DEVELOPMENT OF STUPA IN SOUTH-EASTASIA

Brijesh Rawat

Department of History, Dr Shakuntala Misra National Rehabilitation

University, Lucknow, 226017; rawat.brijesh 11@gmail.com

The word 'Stupa' is derived from Prakrit word 'Thupa,'¹, Sanskrit word 'Sthupa'² and Pali 'Thupa'. Stupa with its various synonyms like- Tumulus, Tope, Dagaba, Cupola, Thupi, Thuva or Top is the name of edifices which serve as receptacle for a relic or as monument.³ Stupas are either hemispherical or bell shaped and rest up on a base of three concentric storeys which form the circumbulatory path round the tope. They sustained a cubical erection called Tee. From Tee arises the spire (Chhatra) also called umbrella which crowns the whole edifice. Sometimes a sort of roofs or temple was built over the tope(Fig.1).

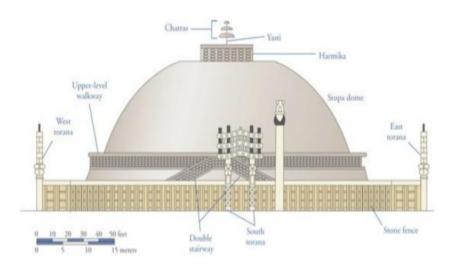


Fig.1: Diagrammatic Representation of SanchiStupa **Source:** Percy Brown, Indian Architecture, Buddhist and Hindu Period

Chaitya too is also used as a synonym. In Burma stupa is called a Pagoda. The word 'Tope' is used for stupa in Afghanistan.

As to the meaning of stupa there are varieties of opinions. Some regarded it solely as the sacred structure or temple symbolising the deity and its emblem Mt. Meru⁴, Tradition has laid down that the stupas should be of three kinds to serve different purpose- Sariraka (mortal remainsor bones), Paribhogika (containing objects used by Buddhas or Bodhisattvas), Uddesika (Commemorative).⁵ Fergusson divide the stupas into two classes- The sacred and commemorative and the relic stupa. Finally Cunningham classified the stupas into -⁶

- a. Religious edifices or dedicatory which were consecrated to the celestial or Adibuddha, or to one of his emanations the Manushi or mortal Buddha like Sanchi or Bhojpur.
- b. Funeral stupa that were erected over the relics of Mortal Buddha or their desciples or other preachers like Bhojpur
- c. Memorial or commemorative stupa like ManikyalaStupa.

An inscription inscribed on a vase from Taxila is as follows-

" *Takasasilaeayamthuvepratithavitasava- Budhanapuyeo*" Thisstupa was erected at Takha-Sila (Takshasila) in honour of all Buddhas.⁷

Thus we can say that stupa were constructed either for the safe custody of relics hidden in chamber near the base, or to mark a spot associated with an event sacred in Buddhist legends.

As regards origin of stupa, PaliBuddhistical annals tell us that stupas were in existence prior to Sakyas advent and they were the objects much reverence to the people. Sakyahimselfespecially inculcated the maintenance of the ancient chaityas. Stupas were erected over the relics in the neighbourhood of Kapilaor Benaras and their worship was too firmly established to be attacked. The origin can be traced back from Vedic times as there is the mention of Stupa in Rig-Veda also (*Hiranyastupa*). The stupa seems to be erected over the relics of supreme monarch prior to Sakya.

Sakya himself informs his disciple Ananda that over the remains of Chakravarti Raja, Theybuiltthupo at a spot where four principal roads meet. Thus we can say that the stupa was the oldest form of funeral structure and Buddha himself expressed his desire to Ananda that stupa to be built over his body relics like that of universal monarch. In his last injunction to Ananda – Buddha likewise dwelt on the merits to be acquired by building thupa over the relics of Tathagata, Pache Buddha, and sawaka or Buddhas, pratyekas and srawaks and he more particularly pointed out that theywho prayed at the shrines that would be raise to him would be born inheaven. But stupas that were erected for the purpose to protect the relics of great men or holy people, later also were constructed with the purpose of commemorating or as a memorial and were constructed on the spots associated with Buddha's life. The numerous stupas that exist in India are confined to few localities. The Stupas of Kabul and Jelalabad were opened by Messrs, Honighberger and Masson in 1835 and those between Indus and Jhelum by Generals Ventura and Court in 1833 and 1834. The stupas near Varanasi by Cunningham and Sanchi and other places by Cunningham and Maisey⁹.

The practice of raising stupa was in vogue even before the birth of Buddha for the burial mound is mentioned even in the vedic literature, SathpathaBrahaman, Buddhist literature like Jatakas ((e.g. SujataJataka)¹⁰, MahaparinibbanaSutta¹¹, Mahavamsa.¹²

When exactly the earthen tumulus assumed a durable monumental form is not known. In Vedic times bricks were used to enclose the earthen mounds. A permanent architectural form of the stupa was probably a conscious effort of Emperor Asoka who is said to have constructed 84000 stupas. Archaeological data known so far does not permit it prior to Asoka. It was Asoka's Nigalisagar pillar Inscription that provides for the first time the indubitable reference to the reconstruction of stupa(*Kona KamanasThubeDutiyamVadhite*). Here mention may be made of the fact that the word stupa (thube) occurs for the first time in Inscription.

According to V.A Smith, "History of Indian Art begins with Asoka." He further says "Nothing deserving the name of a work of art has yet been discovered which can be referred with confidence to an earlier time." ¹⁴

The earliest Buddhist monuments in Indiaare attributed to Asoka, who spent his energy and resources of his empire for the propagation of Buddhism throughout the length and breadth of his empire. Not even this, he even sent his son Mahendra and daughter SanghMitrato Ceylon and messengers to other foreign countries for the propagation of Buddhism. And it is the result of his zealous effort that Buddhism today is one of the major religions of the world andis quite popular religion in Ceylon, China, Tibet, Burma, South East Asiaand Japan.

