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# MEMOIRS OF THE ARCHÆOLOGICAL SURVEY OF INDIA

No. 7. EXCAVATIONS AT TAXILA The Stupas and Monasteries at Jaulian

BY

SIR JOHN MARSHALL, Kt., C.I.E., M.A., LITT.D. F.S.A., HON. A.R.I.B.A., Director-General of Archæology in India.



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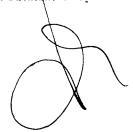
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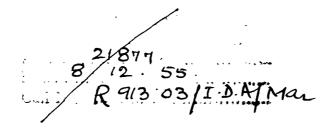
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## EXCAVATIONS AT TAXILA.

## THE STŪPAS AND MONASTERY AT JAULIĀÑ.

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In the accounts of my explorations at Taxila, hitherto published in my Annual Reports, it has been my practice to describe the results achieved season by season on each and every one of the sites where digging has been in progress. This method of publication has been appropriate enough for an Annual Report designed primarily to keep Government en rapport with our latest discoveries, but it has the inherent defect of scattering over several volumes the materials belonging to a single group of monuments, and of thus involving the repetition of plans and other illustrations and of causing unnecessary trouble to the reader. Accordingly, now that it has been decided to issue detached memoirs in place of Part II of my Annual Report, I propose henceforth to follow the more convenient plan of devoting one memoir to each group of buildings and of publishing it as soon as the work of excavation is complete. In the present memoir—the first, I hope, of many relating to Taxila—I shall deal in detail with the important group of Buddhist remains near the village of Jauliāñ which I have already briefly described in my Guide to Taxila.

The exploration of this site was started in the autumn of 1916 and completed in the spring of 1918, the conservation of the monuments exposed being carried out pari passu, as far as that was practicable, with the digging. The operations have been conducted under my own personal direction and under the immediate supervision of Mr. Natesa Aiyar, my former pupil and Excavation Assistant and now Officiating Superintendent in the Frontier Circle, who has brought to bear upon them all the skill and efficiency that habitually distinguish his work. To him I am indebted not only for the sedulous care that he has given to the difficult and delicate task of excavating these fragile monuments from the soil and of conserving them when excavated, but for the methodical accuracy with which he has maintained the record of his work.

The lists of finds at the end of this Memoir as well as the readings of the inscriptions on pp. 9-10 are the outcome of our joint labours, having in the first instance been compiled by Mr. Natesa and subsequently revised by myself. To M. A. Foucher, the well-known authority on Buddhist art and iconography, my grateful acknowledgments are due for the valuable dissertation he has contributed (pp. 22-39 infra) on the decoration of the stuccoed stupas; to Mr. R. B. Whitehead, I.C.S., for having examined the coins and checked the list of those which are decipherable; and to Professor Ramaprasad Chanda, for having made a minute study of the half-burnt manuscript of birch-bark found in the monastery.

Situation, etc.

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The hill on which stand the remains I am about to describe is about 300 feet high and situated somewhat less than a mile North-East of Mohrā Morādu and about half that distance from the village of Jauliañ. It belongs to the spur which ends towards the west in the hill of Hathiāl and, like all the hills in this neighbourhood, is composed mainly of a hard limestone rock, in the cleft and jagged slopes of which grow the wild olive, phulai and sonattha shrubs. A little to the north is a somewhat lower ridge, and beyond this the broad valley of the Haro, the stony bed of which shows as a grey streak in the distance. On the other three sides are higher eminences forming an integral part of the main spur, with here and there, on their summits or in the depressions between, the buried remains of other Buddhist settlements. To the south, this girdle of hills is broken by a narrow ravine, through which a rough track leads to the village of Khurram and the Dharmarājikā Stūpa; westward, another and an easier path, made for the convenience of sight-seers, leads up the valley to the stupa of Mohra Moradu; while a third, in a north-westerly direction. takes us across the open country to Nikra and, half a mile further on, to the ruined city of Sirsukh. We shall see later, when we come to discuss the date of the Jaulian monuments, that they were, in all probability, founded in the Kushān period, about the beginning of the 3rd century A.D., and that their destruction dates from some two and a half centuries later. During this period the capital of Taxila was in Sirsukh; for by that time (the Kushān epoch) the earlier cities of Sirkap and the Bhīr Mound had been entirely abandoned. Indeed, it is probable that most of the monasteries and stūpas in the vicinity of Jaulian, Mohra Moradu and Badalpur were established after the capital had been transferred to Sirsukh; while the Dharmarājikā Stūpa and many of the other Buddhist settlements further to the west are contemporary with the city of Sirkap. Be this, however, as it may, there is no doubt that the excavated remains at Jaulian, as well as those at Mohra Moradu, synchronise with those in the city of Sirsukh, and we can well understand how attractive such a site must have been for the members of the Buddhist sangha eager to enjoy the advantages of this dominating position on the hill top with its wide expanse of view, its calm seclusion, and, last but not least, its cool and dustless air, but no less eager perhaps to keep closely in touch with their devotees in the great city, where their daily alms would be begged. One drawback only would there be to the situation, namely, the difficulty of carrying up their water supply;

but this is a difficulty which never seems to have deterred either Buddhists or Jains from establishing themselves in remote and sometimes almost inaccessible places. Doubtless, they required no great quantity of water for their needs, and possibly they could count on their devotees giving them help when they made their pilgrimages to the hill-top. There were novices, too, in the monastery, and possibly slaves as well, one of whose functions would naturally be the fetching of water. In any case, the difficulty in ancient days was not as great as now; for at the southern foot of the hill there were until a generation ago the ruins of several old wells, no doubt contemporary with the monastery, which have now been closed in and ploughed over by the cultivators.

The monuments now brought to light on the hill-top are neither extensive nor novel in character, but they derive an exceptional interest from their remarkable state of preservation, many of them having apparently been but lately erected and the rest but lately repaired and redecorated when they were overtaken by the catastrophe which resulted in their burial. Their plan will be clear from Plate I. They comprise a monastery of moderate dimensions, and by its side two stūpa courts on different levels—the upper to the south, the lower to the north—with a third and smaller court adjoining them on the west. The Main Stūpa stands in the upper court, with a number of smaller stūpas closely arrayed on its four sides and with lines of chapels for cult images ranged against the four walls of the court and facing, as usual, towards the stūpa. Other stūpas and chapels similarly disposed stand in the lower and smaller court. The monastery, which is designed on the same lines as the one at Mohṛā Morādu, contains an open quadrangle surrounded by cells, besides an ordination hall, refectory and other chambers.

Access to this complex of buildings was provided by three entrances: one near the north-west corner of the lower court, a second at the south-east corner of the upper court, and a third on the eastern side of the monastery. At each of these approaches one or more flights of narrow steps led up the steep incline, but of these flights only five of the original steps have survived at the north-west corner, twelve at the south-east and five on the east. They are constructed of solid limestone blocks, like the steps leading to the second floor of the monastery. The north-west entrance was subsequently closed up by a wall of somewhat poor construction, the space thus enclosed being converted into a chapel. For the convenience of visitors it has now been opened out again, and serves as the usual entrance for those coming from the Nikra side.

In the construction of the buildings two chief varieties of masonry are readily distinguishable. One of these is a large coarse diaper of a kind not infrequently employed in foundations and characterised by the use of relatively large stones to fill the interstices between the bigger boulders. This masonry is found in all the older parts of the walls of the monastery and in the lower courses of the wall immediately to the east of Stūpas D<sup>6</sup>. The other variety is the familiar semi-ashlar work which I have already had occasion to describe in connexion with the buildings at the Dharmarājikā and Kunāla stūpas, at Mohṛā Morādu, Lālchak and other sites. Here, at Jauliāñ, it is used throughout

Plan of Monuments.



Entrances.

Masonry.

the chapel and smaller stupas and in the later repairs and additions to the monastery, as it is used also at Mohrā Morādu. In both varieties the hard local limestone quarried on the hill of Jaulian itself, was used for the larger blocks as well as for the infilling of smaller chips; and in both varieties the core of the wall was composed of loose rubble. Mud served as a binding material in place of lime mortar which had not then come into fashion, and the surfaces of the walls were protected by a coating of plaster made either of mud or of lime and river gravel (bajrī), the latter being reserved as a rule for the exposed outer faces of the structures, and the former for the inside of rooms or verandahs, and especially for the dwelling chambers of the monks. In the semi-ashlar work of the stūpas, kañjūr stone, let in between the limestone blocks, is used for the mouldings and pilasters, and in some of these monuments, where the decoration is more than ordinarily elaborate, kanjūr alone is used for the facing. In many parts of the buildings the foundations of the walls rest on the natural rock. In room No. 16 of the monastery, for example, they descend to a depth of 7 feet below the floor level, of which the first 2 feet 6 inches is dressed stone and the rest rubble masonry.

Of the age of the semi-ashlar masonry there is now virtually no doubt. On other sites at Taxila it was in use, as I have previously demonstrated, from the 3rd until the 5th century A.D., if not longer, and at Jauliāñ there is conclusive evidence, as we shall presently see, to show that some of the semi-ashlar structures here are assignable to the 5th century, though others may be older. The older kinds of this semi-ashlar work are, as a general rule, distinguishable by the thinness of their ashlar courses and by the relative smallness of the stones in the interspaces between the boulders, which approximate to those found in the preceding diaper work.

The age of the coarse diaper masonry, on the other hand, is less easy to determine. I shall refer to it again when I come to describe the monastery. Meanwhile, let it suffice to say that there are good reasons for assigning it to the transition period between the large diaper and semi-ashlar—that is, to about the beginning of the 3rd century of our era.

Besides these two main varieties of masonry, there is a third and later kind, which is found only in two short pieces of walling in front of the chapel B<sup>27</sup> on the north side of the upper court. It is somewhat similar to small diaper work of a rough type, and may have been built in conscious imitation of it, but it is not constructed with anything like the skill exhibited in some of the buildings at the Dharmarājikā stūpa.

In the upper stūpa court the floor was of concrete (bajri and lime) covered with lime plaster, three successive coats of which indicate that the floor had thrice undergone repairs. A few traces of the ancient plaster may still be seen on the stairway of the Main Stūpa. What remained of it on the floor of the court, was in too fragile a state to be preserved, and has had to undergo repair. The steps, also, leading from the lower to the upper court, though constructed of dressed limestone blocks, seem to have been plastered in the same manner and painted red, but whether similar paint was applied over the whole surface of the courts, is uncertain.

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Floors.

In the lower stupa court the floor was paved with rough limestone blocks and brought to an even surface by a coating of lime plaster. For purposes of drainage both the upper and lower courts have had to be slightly regraded, and modern drains constructed in front of the chapels.

In the monastery area, the open quadrangle and the outside edge of the surrounding plinth to a width of some six feet had a rough pavement of limestone; the floors of the rest of the plinth and of the cells were of mud and small gravel (bajrī) well rammed, and the floor of the image chapel was of the same materials but coated with lime plaster.

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Roofs

Modern roofs have been put over the stūpas and some of the chapels in order to protect the sculptures, but in old days the stūpa courts were open to the sky and the only roofs were those over the chapels and cells. In both places they appear to have been of timber secured by iron bolts and covered with a thick layer of mud. Masses of this mud covering, burnt to terracotta by the fire which consumed the buildings, were found on the floors of the monastery and chapels, and mingled with them were many of the iron bolts and nails belonging to the roof. (Cf. List of Iron Objects.)

#### THE MAIN STUPA.

With this brief description of their plan and of the methods and materials used in their construction, we may now turn to consider these buildings in greater detail: and for this purpose we shall start with the Main Stūpa, then proceed to the smaller stūpas, afterwards discuss the image chapels and smaller objects found in the three courts, and end up with the monastery and its antiquities.

Though of much smaller dimensions, the Main Stupa at Jaulian must have been very similar in appearance to that at Mohra Morādu, consisting like it of an oblong plinth approached from one end by a flight of steps and surmounted by a cylindrical drum and dome, the whole embellished with plaster reliefs and crowned by the indispensable umbrellas, which symbolise the world sovereignty of the Buddha. Much of the superstructure—including the dome and all but the lowest course of the drum--has now disappeared, but the lofty plinth is still standing almost to its full height and some portions of its stucco decoration have been preserved. The core of the structure is of rubble and its facing of a very early variety of semi-ashlar limestone masonry with kanjūr blocks let in for mouldings and pilasters. The details of these and other decorative features will be clear to the reader from the drawings on Plate I and from the photographs on Plates II. III and Va. The horizontal mouldings at the base are of the usual torus and scotia pattern, but it is worthy of remark that the lowest torus both in the continuous base which runs round the whole structure and in the bases of the individual pilasters is finished off in bevelled facets, while the other mouldings are rounded. The character of the figural decoration on the south, east and west sides of the plinth is illustrated in Plate IIIa and IV. It consists of a seated colossal Buddha in the dhyānamudrā occupying the bay between each pair of pilasters, and of smaller Buddhas in

Design and Construction.

Figural decoration on south, east and west sides.

a like posture seated one above the other on the face of the pilasters. of these figures, large and small, are of a relatively late date (circa 5th century A.D.) and demonstrably more modern than the body of the stūpa. This difference between the age of the relievos and the body of the monument is evident from the clumsy fashion in which the larger figures have been applied to the face of the walls by filling the hollows between the horizontal basemouldings with small stones and mud, building up a base of the required size (generally of the same materials) and finishing off with a coat of coarse lime plaster. Notwithstanding the late age, however, at which they were produced, they are not without some dignity and charm. The bodies of the larger figures, it is true, are rude and cumbersome, coarsely fashioned on a core which is mainly composed of  $ka\tilde{n}j\bar{u}r$  blocks and mud with a not very thick covering of lime plaster, but the colossal heads, of which seven more or less intact and others broken were found reposing on the floor, were of excellent stucco finished with slip and paint and modelled with both skill and feeling (Plates IV and Xa and b). A feature worthy of notice in these heads is the shape of their noses, some of which (e.g., Plate IVa and b) have prolonged tips and almost aquiline bridges, while others adhere more closely to the true Greek type, as illustrated, for example, in Plate XXIVa. Now, it is commonly supposed that the older such heads are, the more nearly do they approximate to the classical, and doubtless this supposition is true of the majority of Buddhist statues in the North-West; but in these particular cases there is good reason to believe that they belong to one and the same period, and that such differences as are visible are due to the idiosyncrasies of their sculptors rather than to any marked disparity in their ages.

Figural decoration on north side.

On the north side of the stūpa, to the west of the ascending stairs, are two Buddhas in a standing posture with the remains of smaller seated figures in front of their pedestals (Plate Va). One of these standing Buddhas (to the east) may be of earlier date than the other, and earlier also than the seated Buddhas described above. What remains of the drapery of this figure, particularly the lower edge of the under garment (antaravāsaka) is well and skilfully modelled. In the other figure, the drapery is strikingly schematic and wooden and distinguished by a conventional treatment of the folds falling from the right arm, which in this position are meaningless. In one of the corresponding bays on the eastern side of the stair is a seated Buddha with a round hole at the navel, and, on the pedestal below, an ex-voto inscription in Kharoshṭhī characters (Pl. XIa):—

#### Dhammanadisa Buddhamitra.

"(The gift) of Buddhamitra, who delighted in the Law."

The hole at the navel was probably intended for a suppliant to place his finger in when offering up prayers for recovery from certain bodily ailments; for a similar custom still obtains in Burma. To the sides and at the end of the stair are the remains of several seated Buddhas of varying sizes, but devoid of any special interest.

#### SUBSIDIARY STŪPAS.

Of the small subsidiary stupas there are 21 set in close array in the upper court, five in the lower, and one in the western court. In their essential features they are, as might be expected, diminutive copies of the larger edifice, but they differ from it in the decoration and shape of their plinths, which were square in plan instead of oblong (since standing space was not required in front of the drum) and usually relieved with more elaborate ornament. In every case the core of these buildings is of rough rubble, faced as a rule with soft  $ka\tilde{n}j\tilde{u}r$ stone in which the main features of the decoration are blocked out and then finished off in lime plaster, the details of the architectural members and the reliefs being modelled throughout in stucco. In the stupa A<sup>15</sup> (Pl. VIII) the plinth is faced throughout with large diaper masonry similar to that employed in the older parts of the monastery, and it is likely that this is one of the earliest among the small stupas, although it was no doubt refaced and redecorated at a later age. In the majority of others the base is of semi-ashlar limestone masonry, and where relic chambers occur (viz., in Nos. A<sup>11</sup> and D<sup>5</sup>) they also are built of the same masonry. The use of limestone and kañjūr side by side in these and other buildings at Taxila is dictated merely by considerations of convenience, limestone being preferred for its durability, and kanjūr for the ease with which it could be fashioned to any desired shape. The domes had in every case perished, but some remains of the harmikā and umbrellas with which they were crowned were found in the débris of the courtyard and are described in the list of finds on pp. 41-2 infra.

The scheme of decoration on the plinths of these stupas, although as a rule Decoration richer and more intricate than that on the main structure, is not uniformly so. In one instance (A15) it consists only of a series of figures of Buddha in the dhyānamudrā applied to an otherwise perfectly plain background. In two other cases ( $A^2$  and  $A^{20}$ ) the Buddha figures were separated one from the other by Corinthian pilasters, just as they were on the Main Stupa, but here the pilasters are of thicker and more stunted proportions, resembling in this respect the decoration on contemporary stūpas at Sārnāth and other sites in Hindustan. But the majority of the stupas are treated in a far more elaborate fashion. As a typical example and at the same time one of the best preserved, we may take No. A<sup>11</sup> (Pls. I and IX). Its square plinth is divided into several horizontal tiers which recede successively one above the other. Of these, the lowest is adorned with a series of seated images, four on the east and four on the west side. On the east, the figures are of Buddha in the teaching attitude alternating with Bodhisattvas, of which the one at the northern corner (Pl. IXa) is shown by the flask that he holds in his left hand to be Maitreya. On the west side, are one Buddha and three Bodhisattvas. Above these images is a row of Atlantes alternating with lions. The next tier is relieved by a series of Buddhas seated in niches with attendants on either side, separated one from the other by stunted Corinthian pilasters. In the third tier are Atlantes, alternating with the forefronts of elephants, and, above these again, is another series of

Design and construction.



Buddhas or Bodhisattvas, like those in the second tier. At the top of the plinth is another row of niches divided by Persepolitan instead of Corinthian pilasters and over this again, other tiers on the circular drum, which, so far as can be judged from what remains of it, was enriched in much the same way as the plinth.

Although of small and sometimes quite diminutive size, the reliefs are remarkable for the vigour and fidelity with which they are modelled, and, thanks to their exceptional state of preservation, constitute an important addition to our knowledge of Buddhist art and iconography in the 4th and 5th centuries of our era. For the analysis and description of them which is appended below I am indebted to my distinguished friend Mons. A. Foucher, whom a singular good fortune—a fortune which every lover of Buddhist art and antiquities will appreciate—has recently brought back to the scene of his former labours in India.

Relic caskets.

Before closing this description of the stupas at Jaulian it remains for me to notice some other features of interest connected with them. The first of these is the discovery of a casket of a somewhat bizarre and novel type in stupa A11, immediately south of the Main Stupa. The chamber in which it was found was  $10\frac{1}{2}$  inches square and 3 feet  $8\frac{1}{2}$  inches high, constructed of dressed limestone blocks, coated inside with lime plaster, and closed at the top and bottom with limestone slabs. The casket (Plate IXb) stands 3 feet 8 inches high and takes the form of a stupa of slender proportions and conventionalised shape. It is fashioned out of ordinary lime plaster, finished with blue and crimson paint, and bejewelled round the dome with gems of garnet, cornelian, lapis-lazuli, aqua-marine, ruby, agate, amethyst and crystal, cut in a variety of shapes and arranged in several simple patterns. The workmanship of this curious relic casket is undeniably coarse and barbaric, but there is a certain quaint charm in its design as well as in the bright and gaudy colouring of the inlaid gems. Down the body of the miniature stupa runs a hollow shaft, at the bottom of which were the decayed fragments of a small wooden casket, once held together by 4 iron nails.

Inside this casket were some pieces of lapis-lazuli paste, ivory, gold leaf, rock crystal, beads of gold, green vitreous paste, and coral, and a smaller round casket of copper gilt (diam.  $1_8^3$  inch), and in the latter was a still smaller cylinder of the same material (length  $\frac{13}{16}$  inch) containing a little dark-coloured dust. The metal casket and cylinder are illustrated in Plate Xh.

In stūpa D<sup>5</sup>, also, which is situated in the lower court, there is an unusually large relic chamber, divided into two sections, the upper, square in plan with a depth of 1 foot 9 inches, and the lower, circular with a depth of 4 feet 6 inches (Pl. I). But whatever relics this chamber may have contained, it had long since been despoiled of them.

In stupa  $A^{16}$ , on the contrary, there was no relic chamber, but a very rough and primitive kind of casket laid simply in the rubble core of the plinth. The casket consists of a cylindrical piece of  $ka\tilde{n}j\bar{u}r$  (height  $5^3_8$  inches) with a small hole at one end, closed by a  $ka\tilde{n}j\bar{u}r$  plug. Inside the hole was a miniature earthenware vessel (height 2 inches) containing two small copper cylinders,

one within the other; and, inside the smaller one a gold cylinder (length \( \frac{3}{8} \) inch) containing some fragments of bone. Along with the copper cylinders were two copper coins of Vasudeva, one of the 'Siva and Bull' type, the other of the seated 'Ardochso' type.

Another feature of interest presented by these stups is the presence of inscriptions in the Kharoshṭhī script on the plinths of  $A^{15}$  and  $D^{5}$ . The inscriptions on the former occur on all four sides of the structure and read as follows:—

Kharoshthi inscriptions.



East face. On the common base of three-seated Buddhas in *dhyānamudrā*, towards north end (Pl. VIIIa). The first word is at the right end of the base, and the remaining three at the left end, showing that all three reliefs were the gift of the same donor. The reliefs are *appliqué*, the body of each figure having apparently been applied first, then the halo, and then the head, the whole being subsequently covered with a slip.

Saghamitrasa Budhadevasa bhichhusa danamukho.

"The pious gift of the bhikshu Budhadeva, friend of the holy community" (Pl. XIb). The name Saghamitra may have been an honorific title conferred on Budhadeva by the community of monks.

SOUTH FACE. (a) Beneath seated Buddha at the east corner.

Budharachhitasa bhichhusa danamukho

- "The pious gift of the bhikshu Budharakshita" (Pl. XId).
- (b) Beneath seated Buddha next to the above.

[Dha]namitrasa bhichhu[sa] [na]gara[ka]sa danamukho

"Pious gift of the bhikshu Dhanamitra of the metropolis" (Pl. XIe).

WEST FACE. Beneath small Buddha in teaching attitude seated on lotus at north end.

Shamanamitrasa

"Of the friend of the Sramanas" (Pl. XIc).

Shamanamitra is probably another title, like Sanghamitra, conferred on one of the donors.

NORTH FACE. Under second figure from west end.

- (a) Dha[nu]sha...[bhi]chhu....sa [danamu]kho.
- "Pious gift of the Bhikshu Dhanu ....." (Pl. XII).
  - (b) Beneath central figure

Rahulasa vanaeasa bhichhusa danamukho

"Pious gift of the bhikshu Rahula, of Vanaya" (Pl. XIg).

On stūpa  $D^5$  (Pl. Vb to left of picture) some of the inscriptions are invested with additional interest, as they contain the designation of the images beneath which they are inscribed, though, unfortunately, both the images and the inscriptions are in a sadly damaged condition. Each of the four faces of the stūpa is divided into three bays by Indo-Corinthian pilasters of somewhat slenderer proportions and with more ornate capitals than is usual in these stūpas. In each bay is seated a Buddha, seemingly in the *dhyānamudrā*, and smaller figures in the same attitude adorn the shafts of the pilasters. The plinth appears to have undergone renovation and some of the images may be later than the background to which they are applied.

The pious gift. . . . . (Pl. XIh.)

South face. (a) Beneath central figure

[Ka]śavo Tathagato sa . . . sa

"The Tathāgata Kāśyapa" (Pl. XIi).

The two letters śavo are visible only on the lower layer of plaster, the top coat having been broken away; they do not appear on the estampage.

(b) Beneath figure in west bay

. [da]namu[kho]

The pious gift . . . . (Pl. XIj).

West face. (a) Beneath figure in central bay Kaśavo Tathagato

" Kāśyapa Tathāgata" . . (Pl. XIk)

(b) Beneath figure in northern bay Śakamu[ni\*] Tathagato Jinaeśa dana[mukho]

"Sākyamu[ni] Tathāgata, lord of Jinas—a pious gift" (Pl. XII).

Although the information they contain is meagre enough, these records are of very exceptional value for the history of the Kharoshthi script in India. Hitherto it has generally been supposed that Kharoshthi was evolved in the North-West about the 3rd or 4th century B.C., and that it passed out of use in India in the 3rd century A.D. (Cf. Rapson, Ancient India, p. 18), though it is known to have survived for some time longer in Chinese Turkistan. But it is now evident that the date of its disappearance from India must be advanced by at least two centuries. The masonry of the square plinth of stupa A<sup>15</sup> is rough diaper, but the round drum above is semi-ashlar, and it seems clear that the stupa was partially rebuilt and at the same time redecorated. perhaps when the neighbouring chapels were constructed. In any case, the freshness of the inscriptions on both stupas and of the plaster reliefs to which they appertain, leave no doubt that they had not long been executed when they were buried from view, and, inasmuch as the latter event cannot be placed earlier than the second half of the fifth century A.D., it follows that the earliest date to which we can assign the inscriptions is about the beginning of the same century. Doubtless, at that time Kharoshthī was still the ordinary script of the townspeople of Taxila, just as Prākrit was their ordinary vernacular, and it need not surprise us that the common speech and the common script were employed in donative records intended to be read and understood by all and sundry who might see them.

#### CHAPELS,

Plan and Construction.

The practice among the Buddhists of enclosing their stūpa courts with rows of chapels has long been familiar to us from Jamālgarhi, Takht-i-Bāhi and other contemporary sites in the North-West. Sometimes, as at Jamālgarhi and at the Dharmarājikā Stūpa of Taxila, the chapels were arranged in a circle

immediately around the chief monument. At other times, as at Takht-i-Bāhi and at Jaulian, they were planned in the form of a quadrangle sufficiently large to enclose not only the chief edifice but all the subsidiary structures grouped around it. So far as our evidence goes, however, it appears that this practice was not adopted in the North-West until the first or second century of our era, and it seems probable that the quadrangular plan, which is the more developed of the two and which, moreover, has eminent advantages over the circular. did not come into vogue until a later age. Chapels of this kind would not of course, in any case, be needed until cult images of the Buddha had come generally into fashion, and in the North-West this did not happen before the first century A.D. Here, at Jaulian, all the chapels are constructed of semiashlar masonry and were erected no doubt as an afterthought, long after the Main Stūpa, those around the upper court probably coming first, and the others later on. That they are posterior not only to the Main Stupa but to the majority also of the smaller stupas in the upper court may be inferred Date. from the alignment of those numbered B17 to B21 near the S.-W. corner, which have been pushed back in order to permit of a free pradakshina passage around the stupas  $A^{14}$  and  $A^{15}$ ; for, had the stupas in question not already been in existence when the chapels were erected, it is reasonable to assume that the alignment of the latter would have been symmetrical on all four sides of the court. On the other hand, the irregularity in the plan of the lower court is due to the shape of the hill-top, the chapels on the northern side following the edge of the plateau, instead of forming a right angle with those on the East.

