ARCHITECTURE

The master-artists of Ajanta have depicted a variety of architectural details which include almost everything from a humble hut to a sumptuous palace. This enables us to have a fairly good idea of the secular architecture of those times. The representations of religious architecture at Ajanta are very few and do not add much to our knowledge. But the importance of plastic representations of secular architecture can only be realised when we take into consideration the fact that the architectural creations of the ancient past that have survived through the ravages of time and man, are all, with a few exceptions, of religious character. Our knowledge of religious architecture is not matched by that of secular architecture; far from it. The very few ancient sites that have been excavated thoroughly have brought to light only a few fragmentary floors and broken alignments of dilapidated walls of residential structures. It is for this lamentable lack in our knowledge that we have to take recourse to plastic representations. This lacuna is, to a great extent, removed by the illustrations of different types of dwellings at Ajanta.
It needs be mentioned here that except a hut, a chaitya and a vihāra, no architectural details have survived in the earlier group of paintings. It is only in the later group of paintings that we find a tremendous wealth of secular architecture.

The ancient Indian city (nagara) is very often described as fortified by rampart walls (prākāra) with a deep moat (parīkā) all around it. Unfortunately there is no representation of rampart walls and moat at Ajanta.

**Gateways**

The literary descriptions show that ancient cities were provided with a number of gateways and some big cities are said to have hundreds of them. The gateways appear to be of two types - (1) the torana and (2) the gopura. Torana was an ornamental gateway, without a door. It was probably the outer entrance as it is explained as bahirvāra. The gopura was the city gateway. These gateways occupied an important place in

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2. Ibid., p. 77.

3. Ibid.
the town planning inasmuch as they had a definite value from the point of view of defence. The word *gopura* according to Havell, is a compound of *go* (cow) and *pura* (town or fort) meaning a 'cow-fort'. This, however, appears to be far-fetched. The very word *gopura*, according to the author of *Sabda-kalpadruma*, is derived from the root *rupa* to defend or to protect.

Of the city gates there are two fine illustrations. The one in the panel showing the king *Vīśvantara* (*Vīśvantara Jātaka, XVII*) leaving the city with his retinue is seen from the side only. It is raised on two massive pillars, square on plan and decorated at the base with a dainty floral scroll recalling the ornamentation on the *Dhameka* Stupa at Sarnath. The gateway in question can be taken to be an outer city gate (*torana*) as the king is shown leaving the city through it.

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3. The Roman numerals in the bracket indicate the serial number of caves.
4. Brown, Percy, *Indian Architecture (Buddhist and Hindu)*, pl. XXXVIII, Fig. 2.
Another representation of a city gate (Pl. IV, 4) occurs in the same Jātaka wherein the king Viśvantara is shown with his wife and prince, driving in a chariot. The king has passed through the gate and has entered the main bazaar of the city. The shop-keepers and other people are watching him with reverence and some of them are paying him respects with folded hands.

The gateway is seen in its entirety. It is an impressive structure, either in brick or stone, tall enough for the passage of state vehicles like chariots. The lintel consists of a series of roll mouldings in diminishing tiers. It has a gable roof and the sides are embellished with huge rosettes, one each on either side.

From the panel it appears that the gateway is an entrance to the heart of the city, leading to the main bazaar and hence it can be taken to be a gopura.

**Palaces**

Of all the architectural illustrations at Ajanta the most striking and numerous are those of royal palaces i.e. the different buildings which formed the palace complex. Literary descriptions of palaces are abound­ing; yet actual remains, with the solitary exception of the Suganaga Prāśaṇa, the Imperial Mauryan palace at
Pātaliputra, have not so far come to light. Our knowledge of ancient palaces, therefore, is solely derived from their plastic representations and literary references.

The ancient Indian palace, referred to as prāsāda, an account of its quietude and calm, was a huge complex of several buildings which were either single or multi-storied as can be seen from the representations at Ajanta. A palace (Pl. I, 1) depicted in an unidentified scene (XVII) gives an excellent idea as to how it looked from the front. It has an impressive entrance in the centre surmounted by huge cupolas (stūpikā) which are crowned by kalāsas, thus recalling to the mind the palaces described in the Jātakas. On the left is a long pillared portico and on the right is a dwarf wall above which seen wooden trellis work. Behind this, in the corner, are some plants belonging to the palace gardens. The palace, however, appears to be a single storied structure. A multi-storied palace (Pl. I, 2) is represented in the Siśhala Avadāna (XVII). It has probably three stories (tribhūmikā). A similar three storied palace is depicted

1. Very recently the remains of Udayana’s palace have been found at Kaūśāmbi (See Sankalia, H. D. Indian Archaeology Today, p. 106 f.n.25). Marshall also identifies some structures at Taxila as palaces. (Taxila, Vol. I, pp. 171, ff. and pp. 179 ff.)
in Bharhut and is named *Viṣṇujayanta Pāñcāla* in the inscription carved on it.

**Enclosure Walls**

No rampart is seen at Ajanta. But walls of modest proportions, which can better be called enclosure walls adjoining the palace gateway (Pl. I, 2) are seen (Simhala Avadāna, XVII). The wall, with a flat projecting top, may be either of stone or brick masonry and plastered with lime and whitewashed.

Ancient works record that palaces were enclosed within the prākāra or enclosure walls, with a view to afford protection. Similar enclosure wall is also seen in the 'Mother and Child' panel (XVII). The wall is chest-high and has a slightly projecting top with sides rounded off and corners chamfered (Pl. I, 3).

