# 13

# CITIES AND URBAN LIFE IN THE KUSHAN KINGDOM*

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## Contents

The development of urban patterns . . . . . 283
City life in the Kushan period . . . . . 291
City planning . . . . . 293
Royal palaces and community walls . . . . . 296
Bazaars and dwelling-houses . . . . . 296
City administration . . . . . 299
Craftsmen and guilds . . . . . 301
Trade and commerce . . . . . 304

## The development of urban patterns

The evolution of urban life in the territories that formed part of the Kushan state, or were subject to its political or cultural influence, can be traced back to the Bronze Age. During the time of the Achaemenids, urban planning and architecture were strongly influenced by West Asian styles. Hellenism had an even greater impact on town planning in Central Asia after the establishment of Greek cities in the area. This was the time when cities began to amass so much economic power that they became an important element in the power of the state. In the Kushan period that followed (between the first century B.C. and the fourth century A.D.), Central Asian, Hellenistic and Indian town planning blended into a

* See Map 6.

single form. During this period, the ancient cities grew faster than ever before and urban life flourished.[1] Archaeological excavations provide important evidence about the cities of the Kushan period – their layout, architecture and material culture. One of the most thoroughly studied sites is Taxila in north Pakistan, where John Marshall carried out extensive excavations between 1913 and 1934.

The Mauryan city of Taxila on the Bhir Mound was replaced under the Graeco-Bactrians in the second century B.C. by a new city at Sirkap, which remained in use up to the Early Kushan period. The city at Sirkap has the shape of an irregular trapezium, stretching 1,300 m from north to south and 900 m (at its widest) from east to west. Topographically, it is divided into two unequal parts – a lower northern and an upper southern city. Remains of walls along the dividing line between them still survive. The city was intersected from north to south by the main street with side-streets running off at right angles. Each of it is divided into two unequal parts – a lower northern and an upper southern city. Remains of walls along the dividing line between them still survive. The city was intersected from north to south by the main street with side-streets running off at right angles. Each of the spaces between the side-streets (which were 36.5 m or slightly more apart) contained blocks of buildings, occasionally divided by small alleyways. Both sides of the main street were lined with shops (Fig. 1), as well as some shrines, especially stupas. Behind the shops and the shrines were the dwelling houses. East of the main street was the royal palace and, near by, some more opulent-looking two-storey dwellings. In the city and the surrounding areas, there were Buddhist stupas (Figs. 2 and 3), monasteries and shrines. Some 650 m outside the north gate was the non-Buddhist Jandial temple.[2] Early under the Kushans, the city was again transferred to a new site at Sirsukh (Fig. 4). This new Kushan city, founded under the nameless king Soter Megas, covered an area of 1,370 × 1,000 m, but has not yet been excavated.

Shaikhan Dheri, the second city of Charsadda, was laid out in a similar manner. The city was divided by a network of parallel streets some 36.5 m apart. Between the two central thoroughfares in the city centre was a sanctuary, probably a Buddhist stupa, and in between the streets were blocks of buildings.[3] Subsequent excavations have established that this city was occupied from the second century B.C. to the second century A.D.[4]

Bhita is the modern name for the ruins located 16 km south-east of Allahabad. From seal inscriptions the settlement seems to have been known in antiquity as Vichi. Excavations by Marshall in 1909–12 showed that the city covered an area of about 26 ha, and was

[1] Litvinsky, 1973.
[2] Marshall, 1951, pp. 112 et seq., 139 et seq., 1960, pp. 60 et seq.; A. Ghosh, 1948, pp. 41 et seq.
[3] Wheeler, 1962, pp. 16–17, Plates XV –XVI.
[4] Dani, 1955/56, pp. 17 et seq.

FIG. 1. Sirkap. Location of shops (?). (Photo: Musée Guimet/Tissot.)

FIG. 2. Sirkap. Stupa 1A between the second and third street east. (Photo: Musée Guimet/Tissot.)

surrounded by a fortification wall 3.4 m thick by 12 m high. The city area was traversed by straight parallel streets, one of which, 9 m wide, the 'Main Street', began at the city gates and led to a sanctuary in the centre of the town. Another, half its width, which Marshall

FIG. 3. Sirkap. Stupa G east. (Photo: Musée Guimet/Tissot.)