The earlier stupas were hemispherical in shape with a low base while later ones assumed an increasingly cylindrical formwith a well-developed drum. In later examples which tended to be more ornate, the base terraces and umbrellas were multiplied. Gradually there was a further development in the construction of stupas when the railings (sometimes double railings) and gateways were also added. Earlier these railings were of bricks whichlater on were replaced by stone railings as in the Sanchi and Bharhut. These were beautifully decorate with following things¹⁵

- 1. Motifs like Ashtamangalika Symbols, flower garlands,rows of animals,rows of geese, festoons(of small pearls and small tinklers), rows of golden bells, garlands,clust used pearl pendants, full lotus medallions, crescent shape rosettes, stellar rosettes, rows of vases, Gods holding their hands in adoration, groups of dancing gods, gods playing musical instruments, gods holding mirror, divine figures with flowering sticks,figures holding lotuses, rows of jewels, rows of dharma chakras, rows of figures holding daggers, figures holding bowls etc.
- 2. Jataka's Scenes were also carved in the meanders of golden creepers.
- 3. Numerous scenes form the life of Buddhawascarvedon the body of stupa.

4. Figures of Mahabrahma, Sakra, Pancha Sikha holding a vina, Marawitha thousand arms along with his female attendants, the four Maharajikka gods, the thirty gods, the thirty two divine princesses and twenty—eight yaksha kings were represented. All the life scenes of the Buddha beginning from his decision in the Tushita heaven uptohis sitting on the Bodhi Manda were depicted. The Vesantara and the other Jatakas and scenes from Lalitvistara texts were also carved on the railings and slabs of the stupas.

As regards the development of Stupa it can be broadly dived into seven parts (region wise)(Fig.2), as such-

- 1. The Stupas of Northern India.
- 2. The Stupas of Southern India.
- 3. Chaityas (Western India).
- 4. The Stupas of North West (Pakistan, Afghanistan etc).
- 5. The Stupas of Ceylon.
- 6. The Stupas of Nepal, China and Tibet.
- 7. The Stupas of Burma.
- 8. The Stupas of South East Asia.

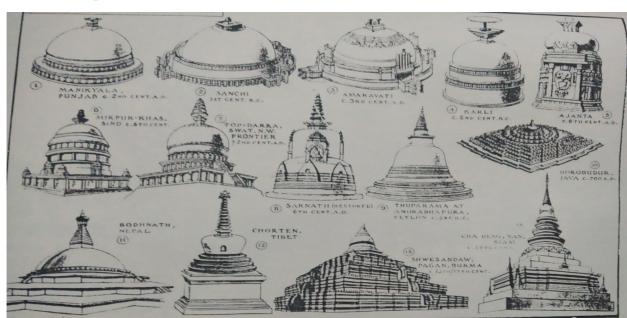


Fig.2: Different Types of Stupas

Source: Percy Brown ,Indian Architecture, Buddhist & Hindu Period

1. The Stupas of Northern India:

The stupa of Piprahawa (Basti district of U.P.) on the Nepalese frontier assigned to the period of fourth century B.C. is built of large bricks with a diameter of 35m and a height of 6.6m indicating a low ratio of height to diameter is a sign of antiquity. An inscription on the relic casket¹⁶ tells us that the relic found in this stupa pertains to Buddha himself. This stupa is regarded as the only brick stupa of probable pre Asokan date. There are about 15stupas mounds in Lauriya and a large brick stupa on a multiple polygonal terraces with numerous re-entrant angles. This edifice of early century A.D. (fourth century A.D.) is the earliest examples of a form of terraced stupa which culminated in the celebrated monuments of Paharpur (East Pakistan) and Borobudur Java both dating circa 800 A.D.

A stupa at Vaisali¹⁷ (modern Muzzafarnagar) excavated by Dr.Altekar (in 1957-58)was seen to have has started as a mud stupa of unpretentious size (7.5m in diameter) in pre Mauryan age was enlarged four times. This stupa was originally built by Lichchhavis over their share of the body relics of Buddha which according to tradition wereopened up by Asoka for the redistribution of relics content. This stupa was beautifully covered with bricks during the reign of Emperor Asoka which increased the size of Stupa.

A Stupa of Bharhut¹⁸(Madhya Pradesh) was discovered by Cunningham in 1873. This stupa was built of bricks probably during the Mauryan period. Though the brick stupa was not enlarged, as it retained the original dimension of some 68ft in diameter, the railing round it was reconstructed. In size the stupa of Bharhut was only about half of Sanchistupa, its railing being a little over 7ft. in height but it marked a contrast to the solid simplicity of the Sanchi, every portion of its stone work is richly carved in bas relief portraying incidents from Jatakas or scenes connected with the life of Buddha. The only surviving portion of stupa was found on the south east side. It measures 1ft in length and

6ftin height. In this portion Cunningham notices rows of recesses evidently meant for keeping lights. The total number of these in the entire monuments was about 120 and there must have been 600 lights in each of the rows made at the lower portion of the stupa. Over the hemispherical dome there was probably a pavilion (Harmika) enclosed by a small railing (vedika) which also supported the shaft of an umbrella now lost. Adjoining the structure there was a terrace which formed the second circumbulation (Pradakshina) path. The maincircumbulation path between thestupa and the railing on the ground had a terraced floor measuring 10ft.4" in width. This stupa was encircled by an inner and outer railing consisting of upright pillars(sthambhas about 80 in numbers), crossbars(suchis), and coping stones (Usnisa). The railing had four gates at the cardinal points thus dividing it into four quadrants. There were 80 pillars measuring 7 ft. 1" in height and having 1 foot 10 and 1/2" surface for the reliefs. There were also three crossbars (suchis) placed vertically and needled to each side of the upright pillars. The height of railing was just 9 feet. According to Barua¹⁹, Bharhutstupawas constructed inthree stagesi.e. pre Asokan and the other two stages in the post Asokanperiod.i.e. Sunga period. The railingswere probably constructed in about 125 B.C. and the gateways were added later. An inscription on the eastern gateways mentions that the gateways were set up by king Dhanabhuti, son of Agaraju and grandson of Visvadeva in the dominion of the Sungas. Therailingsofthe stupas were adorned with the sculptures of surprising richness and interest.

At Sanchi(a great Buddhist site (Fig.3), there was numerous stupas dating from the Mauryanto the medieval ages. The original nucleus of stupa 1, is attributed to Asoka was a low brick structure, of almost half the diameter of the present stupa. During the excavation, it was discovered that during the Mauryan period the railing would have been made of wood and was presumed that the structure of stupa was probably hemispherical in shape (bowl). This structure stood over

a raised platform with terraces that was surrounded by a wooden railing and a *chhatra* (umbrella) at the top.

During the Sunga period, the original brick stupa was enveloped in a stone casing and was enlarged toits present dimension36.60 m and its height excluding the railing and umbrella being 16.46m.to form an almost hemispherical dome, truncated near the top. At the same time a lofty terrace, approached by a double flight of steps on the southern side, was built against its base to serve as Processional path.