**Palace Gateways**

The representations of palace gateways, though few and far between, are but variations of the same type, the only difference being in the shape of the roof and individual decoration. The ornamental toranas with curved cross bars having upturned ends are characteristic of the early period only. These occur only in the earlier group of paintings and vanish altogether in the later paintings of the Gupta-Vākšṭaka period when we have
when we have massive square columns with gable (Conversion of Nanda, XVI) or vaulted roof (Mahājanska Jātaka, I; Birth of Buddha, II), which is sometimes decorated with finials (Śīṃhala Avāḍāna, XVII; Sutasoma Jātaka, XVII). The vaulted roof is sometimes adorned with trefoil arched pattern (Pl. I, 2) similar to the facade of Cave XIX at Ajanta.

Gatehouse (Bahirvāra-sāla)

In the famous 'Mother and Child' panel (XVII) the Buddha is shown as a bhikṣu at the palace door and his wife Yasodharā and son Kāhula are shown standing at the door. The gateway is provided with a chamber at the top (Pl I, 3). The chamber is provided with a niche containing, a pūraṇa-ghaṭa, an auspicious symbol. The structure appears to be a gatehouse for the watchmen to keep an eye over the visitors. It rises above the adjoining enclosure wall. The gatehouse has very thick walls, probably brick built and plastered over, and is capped by a flat roof with a slightly projecting cornice.

The gatehouse is referred to as bahirvāra-sāla denoting thereby a floor (sāla) above the gate or the entrance passage (saṅkramana).
The Great Hall or Court (Māhyāsthānamandapa)

The most important building of the palace complex was the great Hall or Court where the king received public at large and the dignitaries as well on state occasions. An excellent illustration of royal court occurs in the Bestowal of Sword (XVII). The hall, though not seen completely is quite spacious. (Pl. II, l). It has a projecting pavilion supported on four pillars having double cushion capitals. The wooden ceiling has an overhanging eve on which a pigeon is perched. Above the pavilion is a flat-roofed balcony. Its sides are covered with perforated screens while the front is open. The base of the balcony is decorated with a running frieze of birds and animals in low relief. It may probably be a wooden carving similar to that at Ter, and may not be very different from those which Fa-Hien witnessed in the Mauryan palace at Pātaliputra.

The courtyard is beautified with a garden and a branch of mango tree loaded with fruit is seen near the balcony.

1. ARASi, 1902-03, Pl. XXX.

In the projecting balcony are seen some ladies. This very arrangement is found in the Mogul and later palaces wherein the balconies were provided for ladies to watch the proceedings.

The hall recalls to the mind the court of Harṣa which is described by Bana as the bāḥyāsthānamandapa, the state hall, similar to the Diwan-i-am of the Mogul palaces, along with its ājīrā (courtyard).

Another Great Hall (Pl. II, 2) is represented in the Śibi Jātaka (I) wherein king Śibi is shown sitting on a throne in audience to a large public. The pillars of the hall have square bases studded with jewels. The shafts are dodecagonal with an ornamental band in its upper half. They have cushion capitals crowned by stepped abacus. The plinth of the hall consists of a series of mouldings which are strikingly similar to those of the plinth of the Gupta temple at Peogarh (475-A.D.). The entrance to the hall is provided with an easy rise of four steps (sopāna) the balustrades of which have carved lion heads at the top. The courtyard (ajīrā) is beautified with garden plants.

1. V.S. Agrawala, Harṣacharita, p. 213.
The court (Pl. II, 3) represented in the Śimhala Avadāna (XVII) is not very different from those already described. Its walls are decorated with bands containing arabesque patterns and the pillars are studded with gems and pearl festoons. The projecting eyes of the flat roof appear to be wooden.

Audience Chamber

Audience chamber was an important component of the palace complex as the court or great hall. In some panels at Ajanta kings are shown conferring with their ministers or other dignitaries in elaborate halls which can be identified as audience chambers similar to the Rivan-s-khas in the Mogul palaces.

A scene in the Chāmpēya Jātaka (I) depicts a chamber (Pl. III, 1) wherein the king Chāmpēya is shown talking to the king of Vārānasi. The former is accompanied by his queen and attendants some of whom are carrying presents for the latter. The chamber is provided with an entrance gateway which has a waven-vaulted roof. The sides of the roof are decorated with trefoil arches and are crowned by finials.

The pillars of the hall have a double cushion capital the upper one of which is fluted. It is surmounted by a cup-shaped abacus crowned by a stepped, four-armed
on which rests the flat roof. The fluted cushion capital appears to be very much in vogue during the 5th-6th Cent. A.D. as it is to be noticed in the Badami and Elephant caves and a couple of centuries later in Cave 24 at Ellora. The four-armed member crowning the pillar appears to have its beginnings in the 5th Century A.D. The pillars of the Lakshmi temple at Khajuraho (450 A.D.) have plain four-armed members which probably developed into stepped ones later.

The pillars are decorated with horizontal bands containing beaded ornamentation through which are suspended pearl festoons and tassels. This type of ornamentation on pillars is very common at Ajanta, and relying on Bena's statement we may conclude that it was very much in vogue in those days.

On the extreme right is probably a room, the latticed window (jāla-vatapāṇa) of which is seen. The flat roof...

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2. Ibid., Pl. LVII, 1.
3. Ibid., Pl. LVI, 1 and 2.
4. Ibid., Pl. XLIV, No. 1.
5. Agravala, Kādambarī, P. 6 (āvalambita-mukta-kalāpa)
of the hall consists of a series of mouldings with projecting cornice at the base.

The audience chamber in the Palace Scene (I) merits special mention on account of its lavish decoration. The ceiling has huge floral hangings, possibly of metal, through which are suspended large pearl-string pendants and festoons. The pillars too are adorned with floral designs. Their ornamentation is reminiscent of that in the palaces so vividly described in the Sangam literature. Kanimokhalai mentions that the pillars of the palace were studded with gems of brilliant colours and from the edges of roof were hung strings of lustrous pearls. Bana too alludes to the pearl string festoons suspended from the ceiling of the palace hall.