FIG. 4. Sirsukh. Wall running east to south. (Photo: Musée Guimet/Tissot.)

called 'Bastion Street', ran directly parallel to the Main Street at a distance of 45 m.[5] Although the houses on both streets had identical floor plans, those on the Main Street were noticeably larger. In the spaces between the parallel streets, there must have been

[5] The foundations of the buildings in the city date from the Mauryan period, but many of the surviving structures on the Main Street and Bastion Street were built and existed during the period from the first century B.C. to the third century A.D. This was the time when the city had a network of parallel streets. The buildings constructed in the post-Kushan period were not lined up on the same axis. Thus, Item 50, a Gupta temple in the centre of the city, and items 43 and 45, fourth-century-A.D. housing in the north-west part of the city, are all oriented at an angle in the axis of the above-mentioned streets (see Dani, 1955/56, pp. 40, 43).

two rows of two- or three-storey houses each accommodating between ten and twenty occupants, family members and servants included. It has also been estimated that the city had about 940 such houses and a population of between 10,000 and 20,000 persons.[6] In the block of buildings on the south-west side of the High Street was a house (14 × 13.4 m), consisting of a rectangular courtyard flanked by twelve rectangular square rooms. The house had two entrances on opposite sides (north-east and south-west) each set near the longitudinal axis. In one corner room, there are the foundations for four columns, and judging by the thickness of the walls, part of the building may have had a second floor. Marshall was of the opinion that this house could have been built in the Mauryan period. A seal found under the wall foundations and, therefore, belonging to an earlier period bears an inscription that Marshall read as '*Sahijitiye nigamaśa*', prompting the suggestion that the earlier house could have served as the office (*nigama*) of a guild, though the reading has subsequently been disputed.

From the seals found, it has been possible to identify the names of the owners ofdifferent houses. One belonging to Nāgadeva and built in the first century B.C., mostly of burnt bricks, had a section facing the Main Street which Marshall thought was a shop. Flights of steps, flanked by platforms on both sides, led from the street side to the central rectangular room of the shop. On either side was a much smaller room forming a lateral wing, and all three were built in a row along the street. Behind were the courtyards, on the farther side of which were the living quarters (11.3 × 10.4 m), an inner courtyard surrounded by structures mainly rectangular in design. The house was a self-contained unit, separated from the surrounding buildings. It had its façade on the High Street, with lanes on the other three sides and an additional doorway opening on to one of them.

Built in the first century B.C., this house remained in use throughout the Kushan period (seventeen coins from the reigns of Kanishka and Huvishka were found there). In a neighbouring house with a similar layout, an ivory seal was discovered in the fourth-fifth-century stratum bearing the inscription '*Śreṣṭhi Jayavasuda*', which Marshall interprets as 'the banker Jayavasuda',[7] but the person concerned, presumably the owner of the house, could very well have been the elder of a guild. Like others in Bhita, this house was surrounded by lanes. The same was true of houses in Vaiśāli, Rājagṛha, Kolhapur, Sambhar and other cities: each house was surrounded by narrow alleyways separating it from neighbouring buildings. According to the written sources, these alleys were three paces wide.[8]

[6] Marshall, 1911, pp. 127–41; Schlingloff, 1970, pp. 24–7.
[7] Marshall, 1915, pp. 36–48.
[8] Schlingloff, 1970, pp. 27–8.

In Sisupalgarh (ancient Kalingaṅagara), where the ruins of the ancient city cover an area of about 1.36 km$^2$, the ramparts (10 m thick) enclose an area almost perfectly rectangular, with a bastion at each corner. As Lal has noted, this layout calls for a regular network of streets running from east to west and north to south, intersecting each other inside the city.[9] The same system was adopted in other cities in India, for example, Udegram.[10]

One of the most famous cities in the Kushan Empire was Begram, north of Kabul, at the confluence of the Panjshir and Ghorband rivers. The city was rectangular in shape, extending 800 m from north to south and 450 m from east to west with a citadel in the north-east. The stone foundations (0.5–0.7 m high) of the city walls were set into the subsoil, supporting the main section of the wall constructed of square sun-dried clay bricks. Square towers were built along the wall, at intervals of 17 m, and in front were two parallel ditches. A central thoroughfare divided the city into two parts, and it is assumed that there was another thoroughfare at right angles dividing the city into quarters. In the palace in the southern part of the city a number of storerooms were discovered containing hundreds of articles of carved ivory (Fig. 5) brought from India, and Western objects of Roman date imported from the Mediterranean. The excavations yielded a large collection of articles of material culture.[11]