The masonry of the dome and terrace was originally covered withplaster decorated with colour. At the summit of the stupa was built a diminutive square railing with pedestal, from which rose the shaft oftriple umbrella that crowned the superstructure. Another paved processional path was provided on the ground level enclosed by a plain and massive stone –balustrade. This balustrade, consisting of tenoned uprights triple crossbars of alenticular section and coping with scarf -joints was copied from a wooden prototype and formed the gift of individual donors.²⁰

It was in the latter half of the first century B.C. that the four lavishly —carved gateways were erected one in each cardinal direction with the Jataka tales, scenes from the life of Buddha, miscellaneous motifs and crowned by the symbol of dharmachakra.



Fig.3: Sanchi Stupa
Source:www.flickr.com.eileen

A. Ghosh in his book ('Archaeological Remains, Monuments and Museum,' Part I)²¹, mentions that at Bairat(Jaipur district) the remains of a unique type of Mauryan brick stupa has been discovered.²² The main characteristic feature of this stupa is its enclosing circular shrine (diameter 8.2m) which was made with the panels of brickwork that was plastered with lime. This panel of brickwork were alternated with 24 octagonal pillars made of wood. This shrine was entered from the east, the wholebeing enclosed at a later date with in are rectangular compound containing an open space for assembly in front of the entrance.

Out of the numerous stupas at Sarnath, two stupas are worth mentioning. One is the **DharmarajjikaStupa**; (brick built) which comprises of a hemispherical dome (diameter 18.3m) with a low terrace at the base was probably built by Asoka. A monolithic railing bearing an inscription and a polish found near the stupapresumably formed its Hermica. The inscribed Asokan pillarwith thecelebrated lioncapital, appears to have formed a part of its architectural scheme. The original stupa was encased in six successive ones, each larger than the other which ranges in dated from second to twelfth century. The original structure²³ raised by Asoka was 13.94m. in diameter with bricks of the size of 49.5x36.8x 6.4cm and others slightly wedged shape of 41.9x31.7x8.8cm size. The first addition was made in the Kushana periods with bricks measuring 38.1x26.2x7cm.size. The second enlargement came in the fifth and sixth century A.D with addition of circumbulatory pathnearly4.88m wide around stupaand encompassed by a solid outer wall 1.35m high with four doorways in the four cardinal directions. In the third enlargement, in the 7thcentury the Pradakshina-path was filled up and access to the stupa was provided by

placing four monolithic staircases. The sixth and the last of stupas enlargement took place when monastery of Kumara Devi was built in the twelfth century.²⁴

The second stupa i.e. **Dhamekhastupa** at Sarnath(**Fig.4**), is an imposing cylindrical structure (basal diameter-28.3m, height 43.5m) of the Gupta age was partly built of stone and partly built of brick. Its stone basement has eight prominent doorways(façade) with large niches (pillars) which were skilfully carved with geometrical patterns.



Fig.4: Dhamekha Stupa, Sarnath **Source:** Archaeological Survey of India

At Chaukhandi mound a ruin of towering stupa was surmounted by an octagonal tower built by Emperor Akbar. At Kasia also a stupa(remains) belonging to the Gupta period has been found.²⁵

At **Bodhgaya** (place of Buddha's enlightenment), there were numerous stupas built by Asoka. But of the earliest shrines traditionally attributed to Asoka, only the Vajrasana and the sandstone throne with characteristic Mauryan polish and decorative design has been survived and is seen beneath the holy Bodhi tree. To the Sungan period (75 B.C.) belongs a portion of the sandstone railing carved with bas reliefs. The remaining portions of the railings belong to the Gupta period. The main brick built shrine i.e. MahabodhiTemple originally said to have been constructed in about 2nd century A.D. had undergone heavy renovations, the four corner towers being an addition of 14th century.

The other places where the remains of stupas have been found are Nalanda, Rajgir, Sahet- Mahet(Gonda and Bahraich district of U.P. ,Kaushambi (Allahabad).

At Ratnagiri (Cuttack district of Orissa) A stupa of brickwitha base measuring 14.5m square with six elegantly moulded projections on each side and a circular drum, the interior of which was designed as wheel with twelve spokeswith the interspaces packed with mud-filling has been discovered. Dating from eighth century it was enlarged and enclosed by numerous votive stupas of bricks and stone, including clusters of miniature monolithic ones. It had monasteries also.

At Devnimori(Sabarkanthadistrict of Gujarat) there are remains of brick stupa and Monastry. Here the stupa is a massive edifice, with a cupola resting on two square platforms, measuring 26m sq. and is more than 10.4m high. The lower platform that served as a processional path was divided into 11 bays by twelve Indo-Corinthian pilasters on each face. The main entrance in each bay surface surrounded a decorative arch. Whileeach entrance wasadorned with the image of Buddha(made of terracotta). Thus the façade of the stupa were elaborately decorated with statuary and decorated patterns (including pot and foliage, scrolls and dentils. It resembles the brickstupaat Mirpurkhas (West Pakistan) in design, styleand elegance of terracotta sculpture. It was constructed during the reign of western Kshatrap King Rudrasena III in the year 1257(375 A.D.) the stupa underwent construction later on.

2. The Stupas of Southern India

The main characteristics of the southern stupas are that the domes of these stupas were raised over a base cylindrical (medhi), the top surface of which provided an upper circumbulatory surrounding the dome. This balustrade was formed of vertical slabs mortised between uprights with a coping on the top. Often projected asoffsets from the four cardinal sides of the medhi were

platforms carrying on their tops, in the case of some large stupas, a row of some tall slender monolithic pillars called Ayaka pillars. These pillars and Ayaka platforms on which they rested are regarded as the characteristics of the stupas of this region. On the top of anda (hemispherical dome) was the Harmikaenclosing an umbrella (Chhatra) or a series of them (Chhatrapati). At the ground level the lower Pradakshina path was sometimes enclosed by a railing either of brick or sometimes of stone in the beginning.