Very similar halls are depicted in the Chāmpaya Jātaka (I) and the Palace Scene (I); the former has an exquisitely fine floor having painted patterns. The audience chamber in the Vidura Pandita Jātaka (II) is quite different from those already described. The hall has a dwarf wall on the front and to the right is a flight of steps leading to a portico. In the back wall is a window with vertical bars. (satāka-vātapāna) and a

doorway with two door-leaves (kavāta) which can be seen as the door is closed. Below the portico is yet another, but a smaller, portico.

The audience chamber depicted in the 'Embassy' scene (I) would have been an excellent illustration. It is much damaged and hence no details can be made out. From what remains, it can be said that it has an enhance gateway. The pillars bear the usual decoration and the shining floor has floral patterns. The hall is provided with a doorway in the back-wall and the door-frame is embellished with a band containing a dainty floral scroll all around.

**King's and Queen's Drawing Room (antahpura)**

A room depicted in the Viśvantara Jātaka (XVII), wherein the king Viśvantara is talking to his queen, appears to be a drawing room. The royal couple is accompanied by a few select attendants and the king seems to be having a heart-to-heart talk with the queen. The structure appears to be quite modest. The pillars have cushion-capitals and bear gem-set, beaded ornamentation. The ceiling is made of wooden beams and rafters.

It should be noted that the king is conveying to the queen his decision to renounce his kingdom. This shows that it is a private chamber exclusively for the use of the royal couple. The private chamber has been variously
referred to as वसार्थ्या or antahūra. Hana refers to it as वसाभवना which, in the palace of Hara was located on the upper floor, above the द्वालार्थ्या and was adorned with paintings. It was therefore also known as चित्राण्णा or चित्राण्णिका.

There are fine representations of antahūra in the अमारावति sculptures. Antahūra was peopled only by females and no man except चिंचुकि could enter it. It had separate entrances and exits, courtyards, lotus ponds etc., and was a veritable storied mansion.

Another representation of antahūra occurs in the चन्द्रजातिका Jataka (I). Its back wall is decorated with a floral scroll. The queen is shown sitting in it on a pallanza and is surrounded by her maids.

Royal Bedroom (सायनागारा)

There are only a few representations of royal bedrooms, but they are extremely interesting on account of their architectural details.

The bedroom (Pl. III, 3) in the 'Conception' (XVI) is the finest illustration of its class. It is a spacious, rectangular chamber with gem-studded pillars having bell-shaped bases and ghata capitals. The roof is flat and its sides are embellished with trefoil arches.

containing a rosette each in relief. The bedroom has a circular pavilion attached to it which is probably the vāsārīṇī as therein the queen is relating her dream to the king. The same arrangement obtained in the Harsa's palace, wherein according to Dr. Agrawala, the royal bedroom formed a part of the drawing room (vāsārīṇī).

The bedroom is tastefully decorated and adequately furnished. Vīṇās are hung on the wall.

The bedroom in the Chhaddanta Jātaka (XVII) is a rectangular chamber. Its pillars are most lavishly ornamented. In utter contrast with this the āśyanāgāra in the Śaṃsāra Chakra (XVII) is too simple and modest to be a royal bedroom.

The profuse ornamentation of the āśyanāgāras described above, except the last one, shows that their descriptions in literature are not without significance. Thus an early Tamil epic describes a royal bedroom as overspread with an artistic flowery canopy which was the work of skilled hands. It was also ornamented with "hanging festoons of pearls and flowers, strung in rows... ... glittering with the dazzle of diamonds and of lustrous gems ingeniously set at random in gold thread."³

2. Arthasastra (p. 43) states that musical instruments shall be kept in harem.
Bana too vividly describes the bedroom of the newly wed Rājyāśī. Its walls were painted with pictures of Kāmadēva and his consort Kati and was adorned with mirrors.

**Prince's Quarters (Kumāra-bhāvana)**

A scene in Cave XVI shows the young prince Siddhārtha as a young boy taking lessons from his teacher, in the company of his friends. It is a gable roofed chamber supported by ornamented pillars having cushion capitals. Wooden beams and rafters of the ceiling are clearly discernible. Above the beams is a square latticed window (jāla-vāṭāpana) above which rises the gable roof. The structure appears to be a separate building as it is provided with an entrance gateway with a wagon-vaulted roof. On the back wall of the hall are hung viṇās and cages of pet birds. (Pl. III.2).

The structure, in all probability, appears to be prince's quarters wherein the prince received education from his teacher in the company of a few selected children, probably of the palace officials. Rāmāyana refers to the prince's quarters (kumāra-bhāvana) of Kōma and similar practice obtained till very lately in the princely states of India.

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Royal Bath

There is only one illustration of royal bath. (Illustration, I). It is a spacious room (Pl. IV, 1) with a flat roof. The entrance is provided with a flight of steps with curved balustrades adorned with lion-heads at the top. The pillars with a vase-and-cushion capital are crowned by a four-armed member on which rests the roof. The pillars are embellished with precious stones. The ceiling appears to have been decorated with some pattern which is not distinct. From the ceiling are suspended clusters of pearl strings. The back portion is covered with curtains.