In south Uzbekistan, in Bactrian territory, a large city has been excavated atDalverzin-tepc. The main portion, tentatively called the 'lower city', formed a rectangle 650 × 500 m. In the south corner, partly extending beyond the city boundaries, is a citadel shaped like a rounded trapezium (maximum measurement – 170 × 200 m). Outside the city walls were a Buddhist shrine and necropolis, and a Zoroastrian chapel (*naus*). The 'lower city' was surrounded by thick ramparts with towers at 30–40 m intervals. Outside the fortifications, as a further precaution, were canals, a river-bed and a ditch. The only gate was in the southern section near the citadel. In the Kushan period the city was densely built with large blocks of buildings, urban thoroughfares and water reservoirs. Houses belonging to the aristocratic section of the population were situated in the heart of the city, while those belonging to the poor were built on the outskirts. The southern quarters were inhabited by craftsmen near kilns and pottery workshops. It was there, too, on high ground that the temple of the Bactrian goddess was found. Two palatial dwellings (DT-5 and DT-6) had an impressive structure decorated with columns with Attic-style bases. Constructed with vaults and arches of sun-dried clay-brick, their principal façades were embellished with a deep portico bounded in front by columns. Behind the portico, on the principal axis, was

[9] Lal, 1949, pp. 62–105.
[10] Gullini, 1962, pp. 173 et seq.; Faccena, 1964, pp. 14–23.
[11] Ghirshman, 1946; Hackin, 1954.

FIG. 5. Begram. Decorated ivory plate, first/second centuries B.C. (Photo: UNESCO/L. Hammerschmid.)

a large vestibule with a reception hall beyond. The front part of the building, reserved for receiving guests, was separated from the living quarters by a corridor. All the dwelling-houses in Dalverzin-tepe (ordinary as well as palatial) had one feature in common – a special room set aside for household prayer, with a niche for kindling the holy fire. At Dalverzin-tepe some outstanding works of art were discovered, including many pieces of secular and Buddhist sculpture and paintings (Fig. 6) and a most remarkable treasure of 115 gold objects of jewellery, works of art and gold bars with inscriptions in Kharoṣṭhī, indicating their weight.[12]

At Toprak-kala in Chorasmia (Fig. 7), the rectangular site (2.5 km$^2$ in area) running from north to south is surrounded by a wall with many square towers. In the north-east corner was a huge castle for the ruler, with a large courtyard and a triple-towered keep, the remains of which rise to a height of 25 m. South-cast of the castle was a building containing a large central area with a corridor running round, probably a fire temple. The residential area was bisected by a main thoroughfare running from north to south (where the city gate had a huge protective structure in front of it). At right angles to this thoroughfare were streets that divided the city into ten symmetrical blocks. Although the top stratum dates from the fourth–fifth centuries A.D. (and in a few sections from the sixth–eighth), the city was originally laid out in the second-third centuries. Each insula measures 40 × 100 m and

[12] Pugachenkova, 1976; Vorob'eva Desyatovskaya, 1976.

FIG. 6. Dalverzin-tepe. Fragment of wall painting showing the head of a goddess. (After Pugachenkova and Rtveladze, 1978, p. 48.)

FIG. 7. Toprak-kala (Chorasmia). (Photo: © Vladimir Terebenin.)

the street widths are 4.5 m and 10 m (in the case of the main artery). The buildings of the fourth and fifth centuries A.D. formed part of a large building complex developed at one time. It is not clear whether its large units formed part of a single architectural ensemble or constituted separate households. Small groups of two or three buildings – some of them craftsmen's dwelling houses – were found in the outer blocks at Toprak–kala.