The entrance to the rail enclosure was plain and elaborate gateway (torana)adoring the entrance at the Sanchi was absent. The brick work of anda and medhi; the ayaka platforms in the earlier examples were plastered over, with a large looped garland picked out in stuccos as an adornment round the anda, while the earlier stupas were solid, the later ones had often different adaptions of the internal structural supports with voids filled with suitable packing material in between expedients designed to conserve brick and at the same time to ensure strength and stability, as it had to bear the weight of immense hemisphere and also of the casing of limestone slabs which often formed another notable features of the stupa of the foreign region. The large stupaat Bhattiprolu and Gudivada (3rd century B.C.) and of earliest Series) were solidly built.

BhattiproluStupa —was a low hemispherical mound, its basal and railing diameter being 40m and 45 m respectively. The limestone case round its base was sculptured only in the region of the Ayaka platforms, the rest being plain slabs showing little carvings except perhaps in the form of pilasters in the lowreliefreaching upto the edge. The railing round the base was of limestone, the vertical posts(Urdhavapata)being with laterally-cut lenticular mortises into which similarly shaped cross pieces (suchi)were fitted, the top having a coping (Ushnisha). The suchis were plain and unsculptured.

The GudivadaStupa, of almost similar dimension with a basal diameter of over 39m,was also solidly built as on at Bhattiprolu, but had its anda (hemispherical

dome) raised over a taller medhi. It had wooden railing. The

GarikapaduStupais constructed of an outer brick ring about 2.5m thick at the base and the basal diameter of about 25m had hollow interior being packed with alternate layers of time, concrete earth.²⁷

The JaggayapetaStupa(basal diameter 19m) had inside its outer brick casing acoreformed of superposed layers of earth, each about 60 cm. thickseparated from eachby compact brick floors. The casing slabs round the medhi had little or no sculpture, ayaka –platforms slabs had some. The largest of the three stupasat Peddaganjam(basal diameter 22.5m) wasmore or less of this type.

The GhantasalaStupa (basal diameter 37m, central brick column 3m square and concentric outer square being 6.7m wide) was surmounted by two concentric circles, the outer forming the base of the medhi and the inner rising up in the dome internal cross-walls forming radial projections from one rising to another, in addition to those formed by extensions of the sides of the square beyond their corners furnished additional strength the 'chambers 'fitted' with packing.

GoliStupa(8' high and 60' across)²⁸ was a small stone cased structure with exquisite sculptures similar to those of the later phase of Amravati. The earliest structural stone, built of cut stone blocks, is to be found at **Guntapalli** (basal diameter 4.9m with a drum1.5m high with a date assigned prior to the Christian era.

The Amravati Stupa (Fig.5)typifies the class of brick stupas with a stone slab veneering round the drum and the lower parts of the dome very beautifully carved and sculptured. Its stone railing had a diameter of 58.5m and height of about 4m. At the four cardinal points the railing projected into an open entrance flanked in front by two pillars set at intervals, bearing miniature stupas or other symbols at the top. Stupa proper had a basal diameter of about 48.5m round the base of anda. The top Harmika was a square balustrade with an imposing pillar in the centre flanked and surmounted by umbrellas.²⁹ The history of

Mahachaitya extended over a period of about a millennium and a half during which stupa underwent various renovations and additions from time to time which can broadly be dividedinto five major divisions³⁰:-



Fig. 5: Amaravati Stupa **Source:** National Museum, New Delhi

- a. In the first phase during Asoka Periodthe Stupa was probably constructed by Mahadeva; a missionary sent by Asoka and had a height of about 2.3m with three lenticular mortises for holding tenons on top of uprights.
- **b.** During the **second phase** the Granite rail was replaced by alimestone one. It had upright with three lenticular mortises suggesting the presence of three barred rail.
- **c.** In the third **phase** of Satvahanas, the brick stupa had a veneer of sculptured slabs depicting stupas and other reliefs, and the rail was replaced by high ornamentalone carved with beautiful reliefsand elegant designs.
- **d.** In **the fourth phase**ofIkshvakuKings the drum slabs showing a representations of stupa with minute carvings came into existence. The stupareliefs of this period show generally four crossbars.
- e. Fifth phase extended from Pallava to late medieval period 4th to 14th century. Originally it had (like Bhattiprolu, Jaggayapeta,

Garikapadu) the slabs encasing the ayaka platforms alone more elaborately sculptured than the rest of the drum; which had more or less plain slabs with little carving except perhaps for pilasters in low relief at the edges (as at Bhattiprolu and Jaggayapeta), these pilasters carried animal figures over their capitals. In additions there were reliefs of devotees flanking Buddha's symbols. Even during its renovations much attention was given to decorate ayaka -platform. The circumbulatory over the medhi(Ghantasala, Nagarjunakonda, Jaggayapeta, Peddaganjam), had a parapet on its outer edge, formed of rectangular slabs mortised between uprights fixed at intervals, with a running coping on the top. Inner faces of these slabs were finely sculptured. The stone railing at the ground level dating from 200 B.C. was subsequently enlarged in the course of reconstruction, it emerged in its final architectural and embellished form between 150 A.D. and 200 A.D. After this in the last phase, some of the earlier sculptured slabs were reversed and the unsculptured inner faces trimmed and covered with fine sculptured in the period between 200A.D. to 250A.D.

The great **Stupa of Nagarjunakonda**³¹belongs to the class of uncased stupas, its brickwork being plastered over and anda was decorated by a large garland ornament. The original stupa was renovated by Ikshvaku princes in the third century A.D. when ayaka pillars of stones were erected. The outer railing was erected of wood; its upright erected over a brick plinth. Thestupa was 32.3m in diameter, 18m high and had 4m wide circumbulatory. The medhi had a height of 1.5m and the ayaka platform of rectangular offsets measuring 6.7mx 1.5m high. In its construction the stupa shows a great advancement. It had circular central column, with a radial walls, meeting a peripheral circular wall, thus giving the appearance of a cartwheel with its spokes and felly (in plan). There was a second concentric wall outside with further projections of the radial wall

up to it, the two peripheral walls thus forming the base of anda and medhi respectively, while the inner cross walls and the fillings in between afforded support. Many of the other stupas at Nagarjunakonda also had the same plan of construction. Many of these were also case with sculptured stone slabs.

3. Chaityas:

During the same time, when the Buddhist communities at the sites made sacred by Asoka, were elaborating the structural additions, an entirely different architectural development was becoming sanctified in another part of the country. This particular form of architecture was maintained for a very long period from 3rd century B.C. to second century A.D>and was again revived in about 5th century A. D.

