bays' of the Archaeological Surveyor to the Govt. of India can afford to lose a faded leaf with scant damage to the green circlet!' (Cf. E. Thomas, 'Indian weights etc.' op.cit. p.253 f.n.11)

Among certain other minor but interesting discoveries that Cunningham used to lay claim to were -

- (i) The discovery in Kuṣāṇa inscriptions of the names of Macedonian months: Artemisions, Panemos, Apellaios and Peritios. It needed some daring to first suggest this theory as he met considerable opposition, particularly from Rajendra Lala Mitra. Daisios was discovered later, not by Cunningham.
- (ii) The discovery of a Greek military term on an Indian coin: Aspa varma (the name itself was first discovered by Cunningham) the *Strategos* of Azes, The term Meridarch was found later but not by Cunningham.
- (iii) The term *chhatrapa* for the Greek *Satrapes* and the Sanskrit *Kṣatrapa* and
- (iv) the fixation of the Buddha nirvana date at 477 B.C. as early as in 1854 which was adopted by Max Müller in his History of Sanskrit Literature, (1859). This date was reasonably established by his discovery in 1861 at Bodh-Gaya of the inscription dated in the Nirvāṇa era.

The high water mark of this period was reached with the publication of Cunningham's The Bhilsa Topes¹ in which was published for the first time a large number of inscriptions in one place. He gave the eye copies of these Sāñchī inscriptions and translated them as best as he could.

With the establishment of the Survey a new phase opened in Indian epigraphy which reached its climax with the publication of Cunningham's Corpus Inscriptionum Indicarum.

In his Reports Cunningham gradually started gathering together a vast number of inscriptions of different regions and different dynasties, - particularly rich was his collection of the inscriptions of the Guptas² and the early mediaeval Hindu dynasties - such as the Kalachuris, Chāndels, Pālas of Bengal, Chauhāns etc. At the same time he started to sketch out in his Reports the outline of the history of these dynasties on the basis of the newly discovered inscriptions.

As inscriptions increased in number Cunningham conceived the idea of publishing a series of corpuses. Indeed, the idea of a Corpus Inscriptionum Indicarum goes back to the time of Prinsep and Jacquet. As early as September 1836³ Prinsep announced that M. Jacquet of Paris had informed him

1. op.cit.

2. Of the 27 or so main inscriptions in Fleet's CII no less than 17 are Cunningham's discovery. Kharoṣṭhī inscriptions discovered by Cunningham are comparatively few in number.

3. JASB, 1836, Proceedings of September, p.513.

that he was busily engaged on the preparation of a Corpus Inscriptionum Indicarum^e and that he intended to include those of Colonel Mackenzie's inscriptions which were in London and to which the Hon'ble Court of Directors had allowed him free access. Jacquet however died in 1838¹ at the young age of 28. Prinsep himself in the meanwhile had announced his intention to preserve all these inscriptions 'in an accessible shape through the convenient and facile process of lithography'. He said: 'My apology must be that once made public, these documents will be always open to discussion, and their utility will be felt at times and in cases which it is impossible to foresee'.² He also hoped: 'The task of systematically arranging and applying such materials may be safely left to the profound author of the long-expected Corpus Inscriptionum Indicarum' - to whom I proffer the fullest permission to extract all that can forward his object of filling up the history of India from numismatical and monumental data'.³

The first volume of CII, Cunningham's Inscriptions of Asoka came out in 1877 (Calcutta). In it Cunningham announced his project of following up the present volume with volumes II and III respectively dedicated to the 'Inscriptions of the Indo-Scythians and the Satraps of Saurashtra' and the 'Inscriptions of the Guptas, and of other contemporary dynasties

1. JASB, 1838, Proceedings of December, p.985.

2. James Prinsep, 'Facsimiles of Ancient Inscriptions', JASB 1837, p.663.

3. Ibid.

of N. India'.

In this book Cunningham went into the question of the origin of the Brāhmī script and agreed with E. Thomas, Lassen and Dowson in assigning it an indigenous origin, as against the views of Max Müller, Weber and Dr. J. Wilson, of whom the last two would have liked to see it as an emanation from a Phoenician stock.¹ 'Mr. Thomas', * Cunningham pointed out, 'adverts more pointedly to the independent origin of the Indo-Pali [i.e. Brāhmī] alphabet, because, "a tendency exists in many cultivated minds to depreciate the originality and antiquity of Indian civilisation."'² Cunningham sought to trace the origin of the letters of this script to an initial ideographic writing with its ideograms representing the different parts of the human body.³ Then he added a most interesting paragraph in a prophetic vein which is worth quoting in full:

'But if the Indian alphabet was thus locally elaborated by the people themselves, it may be urged that some traces of its previous existence would ere this have been discovered This would be a formidable objection if all our ancient sites had been already thoroughly explored. But as yet,

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1. A theory already hinted by Sir Wm. Jones ('The Third Anniversary Discourse, Feb. 1786. As. Res. I 1788. pp.432-424) was later fully elaborated by J.G. Bühler; Indian Palaeography, Bombay, 1904.
 2. Inscriptions of Asoka, op.cit. p.52. Cunningham later argued against Taylor's South Arabian origin theory by saying that the South Arabians themselves got their script from India. (Cf. CAI, op.cit. pp.39-40.)
 3. Ibid. pp.52 ff.

except in a few places, we have but skimmed the surface, It is possible, also, that some specimens even of the earlier writings may have been found previously, and have been passed by as rude sculptures of little or no value. I have, however, come across one monument which I believe to be a specimen of the archaic alphabetical writing. Its age is, of course, quite uncertain, but I do not think its date can be later than 500 or 400 B.C. This monument is a seal of smooth black stone, which was found by Major Clark in the ruins of Harapâ in the Panjâb' And then followed what may be described as the first attempt to decipher the Indus Valley script: 'Taking the characters from the left, the first may be an ancient form of the letter l, as it approached very close to the shape of the Asoka character. The third seems to be an old form of Chh, and the fourth a true archaic m in the shape of a fish, matsya. The fifth must be another vowel, perhaps i, and the sixth may be an old form of y. The whole would thus read Lachhmiya!' ¹

In the meanwhile however the modern phase of Indian epigraphy had started with the founding of Burgess's Indian Antiquary. The growing amount of materials had convinced Cunningham also of the need for a whole time epigraphist Therefore he wrote to the Home Secretary, Government of India²

1. Inscriptions of Asoka, op.cit. p.61.

2. Letter no.74, dated Simla, the 18th July, 1881. Home Department Proceedings, Archaeology 1881-82, India Office vol. no. 1681.

proposing the employment of Mr. Fleet in this post. He wrote: 'So many ancient inscriptions have now been collected in all parts of India that it seems to me the time has already come when some active steps should be taken for their systematic arrangement and translation. A beginning has already been made by the publication of all the known inscriptions of Asoka Volume II., containing the inscriptions of the Indo-Scythians, is now in preparation, the translation having been kindly undertaken by Dr. Hoernle.¹ Arrangements have also been made for the publication of a third volume to contain the inscriptions of the Gupta Dynasty and their contemporaries. All these inscriptions have been collected and arranged by myself, and their translation has been kindly promised by Mr. Fleet ... who has already proved himself a thoroughly competent translator After this would come the important inscriptions of the Balabhis, the Châlukyas, the Râshtrakutas, and the Kadambas of Southern India, which have been collected by Sir Walter Elliot, Mr. Burgess, and Mr. Fleet himself. These would be followed by the inscriptions of the Maukharis of Northern India and their contemporaries, the later Guptas of Magadha. The succeeding volumes would contain the inscriptions of Bhoja Deva's family and the Râthors of Kanouj (Sic.) the Chauhâns of Ajmer, the Chandels of Mahoba, and the

1. This however never materialised.

Kulachuris (Sic.) of Chedi and Mahâkosala. For Eastern India there are the inscriptions of the Pâla Rajas of Magadha, the Sena Rajas of Bengal, and the later Rajas of Tirhût.¹ In order to impress upon the Government the urgency of the matter he proposed to forego Rs.500/- a month from his own salary to find funds for the project.

Cunningham's proposal was strongly supported by the Fifth International Congress of Orientalists in Berlin in 1881², which passed a Resolution to the same effect, and at the same time Burgess submitted a memorandum from Edinburgh on the collection of inscriptions in Western India.³ A few months later (23rd January, 1882) the Royal Asiatic Society of Gt. Britain and Ireland also memorialised the Secretary of State in support of Cunningham's project.⁴ Fleet's appointment was finally approved by the Government of India in June 1882.⁵ Soon after, in 1885, Cunningham himself retired from service and returned to England.

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1. Cunningham's letter op.cit.
 2. No.224 from the Secretary of State to the Governor-General in Council with the extract of the Resolution (Statistics and Commerce). dated India Office, London, 29th Dec. 1881. Ind. Off. vol. no. 1681.
 3. Ibid. Burgess's memorandum dated 20th August, 1881.
 4. From the Secretary of State to the Governor General in Council. No.32 (Statistics and Commerce) dated India Office, London, 2nd March, 1882. Ind. Off. vol. no.1681.
 5. Govt. of India No. 157 of 1882 (Accounts and Finance) to the Secretary of State for India, dated Simla, the 9th June, 1882. Ind. Off. vol. no.1681.

Architecture: The principles of the study of Indian architecture were formulated by Fergusson - indeed the subject itself was the creation of Fergusson. For several years he 'pursued the study almost un^{re}mittingly, and discovered 'that there was not only one Hindu, and one Mohamedan style in India, but several species of each class; that these occupied well-defined local provinces, and belonged each to ascertained ethnological divisions of the people', and that they could be 'arranged into consecutive series', on the basis of comparative styles.¹ Thus the foundation of the scientific study of Indian architecture was laid.

The beginnings made by Fergusson in classifying Indian architecture were further elaborated by the researches and tours of Cunningham. As more specimens of ancient Indian buildings were discovered, more schools and traditions were added to Fergusson's scheme.

The three outstanding contributions of Cunningham in the field of Indian architecture were his discovery of a number of Gupta temples,² thus revealing the characteristics of early Gupta temple architecture and its gradual evolution towards the later Śikhara type; the revelation of the

1. James Fergusson, On the Study of Indian Architecture, op.cit. pp.5-6.

This pamphlet, incidentally, carried a sketch map of India, probably the first of its kind, showing the approximate distribution of the five principal styles of Hindu-Buddhist architecture according to Fergusson's classification, e.g. 'Buddhist', 'Dravidian', 'Northern Hindu', 'Chalukya' and 'Jaina'.

2. Supra p.160.

In summing up his own achievements after a life-time's work he himself stressed the value of his discovery of these Gupta temples. (Cf. His letter to Govt. of India, 15 Feb., 1885. op.cit. '.... I have traced the Gupta style of architecture

F/note from p.228 cont..

in the temples of the Gupta Kings of Tigowa, Bilsar, Bhitargaon, Kuthera and Deogarh,').

existence of an Indo-Hellenistic school of architecture in the Gandhara region and the discovery of arches, the architectural technique of spanning space that was complacently believed to have been introduced to India by the Muslims, in ancient Hindu buildings.

Before these discoveries, the only form of arch known to have been used in pre-muslim India was the triangular type that was formed by raising two walls with the bricks on their sides gradually projecting forward until they met at a point in the centre - a type that was first pointed out by Kittoe.¹ This form Cunningham called the 'Hindu arch'. But with Cunningham's discoveries this theory had to be changed materially. He summed up the position in 1892 in his Mahâbodhi. 'Formerly it was the settled belief', he wrote '... that the ancient Hindus were ignorant of the Arch. Thirty years ago I shared this belief with Mr. Fergusson, But during my late employment in the Archaeological Survey of India several buildings of undoubted antiquity were discovered in which both vaults and arches formed part of the original construction.'² And he particularly referred to the vaults in the temples at Kuśinagara, Barnâarak, Bhitargaon and Nongarh.³

1. 'Extract of a letter from Cap. Kittoe', op.cit. JASB, 1848 pt.I p.540. 'The bricks are overlapped like an inverted staircase till they meet at a point in the centre'.

2. Mahâbodhi, op.cit. p.85.

3. Supra p.107.

However, he also pointed out that the Hindus had been rather sparing in their use of arches and vaults in brick structures and they never used them in buildings of stone, and that their arches differed very materially from the true arch in that the voussoirs in their arches were placed edge to edge instead of face to face thus leading to a construction that was comparatively weak. He also pointed out that they later evolved a type which Cunningham called the Bonded Arch - in which 'two courses of bricks were laid face to face alternately with each course of the end-to-end voussoirs'.¹

Although Cunningham did not write any separate monograph on Indian architecture or sculpture, he often devoted large sections in his Reports to these two subjects. He found certain characteristics common to all Gupta temples and he summed these up under seven heads: (1) Flat roofs, (2) prolongation of the head of the doorway beyond the jambs, as in Egyptian temples, (3) statues of the rivers Ganges and Jumna guarding the entrance door, (4) pillars, with massive square capitals, ornamented with two lions back to back, with a tree between them², (5) bosses on the capitals and friezes of a very peculiar form, (6) continuation of the architrave of the

1. Mahābodhi, op.cit.

2. About this type of capital Cunningham commented: 'The couchant lions, with the tree between them, are the direct descendants of the couchant animals on the capitals of the Asoka architecture, as seen in the sculptures of Bodh Gaya and Bharhut. And these, again, were the offspring of the Achaemenian capitals of Persepolis and Susa.' Report IX pg.44.

portico as a moulding all round the building and (7) deviation in plan from the cardinal points.¹ At Deogarh however he noticed that the flat roof had been changed to a spire.²

The type of architecture that prevailed in India during the early centuries B.C. Cunningham thought to have belonged to what he called the 'Indo-Persian style' and with the coming of the Graeco-Bactrians, he thought, the Indo-Hellenistic styles were introduced, which he classified under three groups, the 'Indo-Ionic', 'Indo-Corinthian' and 'Indo-Doric'.³ The first of these styles prevailed in Panjab on the eastern side of the Indus, the Indo-Corinthian style was practised in the region beyond the Indus and the Indo-Doric style was in use in Kashmir⁴ and the areas in Panjab which were under the Kashmir monarchs. He summed up the chief features of this style as 'dentils, trefoil arches, fluted pillars and pointed roofs'.⁵

After a thorough study of the early Buddhist structures, and particularly the 'Buddhist railing'⁶ and the 'Torana Gateway', Fergusson quite plausibly came to the conclusion - what must have been a startling revelation at the time - that these constructions represented a stage when the architects were

1. Report ix. pp.42-43.

2. Report X. p.110.

3. Report V. Appendix A.

4. which he had called as 'the Arian order of architecture' in his 1848, JASB, paper, on the Kashmir temples. op.cit.

5. Report II p.189.

6. This term, incidentally, was coined by Cunningham.

'... stone railing of that style so peculiar to Buddha monuments, ... I will venture to call it the "Buddhist Railing". The Bhilsa Topes, op.cit. p.184.

translating their wooden prototypes into stone; implying thereby that building in stone was unknown previous to that time, or rather the coming of the Greeks. But Cunningham contested the implication and insisted that it was incorrect to hold 'that building with stone was unknown to the Indians at the time of Alexander's invasion.¹ His joy was therefore great when he found concrete evidence in his support, the stone house called the 'Jarāsandha-ka-Baiṭhak' at Rajgir, which he dated to the time of Buddha.²

The architecture of the Buddhist monasteries also engaged Cunningham's attention from time to time and the apsidal nature of the Buddhist 'Chaitya' had already been discovered in 1848 by his brother J.D. Cunningham at Sāñchī.³

Sculpture: If the science of Indian architecture was the creation of Fergusson, the study of Indian sculpture was mainly the creation of Cunningham. As early as 1854⁴ he had made a beginning in the interpretation of the various sculptured scenes on the bas-reliefs from Sāñchī. 'In illustration of the ancient history of India, the bas-reliefs, ...' he thought, were 'almost equal in importance to the more splendid discoveries made by the enterprising and energetic Layard in the mounds of the Euphrates'.⁵ The culmination of such a study was

1. Report III p.98.

2. Ibid. pp.142-143. Modern opinion also tends to believe that this is one of the oldest structures. (Cf. Hamid Kuraishi, List of Ancient Monuments of Bihar and Orissa, op.cit. p.125.)

3. The Bhilsa Topes, op.cit. pp.183-184.

4. Ibid.

5. Ibid. p.viii.

reached with the publication of his Bharhut.¹

Indeed, the study of sculpture was the last branch of Indian archaeology to develop - particularly as a result of the Mathurā, the N.W. Frontier and Bodh-Gaya excavations and the discovery of the remains at Bhārhut. The excavations at Mathurā and the Frontier revealed the Kuṣāṇa-Mathurā and the Gandhāra schools of sculpture and Bodh-Gaya and Bhārhut yielded the earliest sculptured forms. As specimens belonging to different schools turned up in greater numbers the evolution and development of the art of sculpture from its beginnings with the Mauryan² capitals, the colossal yaksas and the schools of Bhārhut and Bodh-Gaya, through the Kuṣāṇa schools to that of the Guptas, became gradually apparent. The beginning of this art however, Cunningham believed with Fergusson, India owed to the Greeks. 'I agree with Mr. Fergusson', he said, 'in thinking that the Indians in all probability derived the art of sculpture from the Greeks'³ In his support he particularly mentioned the four-horsed chariot on ~~the~~ Bodh-Gaya Sūrya pillar.⁴

1. Op.cit.

2. It is a curious point that Cunningham, although well aware of the peculiar Mauryan polish, never expressed any sentiment of wonder concerning the achievement.