The total number of chapels in the three courts appears to have been 59, namely, 31 in the lower and western courts and 28 in the upper, in addition to two at the entrance to the monastery and one inside it, but the number in the upper stupa court is not quite certain, since all except one on the south side had collapsed down the hill-side, and owing to the variation in the size of the others it is not possible to compute their number with precision.

Their roofs, as indicated above, were constructed, like those of the monastic cells, of timber protected by a layer of earth. So much is evident from the remains of charred timber and clav found on their floors. On the other hand, it may be taken for granted that, in consonance with the more decorative character of their surroundings in the stupa courts, they were more ornate than the quarters of the monks, though what form this ornamentation took, there is now, unfortunately, no means of ascertaining, and it would perhaps be idle to speculate on the point.

Of the images which stood within the chapels, the only traces now surviving in the upper court are the two pedestals of rough rubble in B<sup>2</sup> and B<sup>27</sup>. In the other courts the remains, fortunately, are more substantial. They comprise the following:

Chapel C4. Torso and arms of a small Buddha figure, of lime plaster, measuring 71 inches across the shoulders; much damaged.

Chapel C15. Against the back wall are what appear to be remnants of three ladders side by side (Pl. XIVa). It may be surmised that they supported three figures: the central one of the Buddha, the side ones of Indra and Brahma, and that the group represented the descent from the Trayastrimśa Heaven.

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Chapel C<sup>19</sup>. Against the back wall is a small, but singularly well preserved statuette of lime plaster representing Buddha in the *dhyānamudrā* (Pl. XIIa). But its diminutive size and unusual position suggest that it is not now occupying the place for which it was originally intended.

In the porch of the same chapel (C<sup>19</sup>) and against the north wall, Buddha seated on throne, in European fashion, his feet resting on a footstool. Only the legs from the knees downwards and lower part of garment are preserved. The statue is of lime plaster on a rubble core.

Outside Chapel  $C^{32}$ . Against north-wall, a similar figure to the one above. Only feet and hem of garment preserved. The feet measure I foot 8 inches from heel to toe. Of lime plaster on rubble core. Traces of red paint on garment.

Chapel  $C^{33}$ . In centre, remnants of a square pedestal, probably of a stupa, composed of rough limestone and  $ka\tilde{n}j\bar{u}r$  blocks. On the north, east and west walls are the remains of three larger and three smaller figures. The one in the south-east corner was of clay and has been reduced to a mere shapeless mass. The others are composed of lime plaster over a core of mud and stone, and exhibit traces of red paint on the surface. The only noteworthy figure is the one illustrated in Plate XIIIa, the height of which is 2 feet 3 inches. It represents a Bodhisattva seated in the  $dhy\bar{a}namudr\bar{a}$  on a lotus, and is distinguished by its free flowing draperies and heavy jewellery.

Chapel C<sup>34</sup>. On the base of the façade in front of this chapel is a row of stunted Corinthian pilasters with a frieze and dentil cornice above, decadent bead and reel mouldings, and Buddhas seated in the dhyānamudrā in the bays between the pilasters (Plate XIIc). On the right jamb are two female figures separated by a (?) lotus stalk; the one to the left standing on a makara, probably Gangā; the one to the right, perhaps a Yakshī. On the left jamb are remnants of two similar figures, the inner one of which also stands on a makara.

Chapels  $E^1$  and  $E^2$ . These two chapels are situated between the lower stupa court and the monastery, immediately to the left of the entrance to the latter, and, thanks to the constricted space and the strength of the adjoining walls, contain the most perfectly preserved group of images on the whole site. The group in question is in chapel E<sup>1</sup> facing towards the west (Pl. XIIIb). In the centre, is seated the Buddha in the attitude of meditation (dhyānamudrā) with a standing Buddha to his right and left, and two attendant figures behind. Of the latter, the one to his right is a monk carrying the fly-whisk (chauri): the other, as proved by his ornaments, is Indra, holding the thunderbolt (vajra) in his left hand. On the central image are still many traces of the red and black paint and of the gold leaf with which it and doubtless the other figures also were once bedecked. All five figures are of lime plaster, probably on a core of rubble and clay. Of the images in the bigger group which faced south in this chapel, most have disappeared, but three of the subordinate ones are left against the eastern wall. One of these, seated in the corner of the alcove at a height of about 1 foot 9 inches above the floor level, is either a Buddha or a Bodhisattva. The other two appear to portray the donor and his son or servant, a youth carrying a basket of fruits and flowers (Plate XIIb). The

latter wears trousers and a long tunic reaching to his knees, belted at the waist and fastened on the left shoulder with loop knot and buttons. The master appears to wear the same kind of dress, but has an armlet on his left arm and a more ornate belt. On the wall behind the head of the servant are the remnants of a lotus, full-blown. All three figures are of clay, which has been burnt on the surface to terracotta, and on the two standing figures are traces of red colouring.

Chapel  $E^2$ . In centre, remains of robe of a standing image of lime plaster, and to its left, a smaller Buddha of Gandhāra stone. The latter is standing in the abhayamudrā and is 1 ft.  $8\frac{1}{8}$  inches high. It is a very creditable specimen of Gandhāra work, no doubt of earlier date than the other figures in the chapel.

From the above brief description of the images preserved inside the chapels it will be seen that, compared with those on the stupas, their remains are singularly meagre, notwithstanding that the stūpas stood exposed in the open, while the chapels were roofed in and well protected. The explanation of this phenomenon is to be found in the different materials of which the figures were generally made, according as they were intended for a sheltered or exposed position. Those on the stupa walls were invariably of limeplaster, which would better resist the effects of heat and rain. Those inside the chapels on the contrary were usually of clay, though here also they were occasionally made of the more costly and durable lime, as in the chapels E1 and E2, C33, C19, and occasionally perhaps of stone or metal, as in E2 (Ct. also list of Stone Objects Nos. 1-3 and Copper and Bronze Objects No. 16). In the neighbourhood of Taxila there is, unfortunately, no stone suitable for sculpture, the only stone found here being a hard and refractory limestone which almost defies the chisel, and a soft  $ka\tilde{n}j\tilde{u}r$ , which is too coarse except for the roughest kind of carving, intended merely as a core to be finished in plaster. Hence it happens that the only stone sculptures found on this site are carved out of the familiar grey schist, which came, as far as is known, from beyond the borders of Swāt. Metal, to, whether copper, bronze or silver, must have been too costly to be used often for this purpose. Clay, on the other hand, is a first-rate medium for modelling-far better, indeed, and more economical than lime plaster, and quite durable enough so long as it is painted and protected by a roof, but doomed rapidly to fall to pieces when rain is admitted to it; and its dissolution is hastened by the white ants eating their way through to the straw and chaff mixed with it for the sake of tenacity and strength. Indeed, had it not been for the heat of the fire which overtook the buildings at Jaulian and which was fierce enough to convert some of these clay figures into terracotta, not a single one of them could have been preserved to us. It is this same fortunate circumstance that explains why the clay figures have perished so much more completely in the chapels of the stupa area than inside or in the immediate vicinity of the monastery—the reason being that the chapels had but a single storey and a small expanse of roof, and consequently there was much less wood to burn than in the monastery with its double storey and broad verandahs, and, as a consequence, the heat in the chapels was not great enough to turn the clay into terracotta.

Materials used for images.

Throne in front of chapel B17.

The suggestion made above that a few of the images may have been made of materials other than clay or stucco derives some measure of support from a curious pedestal or throne which stands to the left of the entrance in front of Chapel B17 (Pl. XIVb). The throne, which measures 4 feet wide by 1 foot 8 inches deep, is of rubble finished with a thick coat of lime plaster. Its two front corners are supported by lion-like legs of highly conventionalised type, by the side of which fall drapery folds also very stylised and belonging, apparently, to a cushion on the throne. At the back of the throne, simple floral and geometric patterns are roughly incised in the plaster, in imitation perhaps of embroidery. But there is no trace whatever on the plaster of any image, there surely would have been, had such an image been of stucco or clay. On the other hand the empty throne could not, of course, have been set merely as a symbol of the Master's presence, as it might have been three or four centuries earlier, nor is it likely that it would have been placed in this position in the stupa court, if it had been intended as a sinhāsana for a preacher, the normal and natural place for such a throne being in the monastery. Taking all things into consideration, therefore, the most likely explanation seems to be that it was intended for an image and that that image was of metal or wood, or at any rate of some material other than stucco.

Lotus in front of chapel B28.

nt <sup>28</sup>.

Staircase between chapels Two other objects connected with the chapels which deserve notice, are the staircase which ascends from the outer court between the chapels C<sup>13</sup> and C<sup>14</sup>, and the remains of a bold lotus modelled in relief on the wall in front of Chapel B<sup>28</sup>. The latter, like the one in Pl. XIIIa, is portrayed in conventional fashion as a full-blown flower with two small buds on the stalk beneath. From the centre of the flower no doubt sprang the figure of a Buddha or a Bodhisattva, but though this figure must have been portrayed, as such figures are portrayed, also, at Mohṛā Morādu,\* seated or standing upright against the wall, the flower itself is, by a strange convention, shown full face, and not, as would be more natural, in profile.

The narrow stairway in the outer court is a curious enigma. It start from a height of some three feet above the floor level of the court and, although the space is narrow, the steps do not extend right across from wall to wall, a small gap intervening between them and the wall on the eastern side, as if intended for some filling which has now disappeared. Moreover, the treads show no signs of wear, and the top of the stairway merely leads out on to the rocky hill-side. Evidently, therefore, it was never intended for use, but what its purpose was, must for the present remain an unsolved problem.

## Antiquities in the Stupa Courts.

From the lists of finds appended to the end of this Memoir the reader will observe that nearly all of those from the stūpa courts consist of stucco figures, heads, limbs or other fragments, which had fallen from the decorations of the buildings. Apart from these stucco objects, the number of which ran into many hundreds, the only antiquities of interest met with in this part of the site were the following:—(a) a number of copper coins mainly of crude Indo-Sassanian and

Scytho-Sassanian types, with a few of Huvishka (barbarous), Vāsudeva and the late Kushāns. Cf. Nos. 16, 20, 21, 95, 96, 104, 108-111, 117-25.

- (b) Four Gandhāra stone sculptures. Cf. Nos. 1, 3, 4 and 5 of List of stone objects.
- (c) An iron lamp from Chapel C<sup>5</sup> (List No. 24), a pipal leaf of copper from in front of the steps of the Main Stūpas (List No. 1) and a copper reliquary found between the stūpas A<sup>7</sup> and A<sup>8</sup> (List No. 2).

#### MONASTERY.

In the age to which these monuments of Jaulian belong, the essential parts of a Buddhist monastery, as M. Foucher has so well and clearly shown in his monumental work on the subject1, were a court of cells, where the monks resided, a hall of assembly (upasthāna-śālā), a refectory (upāhārāśālā), a kitchen (agni-śālā), a store-room (koshṭhaka), bathroom (jantāgāra), and latrine (varchah-kutī). In the monastery at Jaulian the court of cells is at once recognisable in the great open quadrangle to the East of the lower stupa court, and the bathroom in the small square structure at the S.-E. corner of the open depression in its centre. The hall of assembly, too, is without doubt, the spacious chamber with four columns to support its roof at the N.-E. corner of the complex, and the latrine is the small chamber near the eastern entrance from which a drain passes out through the thickness of the wall. The identity of the other roomsrefectory, kitchen and store rooms- is not quite so certain, particularly as it sometimes happened that the refectory and assembly hall were combined into one. But the presence of a second drain leading from the central chambera most useful adjunct for the cook and his scullions, and the discovery also of grind-stones and mortars in this chamber, as well as in the refectory, suggest that it was a kitchen, with a small store-room attached for the use of the cook; and, if this was so, then the chamber communicating with it on the south may well have served as the refectory, to which another store-room was attached for the use of the steward. This disposition of the several chambers finds a close parallel in the contemporary monastery at Mohrā Morādu, though in the latter building the accommodation is more spacious. It is to be noticed, however, that both at Jaulian and Mohra Moradu this part of the monastery underwent considerable modifications in ancient days. At Jaulian. the original structure embraced only the court of cells and the assembly hall, all the other chambers being later additions. In the earlier days, therefore, it may be inferred that, in accordance with the established rule, the monks depended for their food entirely upon charity, eating it without further ado from their begging bowls, and that it was only in the 3rd or 4th century that they developed the idea of possessing store-rooms and kitchens of their own, and of embarking generally on a more luxurious mode of life.

This question of the modifications made in the original plan of the monastery involves a more detailed consideration of the masonry of the building.

Construction.

As stated in my introductory remarks, the masonry employed here is of two kinds. The earlier dates probably from the beginning of the third century A.D. and marks a transitional stage between the large diaper and the semi-ashlar. This masonry is used throughout all the cells as well as in the Assembly Hall. The other variety is the semi-ashlar work which is employed for later additions and repairs (notably on the north side of the Assembly Hall, the wall of which appears to have collapsed, and in all the adjoining rooms on this side of the monastery), for the casings of the door frames and repairs in the cells, and for the base of the niche in front of cell 25.

Court of Cells.

The Court of Cells has an internal measurement of about 97 feet from North to South by 106 from East to West, and consists, as usual, of a chatuhśāla or quadrangle with an open depression in its centre and a line of cells fronted by a broad verandah on every side. The main entrance into the quadrangle is on the west, where it communicates with the lower stupa court. On the opposite side is another doorway leading through cell 15 to the Assembly Hall and the other common rooms. On the north side of the court the small cell numbered 8 on the plan served as a chapel, and next to it is a stairway giving access to the upper storey. The rest of the chambers on the ground floor, to the number of 26, served as cells for the monks, and as the monastery had two storeys with, no doubt, a corresponding number of cells on the upper floor, it follows that there was accommodation in it for not less than 54 monks—that is, if one cell is allowed for each inmate. The cells vary in their dimensions and are somewhat irregular, the smaller ones measuring between 8 and 9 feet square, and the larger ones at the four corners the same in width by twice as much in length. Their height was about 15 feet 6 inches. With the exception of No. 20, each cell is provided with one or two niches placed at a height of about 4 or 5 feet above the floor level, and closed with an irregular pointed arch.

Windows.

Windows are extant in twelve only out of the 26 cells, namely, in all the cells on the north side and in the four cells on the west side towards its northern end. With the exception of the one in cell 11, they are all of the same type, designed to admit a maximum of light with a minimum of heat. They are placed at a height of from 6 to 10 feet above the floor level and from the outside appear merely as narrow slits in the walls, 10 inches or so in width and a foot or more in height, but towards the interior the sides and bottom of the window are splayed out, as in the loop holes of a fortress. In cell 11 the opening is of the same dimensions externally and internally. Probably this particular window is of a later age, for the back wall of this cell has the appearance of having been rebuilt at some subsequent period—simultaneously, perhaps, with the north wall of the assembly hall, both having given way owing to the pressure of the hill side at their back.

In conformity with a practice observable in other Buddhist sanghārāmas in the North-West and common also in the older buildings of Hindustan, the doorways of the cells were furnished with slightly sloping jambs and were strikingly low, their height, as they now stand, being no more than five feet,

or, if allowance be made for the wooden lintels which once supported the masonry, not more than about 4 feet 7 inches, with a width at the bottom of about 3 feet. It is by no means certain, however, that these were their original dimensions, for the casings of small and neatly cut stones embedded in plaster, into which the wooden frames were fixed, are later additions, contemporary, probably, with the chapels in the stūpa courts. The grooves for the wooden door frames\* and panelling are 3 to 5 inches wide and a little less in depth. Many of them are still filled with the charred remains of the old wood.



The walls of the cells, inside and out, were plastered with mud and probably colour-washed. The floors are of bajrī and mud well rammed, and are raised a little above the level of the verandah outside, the thresholds being of roughish limestone blocks sometimes projecting a few inches beyond the face of the wall.

Walls and floors.

Alcoves.

In front of some of the cells and facing on to the verandah were small alcoves containing groups of figure-sculptures. Of such alcoves there were originally four on the west side of the court in front of cells 1, 2, 27 and 29, and one on the east in front of cell 17. They are of varying dimensions, the largest in front of cell 29 having a width of 4 feet 7 inches, and the smallest in front of cell 17, a width of 2 feet 2 inches. Most of them are too much damaged for their shape to be made out with certainty, but the one in front of cell 27 appears to have been quadrilateral, with sloping sides and a flat top; the others may have been of the same form or closed with an arch above. Inside the alcoves are the following groups of figures fashioned in clay and finished with a slip, white limewash, paint and gilding.

Alcore in front of Cell 1.—Image of Buddha in (?) teaching attitude, seated on throne supported at corners by kneeling Atlantes. On each side, two attendant figures, of which the front ones are badly damaged. Of those behind, the one to the left of the Buddha is a female wearing hair ornaments and wreath; the other to his right is probably a male, having his hair adorned with a simple fillet and medallion. The free flowing draperies of the central figure are worthy of notice (Pl. XVIa).

Alcove in front of Cell 2.—Buddha seated in dhyāna-mudrā on throne. To his right, four figures, of which the front one, of larger size, may be the donor, with his wife (a much smaller figure) beside him. Behind, is a standing robed figure of which only the lower part survives, and above it a small seated Buddha much mutilated. To his left, in front, the figure of a monk, corresponding to the donor on the opposite side. Behind, a monk erect and in the attitude of prayer, and, above him, Indra (?) holding a fly-whisk (chaurī) in his right hand and wearing a jewelled head-dress, armlets, etc. The donor's figure bears traces of gilt. Much damaged by white ants (Pl. XVIb).

In front of Cell 17.—In centre, seated Buddha in teaching attitude. To his right and left, in front, lower parts of two standing figures, male to right and female to left. Behind them, remnants of other smaller figures.

<sup>\*</sup>The door frames, fixed in the stone jambs, were probably perpendicular not sloping, in order to permit of the doors swinging easily and truly on their hinges.

In front of Cell 29.—In centre, Buddha standing, probably in the abhaya-mudrā. Of subordinate figures to right and left, there appear to have been twelve, but several of them have perished (Pl. XVIIa). Of the surviving ones the most striking is the male figure of medium size to the right of the Buddha, wearing tunic to knees, trousers with buttons for lacing, ornamental belt and cap. The dress and bearded head of a peculiarly distinctive type clearly prove him to be a mlechchha (Pl. XVIIb). Between this figure and the Buddha is a smaller male figure with long robe and ornaments. To left of the Buddha, a standing figure probably of a monk, wearing sanghāṭī. The other figures are much mutilated.

Pedestal in front of cell 25.

Besides the four alcoves sunk into the façade of the cells, there is an erection of semi-ashlar masonry, now much ruined, in front of cell 25, which may have supported another alcove or served as a pedestal, like those in the monastery of Mohṛā Morādu, for an image.

Chapel.

The chapel near the middle of the northern side of the court is smaller than the adjoining cells, and must have been designed in the first instance for the purpose to which it has been put. Originally, there appear to have been 13 figures in it, of which remnants of eight have been preserved. All are composed of clay and all are partially burnt, but the chapel was too small and the figures were too numerous and too bulky for the heat to penetrate through them, and as a consequence they are not so well preserved as in the alcoves of the open verandah. One of the figures against the east wall appears to be Maitreya holding a flask in his left hand. The clay casing of the door frame is decorated with foliate designs consisting, apparently, of a serpentine pattern relieved by half-lotuses.

Staircase.

Next to the chapel described above and on its eastern side is the stairway leading to the upper storey of the monastery. A more convenient place for it would have been in the immediate vicinity of the entrance, from which point the inmates could have passed directly to their cells on the upper floor; but there must have been some special reason for placing it where it is, and I suggest that the explanation may be that on entering the monastery the monks made a practice of paying their devotions, in passing, at the chapel before going to their cells, and perhaps repeated the devotions again, when leaving the monastery. This explanation is nothing more than a surmise on my part, but the assumption at any rate is a reasonable one and would sufficiently account for this otherwise curious position of the steps.

At the foot of the stair and immediately to the left of the entrance is a recess in the wall, probably intended for a group of figures, the rubble infilling in which is of a late date.

The stairs were divided into two flights, with six steps in the lower and nine in the upper, and the passage-way which connected the stairs with the upper verandah was returned again at right angles to the upper flight. Possibly there was a second chapel above the ground-floor one, but more probably the latter occupied the full height of both storeys. It would have been contrary to Indian practice to construct a cell for habitation over the holy images.

The walls of the cells in the upper storey were of masonry like those below them, but timber was employed for the floor between the two storeys, including that of the verandah, as well as for the pillars supporting the latter, and for the roof. Probably, the pillars were of the Persepolitan or Indo-Corinthian order, like those so frequently portrayed in contemporary sculpture, and carvings in keeping with them would doubtless have adorned the cornices or other members. The verandah itself appears to have been about 13 feet wide.

ep and Depression in courtyard.

The depression in the middle of the court is a little over 1 foot deep and provided with four sets of steps, one in the middle of each side. On its southern side a drain passing beneath cell 21 carries off the rain water discharged into it from the roofs.

Bathroom.

Upper floor and

verandah.

On a platform at the south-east corner of the depression is a small bath-room provided with entrances on the northern and southern sides and furnished with a drain on its west side, which discharges into the larger drain referred to above. The walls of the bathroom are of late semi-ashlar masonry and are now standing to a height of about 5 feet. Why there were two doorways in so small chamber is not apparent.

Assembly Hall and other chambers.

In the Assembly Hall and other rooms on the eastern side of the monastery the following points are deserving of notice. The three largest chambers— Assembly Hall, kitchen and refectory (?)—were too spacious to be spanned by timbers from side to side, and accordingly columns were erected in each of them as supports for the roof beams. In the Assembly Hall and in the refectory the existing bases show that there were four such columns disposed in a square in the middle of the hall, the architraves above them being laid probably in a corresponding square with diagonals from each pillar to the nearest corner of the room. In the kitchen (?) a raised stone plinth, near its middle and running from east to west, suggests that there were two pillars here carrying the roof timbers. As mentioned above, this room possesses a drain of rough limestone. besides several millstones and grinding slabs. In the small store-room belonging to the kitchen is a raised bench of stone, about 1 foot 5 inches high running round three sides of the chamber. In the floor of the latrine near the eastern entrance, is a square depression about 6 inches deep and paved with limestone flags.

## Antiquities in the Monastery.

Apart from the heads and other fragments of partially burnt clay from the figural groups in the alcoves of the quadrangle, most of the minor finds made in the monastery were of earthenware, bronze, copper, brass, iron or gold, and comprised a number of vessels and domestic utensils of the monks, tools, fittings, ornamental objects, and articles of personal use. Nearly all of these are described in the lists appended below and are illustrated in plates XXV-XXVIII, the only ones omitted from the catalogue being some capacious store-jars and water-vessels, which have been kept where they were unearthed in cells 1, 2, 4, 6, 10, 12, 13, 14, 26, 28 and 29. The positions of these vessels. which number sixteen in all, are shown in the plan on Plate I. They are of

the usual types and there is nothing in their shape or fabric which calls for particular remark. The smaller earthenware vessels include gharas, water-bottles, ewers, jugs, goblets, cups, strainers, lamps and what appears to have been an ink-pot<sup>1</sup> (No. 2 of List). Of the bronze and brass objects the most noteworthy is a small image of the Buddha, of crude workmanship, found in cell 21 (No. 16), and of the copper objects, the two pieces apparently belonging to a miniature stūpa (Nos. 8 and 9), the ornamental wheels, rosettes and trisulas (Nos. 3, 6 and 7), which were nailed probably to the doors or woodwork of the cells, and the terminal of a monk's staff (No. 24) adorned with chakras at the three corners of the triangle. The iron tools comprise adze-heads of two types, axes and a chisel with hollow socket (Nos. 11, 12, 13, 17 and 18); while among the iron fittings are numerous nails, clamps, staples, door-chains, rings, hooks and bosses. Other finds made in the monastery are the gold ornaments described on page 57, and a large number of copper coins, the legible specimens of which are catalogued below. Most valuable, however, of all the finds made in the monastery are the remains of a birch-bark manuscript described in detail by Professor Ramāprasād Chanda. This manuscript was discovered in an earthen vessel in cell 29, partly incinerated by the monastery fire, though sufficient can still be made out to establish the fact that it is written in Gupta characters of the 5th century A.D. To about the same date belongs also a seal of burnt cornelian, found in cell 3 (length  $\frac{3}{4}$  inch) engraved with the legend: Kuleśvaradāse, in Gupta characters. Neither the manuscript nor the seal were necessarily new at the time when they were buried, and the only inference that can safely be drawn from their presence in the charred débris is that the fire took place some time after 400 A.D. A like conclusion is also arrived at from a consideration of the coins found in both the monastery and stupa areas, many of which are debased Kushano-Sassanian types, referable to the 4th or 5th century A.D. It is a reasonable surmise, therefore, that the destruction of these buildings as well as those of Mohrā Morādu and other Buddhist settlements in the neighbourhood was due to the invasions of the White Huns who swept over the North-West of India in the second half of the 5th century A.D. Be this, however, as it may, there can be no doubt about the approximate date when the fire took place, and it follows from what I have said above regarding the newness of some of the stucco and clay figures at the time when they were buried, that neither these nor the Kharoshthi records can be assigned to an earlier period than the close of the fourth century, though more probably they belong to the fifth.