The palace, situated in the castle inside the square formed by the outer walls, had over 100 rooms on the ground floor, and there are remains of more rooms on a first floor. Three stages in its existence from the second–third to the fourth–fifth centuries A.D. have been identified. The palace contained a large number of works of art (paintings, sculptures, etc.), and the 'Hall of Kings' alone contained 138 statues. This building, which dominated the whole complex, must be regarded as a holy palace because of its sanctuaries associated with various aspects of the royal cult. Adjoining the north-west section of the Toprak-kala site is the 'north complex' (250 × 400 m), which has an amplified layout and contains a number of imposing structures. Remains of bas-reliefs, sculptures and wall-paintings have been found in the halls. The monumental nature of the buildings, and their layout and decorations, suggest that it was an open palace built at the same time as the palace in the citadel. On the north-west side was a rectangular undeveloped plot of land surrounded by an embankment (perhaps a park or a necropolis).[13]

Mention should also be made of city-sites such as Zar-tepe, Kei-Kobad-shah, Er-kurgan, Saksan-Okhur, etc. Of the various sites of the same period which have been thoroughly investigated by archaeologists, the Kara-tepe and Fayaz-tepe Buddhist complexes atTermez deserve special mention. The findings resulting from excavations undertaken at Dilberjin (Fig. 8) by a joint Soviet-Afghan archaeological expedition[14] are also of considerable importance for studying the history of the Kushano-Bactrian cities.

## City life in the Kushan period

From available evidence it is clear that life in the cities of Central Asia from the first century B.C. to the third–fourth centuries A.D. was incomparably more intensive than that in the preceding period. This is illustrated by:

The quantitative growth of the network of urban settlements and the emergence of new cities that had never existed before (at no time in the ancient history of Central Asia had there been so many cities).

The enlargement of urban areas in the old cities that had existed earlier and the increased density of urban construction.[15]

Further development of the division of cities into three parts: citadel, city proper and suburbs (which, in addition to houses and workshops, included religious buildings, especially Buddhist shrines, temples and cemeteries). Side by side with the cities which had this tripartite pattern there were also cities of other types, many of them lacking a citadel.

[13] Tolstov, 1948, pp. 119, 123, Fig. 62, 1962, pp. 204–6; Rapoport, 1981*a*.
[14] Kruglikova, 1982.
[15] The reference here is to a general trend; in certain specific cases, this trend was not evident.

FIG. 8. Plan of Dilberjin-tepe. (After Kruglikova, 1979, p. 121.) (Photo: V. N. Yagodin.)

Fundamental internal socio-economic changes in the urban organism and the increase in the importance of the city in the economic life of the country, resulting primarily from the rapid growth of urban handicrafts. The cities became centres for the production of commodities for sale, hence their key importance in the city–village–nomadic-steppe system. With the concentration of religious buildings within cities the latter also played an increasingly important role as centres of ideological life.

These conclusions, based on material relating to Central Asia, can – as is clear from the available evidence – be applied also to other territories of the Kushan state. As Dani and Khan note:

> The urban centres increased to a very large extent during the Kushan period. In the main valley of Peshawar all such cities lie to the north of the Kabul River along the old route that came from Taxila and across the Indus to Hund or Salature (present-day Lahur in Swabi Tehsil) onward to Puṣkalāvatī (present-day Charsadda) at the confluence of the Swat and Kabul Rivers. Here the routes diverged in various directions. If the city mounds that exist today on these routes are counted, it is not surprising to note that urbanization even in modern Pakistan has not reached that stage in the Peshawar region. This urbanization in the Kushan period was based on industrial development and on trade entrepots.[16]

Ghosh, too, has noted that 'the Kushan Empire comprised many cities in the Panjab and the Gangetic Basin'.[17]

The role of the city in military operations can hardly be overestimated. Cities were well fortified and some were virtually impregnable. The fortifications were designed to make the best possible use of the characteristics of the terrain, and were supplemented by deep ditches (one or two rows), forward outposts and thick walls with rectangular (more rarely, round) towers, parapets, etc.[18] Together, the fortified cities formed the defensive backbone of individual provinces and of the entire Kushan state. Thus, cities became vital components of the whole infrastructure. To mention only the case of Bactria, in Surkhan Darya province, some 110 monuments have been recorded, most of them situated in river valleys. Two or three are of Achaemenid date, about twenty belong to the Seleucid and Graeco-Bactrian periods and seventy or eighty belong to Kushan times.[19]

## City planning

In the Kushan period, both in Central Asia and in India, cities were still predominantly rectangular in shape,[20] though a few had other shapes: trapezoidal, semi-circular, circular or polygonal. Several newly founded cities, and some dating from earlier periods, were extremely large; but there were also small- and medium-sized towns. Some cities (the new ones in particular) had no citadels, while others had large ones. Indian sources contained a highly developed terminology for describing various types of cities.[21] On the basis of