3. Report III p.97.

4. Ibid and supra pp 113 and 118.

CHAPTER IV.Cunningham's personality and MethodsHazards of Exploration:

Explorations were a painful, hazardous business in Cunningham's time. Most of the travelling had to be done on horseback, elephant, bullock-cart, camel, sometimes even on foot, and, as time went by, more and more by the railway.¹ An idea of the hardship involved can be gathered from Garrick's record that during the season of 1881-82 he travelled 3,450 miles, 750 of which were marched, the remaining 2,700 miles being covered by rail.²

But the work required more than the mere capacity for enduring hardship - tact and resourcefulness also were called for. In those less enlightened times people were always suspicious of the archaeologist prowling about the ruins - what motive could he have but the recovery of hidden treasures? Inscriptions only gave the clues to such treasures! When Bird went to take a copy of the Tushām rock inscription the people of the village claimed a share of the treasure, which, they were convinced, he was trying to recover by reading the inscription.³ Kittoe complained how fruitless were all his

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1. An interesting reference to the railway is in Report XX (p.100 Season 1882-83) when Cunningham had to travel from Central India to Bodh-Gaya and Calcutta, which he was able to do by rail.
 2. Report XIX p.1.
 3. Report V. pp.137-138.

attempts to get the Gayāwāls to allow him to copy inscriptions. In exasperation he wished that authority could be used where persuasion failed. He too noticed that 'the ignorant bigots' fancied that in copying the inscriptions the archaeologists had some extortion in view and were searching for money.¹

Even threats from the authority were not much use, as is apparent from Beglar's experience at Jaugadā where in spite of his being armed with a Parwana from the magistrate and in spite of the presence of one of the executive officers, he faced considerable difficulty in procuring a copy and photographs of the Aśokan inscription owing to the 'passive resistance' of the people in the neighbouring villages. Beglar parenthetically added that the people were 'of course, under the impression that it [was] a record of the whereabouts of vast hidden treasure.'²

At Bhārhut the wonder of the people, who thronged the site of the Stupa in hundreds, was great when they learnt that Cunningham could read the inscriptions. But their disappointment was equally great when they were told what was actually written - records of gifts or the names of Yaksas, devatas and nagas. From 'the incredulous looks' of the people Cunningham had no doubt that he was 'regarded as an arch deceiver who was studiously concealing the revelations made

1. 'Extract of a letter from Capt. Kittoe'. JASB, 1848, Pt.I. p.234 and 540.

2. Report XIII p.114.

by the inscriptions as to the position of the buried treasures'.¹

Cunningham also records his annoying experience at Pāhārpur, where, after extensive preparations for excavation (he 'had brought some silled labourers' for the purpose), he was prohibited by the local zamindar. Much disappointed he reflected: '... almost everywhere in Bengal I have found the same "dog-in-the manger" conduct on the part of the Zamindars. In the present instance the Raja's agent repeated what I had previously heard from the people of the surrounding villages, that a great treasure was buried in the mound. This is the general belief all over the country, but it is in Bengal alone that the owner of the land will neither dig up the treasure himself nor allow anybody else to make any excavations'.²

Noticing the incident in Cunningham's official report submitted to the Government, the Home department advised him to inform in future the Government of India or the local government concerned beforehand of the localities he or his Assistants proposed to visit, so that appropriate orders might be issued 'to secure ... due facilities in ... explorations'.³

In those post-mutiny days, he had also to be particularly careful about religious susceptibilities. Temples which were in use were of course not to be entered by him or

1. Alexander Cunningham. The Stupa of Bharhut, London, 1879. Preface p.v.

2. Report XV pp.118 and 120.

3. From the Offg. Under-Secretary, Home to the Director General, Archaeological Survey. No.408. Simla, 18th Nov. 1880. India. Home Proceedings Surveys. 1880. Ind. Office Vol.no. 1501. p.289.

his European Assistants. For the descriptions of the interiors of these had had to depend on his Indian draughtsmen and assistants. To obviate their difficulty Beglar advocated before the special sub-committee of the Public Service Commission in 1887 the employment as Surveyors in the Archaeological department of native gentlemen of high caste, and especially of Brahmans.¹

Often a non-co-operative priest would foil all Cunningham's attempts to procure a copy of an inscription or the drawing of a sculpture on religious grounds. He found the Jain priests particularly troublesome in this respect.²

Col. Mackenzie's and General Stuart's inscription hunting at Bhubaneswar made the Brahmans of Orissa so mistrustful of all enquirers that Kittoe, while on his tour in that province, strongly urged the Asiatic Society to return any inscriptions from Orissa that they happened to possess.³ Kittoe also found at Jaugadā that in their anxiety to save their inscription from antiquarians the people had plastered

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1. Proceedings of the Sub-Committee, Public Service Commission, Part III. Simla, 1887. p.36.
 2. Report IX p.114. However in Report XI. pp.12-13 Cunningham mentions: 'Fortunately all are not so surly, and I can refer with pleasure to my intercourse with the chief priest at Pawapuri, and with the officiating priest at Mahasara, or Masar in the Shahabad district near Ara'.
 3. James Prinsep 'Examination of the separate edicts of the Aswastama inscription at Dhauri in Cuttack', JASB, 1838 p.435. Also JASB, 1837. Proceedings of May, p.319.

over the whole of it.¹ Kittoe was deliberately decoyed away by the people from finding the Dhāuli elephant.² Forty years later Beglar had exactly similar experience in Orissa, where he found that not a man could be trusted regarding the locations of antiquities.³

Moreover, the dread of offended ghosts and malignant spirits had a deadly hold on the minds of the labourers Cunningham employed - not to speak of the offence that the gods themselves might take. When the image worshipped as Sita-mai at Tandwa was brought outside the temple and washed by the attendant Brahman for the purpose of making a sketch the shocked women gasped and cried, "Look how Sita is weeping at being brought outside the temple". Cunningham however had learnt to remain cool in such situations. He therefore 'took no notice of the remark', calmly proceeded with his business and showed them the sketch. He 'heard no other remarks, and the statue was duly enshrined in its old position inside the temple.'⁴

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1. JASB, 1837. Proceedings of September, p.708. In passing, the curious fact may be noted that when an Orissan inscription was returned by the Asiatic Society to Bhuvanewar at Kittoe's pleading, far from producing cordiality and confidence among the priests - to the surprise of both the Society and Kittoe - it only emboldened them to bring before Kittoe a whole list 'of purloined idols' and to urge him impetuously to procure their return as he had done in the case of the inscription! 'Translation of Inscriptions in the Society's museum', JASB, 1838. p.588.
 2. 'Note by Mr. Kittoe on the Aswastama inscription at Dhāuli near Bhuvanewar in Orissa etc.' JASB, 1838. p.435.
 3. Report XIII p.103. However he chivalrously added that the Orissan females were more reliable and truthful. Ibid.p.105.
 4. Report XI p.74.

He frequently experienced difficulty in getting labourers because of their dread of interfering with the dead cities, which were supposed to be the favourite haunts of ghosts. While digging trenches they would every moment expect some vengeful action on the part of the disturbed ghosts and once at Bilsār, when Cunningham's elephant broke away from its daily bath and scoured the country for two hours, 'the incident was at once seized upon by the people as an exhibition of the power of the Brahm-Rakshas,' Even thunder and lightning at the time of an excavation would be interpreted as a token of the demons' displeasure with the man who had violated their haunts.¹

There were also more real dangers to contend with, like tigers and robbers, disease and accident. In November 1863, while in the wooded region near Sangala in Panjab Cunningham's tent was three times approached during the night by parties of robbers, who were detected by the vigilance of his watch-dog.² At Pāhārpur, while clearing the jungle, two leopards were disturbed.³ Once he severely sprained his knee and this kept him confined to a recumbent position for upwards of a month.⁴ Carlleyle and his whole party were stricken by the dreaded Taria fever in the wilderness of Rāmpurvā. Four of his labourers died and Carlleyle nearly did so.⁵ A

1. Report III p.236, and Report XI p.14.

2. Report II pp.195-196. This, incidentally, reminded him of the similar experience of Hsuan Tsang in the same region.

3. Report XV p.118.

4. Ibid p.28.

5. Report XXII p.54.

family of bears for two generations disputed the ground with Kittoe at Dhāuli and while taking the transcript of the inscription he nearly broke his neck when he lost his footing and landed head foremost on the rock.¹

Methods of Exploration: But Cunningham also had some good Indian friends who used to help him in finding sites and antiquities.

The most trusted of them was his 'zealous' and 'old friend' Raja Siva Prasad - besides the Raja of Nāgod and the Maharaja of Rewa. Some of his important discoveries - like the Gupta temple of Bhitargaon, the Gupta sculptures from Gārhwa, the site of Bilsār and the two inscribed pillars of Kumāra Gupta there - he owed to the zealous investigations of Siva Prasad.²

In emphasising Siva Prasad's service in finding out the Bhitargaon temple Cunningham pointed out that the temple was so completely hidden that he failed to notice it even on his second visit until he was within one mile of the village.³

He also depended on 'trustworthy servants' and 'informants' for collection of coins and location of sites, and

1. Mr. Kittoe's Journal of his Tour in the Province of Orissa, JASE, 1838. p.684.

2. Report XI p.13 and 40; Report III p.53. Siva Prasad was elected an ordinary member of the Asiatic Society of Bengal in August 1880. In the following December however his election was cancelled under Rule 9. Cf. JASE, 1880, Proceedings of August and December.

3. Report XI p.46.

even for their inspection.¹ It is not surprising that he was sometimes hoodwinked by the informants. Thus he once built up a whole theory about the origin of a mound in Mathurā on the basis of the name Ānand tilā (i.e. Ānanda, Buddha's cousin) only to find later to his astonishment that both the mound and its name were but inventions of his informant.²

However his dependence on Babu Jamna Shankar Bhatt, his draughtsman, was on a different footing. After over ten years of association he had learnt to trust him both for his honesty and his experience and it was Bhatt who actually discovered the very interesting temples at Terahi and the lonely Buddhist stūpa in nearly perfect condition at Rajapur only a few miles from Terahi.³

Sometimes he used to take the help of his 'friend Bapu Deva [Shastri], the well known astronomer', the mathematics

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1. Report I. p.269; Report XI p.33; Report XVI p.35. Indeed once he recommended that the officers employed on exploration duties 'should not be content with visiting the places which have been enumerated; they should also make enquiries ~~as they proceed.~~ ~~He/out:~~ It was in this way that I first became acquainted with the sites of several of the most celebrated cities of Ancient India.' Dr. Forbes Watson, Report on the Illustration of the Archaic Architecture of India, etc. Appendix D. 'Memorandum by General Cunningham on the Archaeological remains of India'. India Museum, London, 1869 p.34.
 2. Report I p.235. He also records the interesting story of how in 1835 he recovered the exact spot and the larger ~~outer~~ casket of the Jagat Singh's Stūpa at Sārnāth helped by an old man named 'Sangkar' who at the time of Jonathan Duncan was a child and had been employed by Jagat Singh as one of the diggers and had seen the discovery of the 'urn' on the spot. Report I pp.114-115.
 3. Report XX p.100 and Report XXI pp.177-178.

professor at Benares College, for calculations of Indian dates.¹ For the texts and translations of Jātaka stories in connexion with interpretations of bas-reliefs he would turn to his 'good friend Subhūti, the learned Buddhist priest of Ceylon.'² For the interpretation of inscriptions he sometimes consulted Pandits and also the students of the Benares College.³

In one interesting instance, for the translation of the word Pratoli occurring in the Kumāra Gupta inscription from Bilsār, he rejected Wilson's 'a high street' as well as Monier Williams's 'a street', in favour of his Simla Pandit's 'a gateway'.⁴ He was criticised later by Burgess for this habit of accepting the interpretations offered by Pandits rather than by Europeans.

An interesting side-light is thrown on his exploration methods and his enthusiasm by two recorded occasions when he did not hesitate to buy whole fields of wheat from their owners when told that the spots were known to have previously yielded antiquities. One was at Sahri Bahlol 'where the field had already been sown with wheat, but as the owner was willing to take compensation for the loss of his seed' he bought it up.⁵

1. Report III. p.126. Bāpu Deva Shastri was an Honorary Member of the Asiatic Society of Bengal. (Elected February, 1868 at the same time as Cunningham. See JASB, 1868. Proceedings of February.) Among the Honorary Members of the Society at that time were such people as Darwin, T.H. Huxley, Max Muller, Renan, Böhtlingk, Weber and Rawlinson.

2. Alexander Cunningham, The Stûpa of Bharhut op.cit. p.58.

3. Report III p.129.

4. Report XI p.20.

5. Report V p.43.

The other was at Pākṇā-Bihār where a man voluntarily informed him that in one of his fields on the mound numbers of pieces of stone had been seen when ploughing. Cunningham 'at once purchased the green wheat standing in the part of the field which he pointed out, ... and began an excavation'.¹ On both occasions he was rewarded with important finds.

These tours of exploration, however, were but hurried visits from site to site. In one season he might visit as many as thirty and during these brief visits he could scarcely do them justice.

Usually he stopped from three to six days on a site,² but for an exceptionally long operation he might stay for about a fortnight. During his visit to Śrāvastī in the season of 1875-76 he halted for eleven days, in the course of which he 'made excavations in twenty distinct mounds' in the Jetavana area!³

Sometimes his explorations would degenerate into mere object hunting expeditions; he would visit the site, clear the jungle around and employ a gang of labourers to search for coins, inscriptions, and sculptures, often offering rewards 'for even a single letter.'⁴ Then he would himself scour the countryside, gardens, bushes and the houses of the people. He collected a large number of inscriptions and sculptures by this means,

1. Report XI p.33.

2. Report III p.13; Report X p.9; Report XI p.72.

3. Report XI p.78 and 82.

4. Report I p.344 and Report X p.1.

particularly in Bhārhut, Kosāmbi and Mathurā. At Kosāmbi he declared his 'chief discoveries' had been made 'in the people's houses'.¹

The idea seems to have prevailed at first that it would not be possible, nor would it be desirable, for Cunningham himself to conduct all the excavations during his hurried visits and that he should recommend to the Government of India the sites particularly promising for excavations, which would then be taken up for excavation under the superintendence of the P.W.D. Thus the mound F at Nālandā was excavated by Captain Marshall in 1864 on Cunningham's recommendation.² Some of the Lauriyā mounds also were excavated thus.³ It was at his suggestion that the government authorised a small sum for excavation at Bhitari and curiously enough the Judge of Banaras, Mr. C. Horne, Cunningham's friend, superintended the work.⁴

During his second term however he rarely resorted to this method, the only notable exception being the survey made of the Yusufzai sites, particularly of Takht-i-Bahi and Jamalgarhi, by the 8th Company of Sappers and Miners under Sergeant Wilcher and under the command of Lieutenant Crompton, R.E., early in 1871.⁵

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1. Report X p.1.
 2. Report I f.n. on p.33 and Report III p.122.
 3. Report I. f.n. on p.70.
 4. Report I. p.102.
 5. Report V. p.24 and pp.46-47. It is however to be remembered that excavation during this period was not the monopoly of the department. Excavations were often conducted by private persons. For instance Growse's Mathurā excavations and Dr. Bellew's Yusufzai excavations.

Methods of Excavation: Since the principal objective, in a stūpa excavation was to reach the deposit inside, the method followed by him was to drive a shaft exactly in the centre right from the top up to the plinth or the ground, and to note the depths of the finds inside the shaft.¹ This was the method that he had already devised at Sārnāth and at Bhiṣā so as not to injure the external appearances of the stūpas.

Much anxiety was shown not to miss the centre, as usually the deposit was to be found there; but occasionally he found it in unusual positions. Simultaneously a gallery would be cut in the side, which would eventually meet the shaft in the middle, in order to ensure that nothing escaped detection.