These Hinayana rock cut monasteries represent a definite regional development, as they are limited to the western side of India, many of these lying with in the Mumbai State for example Chaitya halls at Nasik, Bhaja and Karle. Eight others belonging to the Hinayana phase are Bhaja, Kondane, Pitalkhora, Ajanta (No.10), Bedsa, Ajanta (No.9)(Fig.6), Nasik and Karle. The chronological sequence in which the chaitya halls were executed is based mainly on the principle-the earlier the example the closure—it copies the wood structure.³² The architecture resolves itself into some ten separate groups of conventional establishments each group separate and self and self-contained and each originally consisting of a prayer hall(chaityas), as it accommodated a chaitya, or stupa; took the form of a large—vaulted (arched) hall—having an apsidal end and divide aisles (corridors). In the apse stood the stupa, also carved out the structural tumulus. Other chaitya halls at Junnar (Tuljalena having circular plan) and Kanheri (180A.D.), which though revived in 5th century A.D. are of unfinished example.



Fig. 6: Chaitya Hall, Ajanta, Cave No.9 **Source:** Archaeological Survey of India

4. The Stupas of North West (Pakistan, Afghanistan etc)

During the century immediately before and after the beginning of Christian era, when the Buddhist community in the middle and southern India was actively engaged in producing monuments like masonry stupas, wooden chaitya halls and rock cut monasteries (for Hinayana faith), in the North west regions i.e. Gandhara and Taxila, a new form of art i.e. Indo Buddhist Art of considerable significance was developing.

Of all the Gandhara monuments the Monastry was the most frequent and also the most typical of style with two main structures the stupas and the *sangharama* or the quarters for the monk. There is evidence that the original shape of the stupa was in the form of traditional hemispherical mound as devised by Asoka like at Manikyala³³in Sindh. But the tendency of the Gandhara Builders was to depart from the orthodox yet common place, and to develop it into an architectural composition of more inspiring proportions and character. Their aim was to create a structure of more height which they attained by elevating the stupaon tall platform and by elongatingthe bodyof stupa upwards. The uppersurface of the platformwhich was approach by the

flight of steps became the procession path while the stupa itself being composed of series of diminishing drums and surmounted by slender many tiered umbrellas began to assume the appearance of **Pagoda**. Some of the stupas were solofty that the Chinese pilgrims have described these stupas as pagodas.

In addition to the changes in the proportion of the stupa, plastic ornamentation, brilliantly coloured in the form of cornices, moulding, niches, arcades, medallions, and other quasi architectural elements were freely applied. One of the most representative example of this type is that at Takht-i- Bahai. The other worth mentioning stupas at Gandhara are- Manikyala (Rawalpindi) and Jamal Garhi, Ali Majidstupa and stupa at Shah JikiDheri.³⁴

At Taxila were the Greek ideas came to dominate Indian, the circular plinth was replaced by rectangular and the domewas elevated on high drum. Greek influence is also visible in the classical pilasters and the mouldings with which the surface of the plinth and drum was adorned. Later on plinth was divided horizontally into two or three receding terraces, and the figure of Buddha in the middle bay was introduced, and gradually the classical features were Indianized and obscured by the wealth of figural reliefs on the faces of plinth and drums.

Of the stupas at Taxila, the most important is **Dharmarajjikastupa** or ChirTope (originally constructed by Asoka(**Fig.7**). It had four phases (i.e. Asokan, Kushanas, under KidarKushanas, and in the late fourth and fifth centuries. The main stupais approximately circular in plan with a raise terrace around its base, which was ascended by four flights of steps, one at each four cardinalpoints. Its diameter overall includes the terrace and steps(but not including the circumbulatory or processional path) being 150ft from east to west by 146ft.6" form north to south. The height of the ruin is about 45 ft. The core is of rough rouble masonrystrengthened by sixteen walls from three feet to five feet in

thickness, radiating irregularly from the centre. The surviving foundationunder the ruingoes back to the Mauryan period. Under Kushanas probably under the reign of Kanishka, was the reconstruction of the terraceand four flights of steps at the base of the stupas and finally under the KidarKushanas the base of the drum above the bermwas facedwith a deep band of ornamental stonework, which is best preserved on the eastern side. Its most distinguishing features are boldness of the mouldings and inches formed alternatively by trefoil arches and portals with sloping jams and divided from one another by Corinthian pilasters. The same types of decorations are found in smaller stupas belonging to 4th and 5th century A.D.



Fig.7: Dharmarajjika Stupa, Taxila **Source:** Archaeological Survey of India

Other sites of stupas at Taxilaare-KhiderMohra, Akhauri and Kalawan. Giri, MohraMoradu and Pippala (belonging to the Kushana period between late Parthian and early Kushana times) Jaulian (2nd century A.D., during Kushana period and were destroyed in later part of the 5th century A.D.) Bhamala, stupa, Bhallar, LalChakandBadalpur.

5. The Stupas of Ceylon

In Ceylon stupas are called Dagbas and are classified by the shape of dome, as bell shaped, bubble shaped, lotus shaped etc. and is known in Ceylon as 'Gaeba'35The typical Sinhalese dagaba is divided into three fold base(Trimala).

The dome (anda) and the superstructure comprising the Harmika and yasti or mart. According to Mahavamsa, some of theruinedtumulus was founded in the reign of DevanamPiyaTissa in the third century B.C. which were probably enlarged or remodelled at later periods.

The first dagaba to be found was Thuparama (244 B.C.) dominated by a 'bubble' dome of bricks which rest on three circular bases or bracelets, that stood on a circular paved basement, the cupola being surmounted by a balcony and overall is the traditional ringed spire with a series of seven umbrellas, so that in profile it resembles an inverted childs top, leading to the round platform supporting the dome were staircases, and the monument was

surrounded by a quadruple ring of tall slender pillars, of which the two inner rows bore tenons and most of which are still standing. The main purpose of these pillars was to support festoons of lamps. This dagaba was preserved and adorned throughout the classical period, the last restoration being made by ParakramaBabu II in the 13th century.

The MahanagaDagaba (originally of 3rd century and 2nd century B.C. was repaired in first, third and again in about 1100A.D., YathalaDagaba dating from the third or 2nd B.C. was repaired in 1883, and the MahaseyaDagaba (erected in 243B.C. at Mihintale was rebuilt by ParakramaBabu I after the Tamil invasion in the twelfth century.