A most noteworthy feature of the bath, however, is the lion-heads fitted in the plinth. The employment of carved lion-heads in the structures is essentially a Greek motif. But in Greece they are fixed in the roof for draining out rain water through the lion's mouth. But in the royal bath at Ajanta they are to be seen in the foundation. There is therefore every possibility of their being spouts to let out the water from the bathroom. It should also be noted that this is the only structure illustrated in the paintings wherein lion-heads

1. Fletcher, Benister (Sir), A History of Architecture on the Comparative Method, p. 133, fig. B.
2. Lion spouts continue in the Roman period as well. See Fletcher, Op. cit., p. 155, fig. B.
are to be seen in the plinth below the pillars. Animal spouts for draining out water occur in the mediaeval temples and the cow-head is the commonest spout.

According to Dr. Agrawala the bath of Harṣa was located on the ground floor of the palace, at the back in the right corner and was provided with a huge water-basin (amāna-dronī), probably of stone and shower (yantra-dhāra) as well.

**Drinking Hall** (āpānasālā)

There is an excellent representation of āpānasālā (Pl. IV, 3) in the Palace Scene (XVII). Architecturally, the structure is almost similar to those already described. It has a projected pavilion in the middle the pillars of which are exquisitely adorned. On the extreme right and left are two windows; the one on the right is a rectangular latticed window (jāla-vatāpāṇa). The other on the left is wide open and two maids are talking behind it.

In the hall a royal couple, in amorous mood, is shown sitting on a maṅcha. The prince is holding a wine cup (pāna-pātra) and is probably offering it to his consort. A maid, undoubtedly a foreigner, is serving wine through a flagon. Another maid sitting by the side

is having a tāṁbūla-karanda. Nearby is a dwarf carrying a spittoon. The building is provided with an entrance gateway having a vaulted roof.

āpānaśālās are referred to in ancient works. The Rāmāyana refers to such an āpānaśālā wherein different dishes and viands with flagons and goblets of various wines were kept ready.

Music Hall (saṅgīta-sālē)

A saṅgīta-sālē (Pl. IV, 2) is represented in the Mahājanaka Jātaka (I). The hall and its pillars have the usual ornamentation, but a new feature that strikes the eye is the bracket of the pillars consisting of a prancing vāla figurine with a rider. From the mouth of the vāla issue out clusters of pearl strings. A strikingly similar vāla bracket is described in the Vasudeva-hindī, a 5th Cent. A.D. Prakrit work.

For the musicians and dancers a special pavilion is erected in front of the hall. The pavilion is supported by four pillars and has a flat roof. Its back side is covered by screens. A charming dancer is performing a dance number in the pavilion. She is

1. V, 9, 21-22.
2. Khamba paṭibaddha vālaya muha vivara vipinta-muttra jāla vīla śīra, p. 347.
accompanied by a choir of female musicians.

Another dance-hall is depicted in an unidentified Scene (I), but the panel in question much damaged and no details of the structure can be made out.

The Mahābhārata refers to the dancing hall as nartanāgāra and the dancing girls, are said to dance by day and go home by night. Saṅgītā-sālā is also referred to by Kalidasa. Bana informs us that the king used to enjoy music and dance in the company of a selected few in the Saṅgītā-sālā which in the palace of Harṣa was located in a large hall (pruṣṣāda-kuki) - connecting the chandaśālikā and pragrivaka on the first floor of the dhavalā-griha.

Hall of Weapons (Sastrāgāra)

Sastrāgāra was an important component of the palace complex. A structure wherein the young prince Sudāsa is shown practicing a javelin-throw appears to be a weapon-hall. It looks like a long corridor with two projecting pavilions. There are curtains hanging on the left and in the middle of the back wall is a door-way.

2. Rāhul, XIX, 35-36.
On extreme right are seen two huge shields with curved top. The only object that is not in keeping with the whole atmosphere is a vina hung on the back wall.

It is needless to mention that the āstra-gāra was a necessary adjunct of the palace. The Rāmāyaṇa refers to it as the āyudha-chāpa-sāla in Rāvana’s palace where weapons and musical instruments used in war such as conches were kept. Strabo too mentions the royal armory of an Indian king and Apollonius records that the king practiced javelin-throw on the ground on either side of the swimming pool, which was probably in the courtyard of the weaponry. According to Bana āyudha-sāla was located in the first kākṣyā. Harṣa’s armory is said to have been located in one of the halls of chatuhsāla surrounding the dhavalasāla.

Play House (krīdā-rīha)

In a scene from the Vidura Panchita Jātaka (II) is depicted a hall wherein a yakṣa general Punnaka

1. V, 7, 2.
2. Majumdar, Classical Accounts of India, p. 269.
and Vidura Pandita are shown playing dice. The hall is located in the upper floor as the ground floor is seen clearly. The roof of the portico of the ground floor is decorated with figures of horses, probably in stucco.

The halls reserved for playing indoor games are referred to as kriḍā-grīhas.

**Palace Kitchen (Mahānāsa)**

The palace kitchen (Pl. V, 1) represented in the Sutasomā Jātaka (XVII) is a modest structure, rectangular in plan and has a gabled roof made of thatched bamboo covered with grass. It has a high, moulded plinth and is open on all sides. The kitchen is situated in the courtyard of the dining hall.

Similar kitchens are to be seen in the Sāmaśa Chakra (XVII) and the Mriga Jātaka (XVII).

For the location of the kitchen in the palace complex we have to depend on the literary evidence. Kautilya prescribes that the royal kitchen and the storeroom shall be situated on the site east by south in the palace area. Bana mentions it as mahānāsa and states that the kitchen in Harsa's palace was situated on the ground floor, in the back, at the left hand corner.

Dining Hall (Ahāra-mandapa)

An excellent illustration of a royal dining hall (Pl. V, 1) is to be found in the Sutakom Jātaka (XVII), wherein the king is shown taking his meals. The building is provided with an entrance gateway with a barrel roof crowned by finials. The hall proper is quite spacious and has a projection on the right. In the court-yard is a modest kitchen, opposite the hall.