The ability, therefore, to get exactly at the deposit by minute calculations, if necessary, was considered as a great perfection in excavation technique. A good example of the technique is found at Mathurā where the mound A turned out to be a stūpa with bricks $5\frac{1}{2}$ inches broad and 3 inches thick, with a convex curve of $23\frac{1}{2}$ inches in length and a concave curve of 20 inches. Then he writes: 'By putting several of these together, I calculated that the stupa was about 16 feet in diameter. I therefore directed the workmen to drive a gallery through the unburnt bricks for 10 feet in length, and to carry it down to the surface level of the outside ground at a depth of $13\frac{1}{2}$ feet from the top of the mound. These instructions

1. For a typical example of his more elaborate stūpa excavation see the account of the excavation in the mound called Sonāla Pind at Manikyala. Report II pp.166-167.

were followed, and the result was the discovery of a steatite relic casket of the usual shape exactly on the ground level and at a distance of $8\frac{1}{2}$ feet from the outside of the curve. The stupa was therefore 17 feet in diameter -' ¹

At sites other than stūpas, where no structure was visible above ground and superficial excavations failed, the method usually followed by him was to trench their edges and to run long, broad trenches quite across them, sometimes at right angles. He would be satisfied when such trenches disclosed traces of walls and cells - their thorough uncovering being thought unnecessary.² At city-sites he sometimes attempted to trace the ramparts, - for example at Bhiṭā and at Vaiśālī.³

As an example of one of his few well-planned excavations, that at Sankissa is noteworthy.

He was searching for the remains of the Aśoka pillar there and he calculated its possible position from the position of the capital: 'From the site in which this capital was found, I inferred that the pillars must have stood due north of the mound of Bisari Devi, I guessed also from the angle formed by the diameter of the capital, taken along the back of the elephant, that the pillar must have fallen from a position nearly perpendicular to that line, as whichever way the elephant may have faced, the capital on reaching the ground would have

1. Report III, p.17.

2. See for example Report II p.131.

3. Report III p.50 and Report XVI p.12.

turned round, so as to bring the elephant on its side. I gathered also from the actual size/given by FanHian, that the pillar must have been somewhere between 52 and 60 feet in total height. I therefore laid down a line at right angles to the long diameter and marked out a circular space between 50 and 60 feet distant from the elephant for my excavation'.

The result was remarkably successful. He came upon a large circular hole in the centre, in which it was quite clear that the pillar had originally stood. However he did not find any remains of the pillar in the hole and opened another broad trench along a depression towards the capital, but again without luck.¹

Thus, for Cunningham', excavations remained to the end a kind of test probing, which was never followed by a concerted, planned attack with definite aims in view. His chief aim was to identify the cities, and the buildings in those cities, seen by Hsüan Tsang. Rare attempts were made to uncover a monastery, a stūpa, or a temple in its entirety.

The ability to identify ruins with ancient cities was, to him, one of the most important functions of an archaeologist. He dismissed Buchanan's and Liston's accounts of Kasiā as 'very brief' and as offering 'no attempt to identify the ruins with any of the ancient cities which are known to have existed in this part of the country.'² Mere exploration

1. Report XI pp.22-23.

2. Report I. p.76.

was not enough. Kittoe was not really an archaeologist since his 'chief discoveries were limited to temples, sculptures and inscriptions'. There was not 'a single locality which he identified, or a single historical doubt which he settled, or a single name of any dynasty which he established'. 'His discoveries were the result of unwearying exploration, and not the fruit of mental reasoning and reflective deduction'.¹

The materials for 'mental reasoning' and 'reflective deduction' of course were provided mainly by inscriptions, coins and sculpture. He was fully aware that their value was not that of mere curios but that an intelligent study of them might reveal many unknown episodes in the religious, cultural artistic and political life of the country.

Much engrossed as he was in inscriptions and coins, he did not pay any attention to the so-called 'minor antiquities' and their stratigraphical context. Often in his reports an excavation is said to be 'without results' when it does not yield sculptures, inscriptions, or coins. At Shahbazgarhi 'three days' superficial excavation disclosed nothing of value except a number of walls', and this was indication enough for him to give up 'their further exploration'.² At Basārah he was disappointed when the excavation disclosed only 'a few uninteresting fragments of pottery'. 'The only object of any interest' in this excavation was 'a burnt clay inkstand, with a large

1. Report I p.XXVII.

2. Report V p.13.

Buddhist symbol, and a short inscription in Gupta characters'.¹
 At Bhārhut 'numerous pieces of iron' were discovered, which he did not find worth sketching.²

Perhaps no comment on his aims and methods can be as expressive as accounts of excavations like this, which we often meet in his reports. At Manikyala when excavating the remains of the large square building numbered 22 he set 20 diggers to work and in about one hour's time he had roughly traced the positions of several rooms. He excavated five complete rooms and in the evening, as no further discoveries appeared likely to be made, he discontinued the work.³

Methods of Dating: Cunningham had several methods for dating - methods that have been resorted to until recent times and some of them even employed today.

The few archaeologists in India were gradually realising the importance of these means of dating with the gradual broadening of understanding of Indian archaeological materials. But because of his vast experience he was able to apply them with the greatest success. For many years Cunningham and Kittoe (with the exception of some casual workers) were the only antiquarians to work in the field and not merely to concern themselves with inscriptions and coins in the fashion of Prinsep.

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1. Report XVI p.12.
 2. Report IX p.3.
 3. Report II pp.171-172.

Some of Cunningham's methods were peculiarly his own. Constant excavations and explorations opened his eyes to the possibilities of dating by means of masons' marks and size of bricks. It was not long before he noticed the gradual decrease in the size of bricks in India from the Mauryan times to the late mediaeval. This he utilised as a ready means of dating. 'The occurrence of large bricks was always a 'sufficient proof of ... antiquity' ¹. A change in the building phase in a structure he would expect to be announced by a change in the size of bricks.²

He insisted on minutely looking for Mason's marks in a building. This helped him in assigning dates when regular epigraphs were absent.³ It was on the basis of mason's marks that he reasoned that the temples that provided pillars for the Arhâi Din Kâ Jhonprâ mosque at Ajmêr, were 'erected during the 11th and 12th centuries.'⁴ In the absence of even mason's marks he used to look for the records of pilgrims as they were 'sometimes found of dates nearly as old as the buildings themselves'.⁵

1. Report I. p.341. There are many more instances.

2. Report III p.161. Non-Garh stûpa excavation.

3. Report V. p.72. 'In the absence of any formal record, I look upon the discovery of coins, and short inscriptions on statues, and mason's marks, as the most trustworthy proofs that can be obtained of the age of any building.'

4. Report II p.262.

5. Report III. p.vii.

Increasing knowledge of the evolution of Indian sculpture and architecture coupled with his long experience taught him to rely, when other indications were not available, on styles of sculpture and architecture as a means of dating.¹

Indeed for a long period he was the only man who had any real understanding of the comparative styles of Indian sculpture. He tried to discover the ratios of proportions of the different parts of pillars and stupas so as to be able to assign them dates on its basis. He found that the Aśokan pillars had bells of the height of two-thirds of the diameter, whereas the height of the bells of the Gupta pillars, he thought, was three-fourths of the diameter. This assumption misled him into assigning his newly discovered Garuḍa column at Besnagar to the Gupta period² - a date which we now know, from the discovery of its inscription, to be nearly 400 years too late.

He was also the first to realise, when more experienced, that Stūpas in India showed a tendency of gradually assuming a more elongated shape with the passage of time. The lofty form of a stupa he found to be 'an unfailing test' of a late date. 'The earliest topes', he wrote, 'would appear to have

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1. See for instance Report XI p.171 and Report II p.400. The great temple at Suhāniyā could not be assigned 'an earlier date than the seventh or eighth century, or perhaps even later', because of 'the tapering form of the tower'.
 2. Report X. p.42.
 3. Report II pp.286-287.

been simple hemispheres, in which the height was little more than one-half of the diameter' ¹ Starting from this, the proportion of height gradually increased and Cunningham prepared a chart making the transitional stages in this evolution with relation to time. ²

His Burmese experience taught him to associate octagonal wells with Buddhism and therefore the occurrence of a well of this shape on a site would indicate an early occupation. ³

He became aware of a peculiar feature in the orientation of the Gupta temples. He found that the temples had 'an average variation of about $13^{\circ}20'$, or of one whole Nakshatra, to the east of North' ⁴ and exploited this feature for dating when it occurred in a building of unknown origin.

There is also an interesting instance when he resorted to an analysis of the rings of a pipal tree that covered the

1. Report II pp.286-287.

2. Report II. pp.287-288.

1.	Height = $\frac{1}{2}$ diameter ...	B.C. 500 to 300 ...	Sânci, Satdhâra.
2.	" = $\frac{3}{4}$ "	" 300 to 100 ...	Mânikyâla ?
3.	" = 1 "	" 100 to 100 AD	Sânci bas-reliefs [stupas]
4.	" = $1 \frac{1}{8}$ "	A.D. 100 to 300 ...	Dr. Bird's Kanheri Tope.
5.	" = $1 \frac{1}{4}$ "	" 300 to 500 ...	Sârnâth, Banarâs.
6.	" = $1 \frac{3}{8}$ "	" 500 to 700 ...	Dhamnâr
7.	" = $1 \frac{1}{2}$ "	" 700 to 900 ...	Kholvi. '

3. Report XI p.16.

4. Ibid p.72.

lingam in a ruined temple at Hatila for the purpose of dating the temple. As the section showed 849 annual rings,¹ he argued the tree must have been planted in A.D. 1013, during the reign of Mahmud of Ghazni. He was satisfied that this was also about the date of the temple itself.

However, primary evidence of date was always provided by epigraphy and palaeography. But coins wried with inscriptions in importance.² To Cunningham, they were invaluable indicators of the varying fortunes of a city. 'A good test of the antiquity of a place is the age of the coins that are found in its ruins'³

Indeed the presence and absence of coins could lead him to such elaborate conclusions as follows:

'1.- The town of Sunit was in existence before the Christian era, as evidenced by the coins of Uttama-datta and Amogha-bhuti. It continued to flourish during the whole period of the dominion of the Indo-Scythians, and of their successors who used Sassanian types down to the time of Samanta Deva, the Brahman King of Kabul and the Punjab.

'2.- From the total absence of coins of the Tomara Rajas of Delhi, as well as of all the different Muhammadan dynasties, it would appear that Sunit must have been destroyed during one of the invasions of Mahmud of Ghazni and afterwards

1. Report I. p.329.

2. He also sometimes found seals useful for dating.

3. Report V. p.93.

remained unoccupied for many centuries.¹

A building would normally date from the date of the coins found although he was aware that ^{they} ~~it~~ might sometimes be of later date than the building itself; but even then they were useful, he thought, as they served 'to fix a limit to the modernness of the building.'² His anxiety to recover coins in an undisturbed state also shows his awareness of the difficulties of dating from coin finds. He lifted out with his own hands the coins found in the foundations of the Ionic pillar vihāra at Shah Dheri (Taxila) and took great care that the place of their deposit was not disturbed.³

Cunningham's Ideas of Archaeology: However limited in scope his archaeology may have been in practice, in theory at least, he had a much more comprehensive idea of archaeology, - an idea indeed as comprehensive as any of today. He stated this in the Memorandum of Instructions which he issued to his Assistants in 1871.⁴

He begins with the assertion that 'archaeology is not limited to broken sculptures, old buildings and mounds of ruins, but includes everything that belonged to the world's history.' Although architecture is the most important object of study 'researches should be extended to all ancient remains whatever that will help to illustrate the manners and customs of former times.'

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1. Report XIV p.66.
 2. Report V. p.72.
 3. Ibid.
 4. Report III.

In architecture particularly are to be studied these features 'which show the gradual progress of the art of architecture in India, All examples of beautiful ornamentation or of peculiar constructive skill should also be noted;'

The claims of prehistory are not forgotten:

'Connected with the stone celts are the large earthen barrows, stone circles and stone houses or dolmens, which are found in many of the hilly parts of India. The position and dimensions of all these should be noted for further research and future excavation. Smaller monuments may perhaps be opened at once, as the work would not occupy more than a few days; but all the larger barrows must be left for more leisurely exploration. Monoliths or menhirs are more rarely found;'

But coins, inscriptions, architecture and sculpture are not the only objects worthy of an archaeologist's attention. He thinks 'it also desirable that attention should be given to the many rude but curious agricultural implements which are still used in the less frequented districts to the south of the Jumna. Their names should be noted, and a rough sketch made of each implement, showing the material of which each part is constructed. As the names of these implements and their different parts vary in different districts, all these changes should be carefully noted. The various forms of mills for sugar and oil should also be noted Any peculiarities in the form or construction of the native carts might

also be noted with advantage Some of these may help to throw light on the scenes sculptured on old monuments; others may serve to illustrate passages in ancient authors; whilst all will be valuable for preserving a knowledge of things which in many places are now fast passing away, and will soon become obsolete and forgotten.'

Enquiry should also be made on various weights and measures of the country; sati pillars and their records should be noted and attempts should be made to gather as much information as possible on the distribution of races and castes.

Thus his definition of archaeology almost savours of anthropology and sociology. Also interesting is his concern for prehistoric materials. One suspects that his stay in Europe between 1866 and 1870¹ (incidentally, during this period he was the Director of Delhi and London Bank) provided him with the background for such an idea of archaeology, - particularly when we remember that this was the period when prehistory was being widely popularised by the books of Lyell,

1. Indeed pre-history in India had already been given recognition in the India Museum Report on the Illustration of the Archaic Architecture of India, etc. (Dr. Forbes Watson op.cit.) The appendix by Col. Taylor was on pre-history in India. This inclusion of pre-history was only symptomatic of the time. In his own memorandum also Cunningham had discussed pre-history (p.34).

Lubbock and Tylor.¹ It was also hard to escape the impact of the brisk researches then being carried on in the fields of anthropology and Sociology - although Morgan's famous work was not yet out.²

But how far he lived up to the ideals set in this manifesto is, however, another matter. In practice we find that neither did his methods develop in the field of historic archaeology, nor was prehistory given any serious attention except for the collection of stone implements - phenomena particularly curious since he lived most of his active life during the years when elsewhere in Europe and the Near East, in the Aegean particularly, antiquarianism of the old type was slowly being transformed into archaeology by men like Newton, Conze, Fiorelli, Curtius, Dörpfeld and Schliemann. The process was completed at the end of the century by the two great English archaeologists, Pitt Rivers and Petrie.³

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1. Lyell - The Geological Evidences of the Antiquity of Man, 1863; Tylor - Researches into the Early history of Mankind, 1865; Lubbock - Prehistoric Times (in which the words Palaeolithic and Neolithic were coined), 1865, and Translation of Nilsson's Primitive Inhabitants of Scandinavia, 1868. The exhibition of prehistoric materials in the Paris Exposition of 1867 also helped its popularisation.
 2. Published in 1873.
 3. For the history of the development of archaeology we are indebted to the three excellent works:
 - (1) Seton Lloyd, Foundations in the Dust, London, 1947.
 - (2) Walter W. Taylor, A Study of Archaeology, American Anthropologist Memoir Series, no.69. Menasha, 1948.
 - (3) Glyn E. Daniel, A Hundred Years of Archaeology, London 1950.

In India we detect an unbelievable unawareness of the development in method and technique that was taking place outside her borders. Indeed in Cunningham's copious writings one hardly comes across any mention of archaeologists working elsewhere contemporarily with him, except for an occasional reference to Layard.

In 1870, with the establishment of the second Survey, he picked up the threads of his unfinished work in the same manner as in 1861. The same pattern of exploration, excavation and reporting was repeated year after year as if nothing had happened in the science of archaeology in the meanwhile. He carried the British tradition of barrow-digging with him to India and never really grew out of it. Indeed he often uses the word 'barrow' in describing a stūpa, and once at least suggests that the earliest stupas were simple earthen mounds 'similar to those that still exist in England.'

Some of the basic concepts of modern archaeology¹

Cunningham could certainly have developed in India, as he had

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1. The line of development was from the study of objects d'art to the study of the total picture of man in a particular setting. For realising that aim certain techniques were evolved. Digging became dissection. New ideas of field survey, conservation and reporting were born. Fiorelli developed at Pompeii (1860-75) the revolutionary concepts of 'total excavation' and the analysis of strata. From 1870 onwards this idea of recovering a succession of occupations - and not just one object or one structure - became firmly established particularly in the Aegean, where Conze, Curtius, Dörpfeld and Schliemann worked. Schliemann demonstrated the applicability of the principle of geological superposition as a key to relative chronology to the excavation of a great mound. Pitt Rivers 'transformed excavation from the pleasant hobby of barrow digging to an arduous scientific pursuit'. With Petrie came sequence dating, cross-dating and scientific analysis of objects. In the field of pre-history of course the pioneering work of the Danish archaeologists is well-known.

vast and promising fields in sites like Taxila, Vaisālī, Śrāvastī, Kauśāmbī etc. In fifty years he handled innumerable tells in the immense expanses of Northern India and almost all of them were the remains of ancient cities. Yet he never really understood the peculiar problems that their excavation presented nor did he realise the importance of the question of levels that, say, fifty feet high tells, representing accumulations of a thousand or more years, posed. The most important factor that definitely hindered such a realisation was the existence of epigraphic and written records of Indian history - in any case of the period in which he was interested, the so-called 'Buddhist period.'

It is therefore of extraordinary interest to discover that once he did face a situation where the traditional methods were of no help, and in tackling it he almost discovered the principle of stratigraphy.