The largest stupa of Ceylon is

the**Ruvanel**(Ruwanwelisaya)dagabaatAnuradhapura(**Fig.8**),which in origin goes back to the time of King DutthaGamani, we do possess a complete history of it and of its construction than any other early building either in Ceylon or India.³⁶ It is said to have been completed by his successor SadhaTissa (77-59 B.C.). The stupais made of brick. The enlargement was probably made before the beginning of Christian era. According to Mahavamsa,³⁷ the relic chamber was adorned with paintings (rows of animals and *Hamsa*), and contained a

Bodhi tree with a silver stem and leaves of gold, relics of Buddha, jewellery, a gold image of Buddha, and a representation (painting) of VessantaraJataka. The dome is254 in diameter, the paved platform measures 475x 473feet and 180 ft high above the ground. Facing each of the cardinal points and attached to the dome is a kind of front piece Wahalkada). Consisting of superimposed horizontal courses flanked by pillars, decorated in style (like SanchiTorana Posts). On theplatform of it therewere formerly preserved colossal dolomites standing figure, two of Buddhas and one of a King (DutthaGamini) or Bodhisattva in a Severe and a very grand style related to that of Amravati images.



Fig.8:Ruwanwelisaya Dagaba **Source:** World History Encyclopaedia

Another Stupa by DutthaGamini, the MiriswetiyaMaricavati, had the decoration of Wahalkhad with procession of animals- horses, bulls, horses, horned lions and elephant is more elaborate, the flanking pillars have lion capitals and are ornamented wien.th elaborate trees

With a paduku below and dharmachakra above. On the stylistic effect of these two buildings Parker says- "DuttaGamani and his brother SadhaTissa may claim the credit of being first rulers to appreciate the grandeur of the effect of an enormous white dome, for greater than anything of the kind previously erected in Ceylon or India and admirably adapted to be anexpression of stability and perseverance and in accessibility".

The JetavanaDagaba is the largest of all dagaba and is approximately 370 ft in diameter. It was built by Mahasena (277-304A.D). According to Coomarswami –This dagaba seems to be wrongly identified. According to him WatthaGamaniAbhaya (100-76 B.C.) had meanwhile built theAbhayagiridagaba and this structure has been since confused with Jetavana. The Latter probably so called the largest in Ceylon, the diameter of the dome at its base is that is to say above the three basal cylinders called 'bracelets' being 32ft that of lower bracelet being 367 ft.

The NikaweKondedagaba in the North West province has yield crystal and blue glass beads of early types, ten relic cases of crystal and two of green glass.

6. The Stupas of Nepal , Tibet, China

Nepal

The stupas of Nepal usually consists of a square or circular base,a drum like hemispherical body and a square and a rectangular enclosure over the center of the hemisphere, with a tapering umbrella consisting of three and later of thirteen is made between stupa proper and chaitya in Nepal³⁹. Two large stupas one near Pulchowk and other near Lalitpur are among the group of five, almost cardinally arranged in their primitive condition and are traditionally attributed to Asoka. The stupas at Bodhnath and Shambhunath are considered among the oldest.

The stupa can be found everywhere inside the courtyard of the house, on roads and street corners in Monasteries. In 1969 excavations of Tilaura-Kot in district Taulthava by T.N. Misra have brought to light two brick built stupas, which rise from the surface to a height of over two meter. This brings another style of stupa in this complex but it did not contain any human relic.

The major stupas of Nepal arePatanstupa at Pulchowk, Deopatanstupa at Chabahari,Patanstupa nearindustrial Estate,Bodhnath and Shambhunath.

Tibet

The Tibetan Stupa (also named as Chorten) has a bulbous dome set on one or more square bases and like Nepalese Stupa is surmounted by a square Harmika and a tier of 'telescoped umbrellas' surmounted by a flame-finial. The most important stupa is Gyantsestupa with an unusual plan and elevation. It is erected in five stepped terraces on a polygonal plan with multiple recessions or step-backs, on this pyramid or prasadawas built the actual stupa dome, circumbulation waspossible at each successive level. The interest in this monument lies in resemblance to the great Mahayana sanctuary of Borobudur in Java.

China

Stupa in China is called Pagoda. The most important Pagodas are the pagoda of Sun YueTemple, Mt Sung in Hunan built in 523 A.D. Mt. Sung Stupa is supposed to be the oldest surviving stupa in China. This stupa is made up of solid brick having a twelve sided plan (Architecturally). Stupas of China are Pagoda of the Tzu –en temple, Chang-anSium of 70 A.D, pagoda of the Po-king temple- Ying A Sien, Shansi of 1056.⁴⁰

7. The Stupas of Burma

Remains of more than 5000 stupas or Pagodas can still be traced in and near the Pagan. The characteristics of the Burmese stupas are the staircases at the four points of the compass, giving access to the upper portion of the monument. The most important characteristics of this period are the emphasis on the verticality, stressed by the terraced culminating into the tapering slenderness of the superstructure of the stupa proper. The shrinesbearcertain resemblance to Javanese monument like square terraces and circular superstructures.

Like some classical Javanese building such as Borobudur, the walls of terraces at Minglazedi were decorated with relief sculpture leading the pilgrims to the summit of circumbulation.

The stupas of Burma can be classified as follows-

- Stupas of eleventh century Kyanzittha Cave temple 1057-1059, Shwezigon (1059) enlarged
 1059-111, Ananda 1082,1090, Nan PayaSeimyet.
- b. Stupas of twelfth century-Sapada, Thatbinnyu and Shwegugy Pagoda .
- c. Stupas of Thirteenth century Mahabodhi, Kondawgyi, Mingalazedi (1274) and Tilominia
 Pagodas.

With the exception of Kyanzittha and Nanpaya, these are all brick structures and were decorated with carved stucco. The Nanpaya is of stone. The Nat HiaungGuaung and AnandaPgoda are remarkable for their contemporary sculptures. The Kyanzittha, Kondawagi and others are famous for their mural paintings, the ShwezigoAnandapeteik and some others are famous their glazed terracotta brick illustrating the Jatakas, Tilominia is unique in its decoration of green glazed sandstone.

The architectural figures are varied and reflect contact with many countries. The bulbous and cylindrical forms recall Sarnath and Votive stupas of the Palaperiod. The Pebinguang and Sapada are of the old Sinhalese hemispherical type, the Minglazedi and ShewSandow have truncated pyramids, terraced bases with angle tower and a central stairway on each siderecalling Cambodian terraced prangs and the older Borobudur. The Mahabodhi with its height straight-edge Sikhara is modelled on the older shrine at Bodhgaya.