Regarding the location of dining hall in the palace Śana informs us that the Ahāra-mandapa was situated at the back, in the left hand corner of the ground floor (dhavala-grīha).

Pavilion

Pavilions appear to have been erected in the palace for celebrations. One such is seen in the Mañjana Jātaka (I). It is a double-storied structure profusely ornamented with pearl festoons. The roof consists of diminishing tiers and resembles the Drāviḍa type of śikhara. (Fig. 1).

Such pavilions were usually erected for royal couples for amorous enjoyment, more particularly during full-moon night. One such mandapa is referred to as a śveta-mandapa which may not be very different.

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from that referred to above.

**Connected Passages**

A scene from the Sīhale Avadāna (IXII) shows two halls of the palace, opposite each other, connected by a tented passage raised on bamboo posts. It is difficult to say anything definite regarding the purpose and location of these halls and the tented passage joining them. But it is surprising to find a mention of such a tented passage in Harṣa's palace. Bana informs us that there were large rooms in the passage between dhavala-grīha (the principal floor) and the chatuhśala (surrounding rooms) and these rooms and the main building were joined by a tent. In the light of

Banâ's statement the identification of the halls referred to above does not need any elaboration.

A Swing in the Garden (Dolâ)

In the Vidura Pandita Jâtaka (II) is depicted a scene showing princess Irandati on a swing in the palace gardens (Pl. V, 2). The swing consists of two wooden posts with a flat roof having latticed sides. Two metal rings are fixed in the beam through which ropes are suspended. The seat is oval in shape. Two chains are tied to the beam but they do not appear to serve any purpose and are probably merely decorative. Pearl string pendants and festoons are attached to the beam which is also decorated by striped banners.

Swing (dolâ) is frequently referred to in the literature. According to Vâtsyâyana, swing is a necessity in the house of a rich person. Kalidasa also alludes to gardens provided with swings, either in bows or open, in the palace area.

Horse-Stables (Âvasâla; mandurâ)

The horse-stables (Pl.V,3) occur only once

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2. Ramayana, IX, 46, 142.
(Sutasoma Jātaka, XVII). They have a low wall in front, reaching up to the chest of the horses. On this wall pillars have been built up and they support the roof. Inside the stables saddles are placed on pegs, fixed into the wall. The saddles in their shape do not differ much from those of the present day. The horses are also seen inside.

From the stables it appears that much care was bestowed on the royal horses. This is confirmed by Kautilya, who, while dealing at length with the duties of the superintendent of stables, prescribes that he (the superintendent) should have a stable constructed "as spacious as required by the number of the horses to be kept in them twice as broad as the length of a horse with four doors facing the four quarters with its central floor suited for the rolling of the horses. The room for every horse shall be four times as broad or as long as the length of the horse, with its central floor paved with smoothened wooden planks with separate compartments for fodder (khādana-kosthakām) with passages for removal of urine and dung with a floor facing either the north or the east." ¹

¹ Arthaśāstra, p. 54.
The love of Indian kings for horses appears to be almost proverbial. For, Strabo testifies to the existence of excellent stalls for royal horses and other beasts in the palace. Kalidasa tells us that not only palaces but in some cases mansions of rich people contained stables for horses. In the palace they were located on the outskirts.

Harṣa was a great lover of horses. His palace stables (mandurā) were located to the right of the entrance inside the palace. He had an excellent collection of horses of finest breeds some of which were imported from Arabia, Iran and Central Asia. His favourite horse has been referred to by Bana as bhumīla-vallabha turanga or rājavallabha or vallabhā.

Bana also throws light on the manner in which horses were tied to wooden pegs, one in the front and the other at the back, and the horse was tied to these by means of ropes.

The illustration from Ajanta described above does not give us any idea of the interior of the stables, but the literary evidence cited above does enlighten us about it.

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2. Raghu, XVI, 41.
4. Ibid.
Elephant-Stables (Gaja-sāla)

There is no clear representation of elephant stables. Yet a scene from the Mātripoṣaka Jātaka (XVII) shows some elephants inside the palace. From this it appears that stables must be somewhere nearby. In the upper half of the panel an elephant is shown in the right end with some food-stuff for it kept in a huge trough, brought there on a small hand-cart. Nearby is a big basin and another trough, probably containing water and eatables respectively. The place where the elephant is standing is a canopied extension of the palace. The existence of elephants in the vicinity of royal chambers need not surprise us for, Bana records that elephant stables of Harsa were inside the palace, just by the side of the great hall or court. The stables (ibhūdhisāgāra) were provided with a specially erected pavilion (avasthāna-mandāna) for Harsa’s favourite elephant, Vāraṇendra by name. This explains the structure depicted in the panel. It may just be that the king of Vāraṇasī replaced his state elephant by another, who in fact was the Bodhisattva, born as an elephant, and accommodated him in a specially erected

avasthāna-mandupa by the side of the throne-room
wherein the royal throne is seen on the left.

Alms-House (Anātha-Sālā)

An Alms-House (Pl.V, 4) is represented in the
Cave XVII, where a large number of monks, bhikṣus
and beggars have gathered together to receive alms
from the king. The structure is a temporary one as it
consists of a rectangular shāmiaṇa erected by the side
of the palace. It recalls to the mind the one described
in a 5th Cent. A.D. Prakrit text which informs us that
an alms-house (anātha-sālā) was erected near the
enclosure walls of the palace and the monks of various
sects and of different nationalities gather there.
It seems that such alms-houses were erected in different
parts of the country for such a one is referred to in
the Gadhwa stone inscription of Chandragupta II
(407-08 A.D.,) which records the establishment of a
perpetual alms-house which was to be maintained on
the interest of ten dinars.