At Multan he was confronted with an accumulation nearly 50 feet high without any of his favourite signs - remains of structures, pieces of sculpture, or coins and inscriptions - to guide him on his way. In desperation he dug what he called an 'archaeological well'. A huge section was cut, running down to a depth of 40 feet, where he reached the virgin soil. The result is given in tabular form.¹

The table (See Table pp 261-63) is drawn up on the basis

1. Report V, pp. 126-129.

ARCHAEOLOGICAL WELL.

Sunk in the Fort of Multân in 1864.

Depth Feet	Probable date	Discoveries
1)	1700	{ Upper stratum: English broken bottles; pieces of iron shells; leaden bullets.
2)		
3)		
	1600	
4)	1600	Glazed pottery and glazed tiles.
5)	1500	
6	1400	Small Bricks, 6x4x1
7)	1300	
8)		
9	1200	
10)	1100	{ Coins of Muiz-ud-din, Kaikobad, A.D. 1286-89: Glazed blue chiragh, or oil-lamp.
11)		
12	1000	Coin of Sri Samanta Deva -Circa A.D. 900 - 950.
13)	900	Bricks, 11x6½x2: Glazed tiles and pottery ceased.
14)		
15	800	{ Red Ashes, 2 ft. deep. } Bricks, 11x6½x2 2
16)	700	
17)		
18	600	Black ashes, 6 to 9 in.
19)	500	
20)		

Depth feet	Probable date	Discoveries.
21	400	Fragments of large bricks, 14x11x2 $\frac{1}{2}$.
22 } 23)	300	
24	200	
25 } 26)	100	
27	B.C.	
28 } 29)	100	
30	200	} 2 feet of ashes and burnt earth
31 } 32)	300	
33	400	
34 } 35)	500	
36	600	} Natural soil unmixed
37 } 38)	700	
39	800	
40		

'One of my objects in sinking these wells was to obtain some

trustworthy data for fixing the approximate rate of accumulation of debris. The two coins discovered respectively, at depths of 10 and 12 feet appear to furnish exactly what was wanted. The upper one gives a period of 600 years for 10 feet of accumulation, and the lower one a period of 900 years for 12 feet. The two together give 22 feet of accumulation in 1,500 years, or as nearly as possible $1\frac{1}{2}$ feet per century. Taking this amount as a fair rate, I have filled up the second column for the sake of obtaining approximate dates for the other discoveries.'

of a principle that has no place in archaeology today. As he came up against the problem of levels and their dating in his 'archaeological well', he tried to build up a time-clock on the basis of the rate of thickness of accumulation in a given time so that it would be possible to obtain the automatic dating for any particular depth in the section. This was by no means a novel attempt; it had already been tried at various times and discarded by other archaeologists because of obvious difficulties. However, by a somewhat illogical jugglery of figures he obtained, in this particular case, a rate of $1\frac{1}{2}$ feet per century.¹ Had he paid greater attention to the strata of his finds - which in fact he had traced - the absurdity of dead-reckoning from the thickness of accumulation would have become apparent and the true principle of stratigraphy might have forced its way into his understanding. The apparent contradiction, for instance, of the stratum of red ashes representing one conflagration and yet spreading from the 15th to the 17th feet - an accumulation which according to his dictum should have represented a period of about 200 years - did not strike him as absurd. This is true again of the layer of 2 feet of ashes which he shows as spreading over the 30th and the 32nd feet.

Not only did he not understand the absurdity of this dead-reckoning by means of levels but he applied it in

1. But in his table he does not even adhere to his own rate.

other similar cases; one of these was one of Dr. Bellew's excavations at Sahr-i-Bahlol, where Cunningham applied the same rate of $1\frac{1}{2}$ feet per century: '.... The mound was ... not less than 45 feet in height when Buddhism was still flourishing in this district, or not later than A.D.800. If the accumulation of rubbish he calculated at $1\frac{1}{2}$ feet per century, which is the approximate ascertained by excavation at Multan, then the site of Sahr-i-Bahlol must have been occupied as early as 3,000 years before A.D.800, or about 2,000 B.C.'¹

However a few years later he seems to have completely forgotten this immutable law of rate of accumulation that he had discovered! At Sankissa in the course of his search for the pillar to which the fallen elephant capital belonged he found round the basement of the pillar traces of a brick floor at a depth of 4 feet below the present level of the field and on the basis of it he tried to find the date of the fall of the pillar, taking in this instance, quite arbitrarily and completely forgetting Multan, 4 feet in 2,000 years.²

Once again, near the end of his career, the principle of some sort of stratigraphy came almost within his grasp. This was when restoration work was being carried out in Bodh-Gaya. The temple floor was completely dug up and this led to the dramatic revelation of several floors one below the other,

1. Report V. p.38.

2. Report XI p.23.

representing various periods of reconstruction dateable from associated objects. In his report on Bodh-Gaya ¹ he talked about different floors, Aśókan and others - and there was even some rudimentary attempt at co-relating the groundlevel outside the temple with the floors inside and also an attempt to reconstruct the appearance of the site in different epochs. This was indeed a long stride forward, but it came too late in the day to have any lasting effect on the trend of his archaeology, for he was then about to leave the country.

We cannot of course expect the finely evolved ideas of stratigraphy of present times from Cunningham, but in his methods any consciousness of the very basis of relative dating, - the superimposition of layers - seems to have been non-existent.

Indeed, since the idea of stratigraphy was essentially a concept borrowed from the science of geology, it seems somewhat surprising that the idea did not percolate into the Indian archaeological thinking, particularly as already in the second quarter of the 19th Century geologists had been discussing geological formations in India. Newbold's papers in particular were illustrated with section drawings of strata.

A beginning was in fact made in the application of stratigraphy when archaeology was handled by a geologist

1. Mahâbodhi, London, 1892.

- as was to be expected. This ¹ was at Captain Cautley's Behat excavations, ² as early as 1834.

The daring innovation of Meadows Taylor, as early as 1851, of recording stratigraphy of accumulations in the Megalithic tomb excavations, to which attention has already been so pointedly drawn by Sir Mortimer Wheeler, ³ remained unnoticed ⁴ and in any case its significance was not comprehended. And yet Cunningham was all the time coming up against the problem of stratigraphy. One sometimes comes across passages which only show a vague, almost unconscious awareness of the problem. ⁵

1. '.... In the present case, the section is thus: the surface of the country at that point being much lower than that on which the town of Behat stands:

Grass jungle with cultivation on the surface of the country.
River Sand, 4½ feet.

A seam of sand with traces of shingle.

Reddish clay mixed with sand, 12½ feet.

A A, site of Ancient town, A A

Black soil full of pots, bones etc., in which the coin and other articles have been discovered, 6 feet.

Bed of canal, 23 feet below surface.

The line marked above "site of ancient town AAAA" is distinct in section for about a quarter of a mile, ... the soil upon which the town appears to have stood is very black, and full of bones and pieces of pots of different description!

Capt. P.T. Cautley, 'Discovery of an Ancient Town near Behat, in the Doab', JASB, 1834. p.43.

2. Supra p.33.

3. Archaeology

3. Sir Mortimer Wheeler, Archaeology from the Earth, Oxford, 1954 pp.8-9. Sir Mortimer Wheeler goes so far as to say that '.... the work of Captain Meadows Taylor, though limited in scope and scarcely noticed at the time, marked or should have marked the beginning of a new epoch in technical method and scientific observation.'

4. There is evidence that Cunningham read Taylor's papers. He refers to Taylor's articles in his Introduction in Report I. p. XXX-XXX;

/footnotes cont....

Footnotes contin.....

5. See for instance Report V. p.72, or Report XIV p.24:
At Chāsa-dheri he 'made numerous excavations, but although [he] found many walls, yet most of them ran at different angles and evidently had no connection with one another

Or again same Report p.25 'the remaining walls [appeared] to be of different ages, but [he] could not find even a single room, so much disconnected [were] all the traceable remains

Principles of sequence-dating and its hand-maid typology, never dawned on him. He had undoubtedly a vague awareness of the principles of evolution since he had been dealing with the idea in discussions on architecture, sculpture and palaeography.¹ Therefore if he never extended the idea to the study of material objects, it was because he never thought them to be of sufficient importance for any critical attention. Also the importance of pottery and corpus of finds completely escaped him. In any case his excavations were too scrappy, unconnected and unplanned for any such outcome.

One can only wonder now that, after so much searching, when the last cities of India were actually found, it never occurred to him to uncover them as cities - an idea which would certainly have led him to a gradual realisation of the concept of 'total excavation'. Certainly the question of resources does not fully explain this.² The surprise becomes greater when we find him expressing in a letter to Grote, which was published in the JASB, - and which is now a document of exceptional interest considering the revelations made by Marshall's excavations-

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1. Incidentally, there is no vestige of Darwin in his writings.
 2. The sum allowed for excavations and photography was originally Rs. 5,000 per annum, but was afterwards diminished by Rs. 1,200 for the purpose of increasing Mr. Carlleyle's pay from Rs. 300 to Rs. 400 a month. On Beglar's retirement the pay of the post was reduced at Cunningham's suggestion from Rs. 500 to Rs. 300 and half of the money saved was re-transferred to the sum allowed for excavations and photographs.

Cunningham to Government of India. Home, Revenue and Agriculture, No.125 dated Simla, 29th September 1880 and the Government's reply no.406, Simla, 17th Nov. 1880 India Home Proceedings. Surveys. 1880 Ind. Off. Vol. No.1501 pp.295-297.

that Cunningham did in fact notice and recognise the straight streets of Taxila.¹ This is a fact that no one would suspect from reading only his reports. What other archaeologist could resist the temptation to follow through such an exciting clue by sustained excavation?

His reporting did not represent any improvement on that of Buchanan and Kittoe - the two field antiquarians who preceded him.² Cunningham was, indeed, unconsciously following the prototype of reporting that was set by Buchanan. The same heads of enquiry were followed - topography of the site, legends associated with it, speculation on the possible derivation of the name of the place, and of course its antiquities and descriptions of excavations where excavations were made. In his shorter reports however - and these are more numerous - usually there was nothing more than the mere mention of the place; a little about its legends perhaps, but certainly nothing about its antiquities.

Minor antiquities of course were never discussed or

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1. JASB, 1864. 'Literary Intelligence'. pp.332 and 333.
 2. 'During my last season's/^{tour}through the Punjab I believe that I have ascertained the position of Taxila in the immediate neighbourhood of Shah-ki-Dheri, beyond all doubt Near Shah-ki-Dheri there are the remains of a very extensive city, with stone walls and square towers and streets at right angles,'
 2. Buchanan and Kittoe between them had visited most of the important sites of Bihar and U.P. Kittoe also visited Orissa. Buchanan's descriptions were often fuller than those of Kittoe', who usually satisfied himself by giving notices of his visits in the form of letters to the Editor of the JOURNAL of the Asiatic Society of Bengal.

illustrated. The nearest that he came to taking some notice of these was at Bhitā¹ and at Taxila, and at the latter place at least these antiquities were not obtained in excavations but from antique dealers. In his reports even coins were regularly ignored. However he devoted more space to inscriptions and coins in his later reports. One of the rare examples of pottery illustrations was in Report XII where the drawings of a few sherds were given.

His reports² were poorly illustrated. Apparently he did not properly exploit photography for the purpose of illustration - the old-fashioned method of sketching was followed. Most of the sketches were done by Cunningham himself and most of the inscriptions also were hand-copied. The first photographs of sculpture and architecture appeared in Report V in the illustrations of the Appendix on Indian architecture.³ Even his earlier reports included several photographs taken by Lieutenant Waterhouse, the able superintendent of the Surveyor General's Office, but it was not until Report IX that photographs

1. Report III.

2. The octavo sized blue-covered reports used to have an average of about 200 pages and 25 plates each. Short indexes were given. He used to print two quotations on the title page - one was from Lord Canning's minute: 'What is aimed at is an accurate description, illustrated by plans, measurements, drawings or photographs, and by copies of inscriptions, of such remains as most deserve notice, with the history of them so far as it may be traceable, and a record of the traditions that are preserved regarding them'; and the other was from his preceptor James Prinsep: 'What the learned world demand of us in India is to be quite certain of our data to place the monumental record before them exactly as it now exists, and to interpret it faithfully and literally.'
3. The plate of the Dewal Kutial Inscription in Report I (Plate Ll) seems to be a photographic reproduction.

appeared in any number when Beglar began to help him with photography. Beglar's photographic services, especially in the illustration of the sculptures from Bhārhut¹ and Gandhāra, had convinced him of the value of photography and on Beglar's retirement in 1880 he expressed particular anxiety to obtain a photographer as an Assistant. Indeed he appointed Garrick mainly for his photographic abilities.² Cunningham's illustrations used to be reproduced in the Surveyor General's office.³

His reports were often delayed⁴ by many years before publication, with the result that sometimes several reports would come out in one year.⁵ These delays of course, sometimes

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1. The excellence of the plates in The Stūpa of Bharhut have been commented upon by many.
 2. Cunningham to Government. Home, Revenue and Agriculture. No. 125 dated, Simla, 29th September, 1880. India. Home Proceedings. Surveys. 1880, Ind. Off. no.1501 pp.295-297. Henceforward photographs appeared in greater number - particularly in Reports XIII, XV, XVI, XVII, XX, XXI And XXIII.
 3. The newly invented process of reproduction known as photo-zincography - by which photographs could be transferred to the surface of a plate of zinc - was introduced in Calcutta in 1866 and this process along with lithography was used for the reproductions of Cunningham's illustrations. In Report XXI photo-etching was used for the first time. (Plate XXXVI - Image from Gurgi in Rewa). Also in the same Report was used photo-electrotype for the first time. (Plate XXXVII - Stone sculpture from Gurgi). In Report XXIII appeared the first photo-collotype plates (Plates XX, XXI, XXVII, XXVIII). For the information relating to the Surveyor General's Office See B. R. Markham A Memoir on the Indian Surveys, op.cit. pp.176-177.
 4. Although official reports were submitted annually according to the terms of instructions issued to him on his appointment in 1871. Resolution no.649-50, dated the 2nd February, 1871. Also see Appendix.B...
 5. Some of the more serious cases of delay being: the Reports VI, VII, and VIII which were on tours between 1871-74 but were published in 1878; Report XIII on 1874-76 but published in 1882 Report XVIII on 1875-77 but published as late as 1883.

caused unnecessary duplication of work. One such instance, to which he himself alludes, was an inscription from the Ghantai Temple at Khajuraho, which, although already recorded by Cunningham in the report of his 1874-75 tour, was again published by V. Smith in the JASB for 1879, simply because Cunningham's report was not published until 1880.¹

Thus in spite of his 1871 manifesto, in practice, his ideas of excavation or reporting did not advance with time. He had his roots in the days of Prinsep. The method of exploration and reporting that had justification in the beginning of his career became tiresome and meaningless once the preliminary operations were over.

The reaction of Cunningham's contemporaries: It would be interesting to know the reaction of his contemporaries to the sort of archaeology that he practised. In the few accounts of contemporary opinion that are left, we can clearly discern a growingly critical attitude to Cunningham. Archaeological thinking even in India had by then outstepped the limits set by him. Archaeological opinion at home and abroad became restive as year after year he doled out the reports written in the same casual manner and without proper illustrations,

1. Report XXI, p.60.

sections and photographs.¹ Others became weary of the puerile and largely ignorant discussions of forced etymology and ingenuous history by his Assistants - particularly Carlleyle.

Arrayed against him we find some of his well known contemporaries: Burgess and Fergusson and Bühler and Rajendra Lala. Among the lesser are Growse and Sinclair and even the archaeological reviewers of The Pioneer and The Quarterly Review. Even though all the criticisms that are made of his work are not wholly justified, yet they are interesting and important in as much as they show what his contemporaries thought of him or what their reactions were.

With the re-establishment of the Survey in 1870 Burgess had hoped that 'a new scientific departure' would now be practicable in India, 'such as had then taken place in Classical Archaeology'.² But he was soon disillusioned. The shortcomings of the Survey as they appeared to him were that 'the

1. His Bhita report (Report III) is unique in that it contains a rudimentary illustration of an excavation section in the rampart. His reports undoubtedly fell far short of the ideal that he had himself stated in his Memorandum to Canning: 'The description of each place with all its accompanying drawings and illustrations would be complete in itself, and the whole, when finished, would furnish a detailed and accurate account of the archaeological remains of Upper India'. (Report I. p.viii)

He himself, however, thought of at least his first two reports as '... a cheap account of the only systematic, though incomplete, survey that has yet been made of the antiquities of Northern India'. (Ibid.)