The date thus arrived at for these sculptures is corroborated by analog ous proofs at Mohṛā Morādu and other sites at Taxila, and is of great value for the history of plastic art in India. Hitherto, it has generally been imagined that the Gandhāra school had faded out of existence during the 3rd century of our era, long before the Gupta school took its rise in Hindustan. So far as the stone sculptures of Gandhāra are concerned, this supposition appears to be still, in the main, correct; for no evidence is yet forthcoming that stone sculptures

An ancient ink-pot of a different pattern has also been recently found at Sanchi.

of any real merit were produced in Gandhāra after the third century of our era. On the other hand, the excavations at Taxila have now demonstrated that the school was still a vigorous and thriving one at least a century and a half later, and that the plastic work in clay and plaster which it was then producing was hardly less vital and vigorous than the older carving in stone. True, it is of a different order. It lacks much of the ordered grace and dignity which distinguish the earlier work; there is less refinement and delicacy, especially in the architectural features; and far less elaboration and thought in the compositions. On the other hand, the art of these later reliefs is freer and more spontaneous, and for the very reason that it is further removed from the Hellenistic tradition, less academic. The impression, in fact, produced by a comparison of these with the earlier sculptures is that the latter are the creations of intellectual and well trained artists working consciously and thoughtfully in accordance with the traditional precepts of their guilds, while the former are the handiwork of clever craftsmen endowed with remarkable skill and completely masters of their materials, but with no very high conception of the aims and purposes of art.

## THE DECORATION OF THE STUCCOED STUPAS.

## By Mon. A. Foucher.



The most striking feature in the decoration of the stupes and monastery at Jaulian is the fact that it has been almost entirely executed either in clay or in stucco made of sand and lime. The excavations have yielded only a few fragmentary stone sculptures (see Pl. XVIII), and, as the slate of which they are made comes from the Afghan hills, it is very likely that they were brought over ready carved from the other bank of the Indus. We will not discuss again the reasons, which have been set forth above (p. 13) by Sir John Marshall, and repeat why they used, in the Taxila monuments, materials easier and less refractory to work than the local freestone. But, if the Jaulian excavations add nothing to our knowledge of Graeco-Buddhist sculpture, we cannot too much insist upon the importance of what they have disclosed to us about the parttill now almost unsuspected—which clay modelling played in the Gandhāra School. True, the almost rainless climate of Chinese Turkestan has preserved for us, in the dry sands of the Takla-Makan, a number of specimens of a somewhat similar kind. But we needed all the care and intuition now being bestowed on the researches of the Archæological Survey to discover that the clay images were no less numerous in the Buddhist convents of North-Western India, and that in this matter also Central Asia acted merely in conformity with the custom prevailing in Gandhara. Unfortunately, these fragile pieces could only last so long as they were sheltered from any crushing impact or from the inclemency of the weather. Had it not been for a happy accident, we should not have recovered even the few samples described above, the masterliness of which makes us regret all the more their small number. The stucco figures, on the other hand, which decorated the open stupa courts were able to resist (especially when new and freshly coated with paint and gilding) the alternate ravages of showers and sun, and later on, after the buildings had fallen into ruins, the pressure of the wrecked walls and the infiltration of the rains. Thus it happens that numerous remains of them have come down to us, and the extensive use of stucco by the Gandhāra School has been for years a well-known fact. But nowhere yet have any stuccoed monuments been brought to light and preserved in such a good condition as the Jaulian stūpas. The felicitous discovery of Sir John Marshall gives us an exceptional opportunity for undertaking for the first time a detailed account of this kind of decoration.

#### STUCCO HEADS AND FIGURES.

Preliminary Remarks. Decoration in stucco has only been known till recent years through a number of detached heads, jumbled together in public or private collections, and defying every attempt at classification. It cannot but be instructive to find such heads in their proper place, on the shoulders of the figures to which they originally belonged. True, in the case of Jauliāñ, the number of

S. Carlotte

the heads picked up in the diggings-more than a thousand of them-far exceeds the number not only of the heads remaining in position, but of the headless bodies brought to light again. That is exactly what previous explorations had led us to expect: but little reliance could be placed upon hasty and disorderly researches, which were not much better, as a rule, than a wild hunting for coins and museum-pieces. At Jauliāñ the excavations have been carried on with all conceivable care and constant supervision, so that we know exactly the original site of every object. As a result we know now what we had previously only inferred (a) that the number of the heads was primarily equal to the number of the bodies; (b) that the heads owe their comparatively better preservation not only to their form, which enabled them better to resist the pressure of the fallen débris, but also to the fact that they were of a stronger make. It is now an indisputable point that most of the bodies were modelled in situ out of the same coarse mortar with which the walls were faced1, while the heads were separately prepared out of a finer and more lasting material. Occasionally we still find in the neck of the headless images the hole prepared for the head to be set in by means of a trowelful of mortar, with or without a stick imbedded in it. It is easy to understand that, such being the case, while the body has been crushed to powder by the weight of the superstructures or disintegrated by percolating water, we still find the heads almost undamaged under the rubbish of the overthrown buildings.

On another most point closely connected with the preceding one, Sir John Marshall's excavations have thrown light. It has long been open to question whether the school of Gandhāra ever resorted to mould and cast making. It is well known that this mechanical process met with great favour in the religious foundations, of a rather indifferent artistic value, throughout Central Asia. On the other hand, a minute examination of the Gandhara stucco heads had led us to believe that they had been freely modelled into shape with the boasting-tool and then, when dried, worked at again and finished with the chisel. This well-ascertained theory, which still holds good for most of the finds, now requires some limitation. When they had to deal with certain constantly recurring heads of a fixed type, like the Buddha's, the artists even in North-Western India did not always despise the use of moulds. To satisfy himself on this point the reader has simply to compare the measurements of several heads, two of which are reproduced on Pl. XIXd and e. Moreover, an actual mould has been dug out on the site of the Dharmarājikā Stūpa2. All that we can say is that the Indian modellers were quite capable of doing without such moulds, and that, when they did use them, they have shown a more artistic feeling than those of Chinese Turkestan. The latter have attempted to get, at a stroke, out of a single mould, the entire front-view of the head, head-dress and ears included, so that they have been compelled to

Sometimes, however, in the case of small statues (cf. Pl. XIXa and b), the entire body was separately executed, almost in the round, impaled on a stick and made to adhere to the still fresh coating of mortar on the wall. Even the somewhat large statues on the plinth of Stūpa  $A^{15}$  seem to have been set up in that same fashion, when the stūpa was being repaired for the last time (See below, p. 32).

<sup>&</sup>lt;sup>2</sup>Ct. 4. S. R., 1915-16, Pt. II, Pl. IIId.

flatten in the most uncomely fashion the faces of their figures. In the Taxila workshops they were content, as far as we can see, with casting only the most difficult part of the head, viz., the mask. As to the remaining parts, ears, hair or head-dress and neck, they were executed off-hand, with variations insignificant enough, but nevertheless perceptible to anybody who cares to look for them.

In this connexion it may be of interest to point out several minute details. For instance, many of these heads have been finished with a thin slip, of a white or a buff colour. A still larger number of them bear unmistakable vestiges of painting. Often the lips have been tinted red and the hair black; sometimes the pupil of the eye—and, in the case of the Buddha, the  $\bar{u}rn\bar{a}$ ; in that of the demons the beard—has been delineated with the brush. Now and then, a coat of red paint, the remnants of which may be noticed all over the face, including the ears, was most probably intended as a ground for gilding. Even a stone statue (Stone Objects No. 2) still preserves bits of the gold-leaf the devotees had stuck upon it. Once again we ascertain from the facts what a large amount of polychromy and gilding was lavished on these Buddhist monuments. This is an essential feature to keep in mind, when we try to visualise them in their pristine beauty.

An attempt at classification.

When we enter upon the study of the numerous stucco heads collected during the Jaulian excavations, we are impressed, first and foremost, with their variety. Not only are they very dissimilar from one another in point of sizefrom the colossal ones, which measure almost 2 feet, to the small 1 inch ones—but they exhibit strikingly different head-dresses and no less strikingly different expressions, from the shaven heads of the monks to the extravagant chignons of the lay worshippers, and from the Buddha's beau ideal to the grotesque figures of the demons. At first sight, the eye cannot but enjoy such numerous and graphic contrasts, but with a little attention and after a short practice, it quickly detects, under this apparently wild luxuriance of inventive powers, the customary routine of a school long specialized in the mechanical reproduction of a very limited number of set types. More slavishly than ever did the Jaulian artists follow in the hackneyed path, and the range of their imagination was the more cramped because—either by reason of the decadence of technical skill or of a change in the worshippers' taste, probably for both reasonsthey had completely given up the composition of legendary scenes, and had confined themselves to the making of idols or groups of idols. Thus they lost the element of interest which the diversity of the many figures in the Buddha's legend, coming from all the castes and trades of India, and the variety of their dispositions and gestures necessarily introduced in the bas-reliefs. In fact, the examination of the heads, confirmed by that of the monuments, proves that the personages represented all belong to three principal types. The first and most important one, in point of number and dignity, is of course that of the Buddha. Secondly, in contradistinction to his sober ushnisha and plain draperies, the Bodhisattvas and lay worshippers display an elaborate head-dress and profuse jewellery. Thirdly, there are a number of grotesque figures of Yakshas originally

employed as Atlantes along the friezes. To these three main categories, we must add, also, a few monks' heads, some figures of women and children, and, lastly, many animals who shared in the work of the Atlantes.

It goes without saying that our remarks on these different kinds of figures, if restricted to the novelties divulged by the Jaulian discoveries, will be very meagre indeed: but, on the other hand, it would be quite out of place here to undertake a general study of Buddhist iconography. Thus, as regards the Buddha's type, we shall be content with stating that all its traditional features are on the whole faithfully reproduced. As a rule, the wavy treatment of the hair still preserves, especially on the larger specimens (See Pl. IVb and Xa), Some heads, however, already wear the hair a memory of the Greek. curled in the way which was to remain to our days the orthodox one (Pl. XIXI), while on some the locks are indicated only by dots (Pl. XIXa The ears, wherever they have been preserved, show pendulous lobes distended by the former wearing of heavy earrings. Occasionally forehead still retains inlaid in it the small bit of crystal intended for the radiating  $\bar{u}rn\bar{a}$  of the Blessed One. The long eyes, sometimes more than half-closed, bear (very clearly marked on the large heads; see Pl. and b) that singular curve of the upper lid, to which they owe their dreamy expression. The profile has ceased to be purely Greek and the aquiline nose curves now and then in an exaggerated manner (See Pl. IVa and Xb). All the faces show the heaviness of the lower jaw which is characteristic of the school. But a few heads have a somewhat peculiar look. They are to be found in different sizes, from 7 inches (Stucco objects, Nos. 9 and 26) to 2 inches or less (Nos. 21-22; intermediary are Nos. 18-19) all having in common the same rounded profile, the same retreating forehead, the same schematized hair, the same aquiline nose, the same upper lip marked with a dimple, the same slightly prominent mouth, the same neck furrowed by the three traditional creases (See Pl. XIXa, b, c, g). A particular feature consists in their arnā being simply marked by the brush with a red point, and the pupils with two black ones, while on most of them, as if to give confirmation of their relatively late date, vestiges of polychromy are in an unusually good state of preservation. But if these Buddhas have a singular expression of countenance, we must refrain from attributing to them much originality. We find them again, or at least figures very much akin to them, not only on the neighbouring site of Mohrā-Morādu<sup>1</sup>, but on the recently excavated stūpas of Takht-i-Bāhi. Besides. we must confess that this type, as a whole, is not a particularly happy one. Nay, we may go still further and admit that, almost without an exception, all these Buddha's heads are lifelessly dull and insipid. They could scarcely be otherise, when it is borne in mind how many copies of them were made, and that for veral centuries the type had already been a stereotyped one. The occasional e of moulds, demonstrated in the case of Pl. XIXd and e, was not calculated impart to these quasi-mechanically produced images the mysterious spark life which animates true works of art. Still, with all that, it cannot be denied

Buddhas and monks.



1 Cf. A. S. R., 1915-16, Part II, Pl. XXd.

that the memory of their Indo-Greek prototypes has been wonderfully kept in the ensemble, if not in the detail of their features.

Much the same may be said about the bodies of these images: they too bear witness to a marvellous persistence of tradition in the matter of proportions and drapery. Often, when the statue is standing, the left arm is still wrapped in the monastic cloak. like that of the so-called antique orators in their himation. When the statues are seated, their two established postures are those of meditation and teaching: either their right hand lies in their lap above the left one, or both hands are raised together in front of the breast, the index and thumb of the left being supposed to hold from underneath the little finger of the right. In this second case, the monastic cloak leaves the right shoulder bare, according to the Indian ceremonial fashion; but in the first one, it covers both shoulders, up to the neck, in a way still graceful and supple enough (Cf. Pl. V-VIII). As to the lower part of the sanghati, sometimes it covers the feet and even the pedestal with flowing folds1 imitated, not without exaggeration from the oldest Indo-Greek images (See Pl. VIc and XIIIb); sometimes it leaves the feet exposed in the same way as in most Gandhara statues and in all the Mathurā ones of the second century A.D.; sometimes (and this is a manifest proof of the decadence of the school as well as of the growing unskilfulness of the artists) it is tightly wrapped around them in conventional pleats (See especially Pl. XIIc). Such diversity in the treatment of the draperies, as in that of the hair, is a pleasing characteristic; but it need hardly be said that it would rather confuse our researches, were we dependent on these features for intrinsic data in the chronological classification of our statues.

In the same category with the Buddha, we must place the monks, his disciples. As usual, their representations differ from that of their Master only in the fact that their heads are closely shaven; for the dress in both cases is absolutely alike. As to the Jauliān specimens, they are few in number and quite commonplace in execution (Pl. VIc and VIIb); nowhere do we recognise the strong and wrinkle-furrowed features of the monk found near the Dharmarājikā stūpa.<sup>2</sup> Nor do we meet here with any likeness of tīrthikas.<sup>3</sup> A single clay head (Pl. XXVc) reproduces the traditional type of the Brahmanical ascetics, with their beard and their plaited chignon. Finally, a small-sized stucco head, the ushnīsha of which has been unfortunately lost (Pl. XXe) seems to depict the emaciated Bodhisattva, at the time when he was till called the "Sramana Gautama", indulging in vain austerities with she view to acquiring Sambodhi. As in the celebrated statue of Sikri in the called Museum, the eyes are deeply sunken and a short curling beard serv shas only to accentuate the ascetic meagreness of the face.

<sup>1</sup> Compare the same luxuriant falls of draperies on the statues of Mohrā-Morādu (A. S. R., 1915-14).

Pt II. Pl. XIX) and on the Chinese rock-statues of Yun-kang and Long-men in the plates of Ed.

Chavannes: Mission archéologique dans la Chine septentrionale.

<sup>&</sup>lt;sup>2</sup> A. S. R., 1915-16. Pt. II. Pl. III/.

<sup>&</sup>lt;sup>3</sup> In this connexion a group of the Buddha between two nude attendants on Stūpa D 4 might delude us: but as the heads are not shaven, these two worshippers are probably meant for nothing else than children (See belov p. 28).

Of another group of coquettish figures, we cannot too much extol the prettiness and smiling grace. We know only too well to what extent this smile is a stereotyped one, but we cannot help enjoying its charm. The biggest and most striking of these heads is the life-size one reproduced on Plate XXIVa. Its purely Greek profile, low forehead, short nose and small mouth combine to give it, at first sight, a personal as well as a classical appearance: but its almond-shaped eyes, and moon-like visage make it soon recede among the common herd, and we seek in vain to find a name for it, be it only a generic one. The same disappointment will be experienced over and over again with all these faces. Choose among them those endowed with the most animated countenance and which give the most vivid impression of being at least the picture of a wellknown mythological personage, if not some historical portrait taken from life: vet it is useless to question them about their own identity (C/. Pl. XX-XXI). The only obvious element for discrimination lies in the variety of their head-dress. In some the hair, the ringlets of which are pressed on the forehead by a fillet, is gathered in a knot on the crown of the head (Pl. XXt, k-n. XXIg-i); in others it is covered with a kind of cap surmounted with a rosette. This last is fixed either in the middle (Pl. XXI d, n, p) or on the left (Pl. XXo) or on the right (Pl. XXp), unless it spreads on both sides, calling to mind the petasus of Hermes (Pl. XXIq). Very often these elaborate head-dresses are overlaid with iewels or garlands (Pl. XXII and u). Here and there a few exceptional models, such as the tiara of Pl. XXIm, the Phrygian cap of Pl. XXIc. the helmet of Pl. XXIb, or the tapering chignon of Pl. XXh. especially attract attention. But all this teaches us nothing more than that these people are high caste lay-

the types and fashions of their country and time. Indeed, if we met them only on museum-shelves, we should have to be resigned to knowing nothing more about these stucco heads. By good luck, however, the stupas of Jaulian show many of them still in situ. As was expected, all are grafted on bodies clothed with the two traditional lay garments, dhoțī and shawl, and moreover decked with ornaments on their neck, torso and arms. Even that, it is true, does not help us much; it is a well-known fact that the randhara school had at its disposal only this single male type in splendid costume 2 represent both the devas or kings of heaven and Bodhisattvas or supermen. rell as the kings or devas on earth and rich middle-class donors. Another rvation brings us a step further towards the identification of some of these res. On several plinths or dadoes these lay figures are set up side by side figures of Buddhas, and they alternate with the latter on most of the es. This last fact settles the point, and the placing of these richly adorned les on a footing of equality with the "perfectly accomplished Tathagata" In evident proof that we have to deal with Bodhisattvas. Their head is rned sometimes with a turban (Pl. VIb), sometimes simply with a bejewelled non (Pl. IXa); but unfortunately their hands, joined as a rule in the gesture neditation, do not hold any attribute1; so we must once more give up the An exception must be made in reference to the Bodhisattva of Pl. IXa, which his flask marks cut as eya.

worshippers, and that the sculptors have obviously derived their inspiration from

The lay attendants.





hope of learning their proper names. Assuredly it is a justifiable guess that, in many cases, they are still Bodhisattvas who act as attendants on both sides of the Buddha, when it is the latter's turn to occupy the centre of the custom-But even then we are uncertain whether we have not before ary triad. our eyes simply devas or human worshippers, all of them equally anonymous. All we can assert is that these attendants make an outward show of the keenest devotion. Leaning in pious attitude towards the central personage, let it be a Buddha or a Bodhisattva, they hold in their hands, now ribbons streamers, now garlands or purses, now caskets in the shape of a stupa; else they carry in their distended mantle the flowers they are about to shower on the object of their worship (Cf. Pl. VIa and Pl. XX b-d). A special mention may be made of the curly-headed boy, dressed, according to the Mleccha or barbaric fashion, in a pair of trousers and a sleeved tunic, who in chapel E<sup>1</sup> holds out a basket of flowers to his father or master, evidently the Kushān donor of this particular group (Pl. XII b). One of those devotees was even depicted in the act of whistling through his fingers (Pl. XXIa), and it is most probable that with the other hand he waved his scarf; such at least on the old Indian sculptures are the two usual manifestations of religious enthusiasm.1

Among these numerous attendants we find now and then a few women. The relative plainness of the female head-dresses forms a favourable contrast with the extravagant coquetry of their male counterparts. The essential and almost constant feature is the twisted head-band or the laurel crown which binds fast the lower part of the chignon above the forehead (Pl. XXII $b_{i}^{F}(c, d)$ ). Moreover, these upāsikās seem always to wear the traditional feminine consume of the North-West made up of three pieces, the dhoti, the sleeved tune, and Pl. XXIIa shows us how this tunic sometimes displayed spethe shawl. cial fullness in the waist, much like the Greek kolpos. Among the clay coups, in the monastery niches, may be seen a charming figure of a female don! (Pl. XVIa). But the most interesting of all are to be found on two stucco anels decorating stūpas D¹ and D⁴. On either side of a meditating Buddha two men are seated in the European fashion (Cf. Pl. VId). The right-hand attendant Dears in both hands a kind of stupa-shaped casket,2 the bottom of which rests her left hand, while with the right one she seems about to lift up the lide; the umbrella-pinnacle. Her counterpart holds in her right hand a drinking-of copper specimen of which has been found in the excavations) and in the left one init carries a spear. These two attributes are well-known to belong originally to the grants share who is the dispenser of riches, in his capacity of "general" of the Yakirity and to have been later on lent to his consort Hāritī, the fairy grantor of poster. So we may guess that these women, too, will ultimately turn out to be Yaks in and the embodiment of some analogous popular superstitions.

As to the children, we have already alluded above to another group, which equally well preserved on stūpa D<sup>4</sup> and which introduces two completely naked right.

<sup>&</sup>lt;sup>1</sup> Cf., for instance, A. Cunningham, Stupa of Bharhut. Pl. XIIIa.

<sup>&</sup>lt;sup>2</sup> We have already seen it in the hands of other attendants, lay-worshippers or monks, on Pl. VIc and

attendants. Although these are of the same size as the grown-up worshippers in the other panels, they are probably meant for boys. One of them has his hair close shaven except for three locks or tufts, similar to those which occur alone on the stucco-head of Pl. XXIIIc, or combine with a chignon on the clay head of Pl. XXVf, both of which are undoubted pictures of children. Another clay-head, equally remarkable for its chubby cheeks and its gay smile, wears on the contrary all its hair simply cropped (See Pl. XXVd), but from the analogy of Pl. XIIb this one most likely belonged to some boyish assistant of a foreign donor.



Some of these attendants' heads, remarkable for their strongly marked The Atlantes. and somewhat vulgar features (Pl. XXIIIa and b), bring us to the third category of personages, viz., the Atlantes; for the Yakshas or Spirits, which are made to play this part in the decoration of the stūpas, are at once distinguished by their realistic or even caricatural ugliness (Pl. XXII-XXIII). All the fancy and humour which still prevailed in the minds and fingers of the Taxila modellers have evidently found their opportunity in the execution of these miniature figures. By the side of the conventional serenity of the Buddhas and the stereotyped smile of their gorgeous attendants, this swarming gang of subordinate genii opens a kind of safety-valve for all the caprices of artistic imagination. From this point of view we could readily compare these Atlantes to the gargoyles of our cathedrals: they not only share with them their grimaces and contortions, but even (a very exceptional fact on a Buddhist monument) their sly or openly mocking indecency. To be sure, the notion and feeling of the grotesque is not an altogether new departure in this school; from the very beginning, as we know, the artists had found matter for it in the unavoidable representation of the direct prototypes of our Yakshas, viz., the demons of Māra's army. But, there, they still kept serious while depicting the most fanciful forms of hideousness; here, it is evident that they are frankly revelling in the making of caricatures. A shock-head, a swollen forehead, a frowning brow, round protruding eyes, a flat or crooked nose, pursed lips protruding like a snout, such are their usual processes of disfigurement. The curious, seemingly winged head of Pl. XXIIIe may be taken as an exception; here, all the deformity, if we may trust the very clear analogy of another Atlant still in situ on stūpa A6, consisted in grafting a pair of elephant's ears on a human head. We must equally discriminate the clay-mask reproduced on Pl. XXVe, which reminds us in such a striking manner of a Renaissance "mascaron."

The postures of the Atlantes are no less diversified than their expressions of countenance, and we cannot help noticing how skilful and fertile in resources the local artists still were. Every conceivable manner of sitting or squatting, in front or profile, three quarters or from the back, is to be found on the friezes. Now the arms clasp one of the legs purposely bent up, now they rest their elbows on both knees, now they are raised so as to sustain the cornice, now they are held down either to find a point of support on the ground or to grasp the two ankles. Sometimes, while buttressing the upper moulding with their arched neck, these genii still manage to indulge their innate propensity for drunkenness and merriment or their old warlike and diabolical instincts. Some hold in the right hand a two-handled wine cup—the one which the Greeks called a cantharos<sup>1</sup>—and in the left a leather or clay bottle (Pl. Xi), or play upon a kind of guitar (Pl. XXIIg); others blow a conch (Pl. XXIIh), beat on a drum, or brandish arms, sword, spear, mace or shield (Pl. XXIIe, f, i, j), as if they wanted to insist upon their immediate descent from the demoniacal retinue of the Tempter. But the most remarkable fact, in our eyes, is that, after so many years and so much re-editing, these Atlantes have not become in the end mere lifeless puppets, indifferent to their appointed task; on the contrary, it is obvious, if we consider their tormented postures and their harassed or angry looks, that they have never more heavily felt the weight of the building nor more bitterly resented the wrong of their penal servitude.

We must not forget to mention their fellow-sufferers, viz., the lions and elephants, the hind quarters of which are supposed to be concealed beneath the stūpa, while they vainly struggle to disengage themselves with their extended forelegs (Cf. Pl. VII). Not content with thus relieving the Atlantes from a part of their perpetual burden, they still feel bound, on some stūpas, to support on their back the springing of the niches. In spite of their gaping mouths, hanging tongues and spread-out claws, the lions do not succeed in looking very terrible. As to the elephants, they go so far in the way of self-denial as to flourish, at the tip of their salaaming trunk, a lotus-flower intended for the worship of the stūpa under which they lie half-crushed. Lastly, let us mention the couchant bulls set back to back on the Persepolitan pillars which decorate the upper friezes; unmistakably their part is as purely decorative as that played by the acanthus leaves on the Corinthian pilasters of the lower friezes.

## THE ARRANGEMENT OF THE FRIEZES.



With this rapid survey of the throng of images, we must now consider the way they are laid in rows and tiers on the stūpas. Now that they have been roughly classified, they will help us to understand better the meaning of the panels and the simple rules governing their sequence or their superposition on the friezes. In other words, after having essayed to make an analysis of the decoration, it remains for us to make an attempt at its synthesis. By good luck, this reconstruction need not be a purely imaginary and theoretical one. To get a clear and safe idea of the current scheme which the Taxila artists set themselves to execute, we have simply to examine some of the best preserved among the stūpas of Jauliāñ. To illustrate our description, we shall choose the stūpa No. D<sup>4</sup> in the outer court; it will then be sufficient to notice the main points on which the 27 others differ from the selected model.

General design of the stupas.

As may be seen on Pl. Vb, the  $st\bar{u}pa$  D<sup>4</sup> is raised on a square plinth, just high enough to put the first line of stucco modelling above the reach of passing feet<sup>2</sup>. Properly speaking, only two storeys of the structure are still extant.

<sup>&</sup>lt;sup>1</sup> Cf. the cup in the hands of the "Dionysos" in silver repoussé, found at Sirkap (A. S. R., 1912-13, Pt. 1, Pt. XXa)

<sup>&</sup>lt;sup>2</sup> As regards the materials of the core of the stūpa, free stone and blocked out  $ka\tilde{n}j\tilde{u}r$ , etc., we refer the reader to the details given by Sir John Marshall (p. 7 ff. above).

The lower one consists of a row of lions alternating with Atlantes, and above this, of a frieze surmounted with a cornice and divided into panels by Corinthian pilasters, there being five panels to each façade. Each of these exhibits a Buddha between two attendants, sometimes sheltered under a trefoiled arch, sometimes under a doorway with sloping jambs. The Buddha is alternately in the meditating or teaching posture, or rather it is so on three of the four façades; on the southern one (to the left of the plate), the view of which is impeded by the proximity of the adjoining  $st\bar{u}pa$  D<sup>5</sup>, it was found easier and more expeditious, perhaps, to represent all the five Buddhas in an attitude of meditation. The attendants are set up to the right and left of the central figure, in the space intervening between the arch or door-way and the Corinthian pilasters. As a rule, they rest on a kind of lotus-stool; at other times they are two Buddhas seated and meditating; at others, two monks (Cf. Pl. VIc) or two lay worshippers kneeling and praying. The exceptional panel, depicted on Pl. VId and discussed above (p. 28), occupies the middle of the frieze on the northern façade.