1. The gaja-sālas of later period appear to be huge
structures of stone masonry. The one at Hampi
(ancient Vijayanagar) is one of the finest examples.
(See Longhurst, A.M., Hampi Ruins, P.82, Fig.34.)

2. Vasudevahinind, Madhyama-Rāhanda, pp. 64-65.

**Shamiyanas**

Shamiyanas or large tents with clothed roof and supported on bamboo props occur in several scenes. They are open on all sides and thus give an unobstructed view to the occupants. The shamiyanas constituted an important equipment of the royal camps and they are sometimes shown erected inside the palace courtyard, probably for certain special occasions.

The shamiyanas are all rectangular in shape (Pl. V, 4) except the one which appears to be circular. The cloth used for the tents is striped (Śibi Jātaka, I) and the roof is sometimes decorated with triangular frill. One tent has curtains on the side facing.

(Mātriṃpōṣaka Jātaka, XVII).

A tent pitched on the Island Ogresses (Sīmhaśa Avadāna, XVII) appears to be circular in shape (Pl. V, 5). It has a number of bamboo props and the conical roof is surmounted by a squat finial (kalarśā) crowned by feather-plumes.

The shamiyanas described above are shown erected, as we do today, for some special functions such as the presentation of elephant tusks (XVII) etc. Harsa too is said to have erected a special āsthāna-mandapa for the reception of the king of Assam. Similarly the ceremony marking the

beginning of king Chandrāpida's divyājaya was performed in a special āsthāna-mandapa.

The foregoing account makes it amply clear that the ancient palace of the Gupta-Vākūtaka period was a huge complex of buildings set apart for different purposes. This, as already described, is adequately borne out by literary evidence. From the paintings they appear to be brick structures, plastered and whitewashed and large quantities of wood-work were employed in the construction. This, of course, does not rule out the possibility of their being built in stone, for, Kalidasa alludes to mansions even of marble—(manisālā-ṛthā). The excavated remains, too, show that they were mostly stone-built. It is further substantiated by Bana who mentions the palace balcony, white with stucco spotless like moon-light.

The interior of the palace was exquisitely decorated with painted patterns and ornamented with precious materials. The unbridled praise of the poets for the adornment of palaces can on no account be discarded as more poetic fancy. Megasthenes testifies to the elaborate decoration of the Mauryan palace at Patna. Six centuries later Fa-Hien witnessed its walls having elegant carvings and inlaid with sculptures.

There are a few good illustrations of bazaar streets with shops. A scene from Visvantara Jataka (XVII) shows a bazaar with an entrance gateway (Pl.1V,A). The gate has a gabled roof, the sides of which are stuccoed with a huge rosette in low relief. Such bazaar gates existed till very lately in India and some of them can be seen even today.

The buildings in the bazaar are two or three storied, with shops on the ground floor. The upper floors probably served as residential quarters. Of the four shops, the first two are not seen clearly; the third is possibly an oilman’s shop as the shopkeeper is shown measuring liquids. The next is the grocer’s shop as is suggested by the weighing-scale therein.

The shops are provided with wooden doors which could be removed from or fitted in the sockets when required. In another scene (Nālagiri Story, XVII) the shops are shown with awnings of cloth for protection from sun and rain as is the case even today. (Fig.2)
The upper floor, which must have been used for residential purposes has special balconies screened with trellis work.

The graphic evidence is confirmed by archaeological evidence. A number of structures in a row, on either side of a broad street, were unearthed at Bhitā. They have rightly been identified, on the basis of internal evidence, as shops which, though first constructed during the Sunga period continued to be occupied till the Gupta period.

Another interesting feature of the shops is that they were sometimes located in the palace itself as shown in the Vivavantara Jātaka (XVII). This may appear intriguing in the first instance, but has to be conceded in the light of evidence from Taxila where shops have been discovered in the front portion of the palace along the road.

Ancient works inform us that the market place (vipaṇī) was situated in the heart of the city and houses lined the market street (āpana-mārga) on both sides. Pana too gives a graphic description of the city of Ujjavini which had a broad, beautiful main street (mahā-vipaṇi-patha) flanked by shops, behind which were residential quarters.

1. ARASIT, 1911-12, p. 32 Pl. XIII.
3. See Upadhyāya, B.S., India in Kalidasa, p. 245.
4. Agravala, Kādambarī, p. 56.
City Streets and Residential Quarters

There is only one representation of the early period (Pl. VI, 1). It is built on the chatusala principle, i.e., with an open court surrounded by rooms. It is a single storied house with vaulted roofs crowned by finials (kalasas). The woodwork of the roof is very distinct. In the front is a courtyard enclosed within a compound. The entrance is provided through an ornamental torana with horizontal bars below which are some rooms. This is possibly a gatehouse (bahindyarasala). The house is depicted in Cave IX.

Houses built on the chatusala plan existed even at Harappa and Mohenjodaro, and continued through the millennia. The same plan is noticed at Taxila, and such houses, with one, two or three open courts can be seen even today in India.

The dwellings of the later period differ from the earlier ones. A residential locality (Pl. VI, 2) is depicted in the Sutasona Jataka (XVII). The houses are seen nestling with each other without leaving space in between. They are single storied structures in contrast with the multi-storied ones in the market area. Even today we have multi-storied buildings.

2. Ibid, p. 147.
in the business locality while those in the residential
colonies are usually single-storied.

The houses have projecting verandahs in front and
light is admitted through a latticed window (jāla-
valamṇa).