2. ~~XXX~~ James Burgess, 'Sketch of Archaeological Research in India during Half a Century', JBBRAS, 1905. (The Centenary Memorial Volume) p.140.

attention of the Survey ... was concentrated on the ancient sites mentioned by the Buddhist pilgrims and others, and on numismatics and a little epigraphy, - rather than on architectural monuments and their teachings, and the assistants employed were but poorly educated for their responsibilities' He also found fault with Cunningham because 'he formed no central establishment to collect results, but toured much himself and sent his assistants out to survey different places' and 'in the twenty two volumes of his reports, ... there are no proper monographs upon individual groups of remains or styles of art'¹ The reports were also 'not scientific, or reliable'.²

Bühler was impatiently hoping that 'thorough excavations' of the capitals like Taxila, Pāṭaliputra and Mathurā would be taken up. He also critically noticed that all the monuments excavated belonged to the Buddhists who were, as recent researches had shown, by no means the oldest nor the only important sect of ancient India. Cunningham's reports he thought were a perfect mine of information but difficult to use and nothing had been treated exhaustively. Cunningham's diggings he characterised as mere 'prospecting'. The real work was still to be done. He was however fair enough to point out that the costliness of extensive excavations must have

1. JBBRAS, 1905. (The Centenary Memorial Volume). p.140.

2. Ibid p.141.

prevented Cunningham from any such undertaking.¹

Sinclair complained of carelessness in excavations. It happened that small objects were overlooked or stolen by the coolies; the exact position of objects escaped observation or was even misstated; and that sculptures and other heavy objects were, left exposed, to be misappropriated or injured by weather and wear.²

The special Sub-Committee of the Public Service Commission which was appointed in 1887 to go into the question of the re-organisation of the Archaeological Department found Cunningham's administration adversely criticised by the witnesses who gave evidence, - among whom were F.S. Growse and Rajendra Lala Mitra.³

In his written evidence Growse gave his opinion that during his long period of office as Director General, Cunningham had 'effected nothing worthy of his reputation'. He further wrote: ⁴

'.... Of the twenty volumes that followed in successive years down to 1885, even those for which he is personally responsible are so utterly deficient in method as to be almost useless for purposes of reference; while the unrevised lucubrations of

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1. G. Bühler 'Some Notes on Past and Future Archaeological Explorations in India', JRAS, 1895. pp.655 and 656.
 2. 'Archaeological Research': Correspondence by W.F. Sinclair dated June 12th, 1895 to the Secretary of the Royal Asiatic Society. (Following Bühler's above speech June the 11th). JRAS, 1895 p.663.
 3. Proceedings of the Sub-Committee, Public Service Commission, Scientific Departments. Part III op.cit. p.28.
 4. Ibid p.52.

his Assistants are a tissue of trivial narrative and the crudest theories, At present the only tangible outcome of a Department which was in existence for sixteen years is an undigested mass of raw material huddled together in twenty-two volumes'

Rajendra Lala's criticism was mainly based on Cunningham's choice of Assistants who were, according to Rajendra Lala, not properly qualified for their duties.¹

But the most severe criticism came from Fergusson, and almost smacked of a personal malice.² He took Cunningham to task for delay in publication of reports and for the fact that when at last they were published, it was done in a hurry and without proper editing.³ The architectural drawings in his reports were ludicrously inadequate; in fact, he was not capable of making architectural sections or elevations of buildings. The attempts at architectural drawings that were made by Beglar, Fergusson thought, 'were more like the production of a half-educated schoolboy than anything that would be thought worthy of publication by a full-grown man'.⁴

1. Proceedings of the Sub-Committee, Pub. Serv. Com. etc. op. cit. p.54.

2. James Fergusson, Archaeology in India, London, 1884. f.n. on pp.32-33 and pp.76-78.

3. 'Mr. Beglar visited Katak in 1874-5, but his Report did not appear till 1882, when General Cunningham, apparently at a loss for something to publish to justify his appointment, pulled it out of his drawer, and sent it to press without taking the trouble to spend a few hours in editing it'. Ibid. f.n. p.32.

4. Fergusson here was certainly going too far. Cunningham after all was an engineer and so was Beglar.

Fergusson also expressed surprise that in the fourteen years since 1870 Cunningham never thought it worthwhile to pay a personal visit to Orissa which was more full of objects of antiquarian interest than many other areas. The reason why competent assistants were not appointed in the department was that Cunningham did not like the idea of a possible rival: 'The truth of the matter seems to be that General Cunningham chooses his assistants, not because of their fitness for the work they have to perform, but rather because of their incompetence, in order that they may not forestall the credit he thinks may accrue to him, from the great work he one day hopes to be able to publish on Indian archaeology. He seems to be afraid that some one should appropriate to himself a share of what he thinks belongs to him, and him only. On any other theory, at least, it seems impossible to account for his employment during so many years of so incompetent an assistant as Mr. Carlleyle. During the fourteen years he has been employed on the survey, he has contributed almost literally nothing to our knowledge of archaeology or architectural geography' ¹

Even the archaeological reviewer of The Pioneer thought that the reports were 'feeble, inane and all but useless;' and that the Government had reason to be ashamed of the majority of the volumes.²

1. Archaeology in India, op.cit. p.77.

2. The Pioneer, 12th July, 1895.

'We trust', the Quarterly Review hoped, 'that all future Reports issued by the Archaeological department of the Government of India will be free from the defects which mar the usefulness and impair the authority of Sir Alexander Cunningham's series'.¹

Carlleyle's habit of indulging in fanciful and speculative theories became such a problem that after the re-organisation of the Department after 1885, the new Surveyors had to be forbidden by Government order to indulge in arguments and speculations based on the spelling of names, and similar considerations as to the identity of persons, places, tribes etc.¹²

But it has to be borne in mind that the critics of the Cunningham had no clearer idea of ^{the} methods of contemporary European archaeology than had Cunningham himself, in spite of what Burgess said about the 'scientific departure' that had taken place in Classical archaeology and what Bühler had said about 'scientific excavations' in which the whole of the monuments or the sites to be explored were laid bare. The meaning of their 'scientific archaeology' was vague indeed, in as much as the idea of stratigraphy and the importance of pottery and minor antiquities did not form any part of it.

~~1. The Pioneer, 12th July, 1885.~~

1. Quarterly Review, July 1889.
2. Resolution no.2-87-103, dated 6th June, 1885. Governor-General in Council. Quoted in the Proceedings of the Sub-Committee, Pub. Serv. Com. 1887 op.cit. p.29.

It was only in 1907 that someone in India mentioned the importance of pottery and Petrie in connexion with archaeology. In a remarkable speech delivered at the Wilson College, Bombay, A.M.T. Jackson, I.C.S. quoted the famous statement of Petrie that pottery constituted 'the essential alphabet of archaeology in every land' and regretted that it had not been studied at all in India, while even less attention had been paid to costume, ornaments, tools, weapons and metal vessels and coinages.¹

For all his insistence on meticulous care in observation in Rea's 'Methods of Archaeological Excavation in India',² published as late as 1890, the idea of stratification is absent.

As late as 1899 Waddell in his Pāṭaliputra excavations noticed superimposed layers and was mystified by them. He wrote³: 'As the important ruins of those ancient times are so deeply buried in the dust and rubbish of subsequent centuries, it is necessary to resort to excavation in order to recover their vestiges. This operation reveals the interesting fact, as in digging into the older peat-mosses in Europe, that there is a chronological stratification, where each generation has left its own record. This is especially evident in the fragments of pottery and bricks' He even vaguely referred to

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1. A.M.T. Jackson, Method in the study of Indian Antiquities: Being a lecture delivered at the Wilson College, Bombay, on August 3rd, 1907. p.26.
 2. A. Rea 'Methods of Archaeological Excavation in India', JRAS 1890 pp.183-201.
 3. L.A. Waddell Report on the Excavations at Pataliputra (Paṭna): The PALIBOTHTRA of the Greeks, Calcutta, 1903. p.27.

Schliemann, belated though such a reference was in 1900:

'With the information thus now made available, it is possible to take up the excavation of the more promising sites in detail, For this, however, as with Schliemann's excavations at Troy, it will be necessary to dig very deeply, as the structures lie hidden deep down in the accumulated mud and debris of over twenty-two centuries.'¹

Cunningham's place in Archaeology: What then is Cunningham's place among archaeologists? Like Mariette in Egypt he was the 'father and founder' of the Indian Archaeological Survey. As Schliemann followed Pausanias, so did Cunningham follow Hsüan Tsang and Fa Hsien. Like Rawlinson and Norris, he was a great decipherer of scripts. Like Raoul Rochette of France he was a great numismatist. But the analogies end there, because, as we have seen, none of his many-sided activities evolved into systems of study. Epigraphy had to wait for a Fleet, numismatics for a Rapson and excavations for a Marshall. Yet, when all is said, the fact remains that the quality of what he had done for Indian archaeology is impressive enough, and as regards its sheer quantity there is no equal.

He has been too hastily criticised for his so-called pre-occupation with the Chinese travellers.² Surely some kind

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1. L.A. Waddell, Report on the Excavations at Pataliputra (Patna): The PALIBOTHA of the Greeks, Calcutta, 1903 p.60
 2. For instance H.D. Sankalia, Indian Archaeology Today (Heras Memorial Lecture, 1960), London, 1962 p.3.

of a guide was necessary to start with. It is indeed remarkable how many sites were identified with the help of the Chinese pilgrims.

Perhaps his greatest contribution was the listing of the immense number of sites all over northern India, and particularly in areas hitherto unsuspected of antiquarian potentialities. The most important of these, that at once come to one's mind, were the wild tracts of the Vindhyan India and the areas covered by Malwa.

Cunningham's knowledge of India: He was one of the most travelled officers in India. During his stay of nearly fifty years he travelled incessantly from one end to the other of its northern regions - the south and the west he did not know well. Once he managed to a short visit to Bombay, when he examined the caves of Elephanta and Kanheri.¹ A visit to Amarāvati was once contemplated but never materialised.²

To be sure he had an amazing vitality. In his time travels in Rājasthān, Central India, Chhota Nagpur and the erstwhile N.W. Frontier required daring and stamina. He undertook his last tour of exploration when he was seventyone years old. Had it not been for a severe fall from his elephant, he would have perhaps continued in service even longer.³

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1. Alexander Cunningham, 'The Ancient Geogrpny of India', London, 1871, p.lxxi.
 2. In 1879 the Central Government allotted Rs. 15,000 for the exploration of Amaravati on condition that the work should be directed by Cunningham; but nothing came out of it, as he could not spare time for the work. Sourindranath Roy, 'Indian Archaeology from Jones to Marshall' op.cit. p. 19, n.6.
 3. Obituary on Cunningham JRAS, 1894 p.175.

In his earlier years, as we have seen, he had carried out some of the most adventurous geographical explorations ever to have been undertaken in India. His geographical journeys indeed form a truly romantic episode in his career. His respectable contribution to the geography of the Himalayas has an enduring value and for their significance his explorations deserve to be ranked with those of Moorcroft, Burnes and Trebeck.

In fact, he was himself fully conscious of his extensive geographical experiences which he compared with those of Buchanan-Hamilton, Jacquemont and even Hsüan Tsang. He felt that the writing of his Geography was not undertaken without previous preparation as his travels had been 'very extensive throughout the length and breadth of northern India from Peshawar and Multan near the Indus, to Rangoon and Prome on the Irawadi and from Kashmir and Ladâk to the mouth of the Indus and the banks of the Narbada'.¹

In the course of his innumerable journeyings he came to know India and the Indians intimately - an intimacy that was close enough to give him the knowledge that '... in India the wife's father is generally a bore, and often a nuisance, so that the name of sasur has now become a common term of abuse'.²

1. Geography, op.cit. p.lxxi.

2. Report XVI p.36.

He watched Indian life in all its bewildering variety. He mingled with the crowds at the ritual bathing at Haridwar¹ and saw how a chance fall of a meteorite in Andhāra brought luck to a couple of vagabonds who at once became the attendant priests to the heaven sent Śiva līṅgam, gave it the name of Adbhutanāth, and began to raise a brick temple for it. Cunningham reflected that this incident 'may serve to throw light on the history of several of the līṅgams of Śiva, which are very probably only stones that fell from heaven, like the Diana at Ephesus'.² While encamped there he estimated that the daily collection made by the priests could not be less than Rs.10.

In the heart of Central India, at Murmāri he observed the curious worship of the tomb of an English lady³ and the worship of a Muslim inscription at Bediban.⁴ At Bhera he found that Muslims as well as Hindus flocked to the shrine of Bābā Kāyanāth.⁵

He knew how in the jungles around Sāhet-Māhet the people hunted wild hog on foot with spears and swords, and therefore he was much amused whilst encamped there 'to read in the English newspapers how the Prince of Wales had pursued the wild boar - a sport for which the natives of the country had not sufficient pluck!'⁶ He records a curious practice

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1. Report II pp.235-236.
 2. Report XVI pp.32-34.
 3. Report XVII p.148.
 4. Report XVI pp.25-26.
 5. Report XIV p.40
 6. Report XI pp.93-94.

that he observed in Multan of buying crows and then releasing them as it was believed that souls transmigrated to their bodies.¹ Prof. Codrington has indeed very aptly said that Cunningham 'learnt India by walking it'.²

This knowledge of her people gave him a penetrating insight into her history³ and sociology that others working outside lacked. He gave proof of this insight more than once.⁴

He came still nearer to India as he gradually learnt many of the local dialects, as is evident in his reports from his translations of folk songs, proverbs, ritual spells and the ballads of the Rajput bards.

To this Indian experience was added his knowledge of Burma. This was particularly useful in his understanding of Buddhist archaeology - in interpreting its dead remains in India on the analogy of the living practice that he had earlier observed. Time and again in his reports he referred to his use of Burmese experience in the study of Indian archaeology. Thus the representation of clay seals found at Śrāvastī of

1. Report V. p.136.

2. The Place of Archaeology in Indian Studies. Inaugural lecture. Delivered on October 28th, 1948. Institute of Archaeology, London, 1949, pp.

3. Privately to Rapson he stressed his long experience in India. In refuting Fleet's and V. Smith's theory about Śrī Gupta and Ghaṭotkacha he emphasised: 'I have spent 48 years in India and I say that Gupta cannot by itself be a name'. British Museum Collection of Letters of Cunningham to Rapson. Department of Coins, Collection no.3b. Letter dated 8th October, 1891. Later he published this opinion in CMI, p.9.

4. See next page.

Footnote No.4.

4. This insight helped him develop what Marshall called 'an almost uncanny instinct for arriving at the truth, even when, ... his reasoning was at fault.' (Revealing India's Past, Ed. by Sir John Cumming, London, 1939, p.2). An interesting example of this 'uncanny instinct' was his surmise long before Spooner's discovery, that Shah-ji-Ki Dheri at Peshawar in fact represented the famous Kanishka stūpa. This fact was actually dug out by Vogel, Cunningham's published view being in favour of Gor Kātri in Peshawar city (Report II, p.89). Vogel found this in the Report on the Explorations at Mound Shah-ji-ka-Dheri near Peshawar by a detachment of the Sappers and Miners under the command of the late Lieutenant C.A. Crompton, R.E., dated 30th March 1875 (in Punjab Government Gazette, Supplement, 18th November 1875). At the end of his Report, Lieutenant Crompton remarked:-

"Taking into account the poor and scanty nature of discoveries, I am of opinion (1) that this is not the site of the Stupa of King Kanishka, as supposed by General Cunningham, etc'. Vogel concluded: '... it is gratifying that here again the pioneer of Indian archaeology has shown his remarkable insight in questions of ancient topography'. (Vogel's note to Spooner's account of his discovery of the Kaniska casket in ASIR 1908-09 p.39 f.n.2). Those who are familiar with the troubles of Spooner in establishing the identify first publicly suggested by Foucher ('Notes sur la géographie ancienne du Gandhara' in BEFEO, Tome I, 1901. pp.322 ff.) will realise the acuteness of Cunningham's guess.

In stressing the importance of Masons' marks in 1871 Cunningham had hoped that one day a series of them might be found in such a way that they might throw considerable light on the ancient alphabets. It is interesting to recall the discovery more than ten years later of the series of alphabets in the 'Buddha's Walk' pillars in Bodh-Gaya (See Supra p.120.) as if in confirmation of Cunningham's prophecy.

Instances can be multiplied. We have already taken note of his prophetic remarks about the writings on the Harappa seals. (Supra p.225.)

bells hanging from stupas at once reminded him of still nights at Rangoon when the air used to be filled with the 'very sweet and pleasing' tinkling of bells hung from the umbrellas of the innumerable pagodas of the city.¹

Elsewhere Hsüan Tsang's description of a Buddhist procession reminded him of processions in Burma: 'Hwen Thsang describes these processions as carrying flying streamers and stately parasols, while the mists of perfumes and the showers of flowers darkened the sun and moon! I can easily realize the pomp and glittering show of these ceremonies from the similar scenes which I have witnessed in Barma. I have seen streamers from 100 to 200 feet in length carried in processions, and afterwards suspended from pillars or holy trees. I have beheld hundreds of gorgeous parasols of gold and silver brocade flashing in the sun; and I have witnessed the burning of thousands of candles day after day before the great stupa of Shwe-Dagon at Rangoon, which is devoutly believed to contain eight hairs of Buddha. Before this sacred tower, I have seen flowers and fruits offered by thousands of people, until they formed large heaps around it, while thousands of votaries still came thronging in with their offerings of candles, and gold leaf, and little flags, with plantains and rice, and flowers of all kinds'.² How many archaeologists in India could draw on such vivid experience in the elucidation of their materials?