16 Dani and Khan, 1974, p. 102.
17 A. Ghosh, 1975, p. 109.
18 Francfort, 1979.
19 Rtveladze, 1978, p. 114.
20 Filliozat, 1959, pp. 251–2; Schlingloff, 1970, pp. 45–6.
21 A. Ghosh, 1973, pp. 45–6.

archaeological material, cities as organisms can be classified only in external and quantitative terms, that is, in terms of their general layout, component parts, shape and size. On the basis of such material alone, it is extremely difficult to describe the most important features of urban life, ranging from the principles of urban planning to details of municipal administration. When written sources are used, the situation is quite different. Although information about cities in Middle Asia is scanty, for ancient northern India there are many epigraphical and literary sources (the *Arthaśāstra*, the *Milindapañha*, the epics, the Jaina canon, the *Jātakas*, special architectural treatises and others), dating back to the end of the first millennium B.C. and to the first half of the first millennium A.D. and containing various kinds of information on economic and social history and especially on the history of the city.[22] In view of the parallel development of urban societies, analysis of Indian sources is especially interesting.[23]

The *Arthaśāstra* states that, in selecting the place for building a fortress or a settlement, it is important to take into account the features of the terrain, and the final choice must be 'approved by architects'. The city must be strongly fortified: there must be three rows of moats filled with water, a rampart, walls with square towers, etc. The city must be traversed by three roads running from north to south and three running from east to west, and four of the twelve city gates must be main gates. Within the city, the siting of various buildings – from the palace and temples down to the dwellings of craftsmen – is subject to strict rules (*Kauṭilya Arthaśāstra* 2.3.1–32; 2.4.1–32).[24] The layout of streets and residential areas must be carefully planned – *Suvibhāta* (*Rāmayana* 1.5.8; 1.5.10: V, 53, 20 etc.; *Mahābhārata* 1.199.34).

The *Milindapañha*[25] gives a detailed description of the development of an ideal city:

> A city architect, when he wants to build a city, first looks about for a district that is level, not elevated, not low-lying, free from gravel and stone, secure, irreproachable and delightful, and then when he has had made level there what was not level and has had it cleared of stumps of trees and thorns, he might build a city there. Fine and regular [it would be], well-planned, the moats and encircling walls dug deep, the city gates, the watch-towers and the ramparts strong, the cross-roads, squares, junctions and the places where three or four roads meet numerous, the main-roads clean, level and even, and bazaar-shops well laid out, [the city] full of parks, pleasances, lakes, lotus-pools and wells adorned with a wide variety of shrines to devas, the whole free from defects.

[22] It was thought that some works from the post-Kushan period might also usefully be included here.
[23] Litvinsky, 1979, 1981; Litvinsky and Sedov, 1983.
[24] Kangle, 1972, pp. 66–72.
[25] Horner, 1964, Vol. II, pp. 170–1, cf. the *Manusmṛti* (Sanskrit code of laws), Vol. VII, pp. 69–74; the *Rāmayana* 1.5.7; also the descriptions in the Jaina canon (Jaina *sutras*), Vol. I, pp. 252–3; and Schlingloff, 1970, p. 7.

The description of the ideal city has much in common and in many ways is identical with the description of Sagala (modern Sialkot). From the *Milindapañha*, we also learn that the city gates had watch-towers. The city was encircled by a deep moat and surrounded by walls. Among the urban roads, special mention is made of the carriage-roads. The city had a large number of shops, thousands of richly decorated buildings and 'hundreds of thousands' of dwelling-houses.

The architect-builder 'plans the distribution of the carriage-roads, the squares and the places where three or four roads meet'. We learn that the city had a special inspector who sat at a cross-roads in the middle of the city, from where he could see anyone approaching from the eastern, southern, western or northern quarter of the city. From other ancient Indian sources (the *Jātakas*), it is known that the city had a special official, the *dovārika*, to shut the city gates at night and also to show the way to strangers.[26] The *Milindapañha* also provides a vivid picture of the city and its streets swarming with 'elephants, horses, chariots and pedestrians, with groups of handsome men and women; it was crowded with ordinary people, warriors, nobles, brahmans, merchants and workers' and a variety of ascetics.[27] Alongside the carriages, riders on horseback moved along the streets.[28] There were many strangers in the cities – people from other provinces of India and from Scythia (Saka), Bactria (Yavana) and China (Cina).[29] The shops were overflowing with goods. Some sold Benares muslin and other fabrics. From others came the sweet smells of flowers and perfumes offered for sale. The jewellery shops were filled with items of silver, bronze and stoneware, the storehouses were full of goods of various kinds including foodstuffs.[30] The streets swarmed with hawkers of herbs, fruits and roots, and meat, fish, cakes and otherdifferent kinds of foods were offered for sale. Anyone with money could drop into an eating house for a bite. Here and there street actors, conjurers and acrobats gave performances, or professional wrestlers were locked in combat.[31]