In the most distinctively Burmese type (Ananda, Thatbinnyu, Shwegugyi, Gaudapolin etc.) one of the lower terraces is independently developed to a great height, giving a cubical aspect to the main part of the building chapels and galleries are opened in the solid mass thus available.⁴¹

The modern Burmese Pagodas of the Shwedagon type like many in Siam, slope almost smoothly upward from the broad base and present a very different appearance from the medieval cylindrical forms of Sarnath, Pagan and Hmawza, the Later type is more picturesque, but architecturally over refined and aspiring but unsubstantial.

The most important in Burma is the Ananda Pagoda. According to the traditions the temple was first constructed by Buddhist Friars fromIndia during the reign of King.Kyanzittha (1084-1112). Legend mentions that the temple was intended to reproduce the general appearance of the cave when the Indian monks dwelt on Nandamula Hill. 42 In size alone it measures 300 ft. across its width including its portico each way while the four entranced enclosure within which it is centrally placed is a square of 570ft. side. Its height is over 160 ft. plan of this temple is cruciform in shape.⁴³ A large gabbled porch, 57 ft. long, projects from the centre of each face of this square. Theinterior, centre, is occupied by a cubical mass of brick works, with deep niche on each side, containing a colossal standing Buddha image 31 ft. in height above the throne which itself is abot8ft. high. The central mass is surrounded by two parallels corridors, with cross passages for communication between the porch and the image on each side. Externally the wall of the temple is 39ft.in height has over it the fortification walls having a circular pagoda at each corner. Above the parapet rise in succession the two roofs over the two parallels corridors below each having a curvilinear outline and an elongated Stupa at the corners, and a window in imitation of the porches at the centre. Above these two roofs are four receding narrow terraces which serve as basement of a sikhara crowned by a stupa with an elongated bell shaped dome and tapering hti as its finial. Eachofthe receding stages has a figure of a lion at the corners and small imitation Apart from the graceful proportion and symmetry of design, the beauty of this temple is enhanced by the numerous stone sculptured reliefs and glazed terracotta plaques that adorn its walls. The stone reliefs 80 innumber

and some of the plaques illustrate the principle episodes in the Buddhas life and 926 plaques depict the Jatakastories. As regards the plan and origin of this temple Duroiselle is of the opinion that there could be no doubt that the architects who planned and built the Ananda were Indians. According to him, the temple bears the unquestionable stamp of Indian genius and craftsmanship from the top (shikhara) to the bottom (basement), the various splendid stone sculptures that enriches the corridors and the terracotta plaques which adorns the basement.⁴⁴

8. The Stupas of South- East Asia

Among the stupas of Southeast Asia stupas of Indonesia, Thailand, Cambodia, Siam and Java are most important.

The characteristic features are – the diminished dome and drums. The drum was replaced by elevated terraces.e.g. BorobudurStupa. The commonest dome shape was a flattened hemisphere having a semi elliptical silhouette. Bell shaped were also used, (central stupa of Borobudur). Bulbous dome was rare as variant of the bell shaped dome. Occasionally the dome was grooved or fluted (Chand) Prambhanam temple of Shiva. The reliquary in general was a plain square on plan and only occasionally circular. The Finial appears to have been a terminal in all cases, with apparently no example of the parasol spire (chhatra). The following types of stupa developed in style – pot of plenty, Alms or pot pile, stepped pyramid, stepped cone, Pavilion or mandap type.Round bell,square bell, lotus bud. It has the culmination of stupas from almost every country be it India, Indonesia, China, Cambodia, Ceylon, Tibet and Burma.

The stupas of **Borobudur** (**Fig.9**) or 'Many Buddhas' so called on the account of the innumerable images distributed over its various surfaces in the most important Buddhist monument in Greater India, A monument which holds lock with in its hidden galleries the final development of Buddhist Art in Asia.⁴⁶ It stands on the summit of a lower hill top, the upper portion of which was levelled for its reception. According to V.A. Smith, 'the bestknown monument

in theisland is the vast pyramidal pile of Borobudur hill in nine stages combining the characteristic of stupas or dagaba with that of a temple.' As regards architectural pattern or arrangement, it consists of five walled galleries and terraces on a rectangular plan. Above these are threeround platforms open to the sky, on which are 72 belled shaped stupa and a sealed terminal at the very summit and the centre of the monument a nine storey is present, though unseen in the form of hidden basement. It measures some 500 feet wide and mounts up by a series of terraces to a total height of 116ft. and assumes the shape of huge mound of masonry with its paraboloid skyline fretted by a range of turrets, replicas in miniature of thestupa shape thus giving it a ragged contour. Its overwhelming spiritual significance is emphasized by the long galleries of sculptured friezes carried around the corridorsof the elevated terraces. These terraces three in number make up the square formation of the building and each is approached by steep flights of steps through an elaborately carved arched doorway. It is by means of these doorways that the access is obtained to the galleries of sculpture, the most remarkable feature of the monument. Upto this height the stupa had followed the shape of a low pyramid but above the third terrace this pyramid becomes truncated to produce white flat surfaces and from this stage, a change of key in its structural schemes takes place. Here a square system ceases and circular formation is introduced. From over the square platform three circular terraces arise, one above the other. Above all is a large stupa, raised in the centre forming the final or pinnacle of the whole.

The fact that this great pile take the form of tumulus, but in plan is a square has made one writer state that the concept of the architect was, 'to erect a stupa over pyramid'. Another write describes it as — in its mass a cupola half rising from the earth and holding with in its blossom a stepped pyramid loaded with images and the third writer remarks- that its designer 'instead of putting stupa

above the pyramid, really put the pyramid inside the stupa.⁴⁷ Another Buddhist shrine is at ChandiMendut.



Fig.9: Borobudur Stupa, Indonesia **Source:**www.en.wikipedia.org

9. The Stupa of Japan

There are various beautiful pagodas in Japan also, but the most important of them are-

- a. Pagoda of the Yakushi –ji temple at Nara of 8th century A.D. In this the tiered roofs do not taper evenly but show freedom in design which gives the elevation of this pagoda, something of the character of Japanese Calligraphy.⁴⁸
- b. Pagoda of Noryuji Temple Nara of 8th century A.D. In this and previous pagoda the spire is an adaption of Buddhas many type canopy or umbrella.