The second storey of the  $st\bar{u}pa$  slightly receding on the first, just as the first recedes on the plinth, is equally supported by a row of Atlantes; but, this time, their task is shared by elephants, instead of lions. This architectural unit is horizontally divided by a cornice into two friezes, each of which has likewise five partitions on each face: but, while the lower frieze still keeps to Corinthian pilasters, the upper one introduces Persepolitan columns. Each partition contains the usual triad: only, on account of the narrowing of the available space, the attendants are inserted somewhat sideways (Ct. Pl. VIa and b). On both, friezes, arches and doorways are so disposed that they interchange their places horizontally as well as vertically. The springing of the first rests on lions and that of the second on elephants; and, lastly, Bodhisattvas now alternate with the Buddhas.

From this second square terrace sprang, after another set-back, the round drum which supported the dome. This drum, which still exists on some stūpas in the upper court, has here almost completely disappeared. To get a complete idea of these structures, their tapering pinnacle of umbrellas included, we have to resort to one of the luckiest finds at Mohṛā Morādu.<sup>2</sup> In the design of that stūpa as well as of others in this neighbourhood, the Taxila artists, true to the classical origin of their school, have clearly paid the utmost attention to symmetry in the general design and then tempered it by a studied pursuit of variety in the details.

The preceding description applies word for word to  $St\bar{u}pa$  D<sup>1</sup>, and tallies almost exactly with  $St\bar{u}pas$  D<sup>2</sup>-4 and A9-10, 12, 16, (Cf. Pl. VII), 17-18, except that the number of the panels is sometimes reduced to four or even three to each façade. Unfortunately, these  $st\bar{u}pas$ , to whatever height they have been preserved, have lost most of their decoration, if not the whole of it, and show



The Jaulian and other stupas.

<sup>1</sup> We will not reconsider here the architectural origin of these two decorative motives so familiar to the Gandhāran School. Let us only remind the reader that they exactly represent the upper part of the section of a vihāra or chapel with either double-curved roof or an angular one (See L'art g. b. du Gandhāra, I, figs. 46-47 and 51-52).

See A. S. R., 1915-16, Pt. II, Pl. XXIVf. This stups is round from the base upwards.



now almost nothing but their core of blocked-out kañjūr. On other specimens such as A<sup>3-7</sup> and A<sup>14</sup>, the plinth displays a curious (and shall we say later?) tendency to grow loftier. On A 8, A11 and A19, this raised plinth1 is moreover decorated with a row of Buddhas' and Bodhisattvas' figures, set side by side on the faces which were at the same time in good view and well guarded against the wear and tear which the feet and flowing garments of the worshippers would have unavoidably wrought. These statues are, generally speaking, very heavy and dull, as may be judged from plate IXa. All the same, they seem anterior to the still larger ones which constitute the only decoration of the bases of stupas A 1-2 and A15 (Pl. VIII). These have already been described above on account of their inscriptions (See p. 26ff.) The increasing unskilfulness in the treatment of their draperies and of the meditation gesture makes it highly probable that they were the last figures to be executed at Jaulian. Now, were this fact admitted, even so we should not get a quite satisfactory classification of the Jaulian stupas; for three among the most interesting of them would still fail to find a place in the series, viz., Nos. D<sup>5</sup> (also bearing inscriptions), A<sup>2</sup> and  $A^{20}$ . While the size of their statues draws them close to  $A^{15}$ , they differ from it in at least one essential feature, as their images are kept separate (exactly as on the plinth of Chapel B4, Pl. XIIc) by still slender and finely wrought Corinthian pilasters. Where shall we put these three stūpas in any chronological list, and how shall we understand their position with regard to the fourth?

To this question, not to mention many others, the site of Jaulian does not supply us with any answer; and so we are led to believe that it would be expedient to enlarge the field of our comparisons and bring into consideration the largest possible number of specimens. This is not an impracticable undertaking. Of the long discovered stūpas of Ali Masjid, in the Khyber pass, at least photographic reproductions are available.2 Of those more recently brought to light at Sahri-Bahlol by Dr. D. B. Spooner and Sir Aurel Stein. we possess, besides photographs, numerous fragments and even one cast. Lately, Mr. Hargreaves has dug up in one of the out-courts of the main convent (at last thoroughly cleared) on the hill of Takht-i-Bāhi, two small stuccoed stūpas in a tolerable state of preservation3. Now, we must not forget that the small stūpas which fill the open court between the monastery and chapel quadrangles (some forty in all), as well as the large  $st\bar{u}pa$  inside the latter, were once equally decorated in stucco. When first disinterred by Sergeant Wilcher, their ornamentation was much the same and probably as intact as that of Only a few vestiges of it are now extant; but, as Mr. Hargreaves' stūpas. we had of late an opportunity of ascertaining on the spot (for to these wonderfully preserved ruins you must always return for more information), these remains are not without some bearing upon our present research. Compared with the Taxila stūpas, those of the Peshawar District supply all the data wanted for at least a provisional classification of these buildings. To simplify matters,

<sup>&</sup>lt;sup>1</sup> See above, p. 22, the description of A <sup>11</sup>.

<sup>&</sup>lt;sup>8</sup> See J. Burgess, Ancient Monuments, Temples and Sculptures of India, I, Pl. 103-107.

<sup>&</sup>lt;sup>2</sup> A. S. R., 1910-11, Pt. II, Pl. XXIIa.

we shall confine ourselves to distinguishing three main types of stuccoed stūpas. It will clearly be seen how they happen to correspond to as many successive changes in the religious ideas and requirements of their donors.



stuccoed stupas.

- (i) To begin with, the bulk of the Gandhara stone sculptures has taught Evolution of the us that, since the very beginnings of the school, the fashion prevailed of decorating stūpas with legendary scenes, the subject of which was borrowed from either the previous births or the last life of the Buddha. Then a new tendency, which first manifested itself in the North-West and soon spread to the Ganges valley, induced the Buddhist people to substitute iconographic groups in place of narrative compositions, in other words to replace bassirelievi by statues. So we should have, on principle, every reason to infer that stuccoed stūpas, adorned with legendary scenes, are anterior to any showing only rows of idols, with or without attendants. Now the existence of the former has been testified, both at Sahri-Bahlol and at Takht-i-Bāhi,1 by the excavations of Dr. D. B. Spooner. In a series of stucco bassi-relievi, now in Peshawar Museum, he has recognised the customary episodes known as Dīpańkara's Predication, Nativity, Great Departure, Sambodhi, First Predication, etc. That is more than was wanted to prove that the stuccoed stūpas were originally conceived and designed exactly on the same lines as the stone ones. If, later on, they started a special development of their own, it is simply because they long outlived their former models, and transformed themselves to suit the new times.
- (ii) This transformation, as always happens either in nature or art, was of course a gradual one. The first substitute to take the place of the legendary scenes on the squarish metopes,2 must have been these iconographic groups of a Buddha or a Bodhisattya between two or more attendants, so many stone replicas of which have been preserved, and which still retain a faint recollection of the "Invitation" (Adhyeshana) to Predication or of the "Instigation" (Samcodana) to the Great Departure. A ruined and rather late example of this kind has been actually found on the lower frieze of stūpa J, close to the Dharmarājikā of Taxila,3 and we may expect to find more of the same kind. At all events, we already possess very numerous specimens of stupa bases and chapel plinths which only exhibit a row of Buddhas and Bodhisattvas seated4 alone between two pilasters with Corinthian capitals, the abaci of

<sup>&</sup>lt;sup>1</sup> See A. S. R., Pt. II, 1906-7, p. 136-7 (Takht-i-Bāhi) and 1909-10, p. 48 (Sahri-Bahlol) and cf. for stucco scenes in Taxila ibid. 1914-15, p. 6. The importance of this discovery has been pointed out by Dr. Spooner.

<sup>&</sup>lt;sup>2</sup> For this partition of the friezes into squarish metopes, see the stūpa of Sikri (4rt g.-b-du Gandh., I. fig. 73) and most of the stone bassi-relievi. It is true some of the stucco scenes from Takht-i-Bāhi. such as the episodes in the palace, and a Nativity from Sahri-Bahlol are framed in arches: but it seems we have to deal here with those arched gables which flanked the domes of the stone stups as well (ibid. figs. 70-72, and cf. figs. 233, 271).

<sup>&</sup>lt;sup>3</sup> See A. S. R., 1912-13, Pt. II, Pl. X.

Rarely standing: however see J. Burgess, loc. land, pl. 103, 107 (Ali Masjid) and A. S. R., 1910-11, Pl. XXII (Takht-i-Bahi).



which are stretched out to encompass their heads. The great number of these and the late appearance of many induce us to think that this model must have continued in use throughout the later ages of the school. So we are not prepared to contend that in Jaulian the present decoration of stupas D5, A2 and A20 any more than that (so evidently decadent) of chapel C34 (Pl. XIIc) goes back to a relatively early date. Let us not forget that the rejacimento of those statues, when rendered necessary by too long a weathering, had to be executed on much the same lines, since architectural dimensions cannot be easily changed, and since they determine to some extent the size and manner of their own decoration. But if this frieze design does not by itself guarantee the antiquity of the images we find enshrined in it, it may nevertheless be traced to a somewhat ancient period. Its introduction actually marks, in the general evolution of the school, the beginning of a medium stage, when the former crowded scenes were definitely replaced by solitary statues, but when the latter still occupy panels of the same size and shape that had been habitually intended for the former.

(iii) Now the evolution of religious thoughts and forms did not stop there. The enthroning of so many statues on the friezes was of course only the external manifestation of a growing propensity towards idol-worship within the Buddhist community. One step more, and the idea will begin to prevail that the more numerous the images, the greater the merit of the donor. Now, given a stupa frieze of limited dimensions, how can we manage to increase the number of statues to be located upon it? An obvious answer is that, to increase their number, it will be necessary and sufficient to diminish their size. To diminish their size, the first thing will be to curtail the height of the frieze, and to this end, we shall lower the cornice, dentils and architrave above, and raise the plinth below on the heads of some Atlantes. But it goes without saying that another process would provide us with a much larger number of alcoves for images. Let us run a horizontal moulding through the middle of this frieze; we shall double at a stroke the number of panels. In both cases, two results are unavoidable. First, the Corinthian pilasters, shortened in such a ruthless way. will of necessity become quite stunted: and this is actually the first thing to strike the eye when examining the newly found stūpas. Secondly, the panels cease to be about square and take the shape of an elongated rectangle; and this fact, though perhaps less striking. is nevertheless important on account of the consequences it entails. For in such a rectangle, a much larger space remains vacant on each side of the statue, and, to fill it up, the

<sup>1</sup> See A. S. R., Part II, 1909-10. Pl. XIV; 1911-12, Pl. 44 o, 1912-13, Pl. XII (with an arch inserted), etc.

artists have to fall back upon two old expedients of their own. First, they employ, by way of an additional framing, the familiar motives of the trefoiled arch and the door-way with sloping jambs and, by so doing, they obtain at once the exact design of some of the  $st\bar{u}pas$  at Ali Masjid.¹ Secondly, they revert to the long discarded pair of attendants, except that they now insert them in the interval between the two frames, and so come in the end to the elaborate model of the Jauliāñ  $st\bar{u}pa$  D⁴. We do not mean to say that this  $st\bar{u}pa$  has undergone in fact any of the alterations just described. It is much more likely that from the first it was both delineated and executed exactly as we have it. But its very design, particularly the raising of its plinths on rows of Atlantes and the division of its second storey into two friezes, still seem to bear a clear mark of the procedure we have endeavoured to follow step by step.

There the development ends: not that we consider the  $St\bar{u}pas$   $D^1$  and D<sup>4</sup> as the last productions of the Jaulian workmen. They manifestly appertain to the time when all the decorative resources of the school, Corinthian and Persepolitan pilasters, human or animal Atlantes, religious or lav images, were all put under requisition and lavished together to get the maximum of effectsomething, in fact, which corresponds to what they call the "flamboyant" style After bringing forth this highly developed model, in Gothic architecture. the school could go no further; but it lingered long enough to know decadence and retrogression towards more artless and seemingly more primitive fashions. If we were always to proceed from the simple to the complex, we ought to put first in the series the Buddha figures seated side by side, without any intervening pilasters or any other extraneous elements of decoration, such as as we find on the plinth of Stupa A 15 (Pl. VIII). On the contrary, as already stated, we agree with Sir John Marshall that these statues are among the last to have been ordered and executed before the final destruction of the place. This is what, in spite of their large size, their coarse workmanship and their ungainly setting have already led us to believe; now we may safely look upon them as late and clumsy restorations of what was probably, if we may judge by its proportions, one of the oldest stūpas on the site.

Thus the evolution we have just sketched out is a purely theoretical one (we cannot insist too strongly upon this point), and it does not enable us to dispense with a special examination of each particular case. However, it is not unprofitable, in the present state of our studies, to try and prepare, with the documents already at our disposal, a kind of ground-work which future discoveries will contribute to make more correct and precise. From yet another point of view, the comparison between the Gandhāra stūpas and the Taxila ones is instructive enough, especially if we make it still more comprehensive by including the stucco heads now preserved in the Peshawar Museum. For what we see in both cases are the same types, which we have tried to classify.

<sup>&</sup>lt;sup>1</sup> Cf. Art gr.-boud. du Gandh. fig. 81; and Burgess loc. laud.

repeated over and over again—Buddhas, Buddhist monks and other ascetics; Bodhisattvas, devas and lay worshippers; Atlantes, lions and elephants. And the analogy might be followed up even in the minor technical details of style and workmanship. Let it be added, too, that in the glass cases of Peshawar¹, we recognise a few specimens, luckily preserved, of the wonderful clay heads already met with in Taxila. On both banks of the Indus we have not only to deal with the same schools, but, what is more, with the same people. It follows thence that the conclusions arrived at by our study of the Jauliāñ monuments are equally valid for Gandhāra, properly so called. The point is of special interest, as we shall see by and by that some of these conclusions are of no little consequence.

#### Conclusions.

There is no doubt that the excavations at Jaulian have enabled us to get a deeper insight into the ways and manners of the donors who ordered, and of the artists who decorated, these stūpas. Now, this familiar acquaintance with by-gone humanity is after all the chief aim of archæological research. Of course, it would be premature to try and reconstitute, from a mere glance at this débris, a picture of Taxila society with its castes, types, and fashions. But let us wait and see. Should other excavations, as well managed, give us some more ruins, as well or even better preserved, we could soon undertake to define more precisely the social or racial distinctions we already divine between the plebeian Atlantes and the aristocratic attendants, or the Indian and the Scythian donors. Even now it would be possible to utilize these models as contemporaneous illustrations to Fa-hian's chapter on the habits of the Indians. If it does not seem advisable to take at once in hand, with an eye to a "Dictionary of Indian Antiquities," the collecting of all the ethnographical data supplied by this array of images, it is simply because the North-West Frontier ground, far from being archæologically exhausted, is still keeping in store for us innumerable discoveries of this kind. Yet we must not forget that in those data lies the main contribution which this stucco decoration can make to the advancement of our studies.

With respect to the identification of those decorative images, which are unquestionably Buddhist idols, the new examples from Jauliān do not seem to help very much our previous iconographical knowledge. Over and over again, we have only been able to recognise Buddhas and Bhikshus, Bodhisattvas and Devas, Upāsakas and Yakshas; and to these generic denominations we have not succeeded in superadding any proper name. Only the inscriptions preserved on the base of some of the statues record, besides Śākyamuni, his

<sup>&</sup>lt;sup>1</sup> Perhaps it is advisable also to note here the existence in the Peshawar glass-cases, of some clay and terracotta heads very debased, indeed, and possessed of a Central-Asian look due to their prominent and slanting eyes. which have been found on the sites of Sahri-Bahlol and Shāh-jī-kī-Dherī. From what the Taxila excavations have taught us, the Gandhāra school properly so called, even to its last day (say the beginning of 6th century A.D.), did not descend to the level of such deformities. So we must ascribe these last to the subsequent period of Turkish-rule in Gandhāra (8th-9th century A.D.), and to the late and feeble attempts at restoring convents and stāpas, of which effor's the Chinese pilgrim Wou-k'ong was the witness.

seddiate predecessor, Kāśyapa. At the same time they confirm what the heitional rows of the "Seven Buddhas", met with on the Gandhara sculptct's and, lately, on the Mohrā Morādu stūpa, had already taught us, viz., i persistent worship of the so-called Manushi-Buddhas; but of the five Dhyaniffsiddhas we find no mention and no sure examples. Among the Bodhisattvas, tree do not go one step beyond the long-known identification of Maitreva: dire do not even see, as in Mohrā Morādu<sup>1</sup>, any of them holding in his hand a pink lotus and thus deserving to be called by the name of Padmapani. Upon the whole, therefore, the excavations at Jaulian do not bring any substantial addition to the pantheon of the Gandhara school; we can only say that they provide some stepping-stones for future discoveries. The alternation of Buddhas and Bodhisattvas on the friezes shows an unmistakable development of the worship of the latter to the prejudice of the former. One could not without a stretch of the imagination construe the unexpected and twice repeated group of Buddha between two Yakshinis (cf. Pl. VId) into a premonitory symptom of coming "tantrism". But it is undeniable that this panel represents a somewhat later development than the one with the "Tutelary Pair" at Takht-i-Bāhi.2 In another direction it is equally curious to observe the arrangement of the personages in the niches of Jaulian and of Mohra Moradu as well. On either side of the central Buddha are drawn, in a symmetrical array, Bodhisattvas and monks, Devas and Yakshas.<sup>3</sup> The most casual observer cannot but be struck by the fact that such exactly are the personages we meet with about the same time and similarly grouped in the "cave-temples" of Yun Kang and, later on, of Long-Men, in far-distant China,4 and so those Chinese rock-carvings are no longer without counterparts, or rather prototypes, in North-Western India. But we need not look so far to find interesting parallels; let us mention, for instance, on the jambs of the doorway of Chapel No. C34 (Pl. XIIc), the small figures quite analogous to those of Gangā and Yamunā. which it was becoming fashionable to set up at the entrance of every Indian temple.

If we now turn to the chronological problem, we find, here again, that we cannot rely on these stucco images to render easier the difficult task of classifying, according to epoch, the Graeco-Buddhist sculptures. Of course we are not going to deny that it is always possible to establish, on the strength of differences in workmanship, a distinction of time between two statues, even when they elbow each other on the same wall; it is, for instance, what Sir John Marshall has done and rightly done with reference to the Buddhas of Pl. Va (see above p. 6). In the same way we surmise that the heavy conical chignon of Pl. XXh is later than the classical crobylos of Pl. XXm. But most arguments of this kind become very insecure, indeed, when we reflect that the Buddhas and Bodhisattvas we have reason to believe to be the latest are

<sup>&</sup>lt;sup>1</sup> Cf. A. S. R., 1915-16, Pt. II. Pl. XIXc.

 $<sup>^{2}</sup>$  Cf. A. S. R., 1910-11, Pl. XXIIb.

<sup>&</sup>lt;sup>3</sup> For instance, on the only group here reproduced (Pl. XIIIb), a bhikshu holding a fly-flapper (most probably Ananda) stands opposite to Śakra "the Indra of the gods," holding his thunderbolt.

<sup>4</sup> See Ed. Chavannes. Mission dans la Chine septentrionale.

not so much worse than the others, and that there is to the end plenty of life in the postures and countenances of the Yakshas. Nor can we look for a safer criterion to the few intrinsic elements of differentiation which the Buddhas themselves may present. We have already been compelled (p. 26) to observe that the various ways of waving or curling the hair, and of draping the shoulders and feet, are met with side by side, on the same frieze. So far from helping us, the stucco images would simply achieve our utter confusion and leave us completely at sea, but for the fact that the Taxila excavations have supplied Sir John Marshall with other chronological land-marks. We allude to his highly interesting technical observations on the consecutive styles of masonry employed in the buildings all over the valley. As the decoration cannot be older than the walls to which it has been affixed, these observations have enabled him to bring down to a late date, viz., to the 4th or 5th century of our era, the Jaulian decoration in clay or stucco. This is a new and capital piece of information and sheds a much-wanted light on the ultimate destinies, till now quite obscure, of the Gandhara school.

Of its productivity during those two centuries, we knew practically nothing; now we must admit as an ascertained fact that it kept on much longer and in a much more felicitous way than could have been expected. In all likelihood, its several branches underwent varying fortunes and did not all decline at the same time. The first handiwork to deteriorate was of course the coinage, and next came, as far as we can see, the turn of the stone-sculpture. But for a hitherto unsuspected length of time, the clay and stucco modelling went on maintaining a high degree of efficiency, worthy of better days. Nor is this altogether surprising. While India of to-day has few good stone-carvers, it may still boast of very clever modellers, who have not lost the tradition. and produce plenty of small coloured clay-figures, often very skilful and spirited. The excavations at Jaulian, as at Mohra Moradu, have introduced us to ancient products in the same happy vein. Alas! they have taught us at the same time to realize the full measure of what we have lost in the final wreck of the school; for to the irreparable loss of Gandhara painting we must add that, almost as complete, of an admirable clay-plastic.

Thus, the cleverly and steadily pursued researches of the Archæological Survey have already succeeded in throwing much light on the last manifestations of the Gandhāra School. At the same time they enable us to define more correctly the place of this particular school in the general history of Indian art. The fact that it was much less decayed than we dared to imagine when it received its death-blow at the hands of the White Huns, fits in most satisfactorily with what is already known about the evolution of Buddhist sculpture in the Ganges valley. A sudden decline, happening (as suggested by the deterioration of the coins) towards the end of the 2nd century A.D., would have 1c. an unbridged chasm between the last Gandhāra productions and the first Gupta works at Mathurā and Benares, some two centuries later. As things now stand, Taxila, the site of which has given back to us fragments

<sup>&</sup>lt;sup>1</sup> See A. S. R., 1912-13, Part II, pp. 12-13 and fig. 1.

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seed both from the blue slate of Gandhara and from the red Mathura sandhe, supplies the requisite geographical and historical link. When the desctive frenzy of Mihirakula uprooted the old Graeco-Buddhist school, some its boughs had already withered; but some were still in bloom, and its Ashoots in Madhyadeśa were ready to take up its succession and perpetuate its itions, albeit under new forms and in a new spirit. The works of art usinterred in Jaulian admirably illustrate the transition between the North-Western school and the Gangetic ones. This transition was the more easily accomplished, as the former had for a long time been accommodating itself, in the course of its six centuries duration, to the local tastes and ideas of the people. For our part, the more we study it, the more are we impressed by the inner Indian feeling underlying its outward classical form. What trained eve could fail to recognise the origin of the objects reproduced on the accompanying plates? A few heads only, as for instance the one reproduced on Pl. XXIVa, could be mistaken for classical pieces, were not their countenance so strongly orientalized. Apart from these few exceptions, this direct offspring of Indo-Greek ancestors has become thoroughly Indian. Thus it appears more and more clearly to any unprejudiced mind that the Hellenistic influence has not been for India one of those poisons which the living organism strives and hastens to eliminate, but an invigorating food which she has perfectly succeeded in assimilating.1

It will perhaps be said that these far-reaching conclusions extend far beyond the narrow hilly tract from which they originated. Such is, indeed. the case; and there is no better illustration of the special value incidental to any well conducted excavation. The present way of conducting them not only supplies us with plans and museum pieces, but at the same time, with the means of understanding and classifying the finds. Now, the elementary precaution of keeping a careful record of their excavations is just the one which people seem never to have thought of taking during the last century, when digging the inexhaustible soil of Gandhāra. They went on picking up sculptures and piling them up without any proper record of the site and order of the finds, and out of this confused medley of disjecta membra (we ourselves made, years ago, that bitter experiment in the Museum at Lahore) it was hopeless to try and draw any historical sketch of the school to which they belonged. With the reorganization of the Archæological Survey, a new era has dawned upon our studies: now-a-days the approved methods of classical archæology are being properly applied in India; and that is why the Taxila excavations have not only yielded plenty of "Buddhas," but, what is much more valuable, some history as well.

<sup>&</sup>lt;sup>1</sup>[True, but even the best food must be taken slowly and in moderation. In Gandhāra, the process of assimilation took several centuries; in Mathura, the immediate effect of too much Hellenism was aesthetic dyspepsia. It was only further afield (e. g., at Sānchī and Amarāvatī, where its influence was less potent) that the teachings of the Hellenistic genius were quickly and thoroughly assimilated, and that they helped to invigorate at once the true indigenous Art. J. M.]

# LIST OF OBJECTS FOUND AT JAULIAÑ

## By Pandit V. Natesa Aiyar, B.A.

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Serial No.	Registered No.	Sone objects.
		Gandhāra Sculptures.
1	130	Height 2' 8½". The Indraśailaguha scene or the "visit of Indra." In centre, Buddha seated in dhyānamudrā in grotto; face and left ear missing. Around the grotto, are caves, rocks and trees with devatās, animals, etc. Below the cave, to right, Indra's elephant, Airāvata, with attendant holding royal umbrella in front of him. Before them, towards the middle of the panel, a kneeling figure which may be Indra, and, behind him, his wife Śāchī. On the left side of this group the figure holding a broken object before him is probably Pañchaśikha, the harpist of Indra, with his harp. To the left of the Buddha and on a line with his shoulder, is Vaiśravaṇa, spear in hand, seated beneath a tree. Corresponding with Vaiśravaṇa, on the right side of the Buddha, are the remains of a figure, which may be the Vajrapāni. Below him, to right, on the edge of the central grotto, a small monkey is imitating by his posture the Buddha. The remaining figures in the forest are of devatās, etc. From against the plinth of chapel C. 15. Pl. XVIIIa.
2	153	Heig't 2' 1". Buddha standing on pedestal of inverted lotus. Halo, face and forearms mutilated or missing. On face and garment, patches of gold leaf. From right hand side of Monastery entrance.
3	F1	Height 124". Buddha seated cross-legged on lotus throne on pedestal. Head and hands missing, knees damaged. To the right of throne above elephant, base of pillar. In centre of pedestal, the Bodhisattva seated cross-legged in dhyānamudrā in centre, with a standing monk and seated deva to either side. At left hand corner, elephant supporting throne. The two figures of monks are probably the donors of the sculptures. From Lower Stūpa court. Pl. XVIIIb.
4	117	Height 77". Fragment of leafy canopy, with bust of devatā ensconced in foliage, his hands in attitude of prayer. From north side of Stūpa D3.
5	F 2	94" across. Ditto, of pipal leaves from right side of halo. A bird is perched on one of the leaves. From north side of Stūpa D3.
	1	Miscellaneous.
6	290	33 across. Marble lamp with projection at either side. From Mon. cell No. 29.
7	F 3	9 broken pieces of umbrellas of kañjūr stone, ranging from 1' 3' to 4' in diam. Some have raised hubs and rims; and to some are adhering traces of the original plaster coating. From Stūpa Court

-	Serial No.	Registered No.	Stone objects.
			Miscellaneous—contd.
	8	F 4	26 pieces of umbrella shafts, diam. from $5\frac{1}{4}$ " to $14\frac{1}{2}$ ". Some are relieved with mouldings at the top and bottom. From Stūpa Court.
	9	F 5	Harmikā, 8" in height, with torus moulding at base and upper part divided into 4 tiers. From Lower Stūpa Court.
	10	F 6	Balustrade engaged pillar, $10\frac{1}{2}$ " high, bevelled into 3 flat facets on front side, and provided with lozenge shaped depressions (one on each side) for the insertion of cross bars. From Lower Stūpa Court.