Other Indian literary works give an even more colourful and vivid picture of life in the cities of ancient India. The *Umbhayābhisārika* describes the city of Kusumapura with its clean streets and canals enclosed between rows of houses. Mountains of flowers (sacrificial offerings by devout city-dwellers) were heaped along the streets which were lined with shops where various kinds of goods were offered for sale. Occasionally, white-faced women were seen glancing out on the streets, opening the windows of palaces as high as the

[26] Fick, 1920, p. 157.
[27] Horner, 1964, Vol. I, pp. 1–2.
[28] Ibid., pp. 171–2.
[29] Ibid., pp. Vol. II, pp. 4–5.
[30] Ibid., Vol. I, p. 2.
[31] Ibid., Vol. II, pp. 171–2.

clouds. Finely dressed royal officers went about their business on horseback, on elephants or in carriages.[32]

The *Pādatāḍitaka* recounts that the streets of the city resounded with songs, the jingle of women's jewellery, the monotonous sing-song tones of people reciting and studying the Veda, the chopping sound of axes in butcher's shops, the clatter of dishes and the screeching of domestic birds. The city was teeming with local townspeople, visitors from different provinces of India as well as foreigners, including the Sakas, Yavanas and *Tuṣāras* (Tocharians). This text also mentions that some inhabitants of Balkh (Bactra) had come to settle in the city. It notes, too, that the entrances to courtyards and the courtyards themselves were washed down regularly.[33]

## Royal palaces and community walls

The residence of the ruler was located in the centre of the city, an area that also contained the more fashionable and better-built multi-storey buildings, which were not permitted to rise higher than the ruler's palace. Here, too, were many public buildings, including several picture galleries (*citraśālā*), open to the public and visited regularly. Such buildings were well constructed, special care being taken to ensure that the lighting was good. A picture gallery usually occupied a number of rooms linked together by passage-ways and staircases. The walls of the main gallery were covered with paintings of the heavenly world, episodes from the epics or astrological signs. Some galleries belonged to rich city-dwellers and some even to prosperous courtesans. The royal palaces contained magnificent picture galleries, far superior to those owned by private individuals. The *Ratnāvalī*, a seventh-century play by Harṣa, mentioned the picture gallery at the entrance to the palace. The palace had a special music room and many rooms were decorated with sculptures, carvings and paintings. Its park had ponds with small islands, on some of which there were gazebos (*Pādatāḍitaka* §33).[34]

## Bazaars and dwelling-houses

The liveliest part of the city was the bazaar, bustling with shopkeepers and people selling their wares. 'Everywhere here men and women are clustering arc buying and selling'

[32] M. Ghosh, 1975, pp. 4–5.
[33] *Pādatāḍitaka* (Russian translation by I. D. Serebryakov), c§22, 24, 30, 35, 104; cf. M. Ghosh, 1975. pp. 114–15, 119, 123, 153; sec also p. 123 for a specific reference to an inhabitant of Balkh, Hariścandra, of the Kaṅkayana tribe.
[34] M. Ghosh, 1975, p. 117; see also Serebryakov's translation of the *Pādatāḍitaka*.

(*Pādatāḍitaka* §26). 'From the smithy comes the sound of the hammering; from the brazier's workshop comes the shrill whine of the lathe, and a hiss like a horse's breath as a sword is plunged into its scabbard' (*Pādatāḍitaka* §29).