1. Report XI p.89.

2. Report I. p.232.

Cunningham's varied interests: True to the principles laid down in his 'Memorandum of Instructions',¹ he kept his eyes open during his tours for many other things besides antiquities. His reports abound with interesting references to racial history, customs and traditions. In his first report on Panjab² he devoted a whole section to the question of the racial composition of the people of that province, and this, in spite of its Turanian obsession, still forms most interesting and valuable material.

Following the vogue of the time, he took particular care to collect data on the various tribes and their customs and occasionally published the results in his reports. He made a particular study of the Saurās whom he identified with the ancient Savaras and for whom he postulated a Scythian origin under the influence of ^{the} erroneous racial theories of the time. During successive tours in Bundelkhand, Malwa and Gwalior, at every daily march of 10 or 12 miles he generally succeeded in getting some Saurās to visit his camp; these he measured, and from them he obtained information about their language, past history, customs, religion and approximate numbers.³ His findings formed the subject of a long discourse on these people in the course of which he profusely referred to Dalton.⁴

1. Report III.

2. Report II.

3. Report XVII pp.114 and 137.

4. Report XVII pp.112-139.

He also wrote a long treatise on the widespread practice of the worship of deified ghosts like Guga Chauhān, Harshu Brahman and Hardeur Lala. After much persuasion - as he found the people were very shy about speaking on the subject - he managed to collect a number of the spells or mantras used in this worship. These spells he thought were intimately connected with the Śavaras, since the charms were called 'Śābari mantras'.¹

During his tours he would also collect manuscripts - particularly of Rajput bardic poems - and coins. He had a rich personal collection of bardic manuscripts among which were the works of Mukji, the famous bard of the Khichi Chauhāns.² Also in his collection were works on the early history of Gwalior - including those of Kharg Rai who wrote in the beginning of Shah Jahan's reign and of Badili Das who wrote in A.D. 1796, and also of Hirāman of the time of Aurangzib. He tried to procure other histories of Gwalior but all his 'enquiries during a long residence at Gwalior only added an anonymous list of Rajas, which was a close copy of Hiranman's list,'³ In his diary of his visit to Ladakh he mentioned several farmans and family rolls that he obtained from Kashmir and Kāngrā.⁴

Often/ⁱⁿ his reports he would discuss the economic history and geography and the commercial and industrial life of a place

1. Report XVII, p.v and pp.139-166.

2. Report II p.252.

3. Report II pp.370-371.

4. Also Report V. p.150.

visited, - for instance the crude iron industry of Narwar which was about to be 'driven from all the markets of the Doab by the cheaper and more brittle English iron;¹ or the stone quarries at Biṭhā,² Rupbās,³ Paroli,⁴ Maṇḍanpur⁵ and Kānhiārā.⁶ The gold washing and salt mines at Kalabagh were observed,⁷ as were the gossamer muslins of Candhari⁸ and even the practice of plastic surgery of noses in Kāngrā.⁹ And in the discussion of all this he could draw on his own rich and varied experience as well as on an enormous amount of historical knowledge, from Alexander the Great through the Muslim times down to the British period. One striking example of this was in his exploration of the different parts of Mān Singh's palace at Gwalior with the help of Babar's account. But for Babar's description, he recorded, he would have entirely missed the portions that still adhered of the white stucco covering of the façade. He even found the plantain tree decorations of glazed tiles on the walls, as mentioned by Babar.¹⁰

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1. Report II p.325.
 2. Report X: p.7.
 3. Report XX p.98.
 4. Ibid pp.106-07.
 5. Report XXI p.171
 6. Report V. p. 175.
 7. Report XIV p.26.
 8. Report II p.402
 9. Report V. pp.168-169.
 10. Report II p.349.

Even when tracing the routes of travellers or marches of armies (as for instance Alexander's) he could call to his aid his own experiences of marching and road-laying. Abu Rihan's route from Mirat to Lahore he could pronounce as virtually correct, since he had himself marched over the greater part of it'.¹

Only a man of Cunningham's experience could add a note such as that which follows on the question of identity of the battlefield where the son of Porus had opposed Alexander and where resistance proved ineffective, as his chariots were useless on the wet and slippery clay. This place Cunningham thought was at Mong because the surface here was covered with a hard red clay which became both heavy and slippery after rain. He added: 'I speak from actual observation of the field of Chilianwāla for some days after the battle, when the country had been deluged with rain. Both battles were fought on the same ground, between the town of Mong and the southern end of the Pabhi Hills'.²

He was so respected for his experience that Lord Hardinge himself consulted him twice on the same question in 1846 and in 1847. He agreed with Cunningham that the camp of Alexander was most probably near Jālalpur.³

1. Report XIV pp.67-68.

2. Report II p.184 and f.n. on the same page.

3. Report II p.174.

His experience of road-laying made him realise at once that the old high road from Kasiā to Banaras must have crossed the Ghāgrā somewhere below its junction with the Rapti, since otherwise it would have entailed the passage of the Rapti in addition to that of the Ghāgrā river.¹ His experience of road-laying made him perhaps the first historian in India to turn attention to the question of her ancient routes of trade and communication.

As an engineer he was also interested in the various types of bridges in India. He had himself built bridges and subjected the mediaeval bridges to expert scrutiny notably those over the Sindh river near Gwalior and over the two small streams of the Kaliveh and Dhauli Veh in the Jalandhar Doab, also the one at Nurabad (1661 A.D.) over the Sank river and above all the great Jaunpur bridge (completed 1576 A.D.) Although he admired their workmanship stating that they were 'substantially and honestly built with large stone and excellent mortar' and remarked on the 'careful dovetailing of the long stones' - and although he found the Jaunpur bridge to be 'one of the most picturesque structures in India', he observed that the fault in common with them was that of excessively thick piers, which in every case 'filled half the channel with solid masses of masonry which "the indignant" stream ... resented by working its way round each end of the

1. Report I. p.85.

bridge', almost always proving fatal to its permanent stability.¹

Also during his explorations he always remained watchful for any traces of the religious stratification of the country. Thus he found that 'almost everywhere the worship of Vishnu ... prevailed from the seventh to the tenth century, when it was forcibly supplanted by the more fashionable worship of Siva's lingam'.² Although traces of Brahmanism in the Yusufzai region were abundant on coins 'the only sculptured evidence of the former existence of Brahmanism' was a broken lingam of white marble that he had discovered in the course of his excavations.³ The only trace of Buddhism that he found in Northern Gwalior was the stupa at Rajapur.⁴

Cunningham's religious attitude: In later life we do not find any trace of his earlier enthusiasm for evangelism - presumably due to the fading out of the movement itself. In any case, his enthusiasm for Christianity always remained unobtrusive nor did he ever allow it to cloud his judgement. In disapproving of Maisey's fanciful theories regarding the origin and establishment of Buddhism he suspected that his 'views may have been biassed by the pious wish to prove that Christianity was prior to Buddhism' and of course he did not

1. For all this see Report II pp.325-26, 397 and Report XI p.123.

2. Report IX. p.149.

3. Report V. p.45.

4. Report XXI p.178.

'agree with the author's views on this point'.¹

We can discern in his writings an admiration for the Buddhists.² He was however ~~inspiring~~ inspiring of both the Muhammadan and the Brahman. As between the Buddhist and the Brahman on the one hand and the Buddhist and the Muhammadan on the other he was decidedly on the side of the Buddhist.

The Buddhists were 'tolerant' and 'thrifty'.³

The remains of three embankments thrown across the valleys between Sāñchī and Sañdhāra showed that the Buddhist monks were as famous for practical agricultural, as for philosophical learning.⁴ Buddha was 'the great Indian reformer'⁵ who 'as the champion of religious liberty and social equality, ... attacked the Brāhmans in their weakest and most vulnerable points; in their impious assumption of all mediation between man and his Maker, and in their arrogant claims to hereditary priesthood'⁶ The Brahmans were also 'intolerant' and 'crafty'.

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1. General F. C. Maisey, Sāñchi and its Remains, op.cit. Introduction by Cunningham p.xv.
 2. Perhaps as a kind of pre-Christian Christians?
 3. Report I. p.244 and Report V. p.3.
 4. Alexander Cunningham, The Bhilsa Topes, London, 1854 p.365.
 5. Report II p.285. It is noteworthy that ideas similar to these ~~xxxx~~ can be heard in India at the present day from leftist politicians, and they are very common in Ceylon. Probably Cunningham was partly responsible for originating this erroneous conception of the Buddha as primarily a social reformer.
 6. The Bhilsa Topes p.52.

Hindu historians and bards were rarely to be relied upon as they were prone to inventing 'childish and mendacious absurdities ... in support of their religion'.¹ Indeed the 'sober' accounts of the Muhammadan historians were more useful.

Muhammadans on the other hand were 'rapacious'² and particularly the Indian Muhammadan was 'the most bigoted of all mankind'.³ Firoz Tughlak, although much belauded, was but 'an intolerant bigot, who persecuted his Hindu subjects on account of their religion'.⁴ '... the Koran of Mahomed was addressed wholly to the "passions" of mankind, ... while the Dharma of Sakya Muni was addressed wholly to the "intellect", The former propagated his religion by the merciless edge of the sword; the latter by the persuasive voice of the missionary. The sanguinary career of the Islamite was lighted by the lurid flames of burning cities; the peaceful progress of the Buddhist was illuminated by the cheerful faces of the sick in monastic hospitals, and by the happy smiles of travellers reposing in Dharmasâlas by the road-side. The one was the personification of bodily activity and material enjoyment; the other was the genius of corporeal abstinence, and intellectual contemplation.'⁵

1. Report V. p.172.

2. Ibid p.3.

3. Report I. p.244.

4. Report XX p.133.

5. The Bhilsa Topes, op.cit. pp.53-54.

He was however fair enough to defend even the Muhammadans from criticism which he considered unjustified. He protested against 'the fashion [then] to attribute the ruin of all temples to the iconoclastic Muhammadans'. Although 'the followers of Islam' had 'plenty to answer for in India', '.... it must be remembered that Buddhism had disappeared in Northern India long before the Muhammadan conquest, although it still lingered in Bihar, or Magadha, where it first originated...'

He quoted from Mādhava Ācārya and Kṛiṣṇa Mīśra's Prabodha-Chandrodaya to prove that 'persecution was quite as rampant amongst the Hindu priesthood as amongst the most bigoted of Musalmāns'. He continued: '.... Everywhere, even at the present day, at Delhi, at Agra, and at other places, the Brahmans have succeeded in preventing the Jains from holding processions. This persecution has not proceeded from the bigotry of the Musalmāns, but from the more rampant intolerance of the Brāhmans'¹

As far as can be judged, he was free from European vanity while fully believing in European superiority. He talked respectfully of his Indian colleagues - Rajendra Lala, Bhau Daji and Indraji. If he sometimes criticised them he did so on terms of equality. Nothing even remotely approaching the arrogant attack of Fergusson on Rajendra Lala² ever proceeded

1. For all this Report XX pp.103-105. Incidentally, his Assistants, both Carlleyle and the Eurasian Beglar, used to indulge in their official reports in rather uncontrolled attacks on the Indians. It is fortunate that very few Indians at that time read English!

2. Supra p.63.

from Cunningham although more often than not Rajendra Lala differed from him. As we have seen already it did not involve him into a mental crisis to concede an indigenous origin for coins and writing in India.

Cunningham's relation with his Assistants: From the Son Bhāṇḍār episode¹ it may appear that he tended to be despotic in his dealings with his Assistants. But there are other instances which show that he was not only tolerant of their views that contradicted his own but took ^{great} pains to convince them of their error, - which perhaps could have been done more easily, had he chosen to do so, by the mere exercise of his official authority.

When Beglar ventured to disagree with Cunningham regarding the origin of the Qutb Minar and the Qutb Masjid, instead of suppressing Beglar's views he wrote a long preface in refutation. But this was not all; he took the trouble of visiting the place along with Beglar and pointed out to him the difficulties in upholding his views. Beglar was converted and gratefully acknowledged Cunningham's 'kindness and patience' in pointing out the error.²

While appreciating Cunningham's foresight in launching on a project of publishing a 'corpus' of Indian inscriptions containing mechanical reproductions, Beglar wrote: 'The

1. Supra p.102.

2. Report IV pp.xv and xvii.

abnegation of self in thus laying before us the means of convicting the author, whenever he may go astray, is worthy of all praise,' More significantly he added, (I can the more readily avow my admiration of this conduct from the circumstances that my frequent opposition of his views, in my previous papers, must exonerate me from the charge of being unduly subservient to him, or biased in his favour.'¹

It appears that, inspite of Carlleyle's repeated financial involvements, leading to suspicion of embezzlement, Cunningham^{was} patient with him for a long time and when matters came to a state when he was forced to recommend his early retirement he sympathetically handled the matter and also pleaded for a pension.² On Beglar's retirement Cunningham decreased the pay of the post by two hundred rupees and half of the money thus saved he added to Carlleyle's salary, as he felt that after ten years service he deserved Rs. 500 p.m. as pay.³

Many-sided talent: Painting and verse-making: As we have noticed before Cunningham used to draw most of the illustrations for his reports himself. His paintings for his volume

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1. Report XIII p.115.
 2. Cunningham to the Government of India. No.52 dated Simla, the 20th May, 1885. Home Proceedings 1885. Ind. Off. Vol. No.2519.
 3. Cunningham to the Government of India. Home, Revenue and Agriculture. No.125, dated Simla, 29th September 1880. Home Proceedings, Surveys. 1880, Ind. Off. vol. no.1501.

on Ladakh would do credit to a professional artist.

He inherited from his father a talent for writing poetry and a romantic turn of mind. He adored old trees. Barmasar (at Chamba) 'with its gigantic trees and hoary moss grown temples,' he thought was the finest spot he had ever seen.¹ The solitude and stillness of the scenery around the Yunam lake at the height of 16,000 feet moved him to poetry² and standing in the valley of Satdhāra at Bhilsā he thought: 'the view up the river is one of the most beautiful I have seen in India. Above are the Topes, those mysterious piles which have baffled the great destroyer Time for upwards of two thousand years. Beneath are the clear emerald waters of the Besali; on one side darkly shadowed by the overhanging trees and frowning cliffs; on the other side sparkling bright in the noon-day sun'.³

In his books and reports he often tried his hand at verse-making. He also translated in verse Indian folk-songs

1. Report XIV p.110.

2. During his 1846 trip to Ladakh.

'

 Eternal silence reigneth there
 Upon his snow-girt throne;
 And the unsyllabled dull air
 Sleeps echoless and lone.

etc.

However the desolation around he found rather appalling, '... and social man longs for some cheering sound'.

'Journal of a trip through Kulu and Lahul, to the Chu Mureri Lake, in Ladak, etc' op.cit. pp.216-217.

3. The Bhilsa Topes, op.cit. p.320.

and 'geets'. In 1839 he versified the story of the Latukika Jataka which he heard, curiously enough, from a Musalman in Kashmir. This he printed in his The Stûpa of Bharhut in 1879 (pp.60-61). On the title page of his Mahâbodhi¹ he quoted from the 'Light of Asia' and also added a verse discreetly signed A.C.² He finished his The Bhilsa Topes with a long poem on Buddhism and its past glory.

Its conclusion also was expressed in a vivid imagery: 'Let the imagination wander back for two thousand years, and the mind's eye will behold the Chaityagiri, or Tope range of hills, "glittering with the yellow robes" of the monks. Along the road side, and in sequestered spots, will be seen numerous trees, beneath which half-naked ascetics sit silent and still, brooding upon futurity'³

Credulity: Normally acute and critical, he sometimes showed surprising credulity. It required no small amount of credulousness to suggest the derivation of the name of Bakhra from 'Vak (s. vach) "to speak", from the fact that in the Kûtâgâra Hall Buddha had addressed his disciples for the last time'.⁴ The name of Hatial at Taxila is suggested to be derived

1. op.cit.

2. 'Slowly the Prince advanced, beneath his tread,
At every step th' expectant world shook,
Until he rested 'neath the Bodhi Tree -
At once the trembling universe was still.
Acknowledging the thronement of its lord.'

3. The Bhilsa Topes, op.cit. p.365.

4. Report I p.64.

from 'the Sanskrit Asthyâla ..., pr ... the Hindi Haddiâi, both of which mean the "place of bones".¹ In ascribing this meaning he implied that this was the place where according to Sung-Yun the temple of "Collected Bones" was raised to mark the spot where Buddha made an offering of his body to a starving tiger.

Care of the remains: Although he was among the first to show any concern for preservation of ancient objects and monuments, it was of such a limited kind that it may appear grievously inadequate to our modern ideas.² Conservation and repair, however, did not form part of his official duties, the task being left to the local governments. It was of course not a very desirable arrangement and Cunningham protested against it. He pointed out that 'the trained and experienced archaeologist who has examined and measured and described the buildings of different ages was naturally the best authority as to the style of all the repairs that may be required for any ancient monuments.'³ Under the circumstances he contented himself with sporadic and isolated attempts at partial restoration of a few

1. Report V, p.67.

2. So far as the preservation of antiquities are concerned, India seems to have developed a precocious conscience. Even as far back as the days of Prinsep we hear voices demanding more care for the monuments from the Government. But unfortunately not all were so conscientious as will be seen below.