Serial No.	Registered No.	Stucco objects.
		Buddha Images.
1	F 7	Height $10\frac{\pi}{3}$ . Niche enclosed within trefoil arch and divided into two compartments. In the upper compartment, Buddha seated in $Siksh\bar{a}mudr\bar{a}$ , with an attendant Buddha on either side. The same figures repeated in lower compartment. Core of niche of kañjūr; decorations and Buddha reliefs of stucco, burnt on surface.
2	192 <i>a</i>	Height 85". Buddha seated in dhyānamudrā. Ushņīsha and ūrņā missing. Ears and hands damaged. Sanghātī covers both shoulders Curls of hair indicated only by dots. Hole beneath seat for support Red colour on garment, hands lips nose ears, eye-lids, pupils and forehead. Traces of black colour on eye-brow, eye-balls and hair From between Main Stūpa and Stūpa A12. Pl. XIXa.
3	192b	Height 93". Upper part of figure. Left ear damaged. Hands in Sikshāmudrā. Saṇghāṭī covers both shoulders. Curls of hair indicated by dots. Hole as in 2. Traces of red paint on hands lips. ears. eyes, forehead and saṇghāṭī. From between Main Stūpa and Stūpa Al2. Pl. XIXb.
İ		BUDDHA HEADS.
4	57	Height 21½". Back part and left ear missing. Right ear damaged. Lim wash. Traces of red paint over hair and right ear. From North East of Main Stūpa.
5	171a	Height 193". Upper part of crown and ushnīsha missing. Right ear ūrṇā and nose damaged. Left ear missing. Aquiline nose. Circula depression on upper lip. Lime wash. From North-West of Main Stūpe Pl. IVa.
6	32	Height 213". Back part of head partially missing and ears damaged Lime wash. Traces of red paint over hair and ears. From North East of Main Stūpa. Pl. IVb.
7	172	Height 21 <sup>1</sup> / <sub>4</sub> ". Left ear missing. <i>Ūrṇā</i> , nose and lips damaged. Lim wash. From between Main Stūpa and Stūpa A11.
8	53	Height 95". Forehead and right ear damaged. Ushnīsha and lee ear missing. Lime wash. Double coat of plaster on core, the hea having been re-made. From between Main Stūpa and Chapel B28.
9	50	Height $7_8^{1''}$ . Ears slightly damaged. Lime wash. From Main Stup Court. Pl. XIXe.
10	149a	Height 73". Left ear and portion of hair damaged. Lime was and traces of red paint.
		This and the following three heads seem to have been prepared fro the same mould.
11	174a	Height 8". Ears and left eye-brow damaged. Lime wash. Pl. XIX

	Serial No.	Registered No.	Stucco objects.
-			BUDDHA HEADS—contd.
	12	F 8	Height 8". Thin buff slip. Red paint on lips, ears, eyelids and edge of hair. Traces of black paint on hair and eye-brows. In good preservation. Pl. XIXe.
	13	110	Height $8\frac{1}{4}$ ". Right ear and left temple damaged. Traces of red paint on face and ears and black paint on hair.
	14	168a	Height 8½". Right eye-brow and ūrṇā damaged. Lime wash.
•	15	F 9	Height 51". Right ear damaged. Lime wash.
	16	93a	Height $5\frac{5}{8}$ ". Ears slightly damaged. Crystal $\bar{a}rn\bar{a}$ setting still in position.
	17	12	Height 44". Right ear and ushuīsha damaged. Lime wash.
	18	160a	Height $4\frac{5}{8}$ ". Ears damaged. No $\tilde{crnd}$ . Lime wash, and fine buff slip. Traces of red paint on edge of hair, lips and neck.
	19	174 <i>b</i>	Height $4\frac{3}{4}$ ". Right ear damaged. Lime wash and slip. Traces of red paint on edge of hair, eye-lids and lips.
	20	F 10	Height $3\frac{1}{2}$ ". Wavy hair. Lime wash and buff slip. Outer edge of halo painted red.
	<u> </u>		All objects numbered from 9 to 20 are from Main Stūpa Court.
	21	F 11	Height $2_8^{1}$ ". Right ear slightly damaged. Curls indicated by dots. Traces of red paint on neck. ears. lips. face and eye-lids and edge of hair over forehead, and grey-black paint on hair. Lime wash. From south-east side of Main Stūpa.
	22	150	Height 13". Lime wash. Traces of red paint on neck, lips and eyelids. From between Main Stūpa and Stūpa A10.
	23	175	Height $3\frac{1}{2}$ ". Slightly damaged. Hair arranged in ringlets. From between Main Stūpa and Stūpas A13 and A14.
	24	1496	Height 4". Left side of face only. Stucco. Red colouring on chin, lips, nostrils, eye-lids and black in pupil of eye. From south-east corner of Main Stūpa.
	25	154	Height 6½". Ears missing. Forehead, tip of nose and chin slightly damaged. Traces of red colouring on eye-lids. Hair treated in ringlets. From between Stūpas A16 and A17. Pl. XIXf.
	26	F 12	Height 7". Ears slightly damaged. Lime wash. From Main Stūpa Court Pl. XIXg.
	27	178	Height 6". Ushnīsha and right ear missing. Ūrnā and left ear damaged. Traces of red colouring on left ear and neck. Remains of socket hole at the back. From east side of Stūpa A18. Pl. XIXh.

Serial No.	Registered No.	Stucco objects
-		Head of Monk.
28	103a	Height 13. Turned to left. Stucco finished with buff slip. Red colouring on hair, ears, lips and eye-lids; black on eye-brows and pupils. From north-west corner of Stūpa D1.
		IMAGES OF BODHISATTVAS, DEVAS OR LAY WORSHIPPERS.
29	56	Height 63.". Upper part of figure. Halo and head-dress damaged. Wears elaborate head-dress and numerous ornaments, including ear-rings, torque and necklaces. From between Chapel C1 and Stūpa D1. Pl. XXa.
30	. 45	Height 5\frac{3}{4}". Upper portion of a lay devotee, with face turned to right. Hair confined by fillet and adorned with medallion and rosette. Traces of red paint on left side. Wears ornaments and holds flowers in fold of garment. From West of Main Stūpa. Pl. XXb.
31	·91 <i>a</i>	Height 5½". Ditto, with face turned to left. Wears ornaments and holds flowers as above. Slightly damaged. From Lower Stūpa Court. Pl. XXc.
32	103b	Height 6". Ditto, with face turned to right. Hair treated in curls and confined by fillet. Fantail head-dress. Wears ear-rings and bracelets. Holds flowers as above. From West of Stūpa D4. Pl. XXd.
33	82	Height $6\frac{7}{8}$ ". Niche enclosed in trefoil arch containing upper part of Bodhisattva figure in dhyānamudrā. The figure wears ear-rings, neck-lace, torque, bracelets and elaborate turban. Lime wash. Core of niche, kañjūr; decorative details and Bodhisattva figure of stucco. From west side of Stūpa A1.
		HEADS OF BODHISATTVAS, DEVAS OR LAY WORSHIPPERS.
34	4a	Height 15". Ushnīsha missing. Deep sunken eyes and cheeks, lean face with beard. Head of the fasting Bodhisattva. Lime wash. From between Main Stūpa and Stūpa A10. Pl. XXe.
35	1a	Height 103". Head in Hellenistic style, wearing wreath. Back of head broken. Surface damaged. From East of stairway of Main Stūpa. Pl. XXIVa.
36	<b>F</b> 13	Height $3\frac{1}{8}$ . Hair disposed in ringlets and confined within ornamental band made of two strings. Top-knot. Ear-rings and tilāka. Lime wash. From Main Stūpa Court. Pl. XXf.
37	93c	Height $2\frac{5}{8}$ ". Wears ornamental turban and ear-rings. Features blurred. Upper part of turban missing. From south side of Main Stūpa. Pl. XX $g$ .
38	34	Height $2\frac{1}{2}$ ". Left ear missing. Elaborate head-dress with ushnīshalike crest. Ear-rings. Lime wash, red paint on lips, nose and eye-lids and black paint on eye-brow, eye-balls and hair. From south side of Main Stūpa. Pl. XXh.

Serial No.	Registered No.	Stucco objects.
		HEADS OF BODHISATTVAS, DEVAS OR LAY WORSHIPPERS—contd.
39	93 <i>b</i> ʻ	Height $3\frac{1}{2}$ ". Wears skull-cap adorned with medallion and rosette. Red colouring on forehead. Left ear damaged. From south side of Main Stūpa. Pl. XXi.
40	161a	Height $3\frac{5}{8}$ ". Ears, tip of nose and upper part of head-dress missing. Hair confined by a jewelled kerchief. Buff slip and traces of red colouring on face and head-dress and black colouring on eyebrows. From between Main Stūpa and Stūpa A13. Pl. XXj.
41	148a	Height 4". Curly hair confined by ornamental fillets and ending in a fantail top-knot. Ears missing. Nose damaged. From East of Main Stūpa. Pl. XXk.
42	72	Height 4". Curly hair confined by a fillet surmounted by a fantail top-knot. Hair, tip of nose and ears damaged. Red colouring on forehead. From East of Main Stūpa. Pl. XXI.
43	F 14	Height $4\frac{1}{2}$ ". Left ear missing. Curly hair with top-knot confined within a circlet. Lime wash and traces of red paint. From south side of Main Stūpa. Pl. $XXm$ .
44	14Eb	Height $4\frac{1}{4}$ ". Ear damaged. Curly hair confined within a fillet adorned with rosettes. Lime wash. Traces of red paint. From east side of Main Stūpa. Pl. XXn.
45	161 <i>b</i>	Height 37. Right ear missing. Nose damaged. Wears skull-cap adorned on the right hand side with a rosette and medallion. Lime wash and traces of red paint. From south side of Main Stūpa. Pl. XXo.
46	159a	Height $3\frac{3}{4}$ ". Right ear missing, but with the rosette and medallion on the left hand side. Lime wash and traces of red paint. From south side of Main Stūpa. Pl. XXp.
47	F 15	Height 3". Back of head and right ear missing. Hair bunched over left ear and bound with fillet and medallion. Fingers in mouth indicate that the man is whistling. From Stūpa area. Pl. XXIa.
48	185 <i>a</i>	Height 13". Right ear missing and left ear damaged. Ridged helmet.  Lime wash. Traces of red paint on lips and forehead. From south side of Stūpa A11. Pl. XXIb.
49	9	Height 17/16. Right ear missing. Phrygian cap. Lime wash. Traces of red paint on lips and hair. From south side of Stūpa All. Pl. XXIc.
50	127	Height 3". Cap. Lime wash. From north-east side of Main Stūpa.
<b>5</b> 1	98 <i>a</i>	Height 15". Head-dress with fantail crest and medallions. Traces of red paint on cap. From east side of Main Stūpa steps. Pl. XXId.
52	185 <i>b</i>	Height 13. Hair disposed in ringlets over forehead and ears and gathered into a top-knot and tied. Lime wash. From south side of Stūpa A11.

Serial No.	Registered No.	Stucco objects.
		HEADS OF BODHISATTVAS, DEVAS OR LAY WORSHIPPERS-contd.
53	4b	Height $2\frac{1}{8}$ ". Elaborate head-dress adorned with rosettes and medallion. Wears ear-rings. Lime wash. From west side of Main Stūpa. Pl. XXIe.
54	99	Height 23". Features worn. Left ear damaged. Wears elaborate head-dress and ear-rings. Lime wash and traces of red paint. From south-west corner of Main Stūpa. Pl. XXI <sub>f</sub> .
55	90 <i>a</i>	Height $2\frac{1}{4}$ ". Hair disposed in ringlets above forehead and dressed in chignon. Wears ear-rings, Lime wash. From north-east side of Main Stūpa. Pl. XXIg.
56	186 <i>a</i>	Height $2\frac{1}{4}$ ". Ditto Ditto. From north side of Stūpa D4. Pl. XXI $h$ .
57	101	Height $2\frac{1}{2}$ ". Ditto Right ear damaged. From north-east side of Main Stūpa. Pl. XXIi.
58	123	Height $2\frac{1}{4}$ ". Hair covering both ears. Features much worn. Wears ear-rings. Lime wash. From north-east corner of Main Stūpa. Pl. XXI $j$ .
59	906	Height $1_8^{7''}$ . Ears damaged. Close cap with rosette on left side. Lime wash. From north-east side of Main Stūpa.
60	F 16	Height 17%. Hair disposed in ringlets falling over the forehead and ears. Top-knot missing. Lime wash. From Lower Stūpa Court. Pl. XXIk.
61	F 17	Height 23". Elaborate head-dress adorned with medallions. Ear- rings. Lime wash. From Main Stūpa Court. Pl. XXII.
62	90c	Height $2\frac{1}{2}$ ". Wears ornamental tiara and ear-rings. Burnt stucco. From east side of Main Stūpa. Pl. XXI $m$ .
63	<b>F</b> 18	Height $2\frac{1}{4}$ ". Hair falling in locks about the ears. Wears elaborate head-dress and ear-rings. From Main Stūpa Court. Pl. XXIn.
64	98 <i>b</i>	Height 13/4". Hair drawn back in locks over ears and gathered into a top-knot. Lime wash. From east side of Main Stūpa steps.
65	90d	Height 15". Left ear damaged. Wears turban adorned with medallions. Ear rings. Lime wash. From north-east of Main Stūpa. Pl. XXIo.
66	916	Height 24". Right ear missing. Elaborate head-dress. Wears ear- rings. Lime wash. From west side of Main Stūpa. Pl. XXIp.
67	35a	Height 2". Right ear missing. Left ear damaged. Wears turban with fantail crest and adorned with medallions. Ear-rings. Lime wash. Slight trace of red paint on lips. From south side of Main Stūpa.
68	F 19	Height 1½". Right ear damaged. Wears cap adorned with rosette and medallion. Lime wash. From Lower Stūpa Court.

Serial No.	Registered No.	Stucco objects.
		HEADS OF BODHISATTVAS, DEVAS OR LAY WORSHIPPERS—contd.
69	91 <i>a</i>	Height $1\frac{3}{4}$ ". Wears cap with rosette on either side, resembling petasus. Front of head-dress damaged. From west side of Main Stūpa, Pl. XXI $q$ .
70	162	Height $3\frac{1}{2}$ ". Left ear missing. Hair falling in strands above forehead with loose top-knot. Lime wash and traces of red paint. From west side of Main Stūpa. Pl. XXIr.
71	10	Height 7". Right ear missing. Wavy hair parted in the middle and confined within a fillet and curled above the ears. Wears kundula in left ear. Lime wash. From Main Stūpa Court. Pl. XXIs.
72	F 20	Height 23". Right ear damaged. Wears head-dress with conical crest. Ear-rings. Features much worn. Lime wash. From Main Stūpa Court. Pl. XXIt.
73	89 <i>u</i>	Height $2\frac{3}{4}$ ". Right ear damaged. Hair falling over left ear. Ornamental head-dress and ear-ring. Lime wash. and traces of red paint. From east side of Main Stūpa. Pl. XXIn.
74	F 21	Height $2\frac{5}{8}''$ . Hair falling in loose locks about the ears and confined within a fillet above forehead. Ear-rings and (?) $\bar{u}rn\bar{a}$ . Lime wash. Top of head-dress missing. From Main Stūpa Court.
75	89b	Height $5\frac{1}{2}$ ". Right ear missing. Left ear and hair damaged. Wavy hair with top-knot. Drooping moustache. From between Main Stūpa and Stūpa A2. Pl. XXIII $a$ .
76	161c	Height $3\frac{1}{2}$ ". Features much worn. Hair falling in strands about the ears. Ornamental turban with elaborate crest. Ear rings and $til\bar{a}ka$ . From south side of Main Stūpa.
77	91d	Height 27. Right ear damaged. Features much worn. Wears ornamental head-dress and ear-ring. Lime wash. From west side of Main Stūpa. Pl. XXIIIb.
78	F 22	Height 3¼". Ears damaged. Wears ornamental turban. Lime wash. From west side of Main Stūpa.
		Female Figures.
79	545	Height 73". Head and legs missing. Wears skirt. tunic. scarf, torque and bangles. Tunic is fastened with ribbon above waist. Traces of red paint. Pl. XXIIa.
80	6	Height $5\frac{1}{4}$ ". Upper half of female figure. Arms damaged. Hair plaited in coils. Head turned to right. Wears ear-rings. torque. armlets and bracelets. Left hand raised behind head. From west side of Main Stūpa. Pl. XXIIb.
		FEMALE HEADS.
81	F 23	Height 4". Right ear missing. Left ear damaged. Curly hair confined within a twisted band. Lime wash, buff slip and traces of red paint. From south side of Main Stūpa. Pl. XXIIc.

Serial No.	Registered No.	Stucco objects.
		FEMALE HEADS—contd.
82	F 24	Height $3\frac{1}{8}$ ". Portion of right side of face and left ear missing. Hair curled in ringlets above forehead. Lime wash and traces of red paint. From Main Stūpa Court. Pl. XXIId.
		CHILD HEAD.
83	90 <i>u</i>	Height 1½". Head of a boy, as indicated by tufts of hair on fore-head and above ears. From north-east of Main Stūpa. Pl. XXIIIc.
		FIGURES OF ATLANTES.
84	161 <i>d</i>	Height 27. Upper half of Atlant; arms damaged. Wide-open eyes and thick moustache. Mace in right hand and straps in left. (Cf. 90). From between Main Stūpa and Stūpa A13. Pl. XXIIe.
85	1716	Height 3\(\frac{3}{4}\)". Squatting figure of Atlant. Legs and right hand missing. Hair arranged in corkscrew curls. Holds shields in left hand. Traces of red paint on shield. From between St\(\tilde{u}\)pas A18 and A.20. Pl. XXIIf.
86	81(2)	Height 3½". Upper part of Atlant. Head missing. Playing on four- stringed guitar. From East of Main Stūpa. Pl. XXIIg.
87	114 <i>a</i>	Height 4". Upper half of Atlant. Left side of forehead damaged. Is blowing on sankha. held in both hands. Slight traces of red paint. From north side of Stūpa D3. Pl. XXIIh.
88	160Ъ	Height 3½". Upper half of Atlant with cornice of stūpa at back. Strap across left shoulder and around waist. Holds sword with both hands. Red paint on sword, body of figure and face. Black paint on eye-brows, eye-balls and hair. From between Stūpas A10 and A11. Pl. XXIIi.
89	5	Height 7¼". Upper half of male figure. Arms missing. Head turned to right. Hair curled back over forehead and ears. Twisted scarf or edge of robe falling over right shoulder. Torque and cylindrical ear-ring. From west side of Main Stūpa.
90	F 25	Height 75. Upper half of male figure (Atlant). Hair falling ove ear and confined within cap and fillet. Right hand holds indistinct object (club?). Left hand holds straps of sling or shield (?) as in 84. Pl. XXIIj.
91	89c	Height $3_8^{1}$ ". Squatting Atlant. Head missing. Grasps ankles with hands. From West of Stūpa D1.
		HEADS OF ATLANTES.
92	149c	Height 15". Turned to right. Curly hair, wrinkled forehead and high cheek bones. Pl. XXIIId.
93	186b	Height 1½". Elephant's ear over left temple. Sunken eyes, flat thick nose and half-open mouth. Lime wash. From North of Stupa D4. Pl. XXIIIe.

Serial No.	Registered No.	Stucco objects.
		HEADS OF ATLANTES—contd.
94	159 <b>b</b>	Height $1\frac{3}{4}$ ". Turned slightly to proper left. Shaggy hair in coarse curls. Lime wash. From between Main Stūpa and Stūpa A10 Pl. XXIII $f$ .
95	23	Height 3¼". Left side of head broken. Fillet adorned with medallion over forehead. Lime wash. From West of Main Stūpa. Pl. XXIIIg.
96	18	Height 3½". Hair in ringlets over forehead and ears. Wears moustache. Lime wash. Front of crown broken. From West of Main Stūpa. Pl. XXIIIh.
97	64	Height $1\frac{5}{8}$ ". Wavy hair. Wide nostrils and protruding lips. Lime wash. From Main Stūpa Court. Pl. XXIII $i$ .
98	171c	Height 17. Right ear missing. Curly hair indicated only by dots. Wrinkled forehead and frowning eye-brow. Lime wash and traces of buff slip. From between Main Stūpa and Stūpa A18. Pl. XXIIIj.
99	4 <i>c</i>	Height 1%. Hair in ringlets falling over forehead and ears. Moustache and beard indicated by red paint. Lime wash and buff slip. Red paint on lips, nose, eye-lids, eye-brows, and hair. Left side broken. From west side of Main Stūpa. Pl. XXIIIk.
.100	1146	Height 1¾". Hair confined within a cap (?) turned back in front and looped on right side. Lime wash, thin buff slip and traces of red paint on lips, eye-brows, eye-lids, forehead and head-dress. From north side of Stūpa D3. Pl. XXIIIl.
101	114c	Height 2". Moustache and strongly modelled features. Hair waved over forehead and confined by fillet. From Main Stūpa Court. Pl. XXIIIm.
102	89 <i>f</i>	Height 2". Moustache and beard. Curls of hair indicated by dots. From West of Stūpa D1. Pl. XXIIIn.
103	168b	Height 17. Hair waved over forehead and ears and tied into a loop at the crown. Prominent bone structure; sumken eyes, protruding lips and moustache. Lime wash, thin buff slip and traces of red paint. From between Main Stūpa and Stūpa A6. Pl. XXIIIo.
104	89d	Height $2\frac{3}{4}$ ". Right side damaged. Hair falling in strands over forehead and ears. Wears moustache and beard. From north-east corner of Main Stūpa. Pl. XXIII $p$ .
105	143	Height $2\frac{1}{4}$ ". Turned to proper left. Shaggy hair in coarse curls. Lime wash. From south-east of corner of Stūpa A7.
106	179	Height 17. Turned slightly to proper right. Shaggy hair in coarse curls. Lime wash. From between Stūpa A6 and Stūpa A7.
		Animals.
107	176	Height 35". Fore front of lion springing with part of cornice. From between Main Stūpa and Stūpa A13.

Serial No.	Registered No.	Stucco objects.
		Animals—contd.
108	66	Height $4\frac{1}{4}$ ". Head of elephant, holding lotus in uplifted trunk. Traces of red paint inside mouth. From West of Stupa D1.
109	35b	Height 23". Seated bull. probably from Persepolitan capital. Right horn missing. Traces of red colouring. From South of Main Stūpa.
) 		Miscellaneous.
110	96	Height $2\frac{1}{2}$ ". Upper part of trefoil arch. containing miniature stupe Stucco burnt grey. From West of Stupa D1.

Serial No.	Registered No.	Clay Objects.
1	80	Height $7\frac{1}{2}$ ". Head of Buddha. Left eye-brow and left side of head damaged; wears moustache. Surface only slightly burnt. From Monastery. Pl. XXIVd.
2	F26	Height 3". Head of a Brahmanical ascetic, probably of a Jatila. Burnt to terracotta. Top of $jat\bar{a}$ missing and nose damaged. From Monastery. Pl. XXVc.
3	F27	Height 12". Head of a lay man. Ears missing. Right hand side of forehead, nose, lips and chin damaged. Hair waved and tied with bow on crown. Burnt on surface to terracotta. From Monastery. Pl. XXIVb.
4	197a	Height 4%. Head. perhaps of Vajrapāni. Forehead and back part of head and beard broken; chin damaged. Wears drooping moustache, whiskers and beard. Features and muscles strongly marked. Burnt on surface to terracotta. Traces of white lime wash. From southwest corner of monastic quadrangle. Pl. XXVe.
5	197 <i>b</i>	Height $5\frac{1}{2}$ ". Head of a child, with three tufts of hair on forehead and over ears; top-knot and head-dress of looped cords. Socket hole in neck for support. Traces of gilt. From south-west corner of monastic quadrangle. Pl. XXVf.
6	F 28	Height $4\frac{1}{2}$ ". Head of a child with hair falling over forehead. Nose damaged. Socket hole at back of head for support. Slip and lime wash. From Monastery. Pl. XXVd.
7	F 29	73" across. Bunch of pipal leaves of Buddha canopy. Octagonal socket hole in centre for support. From Monastic quadrangle; in front of Chapel 8. Pl. XXVb.

Serial No.	Registered No.	Potteries. (7)				
1	Small goblet. Height $2\frac{3}{8}$ ". Red clay, powdered with fine Monastery cell No. 21. Pl. XXVg.					
2	300a	Ink-pot (?). Height $2\frac{1}{2}$ ". A small handle at either side pierced with a hole for string. Common earthenware. From Monastery cell No. 3. Pl. XXVh.				
3	Three water vessels. Height from 7½" to 7½" Concentric tion at neck, middle and bottom. Wheel-turned. Buf Monastery cell No 19. Pl. XXVi.					
4	274 <i>a</i>	Three water bottles. Length from 9¾" to 11¼". Buff-red clay mixed with sand and mica. Clay wash. Swastika, circle and other symbol on base. From Monastery cell No. 6. Pl. XXVj.				
. 5	F 30	Jug. Height $6\frac{3}{4}''$ . Handle on one side. Red clay, with red slip. Well-baked. From Monastery. Pl. XXV $k$ .				
6	247 <i>a</i>	Water bottle. Height 6½". A handle at either side with hole for suspension. Red clay with clay wash. From Monastery cell No. 14. Pl. XXVIa.				
7	278	Lamp (?) Height $4\frac{5}{8}$ ". Red clay and dark red wash. The burning at the mouth of the vessel seems to indicate that it was used as a lamp. From Monastery cell No. 11. Pl. XXVIb.				
8	<b>301</b> a	Bell-shaped jar. Height $4\frac{5}{8}''$ . Raised rim at the middle. Red clay; dark red slip. From Monastery cell No. 3. Pl. XXVIc.				
9	302	Top of kuza. Height $3\frac{7}{8}$ . Upturned spout. Buff clay with red brown slip. From Monastery cell No. 28. Pl. XXVId.				
10	F 31	Strainer $6\frac{1}{4}''$ across. Handle on one side. Bottom pierced with small holes. Red clay; dark red wash. From Monastery. Pl. XXVIe.				
11	247 <i>b</i>	Bowl 8\frac{1}{4}" across. Cable-moulding at edge of rim. Grey red clay with red wash. Slightly damaged. From Monastery cell No. 14. Pl. XXVIf.				
12	276 and 301 <i>b</i>	Eighteen lids of pots. Diameter from $3\frac{1}{4}''$ to $5\frac{3}{8}''$ . Solid handle in the centre. Coarse red clay. From Monastery cell Nos. 10 and 3 respectively.				