Iconographic sources, supplemented by literature, provide a wealth of information on houses occupied by city-dwellers. Puri[35] notes this in relation to evidence from the sculptures of Gandhāra and Mathura. In the construction of a house, a raised terrace (*prasāda*) preceded the setting up of the walls (*kudyān*) and columns (*stambha*). The roof rafters (*gopānasi*) were of wood (*dāru*). The rooms had several windows (*gavākṣā*) and a balcony (*harmya*) was a usual feature in large houses. In the Mathura sculptures a projecting balcony with couples sitting on it is usually portrayed, as are the *dvāra* and *torana* – gate and gateways. In rooms, partitions (*bhitti*) were set up for privacy and copings (*vedikas*) ensured protection from rainwater. The highest apartment was given a special name (*kuṭagara*); houses were painted (*varṇita*); the term '*sopanam*' suggests that the ground floor was connected with the top floor by stairs; and there was a separate ladies' apartment (*antaḥpura*) inside the house. There is further interesting illustrative material in the frescoes of some of the caves at Ajanta, especially Cave XVII.[36] According to the literature, city houses (not only the palace) often had a garden in the inner courtyard (*Kāmasutra* IV.3); one such garden was to be found in the courtyard of a merchant's house.[37] The *Pañcatantra* (III.5.95) mentions a merchant's house, located in the main street of the city, standing literally on the 'royal road' (*rājamārga*). In the cities and towns, merchants usually lived in a special quarter (Fig. 9). This is clear both from literary and from archaeological sources:

> These quarters were very similar to those of today. Lines of small shops with verandas that were raised slightly above street level. Opening right on the street, they were crammed close together, separated by no more than the thickness of a post. The open fronts were closed at night with removable shutters. The merchant lived with his family on the floor above, in tiny rooms, or else in living quarters behind the shop on the other side of an inner courtyard. Throughout the day, he sat cross-legged on the wooden floor.[38]

In Udegram, every block was divided into two areas, one containing dwelling-houses, the other shops. In some cases, the shops were built in a row along the street. They were rectangular in ground plan with a small room at the back.[39] In every section of the city there was a network of alleyways, which crossed one another at right angles and divided

[35] Puri, 1965, p. 98.
[36] Yazdani, 1946, Plate XXIII.
[37] Schlingloff, 1970, pp. 25–6.
[38] Auboyer, 1965, p. 87.
[39] Faccenna, 1981, p. 31.