The road, by the side of which stand the houses,
is straight and thus indicates the planning of the city
on a 'chess-board' pattern which, though existed in
India in the third millennium B.C., appears to have
been forgotten in the succeeding period. It was
possibly reintroduced by the Hellenistic Greeks in the
North-Western India as is gathered from the excavated
remains at Taxila.

A double storied house (Pl. VI, 3) is also
illustrated. (Four Drives, XVI). It has a spacious
courtyard enclosed within compound walls. The ground
floor of the house has a verandah supported on round
wooden pillars bearing spiral pattern, probably incised.
The upper floor has a flat roof crowned with Kalasās.

Huts

Poor people and anchorites used to live in
humble huts as is the case even today. There are a few

excellent representations of huts which are described below.

1. This representation (Pl. VI, 4) occurs in the earlier group of paintings (Syama Jâtaka, 1). It appears to be circular on plan and has a domical roof. It is possibly made of thatched bamboo with the exterior covered by leaves which explains its appellation parnakuti and is variously referred to as parna-śāla or utaja.

   It occurs very often in the early art at Amaravatī and Mathura and is also seen in a Gandhara relief.

2. The earlier circular hut is now replaced in the Gupta-Vākātaka period by rectangular hut with vaulted roof. It is also made of thatched bamboo and its exterior is similarly covered by leaves.

3. As against the huts covered by leaves on the exterior which were used by ascetics, the huts described below, made of thatched bamboo, and without the use of leaves are shown inhabited by poor people. The hut

1. Amâra, p. 75.
3. Vogel, La Sculpture de Mathura, Pls. XVI, a & Lx, u.
(Pl. VI, 2) is rectangular on plan and its props and beams are of timber. The roof slopes on both sides from the apex and the inner framework is of strong bamboo or wood. The upper part appears to be covered with reeds, the continuous lines of which are noticeable. The beams which are fixed to the pillars by means of iron nails are also seen. From the beams is suspended a rope-sling containing pots. (Monastery, XVII; Sutasoma Jātaka, XVII, and Samsāra Chakra, XVII.)

RELIigious ARCHITECTURE

A Chaitya

The representations of religious architecture in Ajanta paintings are very rare. Of these, a chaitya (Pl. VI, 6) is depicted in the earlier group of paintings. (Stūpa, X). It consists of a stūpa in the centre of its courtyard, entered through a torāṇa. The torāṇa has three curved cross bars with upturned ends and resembles the famous Sanchi torāṇas. The stūpa consists of a cylindrical drum in tiers, with a hemispherical anīla surmounted by harmika. The stūpa is crowned by a huge chhatra and the anīla and harmika are similarly adorned by smaller chhatras.

To the left, in the courtyard, is a tall structure, probably double storied. It has a vaulted roof crowned by kalāśas. It appears to be a vihāra, attached to the chaitya.
**A Shrine**

A shrine of Buddha is represented in Cave II wherein a large number of votaries are shown with offerings for the 'Enlightened One'. It is a double storied structure, rather tall, supported by slender wooden pillars with double-cushion bases and similar capitals which are surmounted by a bell-shaped abacus. The ceiling of the ground floor is decorated with dainty floral scrolls. The upper story, less in height, also has slender poles. On close observation the building appears to be a temporary structure, rather a mandapa for it is almost impossible that such a huge structure could stand on so slender pillars unless they are of iron. It has doorways on both the sides and is decorated with a triangular will at the top. It may just be that the shrine was a permanent solid structure and the additional structure described above was erected on some special occasion, like a fair, when a large number of devotees was expected.

**A. Monastery**

The monastery depicted in Cave II (Pūrṇa Avadāna) is a double storied structure for the residence of monks. The ground floor has a door-frame with leaves of trellis work. There is a latticed window (jāla-vātāpana) on the right between two pilasters. The upper floor
also has a door-way with two leaves and is closed. The monastery is the representation of the Sandalwood Monastery which is said to have been visited by the Buddha.

The foregoing account gives a fairly good idea of the dwellings of the Gupta-Vākātaka period. It would therefore be proper to make a survey of different architectural details.

**Foundations**

From the illustrations it is almost impossible to get any idea of the foundations of dwellings. We have therefore to take recourse to the archaeological evidence which throws a flood of light on this aspect. This has been critically discussed at length by Dr. H. D. Sankalia who rightly observes that "the builders were guided by two things. First, the availability of the raw material, and secondly, the adoptability to the environmental conditions - climatic, geographical etc. of each case." ¹

In the light of above remarks it is necessary to study the foundations of early houses found in the excavations in the Deccan. At Kolhapur (Brahmapuri)

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the houses of the early historic period were raised on a foundation prepared by embedding large pebbles in two layers, at least, of sticky clay. The latter was either regur or brownish river mud. Over this clay and pebble base, the brick walls were erected. This method of preparing the foundation is said to be a typical feature of the Deccan. The same feature was also noticed at Maheshwar. We would not therefore be far off the mark if we infer that the contemporary dwellings were erected on similar foundations.

The plinth of the buildings illustrated in the murals have a series of mouldings, among which the most noteworthy is the heavy torus moulding, a peculiar characteristic of the structures of the Gupta period. Above the plinth rise the walls, probably brick built, plastered over and whitewashed. This is substantiated by the brick structures found in the Gupta levels at ancient sites all over the country and is attested to by Yuan Chwang. "As to the construction of houses and enclosing walls", he observes, "the country being low and moist, most of the city walls are built of bricks while walls of houses are of wattled bamboo or wood."

The same authority again informs us that the walls of the houses were coated with chunam. Bana too, observes that the houses in the capital city of Śhanḍīśvara were stuccoed with white plaster while a contemporary epigraphical record allegorically compares the white-washed houses with the peaks of white clouds.