Seri/	Registered No.	Copper and Bronze Objects.
	68	Pipal leaf of copper. Length $2\frac{1}{2}$ ". From in front of Main Stūpa stairs.
2	149 <b>d</b>	Copper reliquary. Height §". Cylindrical shape. Detachable lid. From between Stūpas A7 and A8.
3	F 32	Five copper trisulas. Height 6". Made of thin plate From Monastery. Pl. XXVIg.
4	231a	Bronze bell with handle detached. Height 33". Tongue missing. slightly damaged. From Monastery cell No. 25. Pl. XXVIh.
5	226, 238 and 272	Three bronze bell handles. Height from $1\frac{1}{4}$ " to $1\frac{3}{8}$ ". From north side of Monastery and cell No. 26, respectively.
6	231b and $301c$	Four decorative chakras of copper. Diameter from $3\frac{7}{8}$ " to $4\frac{3}{8}$ ". Trisula emblems terminating the spokes. Probably meant for decorating wood work. Two are pierced with holes for nails at the centre. From Monastery cell Nos. 25 and 3, respectively. Pl. XXVI.
7	231c and $313$	Six copper rosettes. Diameter from 3" to 4½". Lotus-shaped. Hole in the centre. Probably served as decoration on doors. From Monastery cells Nos. 25 and 29. Pl. XXVIj.
8	224a	Copper harmikā (?) of stūpa. Height $2\frac{1}{4}$ ". Leaf decoration at the corners. From Monastery cell No. 25. Pl. XXVIk.
9	$\begin{array}{c} 202 \\ \text{and} \\ 231d \end{array}$	Hollow copper globe. Diameter $3\frac{1}{2}$ ". Made in two pieces. Probably belongs to same finial as No. 224. Several more globes of the same type were found. From Monastery cell No. 25. Pl. XXVII.
10	260	Copper ring. Diameter $2\frac{1}{2}$ ". Plain. From Monastery cell No. 18.
11	245a	Copper serpentine bracket. Length 6". Flattened at both ends. From Monastery cell No. 13.
12	221	Copper ring with end of staple attached. Diameter 1\frac{1}{8}". From Monastery cell No. 16.
13	244b	Bronze hoop finger ring. Diameter \(^7_8''\). Plain. From Monastery cell No. 8.
14	231 <i>e</i>	Eleven saucer-like objects, probably umbrellas of miniature stūpa. Diameter from $1\frac{1}{2}$ " to $5\frac{1}{2}$ ". Hole in the centre of each. From Monastery cell No. 25. Pl. XXVI $m$ .
15	298	Miniature bronze tripod. Height 1". From Monastery cell No. 3. Pl. XXVIIa.
16	249	Bronze image of Buddha. Height $3\frac{5}{8}$ ". Seated cross-legged in dhyā-namudrā. Plain halo and ushnisha. Sanghati covering both shoulders. Hole through body to right of navel. Cast in mould Crude workmanship. From Monastery cell No. 21. Pl. XXVIIb
17	16	Two bronze bells. Height $1\frac{1}{16}$ with ring attached. Slightly damaged From in front of Chapel C2. Pl. XXVII

Serial No.	Registered No.	Copper and Bronze Objects.
18	299	Ladle. Length 113". Long upright handle, with terminating a Bowl slightly damaged and bent. From Monastery cell No Pl. XXVIId.
19	265	Base of copper vase. Height 11/8". From Monastery cell No.
20	3006	Finial of miniature stūpa Height $3\frac{1}{2}$ ". From Monastery cell No. Pl. XXVII $e$ .
21	245b	Straining pan. Length 125". Pierced like a cylinder, and probable originally fitted with wooden handle. Damaged. From Monaste: cell No. 13. Pl. XXVIIf.
22	125	Pipal leaf of copper. Length $3\frac{1}{2}$ ". Iron ring attached. From irrefront of Chapel C12. Pl. XXVIIg.
23	120	Spoon. Length 37. Major part of handle missing. Slight ridgalong the middle inside and out. From Monastery entrance. Pl. XXVIIh.
24	224	Terminal of monk's staff (?). Height 43". Top missing. Chakras at the three corners of triangle. Iron attachments on two of the chakras. From Monastery cell No. 25. Pl. XXVIIi.
25	270b, 300c and 314	Three antimony rods of copper. Length from 4" to $5\frac{1}{8}$ ". From Monastery cells Nos. 19, 3 and 27, respectively.
26	300d	Copper pin with head. Length 4". From Monastery cell No. 3.
27	285	Bronze ornament. Diameter $1\frac{3}{4}$ ". Roughly lotus-shaped. From Monastery cell No. 3.
28	283	Copper ring. Diameter $1\frac{5}{8}$ ". From Monastery cell No. 19.

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Serial No.	Registered No.	Iron Objects.
]	F 33	Three door rings with staples attached. Diameter about 3". From Monastery. Pl. XXVIIj.
2	F 34	Double clamp. Length $2\frac{3}{4}$ ". With single nail between. From Monastery. Pl. XXVIIk.
3	<b>F</b> 35	Staple. Length $4\frac{3}{4}$ ". The two points turned over. From Monastery. Pl. XXVIII.
4	F 36	Twelve ceiling hooks. Length from $4\frac{1}{2}$ " to $5\frac{1}{2}$ ". From Monastery. Pl. XXVIIm.
5	F 37	Eighty-one bent-headed nails. Length from $3\frac{1}{2}$ " to 12". From Monastery.
6	F 38	One hundred and fifty-one boss-headed nails. Length from $3\frac{1}{2}''$ to $7\frac{1}{2}''$ . From Monastery.
7	F 39	Twenty-one round headed nails. Length from 5" to 21". From Monastery.
8	<b>F</b> 40	Door chain of one link with staple. Length $6\frac{3}{4}$ ". From Monastery. Pl. XXVII $n$ .
9	F 41	Door hook. Length $8\frac{1}{4}$ ". Turned over in ring at one end and in point at other. From Monastery. Pl. XXVIIIa.
10	F 42	Eighteen round door bosses. Diameter from $1\frac{5}{8}''$ to $3\frac{1}{8}''$ . Pierced with nail, $4\frac{5}{8}''$ long, in centre. From Monastery quadrangle. Pl. XXVIIIb.
11	F 43	Axe head. Length $4\frac{3}{8}$ ". Pierced with hole for shaft. From Monastery quadrangle. Pl. XXVIII $c$ .
12	F 44	Axe head. Length $4\frac{1}{2}$ ". Blunt edge. From Monastery quadrangle.
13	F 45	Head of adze. Length 6". Designed to fit in separate socket, which is missing. From Monastery quadrangle. Pl. XXVIIId.
14	F 46	Two square bosses. 3" square. Nail attached. From Monastery. Pl. XXVIIIe.
15	F 47	Head of hoe (?). Width $4\frac{5}{8}'' \times 3\frac{3}{8}''$ . Made of two sheets of metal, hammered together, with hollow space between them on one side for the haft socket. The hollow is traversed by 3 nails. From Monastery.
16	284	Lamp. Length 11". Spherical bowl with round foot, serpentine handle with solid holder. The lid of the lamp is provided with narrow neck for wick. From Monastery cell No. 21. Pl. XXVIIIf.
17	F 48	Adze head. Length $57''$ Pierced with shaft hole. From Monastery quadrangle. Pl. XXVIII $g$ .
îb	273	Chisel. Length 113". With flat blade and hollow socket. From Monastery cell No. 3. Pl. XXVIIIh.

Serial No.	Registered No.	Iron Objects.	
19	F 49	Single clamping iron. Length 7½". 2 nails attached. From Monastery. Pl. XXVIIIi.	 .S-
20	F 50	Thirty-three double clamping irons. Length from 3" to 16". The nail are still attached in most of them. From Monastery. Pl. XXVIII	
21	F 51	Door hinge. Length $12\frac{1}{2}$ ". One section heart-shaped. Nail attache in longer section. From Monastery. Pl. XXVIII $k$ .	ed (
22	F 52	Two Ingots. Length $4\frac{1}{2}''$ and $5\frac{1}{2}''$ respectively. From Monaster quadrangle. Pl. XXVIIII.	ry,]≛ ≰(,en
23	F 53	Hoop. Diameter 13". Pl. XXVIIIm.	•
24	323	Lamp. 45" across. Back portion missing. From Chapel C5.	1
25	F 54	Bell. Height 2". Tongue missing; traces of copper rust at the edge. From Monastery. Pl. XXVIIIn.	he s
26	F 55	Chisel. Length 4". Badly damaged. From Monastery quadrangle	le.
27	F 56	Three door hinges. Length from 8" to 13". In two sections. In the specimen illustrated in Pl. XXVIIIo, one of the nails is stitutated. From Monastery quadrangle. Pl. XXVIIIo.	ne il ill

Serial No.	Registered No.	Gold Objects.
1	F 57	Hoop finger ring, plain; \(\frac{1}{16}''\) diameter. From Monastery cell No. 19. Pl. XXIX1.
<b>'—</b> 3	F 58. F59	Two cup-shaped ornaments, \(\frac{3}{8}''\) diameter, with attachments inside for suspension. Crude floral design outside. From Monastery cell No. 19. Pl. XXIX, 2 and 3.
7		Coin pendants, 1" high, with tubular attachments at top. One is set with garnet in circlet of granules; the others are plain. The coins are later Kushan types. From Monastery cell No. 19. Pl. XXIX, 4—7.
4	F 60	Obv. King nimbate, standing to left. In right hand, trident with streamers above an altar; in left hand. staff; under right arm defaced legend; in right field tasu (?) in Brāhmī characters.  Rev. Enthroned goddess, holding cornucopia in left hand. Marginal legend defaced.
5	F 61	Obv. Ditto Under left arm, Brahmi legend sti; and in right field, praka.  Rev. Ditto.
nd 7	F62, F63	Similar.

# LIST OF COINS FOUND AT JAULIAN.

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Serial No.	Regis- tered No.	Metal and size.	Obverse.	Reverse.	Find spot.	REMARKS.
			Local Taxilan.			
1	1 263 Æ. 7 Lion standing left with 'taurine' in front and svastikā above.		with 'taurine' in front and svas-		Jaulian Monastery, room 2; 9 b. s.	l de
2	287	287 Æ. 7 . Ditto		Ditto	J. M., room 11; 18' 9" b. s.	No.
3	284	Æ. 62 .	Three-arched chait- ya with crescent and 'taurine.'	As obverse but much defaced.	J M. room 21; 9' b. s.	, ,
			Apollodotus.		(	
İ			Square.		!	
4	332	Æ. 65 .	Apollo standing right clad in chlamys and boots holding out an arrow in both hands; quiver at his back; bow rests upright on the ground in front of him. Gk. legend on three sides, BAΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΙΛΟΠΑΤΟ-ΡΟΣ: below, ΑΠΟ	Tripod-lebes. Kh. legend on three sides from right to left Maharajasa [trata]rasa; below, legend completely defaced. In right field, monogram.	J. M., room 12; 12' b. s.	Rare, Cf. P. M., Cat., Pl. V. 353.
5	320	Æ.5 .	Azes II.  King on horse-back. right. Kh. letter Ga.	Zeus standing left with Nike on out- stretched right hand. Monogram and Kharoshthi legend defaced.	J. M., 6' b. s.	
			Soter Megas.			
}			Circular.			
6	222	Æ. 54 .	Radiate and diademed bust of king to right within dotted border; with spear in outstretched right hand. Monogram to left.	King on horse-back to right, Monogram to right, Gk, legend defaced.	J. M., room 14; 5' b. s.	5' Cf. Cunning- ham, Later Indo-Scy- thians. Small size.
7	309	Æ. 85 .	Ditto	Ditto. Gk. legend BAΣIΛΕΩΝ	J. M., room 3; 5° 4″ b. s.	

Serial Regis- Metal tered and No. No. size.		tered and Obverse.		Reverse.	Find spot.	Remarks.
		 	Kadphises I.		1	
8	30	Æ. 7 .	(Kadaphes.)  Head right, diademed, closely resembling that of Augustus. Legend completely defaced.	King seated right on curule chair. with right hand extended. Legend completely defaced.	b. s.	
			Kanishka.		1	
,	) 260 Æ. 65 . K		King standing left, wearing peaked cap, coat, trousers and cloak; grasp- ing spear in left hand and holding an elephant goad over altar. Gk. legend obliterat- ed.	Standing deity with crescent behind head. To right, MAO.	J. M., room 18; 8' b. s.	Small size, of common type.
{ )	right hand altar and left holding spear ΔO on left m		King standing with right hand over altar and left hand holding spear. Gk. legend $\Delta O$ on left margin. Kh. cha in left field.	Sun-god standing, facing to left with right arm advanced and left hand holding sword (?). Monogram under right arm. Legend lost.	•	Rare. Cf. P. M. Cat., p. 135, No. 57.
11	324 Æ. 68 . King standing with right hand over altar and left hand holding spear. Gk. legend obliterated.		Sun-god to front.	J. M., outside N. wall.	Small size	
12	244	Æ. 1·06 .	King standing left at altar, holding spear in left hand. Legend in left margin NH pKI	left. Monogram as in No. 10. in left	J. M., room No. 8; 10' b. s.	Large size.
13	217	Æ. 75 .	King standing left at altar. Legend on left margin as in No. 12.	Standing deity to left	J. M., inside central courtyard; 10' b. s.	Small size.
14	281	Æ. 9 .	As No. 12	As No. 12	J. M., room 11; 18' b. s.	Large size
			Huvishka.			<u> </u>
15	232	Æ. 88 .	King, facing, seated cross-legged, holding sceptre in left hand, right hand on hip. Legend defaced.	Sun-god facing Monogram to left. Legend MII P	J. M., room 23; 9' b. s	Large size. For type see P. M. Cat., p. 204.



Serial No.	Regis- tered No.	Metal and size.	Obverse.	Reverse.	Find spot.	Remarks.
16	170	Æ. 8 .	King riding elephant right. Legend completely de- faced.	Standing deity ,	J. S., between Main Stupa and Stupa A 16; 9' b. s.	Small coin. Late and decadent in style.
17	211	.E. 1.02 .	King reclining on couch.	Standing deity, possibly Śiva.	J. M., North-west side; 11' b. s.	Large size. For type, see P. M. Cat., p. 202.
18	288	Æ. 95 .	King reclining on couch with right knee tucked up.	Standing deity .	J. M., room 6; 11' b. s.	Much defaced, Large size.
19	281	Æ. 1·0 .	As No. 18	As No. 18	J. M room 11; 18' b. s.	Much corrodeded. Large size.
20	84	Æ.5 .	Barbarous Huvishka; fragmentary.		J. S., 3′ b. s.	
			Vasudeva type.			
21	335	Æ. 95 .	King standing, facing to front. with right hand over altar. Monogram and legend lost.	Siva standing, leaning on bull facing to left. Monogram and legend lost.	of Stupa A 16; 1'6" b. s.	
22	242	Æ. 72 .	King standing at altar. Legend lost.		ı	Late and decadent type. Large size.
23	263	Æ. 75 .	As No. 22	As No. 22	J. M., room 2; 9' b. s.	As No. 22.
24	252	Æ. 1.0 .	As No. 22. Monogram in right field.	As No. 22. In circle of dots.	J. M., room 26; 6' b. s.	Earlier coin than Nos. 22 and 23.
25	106	Æ. 75 .	Ditto	Ditto	J. S., 4' b. s.	 
26	307	Æ. 75 .	Ditto	Ditto	J. M., room 28; 12' b. s.	
27	305	Æ. 85 .	Ditto	Ditto	J. M., room 24; 1' 3" b. s.	Much corrod-
28	267	Æ. 7	Ditto	Ditto	J. M., room 1; 12' b. s.	
79	300	Æ. 75 .	Ditto	Ditto	J. M., room 3; 13' 2" b. s.	
30	291	Æ. 62 .	Ditto	Ditto	J. M., room 7; 12' b. s.	
31	277	Æ. 75 .	Ditto	Ditto	J. M., room 10; 18'	1



	Serial No.	Regis tered No.			erse.	Reve	erse.	Find spot.	REMARKS.
	32	308	Æ. 75	As No. 22.	!	As No. 22. of dots.	In circle	J. M., room 29; 12' b. s.	
	33	286	Æ. 75	in right in Ditto	ield.	Ditto		J. M., room 3; 5' b. s.	
	34	307	Æ. 8	Ditto		Ditto		J. M., room 28; 12' b. s.	In fair pre- servation.
	35	305	Æ. 87	. Ditto		Ditto		J. M., room 24; 1' 3" b. s.	servation, though
	36	263	Æ. 75	Ditto	• •	Ditto	• •	J. M., room 2; 9' b. s.	corroded.
	37	263	Æ. 62	King standaltar.	ding at	Enthroned as on No	goddess o. 44.	J. M., room 2; 9' b. s.	
	38	300	Æ. 75	Ditto	• •	Ditto	• •	J. M., room 3; 13' 2" b. s.	Much corrod- ed.
	39	309	Æ. 75 .		• •	Ditto	• •	J. M., room 3; 5' 4" b. s.	Ditto.
	40	205	Æ. 75 .	Ditto	• •	Ditto	• •	J. M., east side; 8' b. s.	Ditto.
,	41	294	Æ. 95 .	King nimb left, with helmet a plete suit mail, ma offering whand over altar; led dent in left field ZOAHO margin.	peaked nd com- of chain king an ith right er an ong tri- ft hand; ith fillet L. Legend	As No. 24	•	J. M., outside east main wall; 2'9" b. s.	In good preservation. A comparatively early issue. like No. 24. Large size.
	42	234	Æ. 72 .	Ditto	•	Ditto		J. M., room 4; 5' b. s.	
	43	315	Æ. 75 .	King stand altar. etc., lost.	ling at Legend,	Seated godde	ess .	J. M., débris	For type see <i>P. M. Cat.</i> , p. 210.
	44	335	Æ.8 .	As No. 21		As No. 21		As No. 21.	
	45	58	Æ. 56 .	Ditto	•	Śiva leaning Monogram legend lost.	and .	J. M., south west corner, outside; 5' b. s.	
	46	31	Æ. 75 .	Ditto	•	Ditto	•	J. M., débris out-	
	47	49	Æ. 56 .	Ditto	•	Ditto	•	J. M., room 1. doorway; 11' 9* b. s.	
	48	49	Æ. 75 .	Ditto	•	Ditto	• •	Ditto.	
	49	54	Æ. 56 .	Ditto	•	Ditto	• •	Ditto, 11' b. s.	
	50	54	Æ 62 .	Ditto	•	Ditto	•	Ditto.	



Serial No.	Registered No.	Metal and size.	Obverse.		Reve	rse.	Find spot.	Remarks.
51	44	Æ. 62 .	As No. 21 .	•	Śiva leanin Monogra legend lo	m and	J. M., room 1 of extension; 94 b. s.	
52	2	Æ. 69 .	Ditto .	•	Ditto		J. M., outside Stupa D 6; 3' b. s.	
53	31	Æ. 56 .	Ditto .	•	Ditto	• •	J.M., room on southeast side of extension; 9' b. s.	
<b>54</b>	49	Æ. 75 .	Ditto .	•	Ditto	•	J. M., room 1, doorway; 11' 9" b. s.	
55	31	Æ. 75 .	Ditto .	•	Ditto		J. M., débris out-	
56	31	.E. 62 .	Ditto .	•	Ditto		Ditto.	
,			Miscellaneo Kushan.					
57	264	Æ. 62 .	King standing	•		ns to be worship-	J. M., room 7; 8' 6" b. s.	An interesting type,
§58—68	106, etc.	ı	King standin	g at	Indistinct		Nos. 58 and 65 from J. S., and the rest from J. M.	No. 60 is a NANA coin of Kanishka, large size.
			Indo-Sassan	ian.*				
			Uncertain.					
69	49	Æ.5 .	Bust of King to	right	Traces of	fire-altar	J. M., room 1, doorway.	Cf. I. M. Cat., Pl. XXIV, 5. Frag- mentary.
70	49	Æ.5 .	Ditto .	•	Fire-altar symbols and left	with in right fields.	J. M., room 1, doorway; 11' 9" b. s.	Fragmentary.
71	49	Æ. 42 .	Bust of King to completely faced.	right, de-	Ditto		J. M., room 1, doorway; 11' 9" b. s.	Ditto.
72	309	Æ. 43 .	Bust of king to with long	right. beard.	Ditto		J. M., room 3, 5'	Ditto.
73	300	Æ. 43 .	Ditto .	•	Fire-altar	defaced.	J. M., room 3; 5'	Ditto.
74	309	Æ. 43 .	Bust of king to defaced.	right,	Traces of	fire-altar	J. M., room 3; 5' 4" b. s.	Ditto.

<sup>§</sup> With only two or three exceptions all the coins from No. 22 to No. 68 are of late and decadent type, and some of them must have been struck one or two centuries after the death of Vasudeva, on whose issues they are modelled. The latest coins are exemplified by Nos. 66 to 68, which have lost nearly all resemblance to their prototype.

<sup>•</sup> The coins under this heading are of irregular shape and, in some cases, restruck upon Kushan issues.



Serial No.	Regis- tered No.			Reverse.	Find spot.	Remarks.
75	49	Æ. 5 .	Bust of king to right, partially defaced.	Fire-altar	J. M., room 1, doorway; 11' 9" b. s.	
76	57	Æ. 7 .	Bust of king to right, defaced.	Ditto	J. M., outside west wall.	Circular.
77	289	Æ. 5 .	Bust of king, defaced	Ditto	J. M., room 3; 8' b. s.	
78	303	Æ. 54 .	Ditto	Ditto	J. M., room 29; 11' 8" b. s.	
<b>7</b> 9	267	Æ. 54 .	Bust of king to right	Ditto	J. M., room 1; 12' b. s.	
<b>8</b> 0	312	Æ. 54 .	Bust of king to right, partially damaged.	Ditto	J. M., room 27; 11' 4" b s.	
. 81	303	Æ. 54 .	Ditto	Defaced	J. M., room 29; 11' 8" b. s.	
82	303	Æ. 5 .	Bust of king to right, defaced.	Indistinct	J. M., room 29; 11' 8" b. s.	
82	303	Æ. 54 .	Ditto	Ditto	J. M., room 29; 11' 8" b. s.	
84	303	Æ. 6 .	Ditto	Fire-altar	J. M., room 29; 11' 8" b. s.	
85	303	Æ.5 .	Ditto	Ditto	J. M., room 29; 11' 8" b. s.	
86	303	Æ. 56 .	Ditto	Traces of fire-altar	J. M., room 29; 11' 8" b. s.	· 
87	313	Æ. 56 .	Ditto	Ditto	J. M., room 29; 12' 3" b. s.	
88	256	Æ. 56 .	Ditto	Ditto	J. M., room 10; 6' b. s.	
89	268	Æ. 5 .	Ditto	Ditto	J. M., room 2; 13' b. s.	
90	309	Æ. 5 .	Ditto	Ditto	J. M., room 29; 11' 8" b. s.	
91	<b>2</b> 30	Æ. 69 .	Ditto	Ditto	J. M., room 24; 5' b. s.	
92	267	Æ. 5 .	Ditto	Ditto	J. M., room 1; 12' b. s.	
93	303	Æ. 56 .	Ditto	Ditto	J. M., room 29; 11' 8" b, s.	
94	205	Æ.5 .	Bust of king to right within dotted border.	Fire-altar in splen- did preservation. Monogram in left field.	J. M., east side; 8' h. s.	A beautiful little coin.
95	164	Æ. 43 .	Indistinct	Symbol	J. S., 3' b. s.	A pretty coin. Cf.Cun., Later Indo-Scy- thians, Pl. IV, 11.



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Serial No.	Regis- tered No.	tered and Obverse.		Reverse-	Find spot.	REMARKS,
96	<b>306</b>	Æ.7 .	Bust of king to right. Lion's head on front of head-dress.	Massive fire altar; symbols on shaft. No legend.	Jaulian Stupa D 5; east side.	ı
97	303	Æ. 62 .	Bust of king to right. Eagle or vulture head dress.	Fire-altar	J. M., room 29; 11' 8" b. s.	
98	303	Æ. 68 .	Bust of king to right, wearing three-pointed crown.	Ditto	J. M., room 29; 11' 8" b. s.	Cf. Cun., Later Indo-Scy- thians, Pl. IV, 9.
99	307	Æ. 5 .	Ditto	Ditto	J. M., room 28; 12' b. s.	Ditto.
100	303	Æ. 56 .	Ditto	Ditto	J. M., room 29; 11' 8" b. s.	Ditto.
101	267	Æ. 56 .	Bust of king to right	Fire-altar with broad base and top.	J. M., room 1; 12' b. s.	Cf. I. M. C Pl. XXIV, 7.
102	303	Æ. 56 .	Ditto	Fire-altar with symbols at the sides.	J. M., room 29; 11' 8" b. s.	Ditto.
103	303	Æ. 56 .	Bust of king to right, damaged.	Traces of fire-altar.	J. M., room 29; 11' 8" b. s.	
104	306	Æ. 62 .	Indistinct	Fire-altar	Jaulian Stupa D 5; east side.	
			Later Kushan.			
105	270	Æ. 62 .	Traces of king standing to left	Seated goddess .	J. M., room 19; 4' 9" b. s.	
			Uncertain.			
195	123	Æ. 56 .	Nandipada symbol.	Indistinct	Stupa court; between A 2 and A 4.	
107	106	Æ. 56 .	Uncertain	Ditto	Stupa court; 4' b. s.	
			Crude Indo≈ Sassanian.			
108	185	Æ. 43 .	Uncertain	Crude fire-altar or temple in form of square.	Stupa court ; between A 11 and A 12.	
109	185	Æ.5.	Ditto	Ditto	Stupa court; between A 11 and A 12.	
110	185	Æ. 56 .	Ditto	Crude fire-altar or temple in form of square within dotted border.	Ditto.	