To summarise, the earlier stupas were hemispherical in shape and were quite plain, usually made of brick and mud, later on it were replaced by stone with addition of railings, terraces, gateways with beautiful carvings with the images of Buddhas, and various other designs; but with the passage of timevarious changes took place in the development of stupa. Stupas of different regions assumed the characteristics of their own, like the stupa of central India were plain but their gateways and pillars were

richly decorated with sculptures, and designs were made of red sandstone, the stupas of the south were of white stone, their dome slabs richly decorated and another important characteristic were the Ayaka Pillar or sthambhas. Later on stupas were carved out of rocks in the cases of chaityas. The stupas of North west had a peculiar characteristic as stupas were raised on a tall platform and the body of the stupa was made more elongated upwards and were approached by flights of steps which were used as processional path. Stupas consisted of a series of diminishing drums and surmounted by many tiered umbrellas began to assume the appearance of Pagoda (Some Chinese travellers called t Pagoda). The Stupas of Ceylon hadathreefold base (Trimala). The andawas also of different shape like bell shaped etc. The stupas of Nepal, Tibet, China etc. were quite elongated at the top and were called pagoda and rested upon ahuge platform. Stupas of Burma were also cylindrical e.g. BawbagiStupa(of early seventh century) while stupas of South East Asia had a great Indian influence. The square high platform with steps provided passage on the cardinal side. The images of Buddha were Indian. The arrangement of the niches and miniature stupas on the terrace (of Borobudur), is on the model of arrangement of the miniature shrines forms on the tales of a south Indian Vimana.⁴⁹

REFERENCES

_

¹ Brown, Percy, 'Indian Architecture,(Buddhist & Hindu)', D.B. Taraporevala& Sons, 7th Edition Bombay,1971, p.4

²Maisey,P.C., 'Sanchi and its remains', Indological Book House, Varanasi,1972, p. 3

³Acharya, P.K., 'Mansasaraan Encyclopaedia of Hindu Architecture,' Vol. VII, Allahabad, 1944-46, p.574

⁴ Sorensen. S., 'An index to the ,names in Mahabharata,'MotilalBanarasidas , Delhi, 1967,pp.478-479

⁵ Banerjee, N.R., 'Nepalese Architecture,' Agam Kala Prakashan, Delhi,1980,p.61

 6 Cunningham A. , 'The Bhilsa Topes,'Indological Book House , Varanasi, 1966, p.332

⁷Acharya, P.K., ibid, p.577; See also EpigraphicaIndica, Vol. VIII, p.287

⁸Upaddhya, V., 'PrachinBhartiyaStupa, GuhaEvamMandir,' Patna, 2008, p.8

Chatu Mahapathe Ranjo Chakka Vatissa Thupam Karoti

⁹Cuningham, A., ibid, p.8

¹⁰Sarkar, H.,'Studies in Early Buddhist Architecture of India', MunshiramManoharLal, Delhi, 1986, p.3

¹¹ Rhys,Davis,T.W., 'Buddhist Suttas, The Sacred book of East', Oxford,1881,p.93

¹²Agarwala, V.S , 'Studies in Early Buddhist Art,', PrithviPrakashan, First Edition,1965, p.81

¹³Sircar, D.C., 'Select Inscriptions bearing on Indian History and Civilization', Vol. I, Calcutta,1966 (Revised Edition), p.71

¹⁴ Smith, V.A, 'History of Indian and Indonesian Art',p.57-58

¹⁵Agarwala, V.S, ibid, p.82

¹⁶Upadhyaya, V.,ibid, p.9

¹⁷Ghosh, A., 'Archaeological Remains, Monuments and Museum,' Part I, Archaeological Survey of India, 1962, p.88

¹⁸ Kala, S.C., 'BharhutVedika,' Allahabad, first publication, 1951,p.4

¹⁹ Kala, S.C., ibid, p 4-5

²⁰Ghosh, A., ibid, p.88

²¹Ibid, p.88-90

²²ibid, p.91

 $^{23}\mbox{Agarwala,V.S.,'Sarnath'}$, Archaeological Survey of India, IV Edition , New Delhi, 1984,p.17-18

²⁴Agrawala, V.S., 'Sarnath' ibid, p.17-18

²⁵Ghosh, A, ibid, p. 92-94

²⁶ ibid, p.101

²⁷ ibid, p.103-104

²⁸Subramaniam, K.S, 'Buddhist Remains in South India(Early Andhra History)', Cosmo Publication, First Edition, New Delhi,1981, p.17

²⁹Ghosh, A., ibid, p.106

³⁰Sarkar, H. and S.P. Nainar, 'Amravati,' Archaeological Survey of India, New Delhi, 1980, p.13-16

³¹Ghos, A., ibid, p.105-6

³² Brown, Percy, ibid, p.19-20

³³ Brown, Percy, ibid, pp.31-33

³⁴ Marshal, John, 'A Guide to Taxila', Cambridge, 4th Edition, 1960, p. 124,143,156,164,172,178.

³⁵ Rowland, Benjamin, 'The Art & Architecture of India, Buddhist, Hindu and Jain', Great Britain, Third edition, 1967,p.214

³⁶ Rowland, Benjamin, ibid, p.214

³⁷Coomarswami, A.K., 'History of Indian and Indonesian Art',p.160; See also Mahavamsa, Chapter XXIII, XXXI

³⁸ Ibid, 214-215

³⁹ Banerjee, N.R., 'Nepalese Architecture', Agam Kala Prakashan, Delhi,1980, p.61

 $^{^{40}}$ Coppleston, Trewin, 'World Architecture', Printed in spain ,Artes Grafice , $10^{\rm th}$ Edition , 1977, p.87-92

⁴¹Coomarswami, A., ibid, p.170

⁴²Rowland, Benjamin, ibid, p.256

⁴³ Brown, Percy, ibid, p.175

⁴⁴ Rowland Benjamin, 'The Art and Architecture of India, Buddhist, Hindu and Jain Great Britain, Third Edition,1967

⁴⁵Pande, B. M., & B.D. Chattopadhyay, 'Archaeology & History', AgamKala Prakashan, Vol.II, Delhi, 1987, p. 462

⁴⁶Majumdar ,R.C., 'Ancient India', MotilalBanarasi Das, New Delhi, 1964,p.497

⁴⁷ Brown, Percy, ibid, p.195-196

⁴⁸Coppleston, Trewin, ibid, p.118

⁴⁹Chandra, Lokesha and Others, 'Indian Contribution to world thought and culture', Delhi,1964,127