3. Cunningham's memorandum on the Archaeological Department and the Conservation of monuments. Home, Archaeology, July, 1885, 5-9. Quoted in 'Indian Archaeology from Jones to Marshall 1784-1902', Ancient India, No.9 op.cit., p.17.

edifices, depending on the funds available.

In one such rare instance we learn, that he brought two Mussalman masons from Korā-Jāhānābād to repair one of the broken corners of the Bhitār-Gaon temple.¹ The state of funds forced him to leave the sites uncared for in spite of his knowledge from experience that 'whenever the foundations of a building are uncovered, the people of the country immediately carry away all the stones and bricks, and leave not a trace behind.'²

But he was fully aware of a greater necessity for conservation. Indeed it was his anxiety to save the monuments that caused him to devise the method of stūpa excavation that to him at least appeared to be less injurious than the method followed by his predecessors such as Masson and others. Rather than tear away the whole length of one side, or sometimes even both sides, and thus disfigure and weaken the structure, he preferred to reach the core by tunnelling from the top. To this tunnel usually a low gallery would meet from the side.

The former method appeared to him as 'amateurish' and he was indignant at this methodical destruction of monuments: 'The persons who tried to open the great Sānchi Tope in 1822 made a large breach on the south-west side, and carried the excavation to the foundation, but they failed in reaching the

1. Report XI p.41.

2. Ibid. p.93.

centre of the building. The Tope was thus partly ruined without any discovery having been made to repay its destruction. Lieutenant Maisey and myself determined to proceed in a different manner, by sinking a perpendicular shaft down the middle of the Tope, so as not to injure its external appearance In 1819, when Captain Fell visited Sanchi, this Tope [i.e. no.2 Sanchi] was "in perfect repair, not a stone having fallen;" but in 1822 it was half destroyed by the same amateur antiquaries who ruined the larger Tope.¹

Even during his period of service as an army engineer there are notable instances when he took measures for the preservation of some of the monuments in areas under his charge.

In 1844 he ordered the repair of the great Sās-Bahu Temple in Gwalior so that it would last for several centuries'.² He also repaired the rotten wooden gate of the Alamgiri Paur of the Gwalior fort.³ His anguish was unlimited when he learnt at the end of the Mutiny that the palace of Cheghel-Situn at Jaunpur was to be dismantled 'on the plea that people crossing the Gumti bridge were exposed, to be fired at from the palace.' As soon as he heard 'of this barbarous intention,' as the Chief Engineer of the North Western Provinces he 'telegraphed to stop work at once'. But it was then too late. Two years later he visited the place with Mr. Edmonstone, the Lieutenant-

1. The Bilisa Topes op.cit. pp.269 and 275.

2. Report II p.361.

3. ¹bid. p.333.

Governor, the latter 'turned his back towards the fort with an expression of indignation' in which Cunningham fully shared.¹

This was, however, the great railway-building period in India and the railway contractors proved to be the greatest enemies of ancient monuments. No invader of India had ever so ruthlessly and wantonly destroyed her ancient remains as did the railway contractors in the civilised nineteenth century. The immense loss due to the operations of this agency will never be properly known. The railway contractor was joined by the road-builders and also the ordinary people and the zamindars, who built their houses with the ready-made materials provided by the ruins. In report after report we come across lamentation and indignation expressed by Cunningham and his Assistants at the depredations of these agencies, to cope with which was beyond their means. The department was neither legally authorised nor financially armed to do so.

The ruins at Sultanganj 'furnished brick ballast for many miles of the line'.² Indeed the famous Sultanganj Buddha itself was found as a result of railway excavations.³ The railway contractors also possessed keen eyes for brick ruins and it was they who discovered the site of Bhiṣā.⁴ A striking modern parallel is the discovery of the site of Mainamati in

1. Report XI p.120.

2. Report XV p.24.

3. Rajendra Lala Mitra, 'On the Buddhist Remains of Sultanganj', JASB, 1864, pp.360 ff.

4. Report III p.46.

Comilla (East Pakistan) by the military contractor for the air-field during the Second World War.

The remains at Rajaona had furnished several miles of brick ballast to the railway, yet the supply seemed to be inexhaustible.¹ The site of Masār supplied bricks sufficient to ballast seven miles of railway.² About 100 miles of the Lahore-Multan Railway had been ballasted by bricks supplied by the mounds of Harappa.³ Over 50 statues along with many carved stones from Sārnāth⁴ were thrown by Mr. Davidson into the Barna river to check the cutting away of the bed between the arches of the bridge over it.⁵

But the most shocking of all was the devastation carried out at Tigowa where a whole group of at least thirty-six temples 'had been utterly destroyed by a railway contractor Two hundred carts are said to have been brought to the foot of the hill by this rapacious spoiler, when the removal of the stones was peremptorily stopped by an order from the Deputy Commissioner of Jabalpur, to whom, the people had sent a petition. His name, which is still well remembered, was Walker.' Then indignantly Cunningham added: 'Wherever I go, I hear the sordid rapacity of some of these railway contractors.'

1. Report XV. p.14.

2. Report III p.67.

3. Report V. pp.106-107.

4. which, incidentally, were collected by Cunningham and left on the site.

5. Report I. p.123.

By one of them, named Pratt, the great temple at Bilhari is said to have been despoiled; and by another a fine temple at Tewar was completely removed. To the railway contractor the first temple is only a heap of ready squared stone; and

The temple of Jerusalem,
A ready quarry is to him;
And it is nothing more.' 1

Before the railway contractors, destruction of antiquities was monopolised by the barracks department, which did not hesitate to pull down one half of the palace at Delhi to make way for a regimental barracks.²

Hiss Assistants showed equal zeal in condemning unwarranted and wilful destruction of ancient remains and urged the adoption of some kind of a policy of preservation. Beglar

1. Report IX pp.41-42.

2. James Fergusson, On the Study of Indian Architecture, London 1867. p.23.

C.E.D. Black in his A Memoir on the Indian Surveys, 1875-1890 (London, 1891) in f.n. on p.320 refers to some interesting examples of destruction of antiquities:

'So far back as 1784 Mr. Charles Grant, a resident at Malda, wrote as follows:- "I imagine a number of stones sufficient for the pavement of the New Church, may be collected from the ruins of Gour (Historical and Ecclesiastical Sketches of Bengal. Calcutta, 1831, p.188.) Fergusson in his "Indian Architecture" makes mention of an inscribed Asoka pillar converted by some utilitarian officer into a roller for the station roads at Allahabad. (See page 53). Again, in 1885, a French archaeologist drew attention in the columns of the "Temps" to a gross act of Vandalism, whereby no fewer than 40,000 cubic feet of stone, the ruins of decayed temples and palaces forming the ancient city of Chandravati, the early capital of Gujrat, were carted away by railway contractors. The general subject was brought to the notice of the Government of India, Home Department (June 10, 1886), and a Circular (No.4, P.W. of September 8, 1886) was issued for the better protection of remains from destruction by railway contractors etc. etc.'

took Broadley to task in unequivocal terms for destroying the so-called Temple of Bālāditya. 'In the interest of true archaeology, I venture to enter a strong protest,' he wrote, 'against acts which destroy such interesting ruins without preserving detailed and minute measurements of what is thus destroyed, I trust my feeble voice will have some effect in adding that discretion to the laudable zeal of explorers, without which they risk destroying for ever that which is of solid and enduring interest The excavation of this Temple, ... was not a work which Mr. Broadley should have undertaken without professional assistance' ¹ As we have seen, ² the greatest restoration work of the period - at Bodh-Gaya - was carried out under the direction of Beglar.

But Carlleyle was more eloquent in advocating a policy of preservation. 'It is well known that from Afghanistan to Bihar, or Magadha, numerous stupas have been ruthlessly excavated, ³ and thus irremediably ruined and destroyed, in many of which absolutely nothing has been found! There was once a mania for digging into the bowels of every stupa that was known ... but I hope that this mania has exhausted itself and subsided; and I fervently trust that the aims and energies of the Archaeological survey will not any longer be directed to the injury, ⁴

1. Report VIII pp. 84-85.

2. Supra pp. 119 ff.

3. It is worth recalling how Cunningham in the excavation of the Stūpa of Dhāmek at Sarnāth in 1834 had brought quarrymen for extricating the stones from their iron clamps. ~~Supra p. 119.~~

4. We know how Garrick broke the Rāmpurvā capital in his attempt to photograph it. Supra p. 88. n. 1.

disfigurement and destruction of ancient historical buildings, but to the preservation, and, where practicable, to their repair! ' 1

In his zeal for conservation, Garlleye repaired the Nirvana temple and statue of Kasiā and did not hesitate to meet the expenses out of his own pocket when the funds ran out. 2 He restored the temple with considerable difficulty since the work posed a very serious problem in building the roof without injuring the statue which he had already repaired. This problem so much discouraged his masons that a group of them led by the head mason fled! When the repair of the statue 3 was complete, we learn to our horror, he gave it a coat of paint and 'coloured the face, neck, hands and feet, a yellowish flesh-colour, and ... the drapery white; and ... also gave a black tint to the hair'. 4 He triumphantly observed, 'Thus I really made the statue as good as perfect as ever it was or perhaps even better than it ever was' 5 He was also

1. Report XVIII p.76.

2. Report XXII p.23.

He claims to have spent Rs.1,200 from his own pocket. But considering his reputation in matters involving funds we do not know how much reliance is to be placed in his statement. At the same time however it is to be borne in mind that an official publication - the Report - carried this statement.

3. In which, incidentally, he was helped, as he informs us, by a quantity of Portland cement that he was fortunate enough to obtain through the kindness of Mr. Peart, who was the District Engineer of Gorakhpur!

4. Report XXII p.20.

5. Ibid.

proved that he had himself worked at the restoration of the statue 'like any common mason.' And after this he went to the length of employing men to watch and guard the whole place - again meeting the expenses out of his own pocket.

In the days before the Treasure-Trove Act (1878) private trade in objects flourished; particularly so as the collection of antiques was a favourite hobby of civil and military officers. Forgery of ancient coins became a lucrative business. Cunningham had long since turned his attention to the problem and had warned collectors through articles in the JASB.¹

As the price of coins went up² forgery became rampant. Coins in gold and silver began to turn up which were in fact exact replicas - including their flaws and sometimes with obverses and reverses mixed up - of coins in copper already published in Prinsep's plates. These peculiarities did not escape the keen and trained observation of Cunningham. Raoul Rochette in Paris also had become suspicious about the genuineness of certain coins. Cunningham's examination of all the suspicious pieces led to the startling revelation of the fact that the originals of all of them came from the same plate in the Nov. 1836 issue of the JASB, Pl.46.

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1. 'Notice of some counterfeit Bactrian coins', JASB 1840, pt.I. pp.393 ff.
 2. '... 100 rупees are asked for a tetradrachm of Antimachus and the same sum for a tetradrachm of Euthydemus'. Cf. Cunningham 'Appendix to the notice of Forged Bactrian Coins', JASB, 1840 pt.I. pp.543-544)

The rest of the story is best told in Cunningham's own words: '... I am almost tempted to believe that the forger of these spurious coins is in possession of a copy of that plate; and that all these forged pieces have been imitated from the engravings contained in it. It is scarcely possible that a native of the East, resident in Afghanistan, should have one of these plates in his possession; and as all the information which I have received from Dr. Chapman and from others, tends to prove that a white man is the superintendent forger of many false coins, I have hopes that before long, I shall be able to expose the white gentleman, to the merited contempt of the public'.¹

Later Cunningham claimed to have discovered the forger, about whom he commented: 'The fellow has not much character to lose, but I think an exposure will put others on their guard against purchasing coins from him.'²

The practice was not fully suppressed even at the end of the century. In one of his letters to Rapson dated 17th February, 1892, he mentions the news sent by his son from India - of a police raid amongst the coin-dealers at Rawalpindi. The police 'seized numerous tools, dies and materials for forging ancient coins'.³

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1. 'Notice of some counterfeit Bactrian coins', JASB, 1840, Pt.I pp.393-396 and 'Second Notice of Some forged coins of the Bactrians and Indo-Scythians,' JASB, 1840, pt.II pp. 1217-1230. Quote from p.1226.
 2. JASB, 1840, p.860 Proceedings of November.
 3. Brit. Mus. collection of Cunningham's letters to Rapson. 3b. Department of Coins and Medals.

While in India, Cunningham often bought coins, relic-caskets and other objects from 'the well-known coin-dealers' in Rawalpindi.¹

In his Reports he sometimes described objects which were not obtained in excavations but from dealers. One of his close collaborators in Taxila was Nur, that 'great treasure-seeker' - The Indian counterpart of the Egyptian tomb-robber-who used to roam amidst the ruins of Taxila in search of gold. He would even break up large columns into small pieces 'in the hope of discovering gold inside.'² A gold coin could fetch Rs. 32/- and Cunningham heard that 'a gold bracelet of chain-work' with four beads of rock crystal attached at regular intervals' from Manikyala was sold for Rs. 80/-.³

Moreover, according to the terms of his first appointment, Cunningham himself had shares in all finds.⁴ By this means he amassed a unique and unrivalled collection of coins, seals, stone implements and other objects including smaller statues and relic-caskets,⁵ much of which unfortunately went

1. This 'well-known/coin-dealer' once put into his hands a manuscript detailing minutely how the treasure that was supposed to be in the great mound at Chāsā was to be found! (Report XIV p.25) V. Smith gives his name as 'Chanda Mall' and according to Smith he was sometimes able even to deceive Cunningham himself with forged coins. Cf. V. Smith, Catalogue of the Coins of the Indian Museum Calcutta, Vol. I, Oxford, 1906, p.65.

2. Report XIV p.10.

3. Ibid pp.5 and 6.

4. Canning's Minute. 'It would be premature to determine how the results of Colonel Cunningham's labours should be dealt with; but whilst the Government would of course retain a proprietary right in them for its own purposes, I recommend that the interests of Colonel Cunningham should be considered in the terms upon which they may be furnished to the Public'

5. Of the hundreds of relic-caskets recovered by Cunningham not all are traceable today.

down to the bottom of the sea as a result of the shipwreck. The more valuable articles, however, were saved, since he took them with him on his voyage home.

During his years of retirement in England he carried on a profitable business in coin selling - particularly to the British Museum.¹ Also during this period, as is apparent from his letters to Rapson, his son used to send him further collections of coins from India.

What happened to the objects found in the course of explorations and excavations during his second term of office? An official document gives some idea.

The Government of India asked him in 1882 for a 'Statement showing the present place of deposit of the objects of antiquarian interest brought to light by the Archaeological Survey.'² Cunningham's reply³ shows that most of the objects

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1. Letter to Rapson dated 4th February, 1889: 'I have got a letter from Bodley's Librarian asking about the balance of my coins - But I suspect that the Bodleian authorities have little cash and great expectations of outside liberality! I have sent all my lists to Howorth'.
Ibid. dated 5th December, 1889: 'I shall be glad to get back the duplicate coins, as I propose to have an auction sale in January or February'.
Ibid. dated 18th May, 1892 about one lot of gold coins valued at £120.0.0.
etc. etc.
The last sale was made by his son Allan Cunningham immediately after his father's death. He thanked Rapson in his letter dated 31.12.1893 for 'the very handsome offer' for his father's collection of coins.
Some of the rarest specimens from his Graeco-Bactrian collection (which, incidentally according to Whitehead, represented 'the cream of the entire output of Indo-Greek coins for more than fifty years' Cf. Catalogue of Coins in the Panjab Museum, op.cit. p.177) went to the Bodleian Library: the original

Footnotes cont...

copper Artemidorus obtained in Kashmir (Alexander's Successors p.294) and the first silver Telephus obtained in 1841 (Ibid., p.296.).

2. Letter No. 105 dated 6th July, 1882. Referred to by Cunningham.
3. Cunningham to Government of India. No. 161, Simla, 12th September, 1882. Home Proceedings, Archaeology, 1881-82. Ind. Off. Vol. No. 1681.

were left on the sites. Some were housed in the local museums which were gradually coming into being and many were sent to the Banaras College and the Aligarh Institute. Some of the inscriptions were lost. One was lying in the Alfred Park at Allahabad. The beautiful sculptures from Gārhwā were deposited in the local Fort but were then made over to the Raja of Bara by the Magistrate of Allahabad without any reference to Cunningham. The Sankissa elephant capital was still lying at the site where it was worshipped as Gaṇeśa! Nothing is said in this dossier about the fate of the coins. From his Reports we know that one of the important sculptures, the Heracles and the Nemaean Lion for example, he arranged to send to the Calcutta Museum or to the Asiatic Society Museum.