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Serial No.	Regis- tered No.	Metal and size.	Obverse.	Reverse.	Find spot.	REMARKS.
111	185	Æ. 56 .	Uncertain	Crude fire-altar or temple in form of square within dotted border.	J. S. Court; between A 11 and A 12.	
112	307	Æ.5 .	Crude standing figure.	Four vertical lines, probably indicat- ing fire-altar.	Jaulian Monastery, room 28; 12' b. s.	
113	303	Æ. 5 .	Traces of crude standing figure.	Crude fire-altar .	J. M., room 29; 11'	
114	320	Æ. 43 .	Ditto	Crude fire-altar within dotted border.	J. M., north wing; 6' b. s.	
115	313	Æ. 5 .	Ditto	Ditto	J. M., room 29; 12' 3" b. s.	
116	158	Æ.5 .	Ditto	Symbol or crude figure within border of dots.	Jaulian Stupa A 5.	
117	192	Æ. 43 .	Ditto	Indistinct	J. S. court; between A 11 and A 12.	
118	152	Æ. 43 .	Ditto	Ditto	J. S. court; between A 20 and A 21.	
119	186	Æ. 5 .	Ditto	Ditto	Jaulian Stupa D 4.	
120	185	Æ. 43 .	Ditto	As on No. 110 .	J. S. court; between A 11 and A 12.	
121	185	Æ.5 .	Indistinct	Square within dotted border.	Jaulian Stupa court; between A 11 and A 12.	
122	185	Æ. 5 .	Traces of crude standing figure.	Ditto	Ditto.	
123	185	Æ. 43 .	Ditto	Ditto	Ditto.	
124	185	Æ. 5 .	Ditto	Ditto	Ditto.	
125	84	Æ. 5 .	Ditto	Square within incuse.	Jaulian Main Stupa, east side.	
126	327	Æ. 37 .	Bust of king to right	Small squares within border of dots.	Jaulian Monastery, room 29.	

Coins Nos. 106-126 are small copper pieces fragmentary in shape and crude in design. They are probably not earlier than the 4th century A.D. It has been suggested that they are tokens or offerings, but piece No. 126 is similar in shape and weight to the rest and is certainly a coin of Sassanian design. The figure of a square within a circle of dots is more probably a crude representation of a fire-alter or fire-temple than of a stupa; that is to say, these strange little pieces are more likely to be Indo-Sassanian than Buddhistic issues.

### THE JAULIAN MANUSCRIPT.

### [ By Prof. Ramaprasad Chanda, B.A.]



The Jauliān manuscript consists of a number of loose half-burnt birch-bark fragments of different sizes. Of these only 52 fragments, varying in size from  $2\frac{7}{8}$  in. by  $2\frac{1}{16}$  in. to  $\frac{7}{8}$  in. by  $\frac{1}{2}$  in., bear writing that yields or is likely to yield any sense. There are still smaller fragments bearing a few letters and one or two bigger ones that bear a few scattered letters. The manuscript must have been written with a reed-pen; for in some cases letters are visible, even though the ink has disappeared. With a few exceptions, all fragments bear writing on both sides. In many of the fragments several letters and even lines have become illegible. Some letters are hidden in the depressions of the folds. The extreme fragility of the fragments renders their straightening impossible and their manipulation for decipherment very risky. The writing on the fragments shows that the manuscript was neatly and carefully written in uniform characters.

The characters used in these fragments closely resemble the characters of the Kasiā copper-plate<sup>1</sup>, written in black ink, found in the Nirvāṇa stūpa, and, to a less extent, the characters of certain ancient manuscripts from Eastern Turkestan written in what is called the early Upright Gupta characters.<sup>2</sup> This calligraphic script is classed with the western variety of the Northern Gupta script of the inscriptions. The peculiarities of this division of the Gupta script have been fully discussed by Hoernle in his Introduction to the Bower Manuscripts, Chapter III. The Kasiā plate has been assigned to the third quarter of the fifth century A.D. because of the coins found with it.<sup>3</sup> The uniform use of ma with serpentine left limb and of tripartite ya with a loop on the left arm in the Jauliāñ manuscript indicates that it may be somewhat earlier in date.

These birch-bark fragments presumably belong to a Sanskrit Buddhist text. The religious and particularly the Buddhist character of the text is indicated by such terms as:—guṇabhakti-gandhitaḥ (1, a3), 'fragrant with virtue and loving faith'; abhiyōga (2, a2), 'exertion'; iryāpatha, (2, a3), 'the observances of the religious mendicant'; gataspriha (2, b1) 'one who is without desire'; bhikshu (35, b2). 'monk'; arhat-prati[mā] (40, a2), 'the image of the Arhat (Buddha)' etc., and by the mention of the name of Subhūti (48, a1), one of the leading disciples of Buddha. There are other words and phrases such as kampayat (19, a2), 'trembling'; kuṇapa (33, a1), 'dead body'; adīrgharātreṇa (33, a2) 'in a short time'; ity=avadhārya (33, a3), 'having settled this'; vanash anḍa (35, b2). 'forest'; haya-khura-bhinna (46, b1), 'split by horse's hoof;

<sup>&</sup>lt;sup>1</sup> A. S. R., 1910-11. Part II, Plate XXXIX, b.

<sup>&</sup>lt;sup>2</sup> Stein's Ancient Khotan, Vol. II. Plates CVIII, CIX (Leaf of Buddhist Dhāranī); for other specimens se Hoernle's Manuscript Remains of Buddhist Literature found in Eastern Turkestan, Vol. I.

<sup>&</sup>lt;sup>3</sup> A. S. R., 1910-11, Part II, p. 75.

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the text embodied a narrative and not a didactic composition. The reference to shadgunya-naya (7, a2), 'policy consisting of six expedients,' strengthens this supposition.

Verses, particularly stanzas in Vamsastha metre, must have constituted considerable part of the text, if not the whole of it. In two of the fragments we find the two following complete pādas (quarter-verses) of stanzas in Vamsastha metre:—

- (21, a3) kvachit=tad=ētarhi mukham vilokyate "At this time that face is seen in some places."
- (34, 2) mahaujaso vipratibhā balāt kṛitā 'men of great powers are deprived of their intelligence by force.'

Other fragments also contain expressions that fit in well with pādas in the Vamsastha metre. But there are some lines (6. a2; 10, a2; 33, b3) that do not appear to do so. That the text included verses is also shown by the occurrence of the interpunction mark resembling a comma laid lengthwise ( -) or prone comma used in the manuscripts of Eastern Turkestan in Gupta script to indicate the ends of half or whole verses. Two instances of the use of the single prone comma may be cited from our fragments after terms that scan well as the last three syllables of a pāda of a Vamsastha stanza:—

(13, b2)  $\circ$  -  $\circ$  -  $\circ$  -  $\circ$  ras-kṛiyā

(14, a2)  $\circ$  -  $\circ$  -  $\circ$  - [u]pāsatē  $\circ$ 

This prone comma is also used above final consonants.

There is nothing in our fragments to show that the text is a canonical one (buddha-vachana, or 'Buddha's saying.')

### Fragment No. 1 (1 $\frac{7}{8}$ inches by $2\frac{1}{16}$ inches).

- (a) 1 t. gau ra . . . dhana pra
  - 2 . . id. hi . rtai jagad-ādi
  - 3 . guṇabha[kti]-ga[ndhi]taḥ a[bhi].
  - 4 . la va nā mi tā da
  - 5 . phalochchayaḥ bikā
  - 6 . rvinātu ma h. va
- (b) 1 ch. p. tta ye . . .
  - 2 višeshato hā te bha . .
  - 3 sakala . . . . .
  - 4 . ņāja . . . .
  - 5 pya bhyā kā . . . . laksha
  - 6 na

<sup>&</sup>lt;sup>1</sup> Hoernle's Introduction to Bower Manuscripts, p. XXXVIII and Table V; Hoernle's Manuscript Remains etc., p. 62, and transcripts on p. 66 ff.

# Fragment No. 2 ( $1\frac{11}{16}$ inches by $1\frac{1}{4}$ inches) (a) $\square 1$ [m.]na . abhavya pha[1]. 2 par-ābhiyōgēshu ni 3 lpitē=ryāpatha . (b) □1 gataspri [hena] 2 . budhāḥ nimit=[ta] pe sh. . . tā gu ņ. Fragment No. 3 (15 inches by $\frac{3}{4}$ inch). (a) 1 ch. th. d. shāma y. 2 [pa]śyati tad=apy-a 3 y. (b) □1 2 . tu. hi sam pra d. 3 . . pra n. p. Fragment No. 4 ( $2\frac{3}{8}$ inches by $1\frac{1}{4}$ inches) 2 da ma nya ch. 3 ya se tushti subhiksha 4[mo]ma . . . bhyām sa nara . ra (b) $\square 1 \text{ kātar}[\bar{a}]$ 2 yaḥ ki[m]k. 3 . g . . Fragment No. 5 ( $1\frac{15}{16}$ inches by $\frac{7}{8}$ inch). 1 . yam hi tai tva 2 yate tha cha . ghāta sa tma(?) kri Fragment No. 6 ( $2\frac{1}{8}$ inches by $2\frac{1}{16}$ ). (a) $\Box 1$ h. . . . . . . o-ttama 2 hi simhavan-na kāka-vak=āpi kha . . pra gati . . . 5 [ka]tham k . . . .(b) 1 tam da . . lā . . s. ś. lā 2 . . . . . ti . . 4 tasya śra . . hi bh. të vidhana pa r. Fragment No. 7 ( $1\frac{1}{16}$ inches by 1 inch). (a) □1 [sa]d=ābhiyōgaḥ pa 2 shādguņya-naya (b) □1 ghayet¹ naraḥ sva

2 . . tām ki

<sup>1</sup> Read lamghayēt,

# Fragment No. 8 (1 $\frac{3}{8}$ inches by $\frac{1}{1}\frac{5}{6}$ inch).

(a) 1 sham bha vi ma 2 . pa[rai]  (b) 1 [bh].va kuli
Fragment No. 9 ( $2\frac{1}{2}$ inches by $\frac{7}{8}$ inch).
<ul> <li>(a) □1</li> <li>2 sakramāḥ samaṁ t. t.[śchhi]n.</li> <li>3</li> <li>(b) □1 ra laṁ</li> <li>2 t. r.</li> </ul>
Fragment No. 10 (1\frac{5}{8} inches by $\frac{13}{16}$ inch).
<ul> <li>(a) □1 [ya]ntraṇā bha</li> <li>2 [du] shkaram kimchid=udāra cha</li> <li>(b) □1 , . h[i] na mātra sphuṭaka</li> <li>2 sha pakshayoḥ</li> </ul>
Fragment No. 11 ( $I_{\frac{1}{2}}^{1}$ inches by $\frac{1}{2}$ inch).  (a) $\square$ mati charācharam jaga <sup>1</sup> (b) $\square$ d . bh
Fragment No. 12 (1½ inches by 1 inch).  1 . ko[vi]dhiḥ 2 jagato-sya mu
Fragment No. 13 ( $1\frac{1}{8}$ inches by 1 inch).
<ul> <li>(a) □ 1 sa mūlam ja</li> <li>2 divāśuchiḥ ya</li> <li>3 sh[a] hētavo</li> <li>(b) □ 1 v. m</li> <li>2 raskṛiyā ·[vi]</li> </ul>
3 [ga]d-guṇādhā²
Fragment No. 14 (1 inch by ½ inch).  (a) 1 . n  2 pāsatē ^  3 ^višēsha  (b) 1 [vya] pāśritā  2 [to]g. ņotkar  3 □ . tayam .

¹ Read jagat.
¹ Read guṇādhāraḥ.

# Fragment No. 15 (1 $\frac{1}{8}$ inches by $\frac{1}{1}\frac{5}{6}$ inch).

(a)	1 [yam]nya yāt=kām.
	2 . maḥ pramā.
(b)	1 tt $\operatorname{vri}[j]$ .
	2 pā yai pa
	3 yō gā
	Fragment No. 16 ( $1\frac{1}{8}$ inches by 1 inch).
(a)	1 ten-tarat-mani pra
` '	2 cha ya ni hā
<b>(b)</b>	-
	2 r=janēn=aiva hi
	3 re pya paka
	Fragment No. 18 (1\frac{1}{4} inches by $\frac{7}{16}$ inch).
(a)	chasya vai nṛi laṁ k
(b)	ty=apētya śāstrakri
	Fragment No. 19 (1 $\frac{7}{16}$ inches by $\frac{7}{8}$ inch).
(a)	1 m. d. t. t. kshitu ch.
` '	2 na kampayat ra
	3 [pa]
(b)	l. gu. sa
	2 tiva lak[sha]ņa
	3 [k]. [tam] guṇarāśi
	Fragment No. 20 (1\frac{1}{4} inches by $\frac{7}{8}$ inch).
	1 v. n. y. tā
	2 rā v. m. k. th.
, ,	Fragment No. 21 ( $2\frac{3}{4}$ inches by $2\frac{3}{16}$ inches).
(a)	1 [jā]tamātra sār. km.
	2 [pa] drutam sugandhi kāle vy. v. k. m. thā
	3 [kva] chit-tad-etarhi mukham vilōkyatē vilupta
5	4 ta=stad=īdrig=cha[k] [pra] [pa]te . su
6	•
	1
(~)	2
	3 py. hā vō vivardhatē ja na .
	4 vādinah ga nya višesha sādhva <sup>1</sup>
	5
	6

<sup>1</sup> Read sādhvasam.

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Fragment No. 22 (11 inches by \frac{7}{16} inch).
       1 sya ka [j].śr. . sy . ś. l.
                      naram krita . . kshipa
       3 . tma ni v\bar{e} .
                 Fragment No. 23 (2\frac{5}{16} inches by 1\frac{1}{8} inches).
   (a) 1 jen-mri
       2 . kṛitōpakā[rē] . pi
   3 [yya] d [ai] na . . . .
         . . . . hrid .
              . . nam śārā n.
                  Fragment No. 24 (1_{16}^{9} inches by \frac{3}{8} inch).
   (a)
           . nā mahā n. pā śra
   (b)
           . . na sa vi ta n.
                 Fragment No. 25 (2_{16}^{1} by 1_{4}^{1} inches).
              . . l . . . balam vitta[m]
       2 ram ayam s . . . .
       3 daksh[i]nā
       4 .
               Fragment No. 26 (2 inches by 1\frac{1}{4} inches).
       1 sā
       2 sa tasya tādriśa . . . t.
       3 . ma puṇya-darśana 1
       4 . . k[ri]ta che. sam
                Fragment No. 27 (2\frac{1}{16})^3 inches by 2\frac{1}{4} inches).
             . . d. t. . .
(a) \Box 1
          \cdot \cdot \cdot \cdot ya \cdot yath[\bar{a}] \cdot \cdot
          . tath[ā]vidhe janēna v. . . bādha hatāś=cha
                    y.
                    kī
                           . . . . rmu . . . pra
          . samunna m
(b) \square 1
                    . . . ch. . to guṇān=vṛithā
      3 tep. . . prakara<sup>2</sup>
      4 pakareshva pi t. . . sa dh.
      5 sad vi ra pai
               Fragment No. 28 (1\frac{1}{4} inches by \frac{1}{2} inch).
(a) \Box 1 \ j \ . \ . \ [k]
      2 sh. yāya nu ṇa
(b) □1 sya chāsat i ni
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<sup>1</sup> Read darsanah.

<sup>&</sup>lt;sup>2</sup> Read prakaraṇam.

	Fragment No. 29 ( $I_{16}$ inches by $I_{16}$ inches)
1	
	2 . rūpā . khalu
3	3 to
<i>(</i> )	Fragment No. 30 (1 inch by $\frac{15}{16}$ inch).
$(a) \square 1$	
	2. no ti va
3	
• /	
	g [syā] pi [ja] na
3	3 'i dam
	Fragment No. 31 ( $I_{16}^3$ inches by $\frac{1}{8}$ inch). s. dh[a]rm[a]t. [y]. [n]. sh u [v]
	Fragment No. 32 ( $\frac{7}{8}$ inch by $\frac{1}{2}$ inch). prāyam va[cha]
2 3 4 (b) □1 2 3	Fragment No. 33 (211 inches by 13 inches).  m [pr]. [k]. [r]. kuṇapā dinaḥ adīrparātreṇa¹ vich.  [mi] trayōḥ kutō namēd=ity=avadhāryam=aprati cho pi  [ya]s=tv=amī d. n. t  v. sa[ta]m na nīcha h halā [a]dh sk[ri] yā janād=vidheḥ pra
4	parā pu
1	Fragment No. 34 ( $2\frac{13}{16}$ inches by $1\frac{3}{8}$ inches) d. märgē m .
2	. t mahaujasõ vipratibhā-balāt kritā na
3	balān-niyukta rīva sā [dh]avaḥ pri[yaṁ]
	yate n. n. timā
	Fragment No. 25 (97 inches last 13 inches
(a) m1	Fragment No. 35 ( $2\frac{7}{8}$ inches by $1\frac{3}{4}$ inches).
• •	tvaḥ² śubha-puṇya-lakshaṇaḥ paraiti sarvva
	. prava. titah kriyāh
	. prava. maņ krīyaņ sivam
	chi t asripta
	d vanashaṇḍ³ bhikshu
	. yam su
	mayā
<b>T</b>	

<sup>1</sup> Read adirgha.

<sup>&</sup>lt;sup>2</sup> Read satvah.

<sup>3</sup> Kead vanashande.