The buildings, usually had verandas and the entrance to a structure, particularly that forming a part of the palace complex, was provided by an easy rise of a flight of steps, with balustrade having lion heads at the top. The only parallel of this is to be found at Pitalkhora caves where the entrance to the main chaitya cave was provided with a flight of steps which, however, does not have ornamental lion-heads.

Lion-heads are also fixed in the mouldings of the plinth of the royal bath. As already discussed this particular architectural member is Graeco-Roman in origin. This holds good only if the lion-heads were meant to drain out water.

1. Ibid.
The possibility of the elephant being employed to support the superstructure above can also not be ruled out, for animals have been employed in the plinth of buildings. Very recently, the debris-clearance at Pitalkhora revealed that the main vihāra cave rests on a row of corpulent elephants (ajjāstharaś). The tradition continued through the centuries and its finest example is sculptured in the Kailāsa Cave XVI at Ellora. The origin of the concept lies in the myth that the earth is supported by eight mighty elephants (āsta-dīggaajas). The change from elephant to lion therefore is not impossible.

Floor

The floors of the dwellings of commoners are nowhere seen in the murals but they might not be very different from those in our villages today. The floors of the palaces are seen in many panels; they are all smooth and polished floors. The most noteworthy feature is that in many cases we find some flowers strewn on the floor. There is every possibility of their being mistaken as the floral decoration of the floor, but on closer observation it becomes clear that the flowers are purposely thrown on the floor. This appears to be a peculiar custom which is recorded in the

1. Deshpande, op.cit., 47, No. 15, p. 74, Pl. L.
literature as well. The floor of Vasantasañca’s house was adorned with sweet-smelling flowers of different colours. Vasudeva-hiṣṭi relates that flowers of five colours are strewn over the floor. Yuan Chweng notes that the floor was purified with cow-dung and strewn with flowers of the season.

**Pillars**

The pillars, as already described, are all with a cushion capital which is sometimes fluted. The origin of the cushion capital can be traced to the bell capital of the Asokan columns, the constricted form of which, can be seen in the Mamodha group of caves at Junnar (1st Cent, B.C.) and at Karla (1st Cent, A.D.) It develops into a cushion, a fluted one, and encased in a box-like frame in a 2nd Cent, A.D. Cave (No. 10) at Nasik. It further

3. op.cit., I, 14.
4. Brown, op.cit., Pl. XXIV, Fig.2.
5. Brown, op.cit, Pl. XIX, Fig. 2.
develops into a full-fledged cushion at Ajanta and its perfect specimens are to be noticed at Elephanta and Ellora (Cave 29).

It should be specially mentioned that the _ghata-SELLAVA_ capital, so common in the Gupta period, is conspicuous by its absence in illustrations at Ajanta. It appears that the 'cushion capital' evolved and remained a typical Deccan feature.

In a very few cases the pillar is crowned by a stepped, four-armed member, which is obviously a further development of a plainer, but earlier, proto-type in the Lac-Khan temple at Aihole.

The pillars of the palatial buildings are all lavishly ornamented with precious stones and pearl-string pendants and festoons. As already explained by it is also borne out by literary descriptions. The pillar

1. Ibid, Pl. LVII, Fig. 1.
2. Ibid, Pl. LVI, Fig. 1 and 2.
3. Ibid, Pl. XLIV, Fig. 1.
ornamentation of this character is not found on early pillars such as those in the Hinayāna Caves in Western India. It can, therefore, be said that the same came into vogue sometime during the Gupta-Vākāṭaka period. Since then it becomes common and is translated in stone on the temple pillars of later period.

In the murals, very rarely vyāla brackets with riders are shown. In early period, the ālābhaṃḍikā bracket figurines, such as those at Sāschi, were employed. The vyāla bracket with riders is also possibly a new motif evolved in the 4th-5th Cent. A.D. It is, however, not very common.

Ceiling

The ceiling of the structures is undoubtedly wooden, for, the rafters and beams of wood are distinct in many panels.

Roof

It appears that vaulted roof was common in the early period and the same can be seen in the early Hinayāna Cave temples. In the later period, however, buildings are shown with flat roofs and with cornice all around. Flat roofs have a high antiquity, for, even the Harappan houses had flat roofs and so also was the case at Taxila.

2. Ibid.
Even today many of the houses in the Deccan have flat roofs made of beaten earth. In the whole range of illustrations all the buildings are shown with flat roofs with the exception of that of the Prince's quarters (Pl. III, 2) which has a gable roof. The gateways too, similarly have gable or vaulted roofs. The huts have sloping roofs.

In some cases the sides of the roof are embellished with miniature trefoil arches containing either rosettes (Pl. III, 3) or lion heads (Mahājanaka Jātaka, I) Fig. 3. The latter motif is significant inasmuch as it has early parallels in classical Greece and Rome where lion spouts, either of marble or terracotta were set in the roof for draining out rain water. The Ajanta

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Fig. 3.

1. Fletcher, *op. cit.*; p. 133, fig. 3; p. 155, fig. 8.
illustration too, appears to have served the same function even though the possibility of its being merely an ornamental motif can also not be ruled out. (Fig. 3)

Regarding the dwellings of the common people I can do no better than quote Yuan Chweng: "As to the construction of houses and enclosing walls", he says, "the country being low and moist, most of the city walls are built of bricks, while the walls of houses are of wattled bamboo or wood. Their halls and terraced balustrades have wooden, flat-roofed rooms and are coated with chunam and covered with tiles, burnt or unburnt. They are of extraordinary height and in style, like those of China. The (houses) thatched with coarse or common grass, are of bricks or boards; their walls are ornamented with chunam, the floor is purified with cowdung and strewn with flowers of the season."

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