Asiatic

The neglect of one of the statues sent to the Society Museum brought forth some trenchant remarks from him. This was the statue from Śrāvastī. He found it in the 'midst of a herd of stuffed deer and antelopes' and observed 'perhaps the Naturalists, who then monopolised the direction of the Museum, may have considered this arrangement a highly appropriate compliment to Buddha, who in several previous births had been a "King of the Deer"'.¹

He took considerable pride on the way he saved the Bharhut railings from spoliation by arranging to send them to the Calcutta Museum, a step which curiously enough, appeared to

1. The Stūpa of Bharhut, op.cit. p.vii.

Professor Childers as an act of 'vandalism'. It was as reprehensible as the idea of carting away stonehenge'.¹ If they were to be removed at all, Professor Childers suggested, they should be sent to the India Office rather than to an Indian museum. To this Cunningham retorted: 'In this hope I should most cordially agree were I not afraid that they might be consigned to the still more oblivious vaults of the British Museum, where some 10 years ago I ~~discovered~~ no less than seven Indian inscriptions in the full enjoyment of undisturbed repose, unseen, uncared for, and unknown'.² He eventually sent them to the Calcutta Museum where they are one of the most treasured collections today, and expressed satisfaction that he had 'saved all the more important sculptures. Of those that were left ~~behind~~ every stone that was removable [had] since been "carted away by the people' He added that Rajendra Lala also, when he heard of the Bhārhut discoveries, had addressed the Government of India, suggesting that the sculptures should be removed to a place of safety to prevent the people from carrying them off.³

The debt of Indian archaeology to Cunningham: Even a casual reading of the Corpus of the Inscriptions of India convinces us of our great debt to Cunningham, as they show what a large number of these inscriptions were discovered and collected by him.⁴

1. Academy, 28th November 1874. Quoted by Cunningham in The Stûpa of Bharhut, p.vii.
2. Ibid. p.vii.
3. Ibid.
4. Particularly Gupta and Rajput. See Supra p.222.n.2.

These inscriptions when deciphered - many of them by Cunningham himself - helped to illumine many a dark corner of Indian history.

The same is true about coins. He was one of the greatest collectors of all times and many new types and varieties were for the first time discovered by him. Whitehead had aptly said: 'During the sixty years covered by his activities, Cunningham, ... was an unremitting collector of Indo-Greek coins, and spared neither trouble nor expense in their acquisition. The result is to be seen in the truly superb Cabinet of Indo-Greek medals in the British Museum,'¹ He provided us with the first chronological frame-work for the whole series of ancient Indian coins in his prolific numismatic papers in the JASB and the Numismatic Chronicle. Regarding his series of papers on Alexander's Successors in the East Whitehead commented in 1914 that these essays were until then 'the only full accounts' of the Indo-Greek series of coins, and were remarkable testimony to the knowledge and ingenuity of their author.²

Cunningham's fame is also thought to rest on his identifications of the ancient Indian sites and his elucidation of the geography of ancient India, which had baffled all the ingenuity that Jones and Wilford could master.

1. R.B. Whitehead, Catalogue of coins in the Panjab Museum, op.cit. p.4.

2. Ibid.

It has however to be remembered that attempts to elucidated this geography were going on with reasonable success much before he wrote his Geography in 1870.¹ We have already taken note of the magnificent efforts of Lassen, Wilson and V. St. Martin. After these attempts there was indeed very little to be done except in one important respect. What was needed now was for someone to undertake arduous travels to visit all these places to search for confirmatory evidence. Cunningham performed precisely this useful task. However, to say that it was Cunningham who proposed the identification of the most important cities of ancient India - as is done without questioning in standard publications - is historically wrong. Cunningham has to share the credit with Wilson, St. Martin and even Kittoe. For, a hitherto unnoticed paper in the JASB² shows that Kittoe, in fact, had already proposed the identification of Barḡāon with Nālandā. His earlier view that the ruins of Bihar represented the site of Nālandā received greater acceptance.

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1. The greater part of this Geography, is formed of already published materials in his Reports - often repeated verbatim. It may be mentioned incidentally that he wrote the book because he believed that 'the peculiar opportunity of local investigation' which he had enjoyed during a long career in India, would enable him to determine 'with absolute certainty the sites of many of the most important places in India.' (Geography, p.lxiii) He dedicated the book to his friend Major General Sir H.C. Rawlinson who, according to his dedication, had 'himself done so much to throw light on the Ancient Geography of Asia'.
 2. 'Extract of a letter from Capt. Kittoe', JASB 1848. p.539 The ruins of Barḡāon were so immense, that Dr. Buchanan was convinced that it must have been the usual residence of the King; and he was informed by a Jain priest at Bihar that it was the residence of Raja Srenika and his ancestors. (Geography, 1924 edition. pp.536-537) The identification was accepted by St. Martin/p.382.

Although the translators of Fa Hsien had roughly indicated the positions of the Gangetic sites tolerably correctly, they were completely off the track regarding the sites in Panjab because of their belief that Fa Hsien had entered India via the great desert and then reached Mathurā. This only underlines the chaos that prevailed in the field even as late as 1836.

Wilson made his own calculations on the basis of the translation now provided and obtained - as was proved later - remarkable results. At the very outset he corrected the mistake of the translators of Fa Hsien and rightly upheld the view that in entering India the pilgrim had followed the traditional high road to Lahore. The map that he provided with his articles¹ is remarkable, since it is perhaps the first map depicting the geographical locations of ancient India reasonably correctly.

Wilson placed Kapilāvastu 'north of Gorakhpur, near where the branches of the Rapti issue from the hills'.² Sravasti he predicted would be found 'in the neighbourhood of Fyzabad, or Oude'³ Its actual emplacement by Cunningham at Sāhet-Māhet and his locating of the Jetavana were indeed brilliant feats of archaeological exploration. Although Csoma from his reading of the Tibetan text Kah Ghyour had placed Kuśinagara in Kāmarupa in Assam,⁴ Klaproth in his note in the Foë Kouë Ki

1. JRAS, 1839 op.cit. pp.108-140.

2. Ibid, p.123.

3. Ibid.

4. Dictionary of the Tibetan Language, Calcutta, 1834, p.258 and JASB, 1832 p.5.

questioned its validity.¹ Wilson very brilliantly identified it eventually with Kasiā,² about the existence of the ruins of which place he came to know from the article by Liston.³ St. Martin later accepted this identification.⁴

The position of Vaiśālī was roughly indicated by Klaproth⁵ but its actual location was again brilliantly pinpointed by Wilson as being in Bassār⁶, about which he came to know from Stephenson's article.⁷ Thus Cunningham wrongly stated⁸ that it was St. Martin who identified Bassār with Vaiśālī. St. Martin⁹ was only following Wilson.¹⁰

1. Foë Kouë Ki, op.cit. p.236 note 4.

2. JRAS, 1839. p.126.

3. Supra p.33.

4. Mémoires sur les Contrées Occidentales etc. op.cit. p.359.

Cunningham never mentions in his Reports about Wilson's suggestion regarding this identification. He, however, points out in his Geography (1870) that it was Wilson who first suggested this identification (p.493).

5. Foë Kouë Ki, op.cit. p.250 note 2.

6. JRAS, 1839, op.cit. pp.128-129.

7. Supra p.33.

8. Report I pp.58-59.

9. Mémoires etc. op.cit. pp.363-364.

10. That Cunningham had already in 1854 accepted Wilson's identifications is however evident from his f.n. on p.29 of The Bhilsa Topes (1854) where he stated that Vaiśālī existed at Bassār, Kusinārā at Kasiā and Kapilāvastu somewhere between Ayodhyā and Gorakhpur. Even in 1848 in his Verification of the Itinerary of Hwan Thsang (JASB Pt.II 1848 pp. 13-60) he mentioned the above identifications. His other identifications in that paper are amusing:-

Pushkalāvati	=	Hāshtnagar
Taxila	=	Manikyala
Kauśāmbī	=	Karrā
Śrāvastī	=	celebrated city of Ayodhyā
Kapilāvastu	=	Jaunpur

Puruṣapura was identified with Peshawar by St. Martin.¹ The credit for casting doubt on the identification of Pushkalāvati with Peshawar, goes to Court.² St. Martin left the question of the identity of Pushkalāvati vague and Wilson later (Ariana Antiqua) roughly pointed out the region where it was to be found.

But the most important identification in this region was of course that of Taxila, which for many years was wrongly supposed to be identical with Manikyala.³ Its correct identification was entirely due to St. Martin who however was in a position to call to his aid the increased topographical and cartographical knowledge of the region due to the explorations and travels of Mohan Lal, Gerard and Burnes, and due to the valuable map prepared by Walker on the basis of Cunningham's and others' surveys and included in Cunningham's Ladak.⁴

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1. 'Mémoires etc. op.cit. pp.306-07.
 2. M. Court, 'Conjectures on the march of Alexander', JASB, p.394.
 3. Cunningham himself declared in 1854: 'I take this opportunity of again stating my firm conviction that Manikyala is the ancient Taxila. I do this because it has been stated in this Journal on several occasions, that I consider Trakpari to be the true site of Taxila' and in the note he added: '.... In 1839 my brother first informed me of the village Takhala, and in 1848 I saw the village myself I again repeat my belief that this village preserves the name of the ancient Takkasila' 'Coins of Indian Buddhist Satraps etc'. op.cit. JASB 1854, p.693. Also p.702.
 4. For Hsüan Tsang's journey from Pushkalāvati onwards St. Martin depended very much on this map. In praise of it he wrote (Mémoires Tome II p.255): 'Pour la région nord-ouest de l'Hi-mâlaya, depuis le Hindou-Kôh jusqu' au Gange supérieur, la grande carte du Pendjâb jointe à la récente publication de M. Alexander Cunningham, intitulée Ladak (London, 1854). C'est la première carte satisfaisante du Pendjab et du Kachmîr qui ait encore été publiée. M. Walker, qui l'a rédigée, ya rapporté toutes les reconnaissances faites par MM. Cunningham, Thomson et Henry Strachey dans l'expédition de 1847, pour la délimitation de la frontière indo-tibétaine etc'.

The position indicated by St. Martin was a place near Usman-Katar at 7 or 8 miles to the E. or S.E.^{of} Hasan Abdāl.¹ The actual site that Cunningham found at Shah Dheri was 10 miles to the south-east of Hasan Abdāl.

The places which had retained their ancient names like Ahichhatrā and Kauśāmbī, Cunningham found in due course during his journeys of exploration. Ahichhatrā, however, had been found before him by Captain Hodgson, the Surveyor, as Cunningham himself points out in his Geography.² The existence of Kauśāmbī in any case had been communicated to him by Mr. E.C. Bayley.³ Sankissa, as we have seen, he had discovered already. But here again Rémusat⁴ had already pointed out that it was in the locality of Farrukhabad. Wilson had accepted this.⁵ However the identification of Mahāsthāna with Puṇḍranagara was entirely Cunningham's own.⁶

It is also wrong to postulate a Cunningham period in Indian archaeology. It is the peculiar preponderance of Northern India in Indian historical researches that gives Cunningham perhaps a disproportionate importance. He never concerned himself with the tremendously vast field of the epigraphy, numismatics, architecture and sculpture of the South, where so much

1. Memoires etc. op.cit. pp. 19-20.

2. P.415 1924 edition.

3. Supra p.138.

4. Foë Kouë Ki etc. op.cit. p.128 note 1.

5. JRAS, 1839 op.cit. p.121. He had been more precise by placing it 'about Mainpuri'.

6. Supra p.167.

fruitful work was being done by Fleet, Hultzsch, Kielhorn, Rea, Rice and Sewell. Also contemporarily with him great work was being done in the South, particularly in Western India, by his fellow Dumfriesshire man - Dr. James Burgess, the mathematics teacher turned archaeologist. From 1873 he was put in charge of the Survey of Western India to which was added the South in 1881, and a few years after Cunningham's retirement he became the Director-General. Burgess retired in 1889. During a span of twenty years he produced as many royal quarto monographs on the antiquities of the West and the South.

Although Burgess was not an excavator - he did very few excavations - and his understanding of and insight into Indian history and archaeology were not as acute as Cunningham's, his methods in architecture and epigraphy were perhaps sounder than Cunningham's. If Cunningham had genius, Burgess had method. His reports were much better produced and much more systematic than those of Cunningham. Particularly, the volumes in the New Imperial Series started by Burgess, are models of their kind. He was the first archaeologist in India to make extensive use of the recently developed art of photography in his reporting. He realised the importance of specialised knowledge and scholarly co-operation and depended for his epigraphy and numismatics on experts. He had vision and imagination enough to have played such a vital part in the development of Indian archaeology and history; the Indian Antiquary and

the Epigraphia Indica, - journals that enabled a brilliant band of men, particularly in the field of epigraphy, to play their proper role - men like Bühler, Fleet, Hultzsch and Kielhorn, who by their researches changed the whole aspect of Indian archaeology and history.

Cunningham's true place in Indian archaeology had been accurately summed up long ago by Vogel. When speaking about Chāmbā, he wrote: 'Here, as elsewhere, the great pioneer of Indian archaeology only demarcated the field, leaving to others its further exploration'.¹ (The italics are mine). He was indeed a pioneer and that is his greatest claim to recognition by posterity.

1. Antiquities of Chamba State. op.cit. p.1.

APPENDIX AEarly Theories on the Nature of the Stūpa.

Controversy regarding the exact purpose of the stūpa had been raging for a good many years. Wilford's Pandits, when told about the Egyptian pyramids, would not believe that they were intended as repositories of the dead, - they were of course temples as the Indian pyramids (i.e. stūpas), they were sure, were. (Wilford, 'On Egypt and the Nile from the Ancient Books of the Hindus', Asiatick Researches, III. (1792). pp.438-439) It was also thought that they were perhaps memorials to Satis - this was the explanation given by the local people to Jonathan Duncan after the discovery of the relic-casket from Jagat Singh's stūpa at Sarnath. But Duncan was on the right track when he differed with this view and thought that 'the bones found in these urns must belong to one of the worshippers of Buddha, a set of Indian heretics ... a surmise that seems strongly corroborated by the circumstance of a statue or idol of Buddha, having been found in the same place under ground ...' (Jonathan Duncan, 'An Account of the Discovery of Two Urns in the Vicinity of Benares', Asiatick Researches V (1798) pp.131-132). In 1799 however Buchanan pointed out that they 'pyramids' in Burma were 'supposed to contain ... relics; such as a tooth, a bone, a hair, or a garment' ('On the Religion and Literature of the Burmas', Asiatick Researches VI (1799) p.293)

But it appears that not much notice was taken of the statement.

Bu 1834 two opinions were contending for acceptance, - one, held by Court and others, tended to the view that they were sepulchres of ancient Indian kings, and the other, held by people who had sounder ideas about things Indian and Buddhist, like Hodgson and Wilson, was that they were in fact 'Déhgopes or Bauddha, containing relics of, or offerings to Buddha'. Prinsep directed his attention to the question and tried to effect a compromise by postulating that they were tombs of Kings who were Buddhists by religion, - not merely shrines for the deposits of some holy relic. He called to his aid the expert testimony of Csoma de Körös who, on the authority of his Tibetan knowledge, pronounced them as 'Mausolea of the dead' (James Prinsep, 'Remarks on the nature and origin of the Topes of Manikyala', JASB, 1834. pp.569 ff.). Prinsep also found much similarity between these stupas and what we now know to be the Megalithic tombs of the South. (He quoted J. Babington's description of Pandu Kulis and Topi Kulis.)

The **natural** analogy between the English barrows and the Indian Stupas, which always worked at the back of Cunningham's mind as we have seen before, also struck Prinsep. He said, ' While our enterprising friends have been engaged in opening the ancient topes of Upper India, the antiquaries of England have been at work at some ancient Roman tumuli or barrows in Essex. ... it is impossible to read the pages of the

Archaeologia (1834, Vol. XXV) without being struck with the similarity of customs prevailing in such distant localities,' (Ibid, p.572). He also pointed out the similarity of the finds from the respective places including 'the brown liquid itself! ' (Incidentally it may be pointed out that the mysterious brown liquid obtained by Ventura from the Manikyala Stupa was chemically analysed by Prinsep. This was the first scientific analysis of antiquity in India.).

APPENDIX BDates of Publication of Cunningham's Reports.

Report No.	Touring Season	Date of Publication.
III (Cunningham)	1871-72	1873
IV (Beglar & Cunningham)	1871-72	1874
V (Cunningham)	1872-73	1875
VI (Carlleyle)	1871-72-73	1878
VII (Beglar)	1871-72, 73-74	1878
VIII (Beglar)	1872-73	1878
IX (Cunningham)	1873-74-75	1879
X (Cunningham)	1874-75, 76-77	1880
XI (Cunningham)	1875-76, 77-78	1880
XII (Carlleyle)	1874-75-76	1879
XIII (Beglar)	1874-75-76	1882
XIV (Cunningham)	1878-79	1882
XV (Cunningham)	1879-80	1882
XVI (Cunningham & Garrick)	1880-81	1883
XVII (Cunningham)	1881-82	1884
XVIII (Carlleyle)	1875-76-77	1883
XIX (Garrick)	1881-82	1885
XX (Cunningham)	1882-83	1885
XXI (Cunningham)	1883-84-85	1885
XXII (Carlleyle)	1877-78-79-80	1885
XXIII (Garrick)	1883-84	1887

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