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Fragment No. 36 (2\frac{13}{16} inches by 1\frac{1}{8} tuches.
(a) 1 [t].[ty].h khy. ti
      2 ty=apalakshaṇā . k . pr.
      3 . vacha na ya mā . pi . .
(b) \square 1 \text{ purask}[\bar{a}]\text{ro} . v.
      2 . vi nam ni ro cha në nai
      3 . . . vā
               Fragment No. 37 (2\frac{3}{4} inches by 1\frac{1}{16} inches).
(a) 🗆 1 śa. rūpā ā p. t. vra . . . yah vi
      2 yan katham nu
                 . . mā taṁ
      3
(b) \square 1
      2 m. tva mi tya[bh].
      3 g.
               Fragment No. 38 (2\frac{15}{16} inches by 1\frac{7}{8} inches).
                  dvya të
      1
            2 . pramathya[mo] . nirmulīti
      3 yathā . . . thā . . . ti n. k.
               Fragment No. 39 (27 inches by 1\frac{3}{8} inches).
              di . v. .
(a) \square 1
      2 . tā ya¹ cheshṭatē k[ri]t-ōpa
      3 mya ch=aushadham krit-ōpakarēshu [bha]yē sakhē
             m. nu
(b) □1
      2 gūdha a . . . . . . . . na va
      3 . . ta puraḥ [a]s[am] . . ditā
               tham . . mopaha
              Fragment No. 40 (1\frac{7}{8} inches by \frac{15}{16} inch).
         . l puraskrito-py-amjali vamda
     2 . rhatorhat-prati[mā]
(b) □1 vat . . . .
     2 [va][mī] m. n. r. thai r. . .
     3 . vā . . . a . sya sā
              Fragment No. 41 (2 inches by 1\frac{15}{16} inches).
 (a) 1 dōshēshu sa . . h .
     2 parō . .
                       to
     3 . s. ś. .
  (b) 1 tt. .
     2 . tā pri
     3 ś. sv.
     4 tā
```

<sup>1</sup> Read hitāya.

### Fragment No. 42 $(2_{16}^{2} \text{ by 1 inch})$ .

- 1 tāva kumārgam-āśr [itya]
- 2 nāśa mārgē . nayan mahā

# Fragment No. 43 ( $2\frac{1}{8}$ inches by $1\frac{3}{16}$ inches).

- (a) 1 . . . sa t. . rū . . 2 d-v[i] dham-upā . . jaga
- (b) 1 kācha . .
  - 2 gaņaya . . . y.
  - 3 sām

### Fragment No. 44 (1\frac{7}{8} inches by $1\frac{1}{8}$ inches).

- (a) 1 h. da y.
  - 2 sha vish-ojjihīrshu v. j.
  - 3 gā sā ti[śa]ya chā[kri]
- (b) 1 chch. yad-asti . ch . pya nā
  - 2 . dva ha

### Fragment No. 45 ( $2\frac{1}{2}$ inches by $1\frac{1}{8}$ inches).

- (a) 1 gocharē cha[r]ed
  - 2 . padēna tath=opasarpiņī
  - 3 prapīḍayann=iva ma
- (b) 1 kim=atra chitram pra . ti hi

# Fragment No. 46 ( $2\frac{13}{16}$ inches by $2\frac{1}{8}$ inches).

- (a) 1 . y. . . . . tī . . .
  - 2 . . kā ve . . . yini jī[vi]
  - 3 nair=api kshepya . midam bha . .gē
  - 4 . . . su . . pi .
  - 5 jri . . nayana
- (b) 1 haya khura bh[inna] . . .

# Fragment No. 47 ( $2\frac{7}{8}$ inches by $2\frac{3}{16}$ inches).

- 1 . tma nā tm.
- 2 ti . . tm . . . . . . bhy.
- 3 . ya vitta m . . t. . . . vi
- 4 . shu chā . cham ra . . . d. n. ma . tsu cha

# Fragment No. 48 (2 $\frac{5}{8}$ inches by $\frac{7}{8}$ inch).

- (a) 1 nam subh $\bar{u}^1$ 
  - 2 ch . . .
- (b) 1 . . . . pra va
  - 2 pā ta . . . dā n.
  - 3 . ritē hi

<sup>1</sup> Read subhūti.

Fragment No. 49 ( $1\frac{15}{16}$  inches by  $1\frac{1}{8}$  inches).

- (a) 1 .
  - 2 . sa mam ja śai[kshi]1
  - 3 . m.

(7)

- (b) 1 t=tu kṛi[pā]
  - 2 . sta kārmukāḥ na

Fragment No. 50 (1 inch by  $\frac{13}{16}$  inch).

- 1 kshanah
- 2 m . ko pi ma

Fragment No. 51 (1 $\frac{5}{8}$  inches by  $\frac{7}{8}$  inch).

- (a) 1 matī cha paṇḍ[i]ta[ḥ]
  - 2 shv-atitīkshņa-chakshushā ni
- (b) 1 my. vedam s. l.
  - 2 . gat $\bar{e}$  . vam s[u]

Fragment No. 52 ( $1\frac{1}{4}$  inches by  $\frac{3}{8}$  inch).

- (a) tā = parādhād = ap[ā]
- (b) na tā vā na pa kār.

Fragment No. 53 ( $1\frac{1}{4}$  inches by 1 inch).

- 1 [sa]t-kṛ[i]yām
- 2 . āliṃgya [ni]

√¢.

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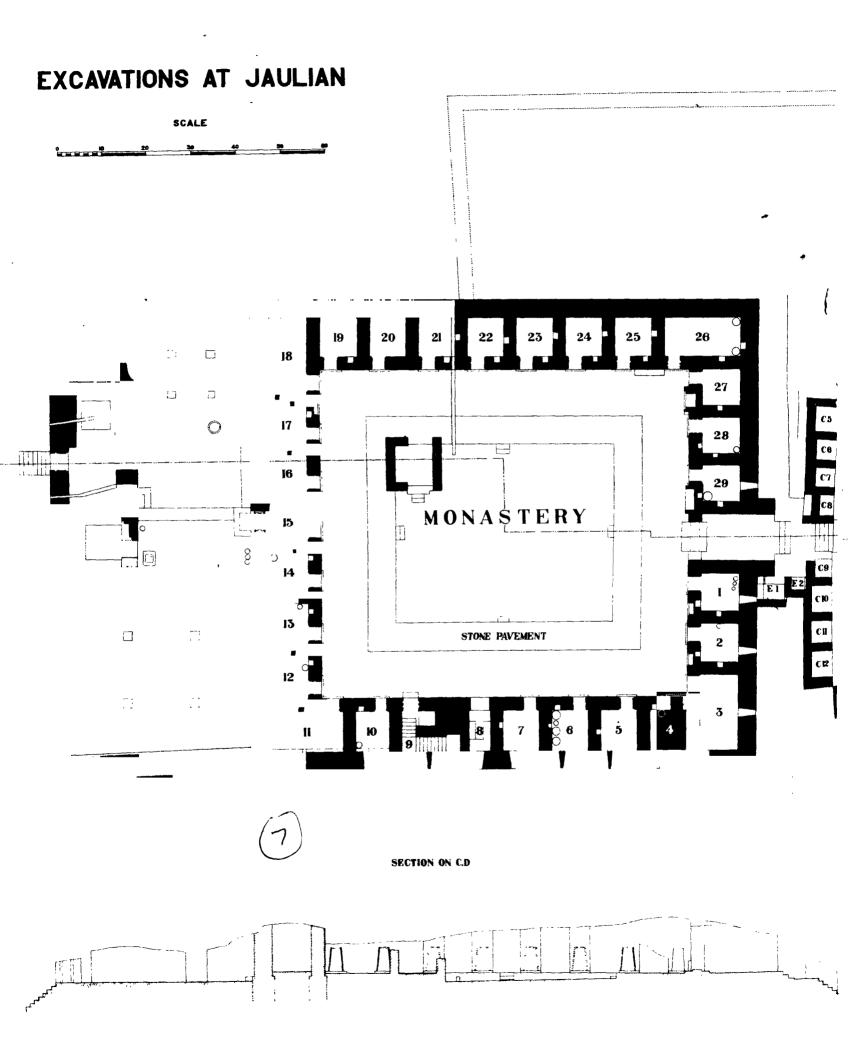
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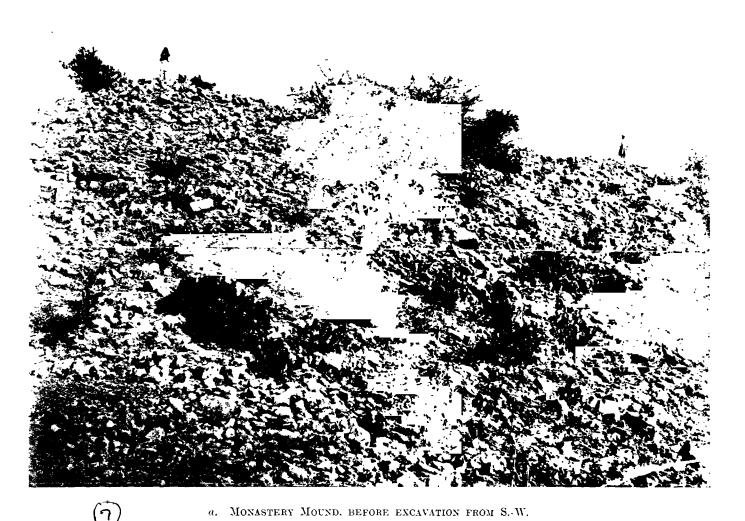
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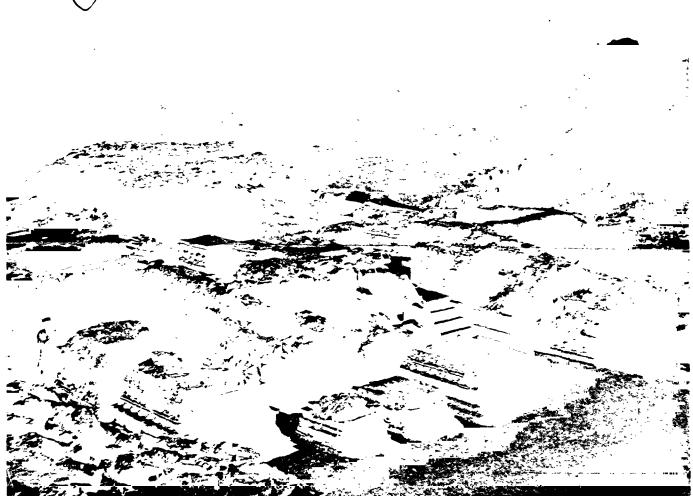








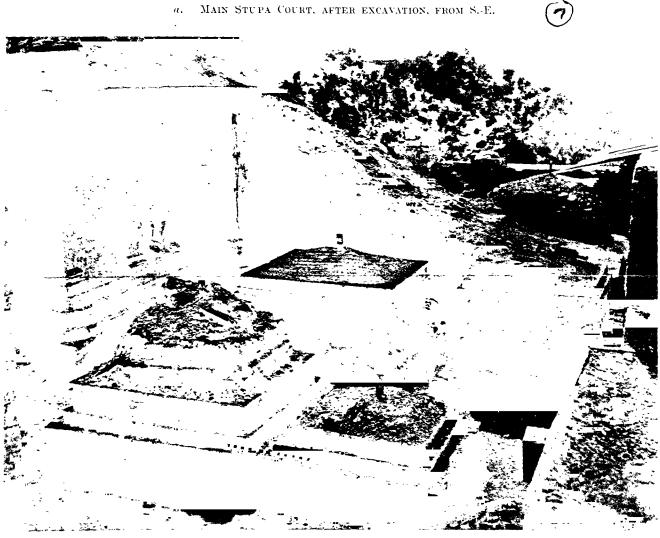




b. General view of stupa courts, after excavation, from N.-E.

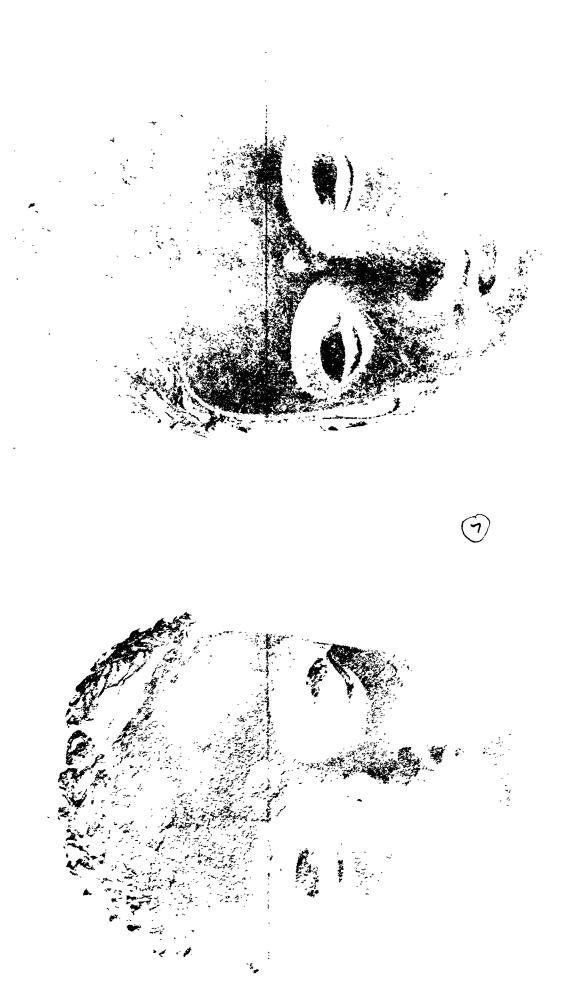
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 $b_{\gamma}$  Main Stupa Court, after excavation, from N.-E.







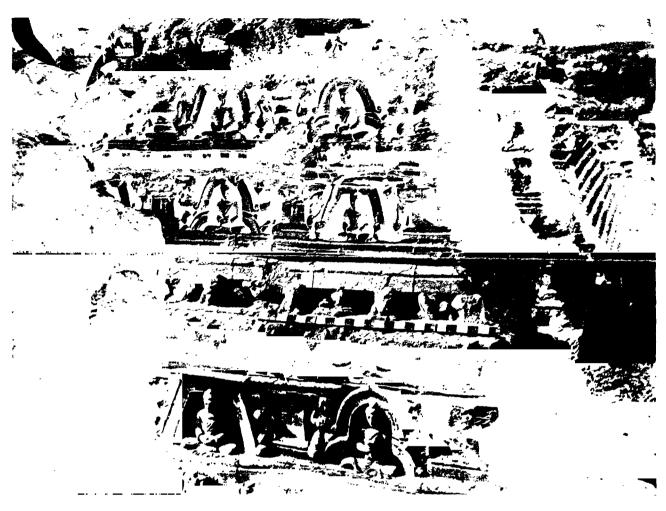




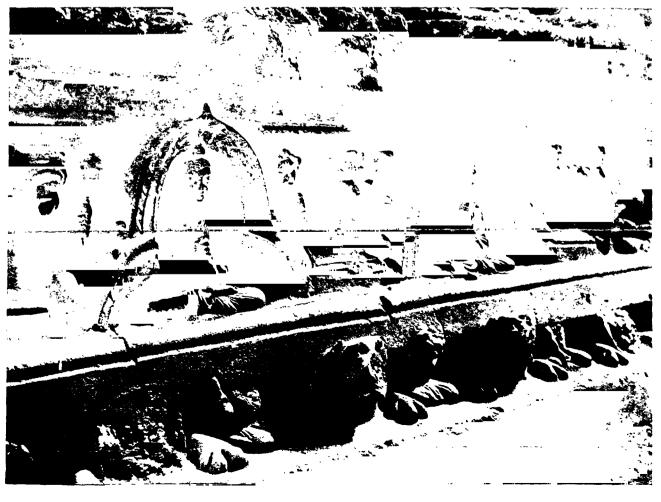




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 $a_{\rm e}$  Stupa  ${\rm A}^{16}$  from S.-E.



b. Details of decoration on Stupa  $\mathbf{A}^{o}$ .

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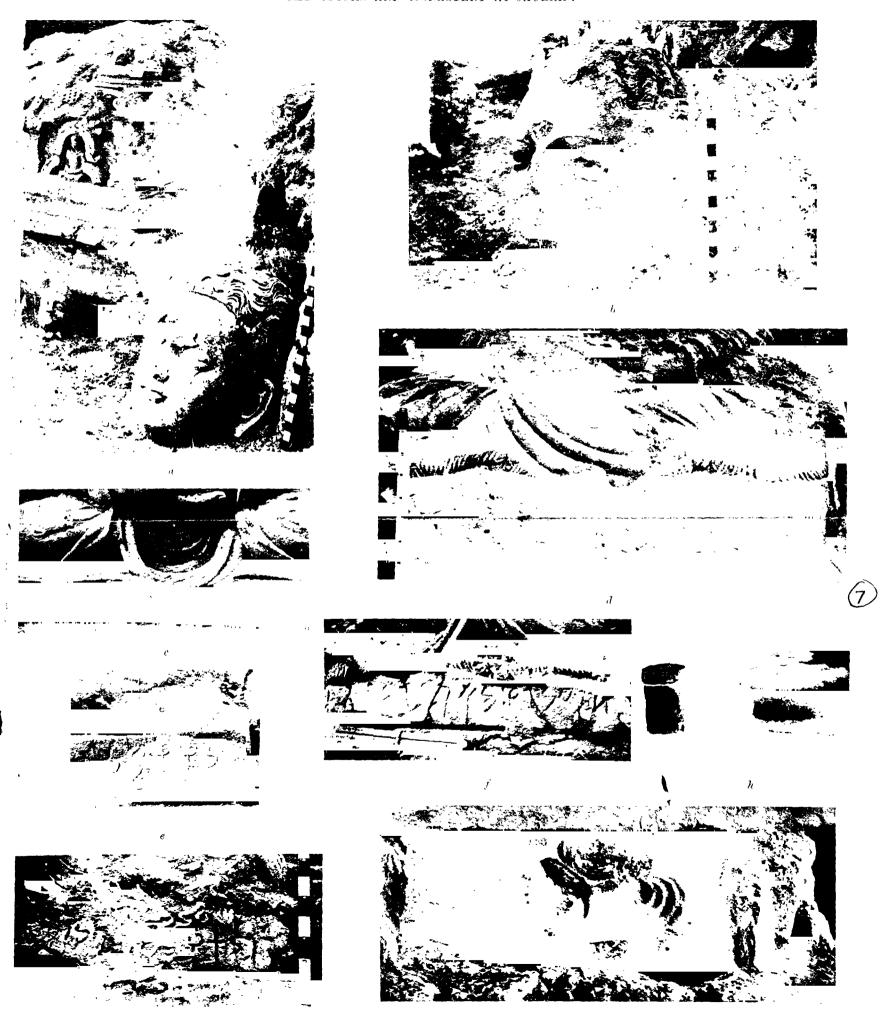
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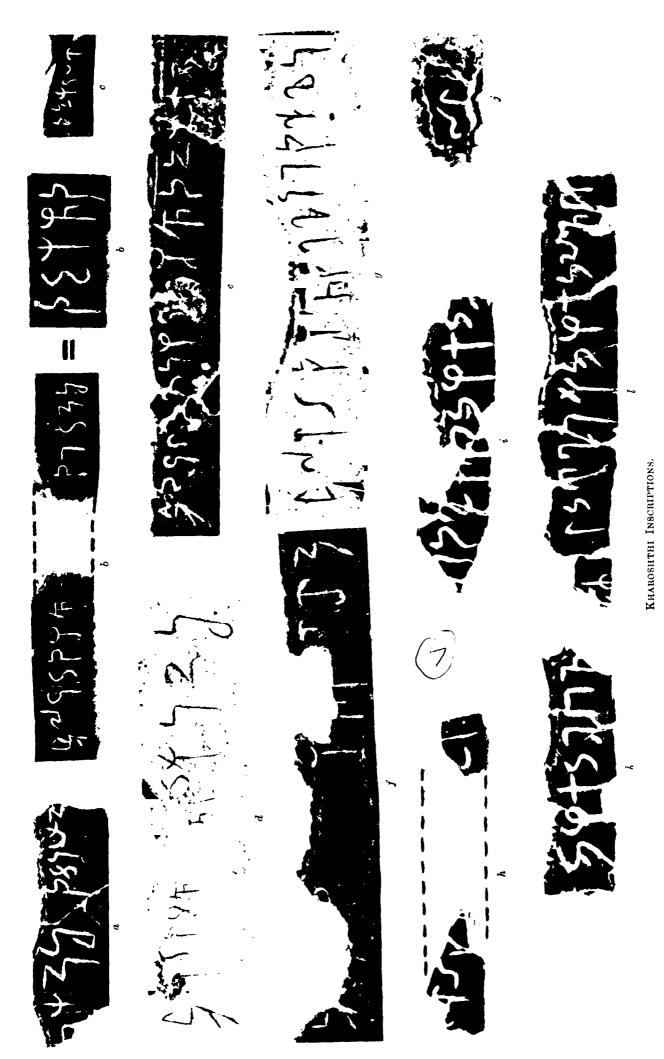
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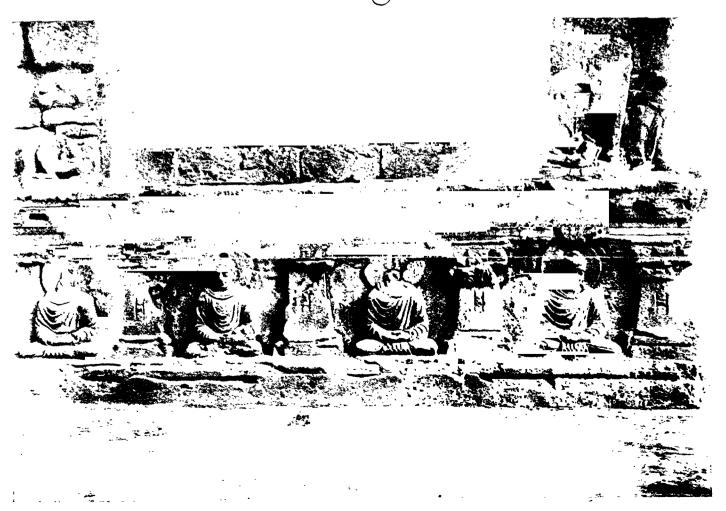




a. Stucco relief of Buddha in Chapel  $\mathrm{C}^{\mathrm{to}}$ .



b. CLAY FIGURES IN CHAPEL E



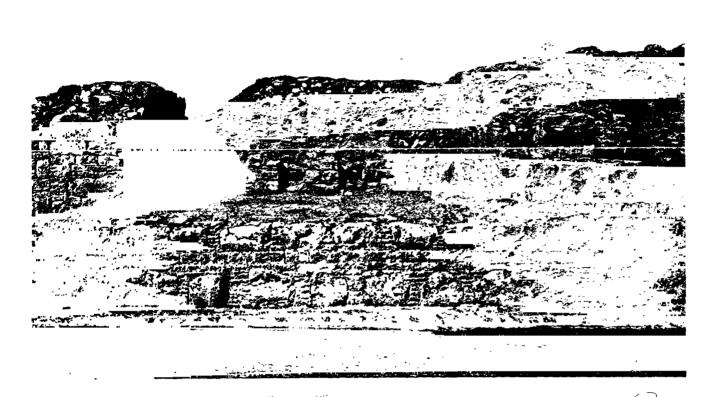


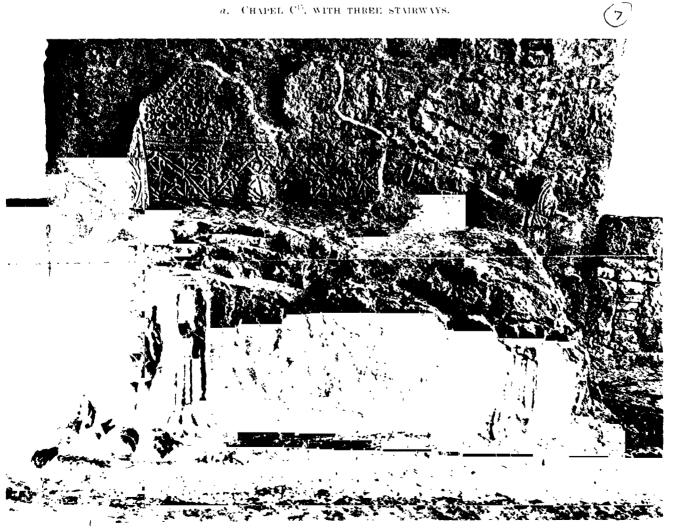


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b. Throne in front of Chapel  $\mathrm{B}^{\mathrm{t}^{7}}$ .







a. Entrance to Monastery during factivation, from N.-W.



 $b_{\gamma}$  . Interior view of courtyard of Monastery, from N.-P.,





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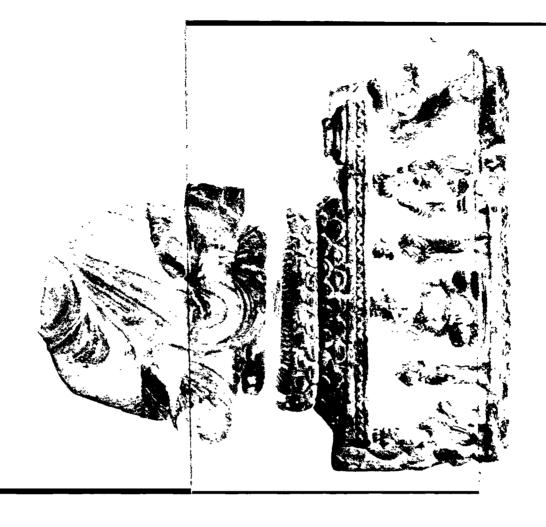






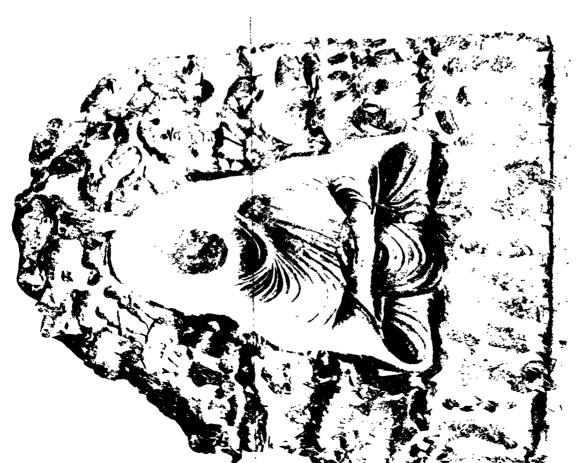
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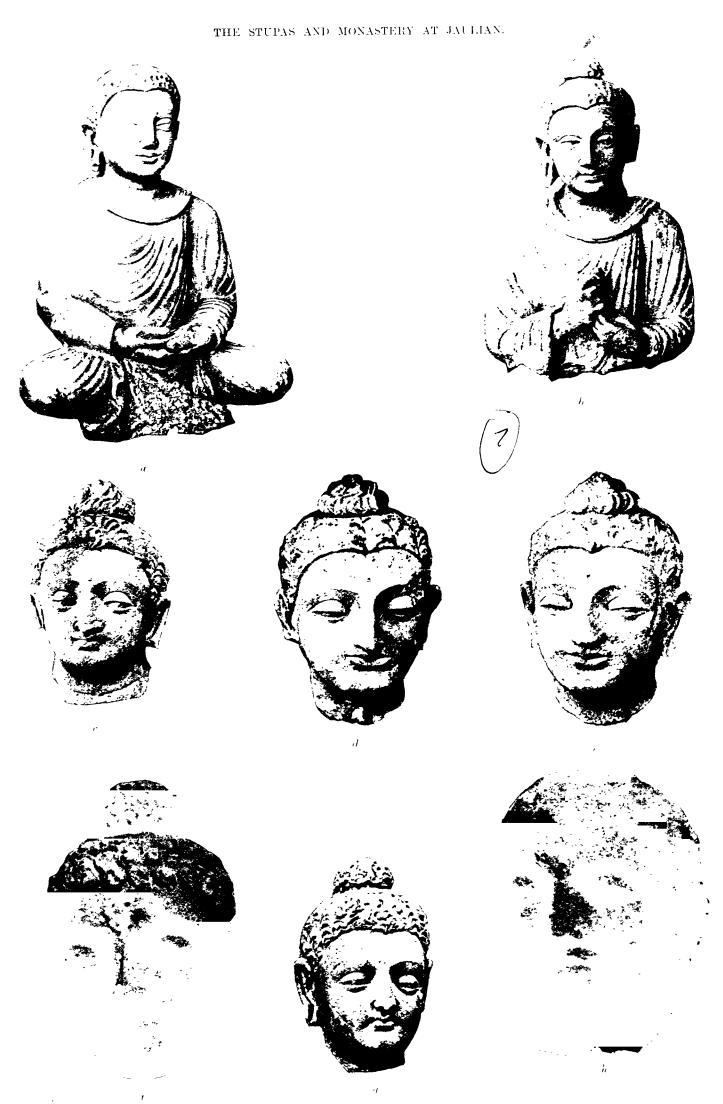






a. GANDHARA BELHIE FROM CHAPILL CP.





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STUCCO FIGURES AND HEADS FROM STUPA COURTS.



THE STUPAS AND MONASTERY AT JAULIAN.



STUCCO HEADS FROM STUPA COURTS.







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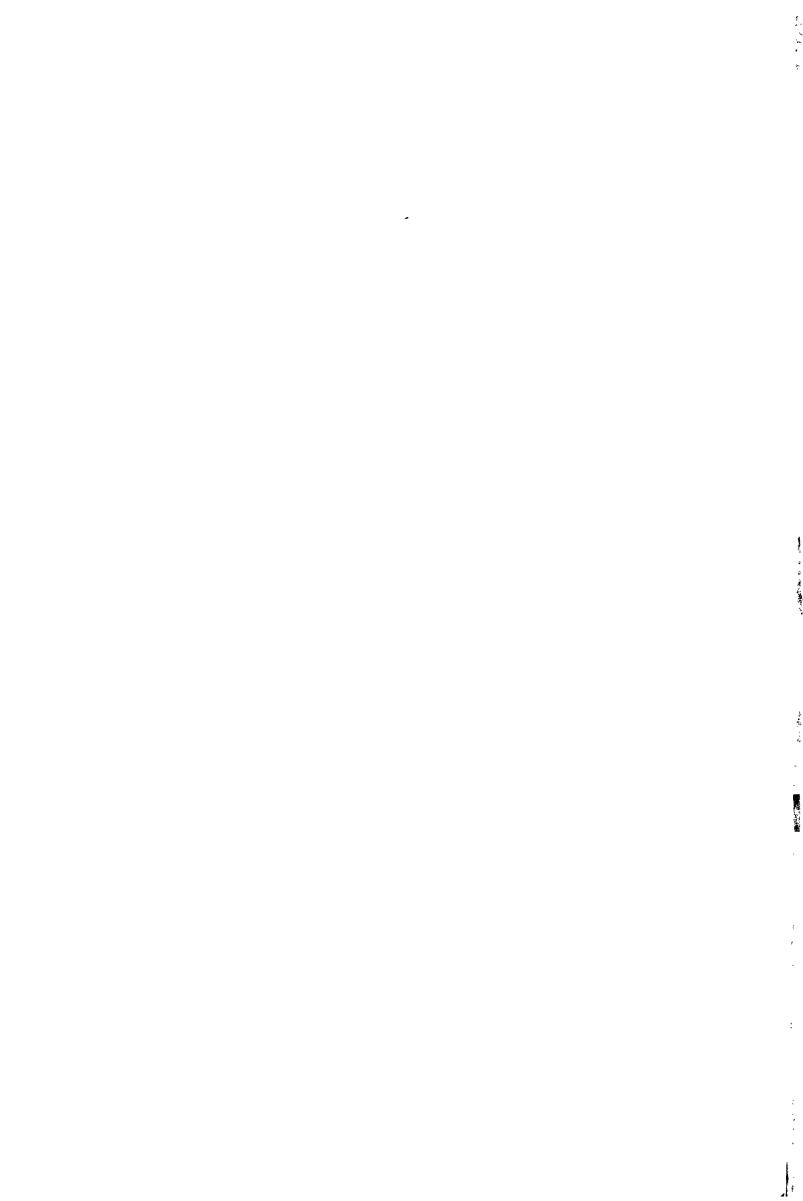
a. Stucco head, b, c, d, d. Clay heads.



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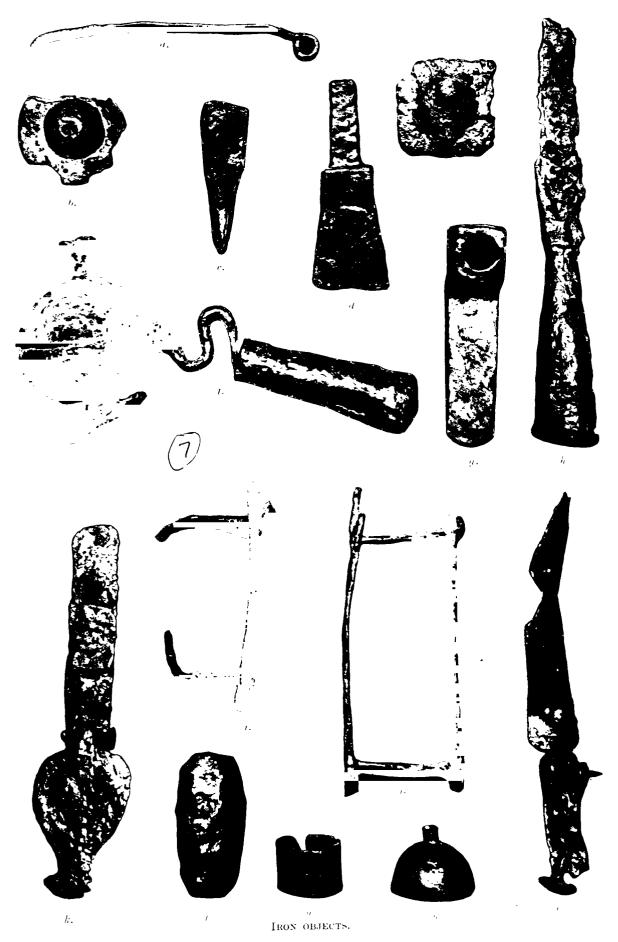
POTITIBLES AND COPPLE OBJECTS FROM MONASTERY.





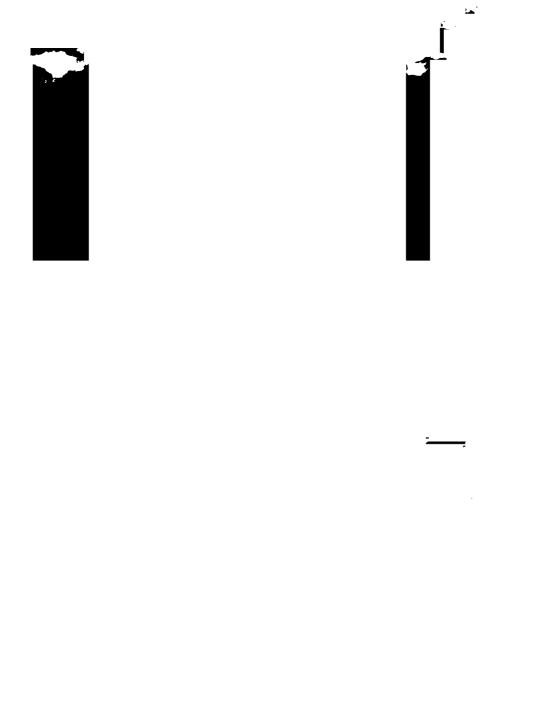
BRONZE, COPPER AND IRON OBJECTS.





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