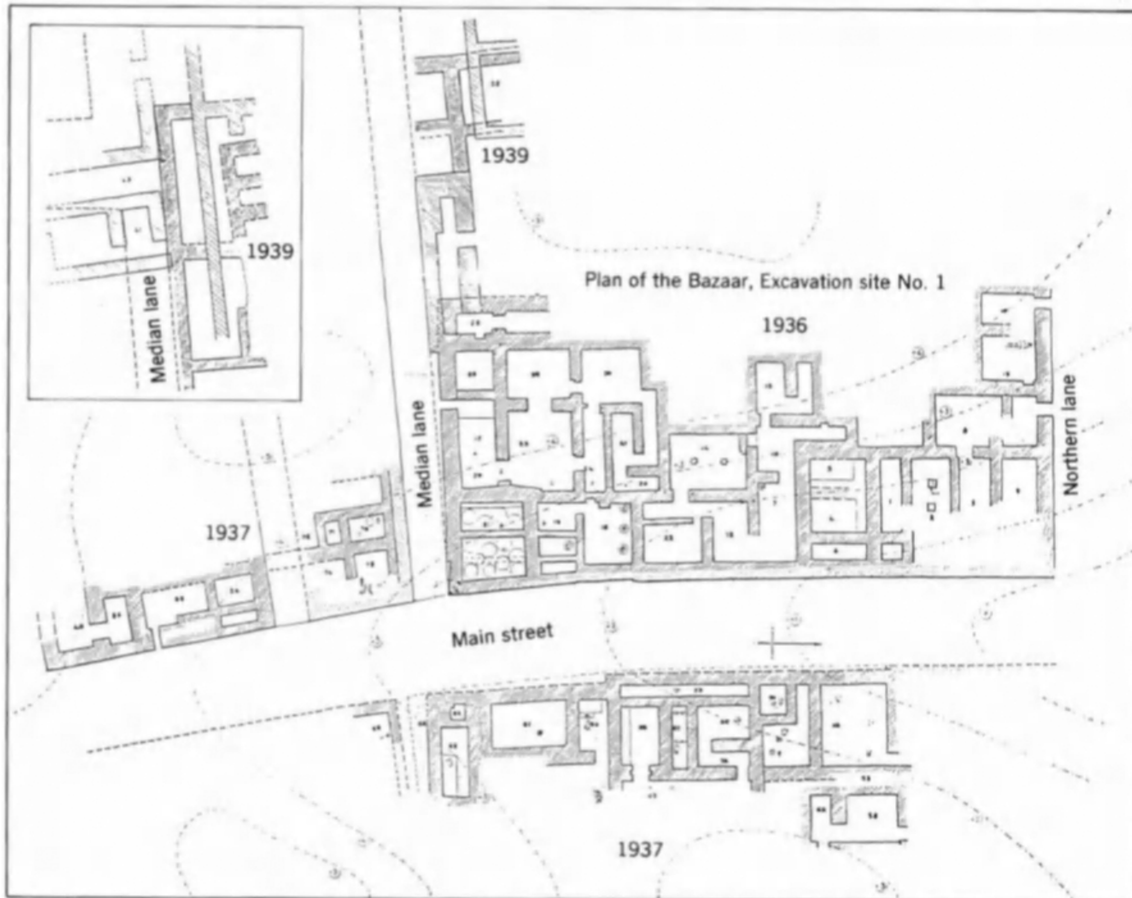


FIG. 9. Begram. Plan of the bazaar. (After Hackin et al., n.d.)

the city into blocks (eighty-one blocks were sometimes called a *pada*, a number which appears to have had ritual significance). According to Indian architectural treatises, each such block or *pada* was associated with some deity, who was the patron of the block. Again, according to the texts, each block was surrounded by a wall and enjoyed a certain degree of autonomy; it had its own water reservoirs, holy trees and temples dedicated to local deities.[40] Outside the city walls were the suburbs, which often extended over a very large area.[41]

Cities were centres of science and culture, especially fine arts and music. Many of their inhabitants were literate, and it was precisely to them that the monumental inscriptions were addressed. Specimens of the written language on metal, stone, fragments of earthenware and birch bark have survived and frequent discoveries of inkwells (at Taxila and elsewhere) provide clear evidence of the dissemination of literacy.

[40] Auboyer, 1965, pp. 120–1.
[41] Ibid., p. 125; A. Ghosh, 1973, pp. 53–6.

## City administration

Indian cities were administered by a governor. Subordinate to him were the three chief magistrates. The district inspector (*gopaḥ*) was in charge of ten, twenty or forty families. He was expected to know the caste, names and occupations of all the men and women living in his district, and even how much they earned and spent. There was also a borough inspector (*sthānikaḥ*) in charge of each of the four city sections. Each of these inspectors managed the affairs of one quarter of the fortified city *(Kauṭilya Arthaśāstra* II.36.1–4).[42] The cities of Sasanian Iran also had district inspectors[43] and there is some evidence that districts were enclosed by walls. In India the municipal authorities controlled the activities of artisans and merchants. There are references to city councils and some cities had a city seal. According to Megasthenes (Strabo XV.1.51), urban life was administered by six committees, each of which consisted of five members and had its own specific functions.[44]

Information about the population of Central Asian cities during the Kushan period is very scanty, but if certain adjustments are made, information about the composition of the population of the Indian cities can probably be extrapolated to Central Asian cities as well. The documents from Nisa provide no information on the rank-and-file population of 'fortified settlements' (*diz* in Parthian). In these documents the commandant of a *diz* is referred to as a *dizpat*. It is clear from the material in the highly specialized Nisa archives[45] that cities, especially larger ones, were inhabited by members of the aristocracy, the clergy and officials of the complex administrative apparatus. The high three-towered castle at Toprak-kala, the citadel of Bactra and the splendour of the palaces in other cities constitute clear and unambiguous evidence of the importance of the aristocracy in the life of the period.[46]

The Kara-tepe inscriptions show that where Buddhism was widespread, an important role was played by Buddhist monks and officials of the Buddhist religious community (*saṅgha*). An equal if not more important role was of course played by the numerically larger Zoroastrian priesthood. The population in many cities included a number of foreigners. Harmatta[47] has calculated that some 30 per cent of the names found in Kharoṣṭhī inscriptions in India were Iranian, and Bactrian names predominate. Urasaka, a Bactrian from Noacha who was an official of the Kushan administration, notes in an inscription from

[42] Kangle, 1972, p. 185.
[43] Perikhanyan, 1973, pp. 393, 496.
[44] Bongard-Levin, 1973, pp. 197–202.
[45] D'yakonov and Livshits, 1968, 1977.
[46] Livshits, 1984, pp. 265–79.
[47] Harmatta, 1964, pp. 387–8; cf. Livshits, 1969, p. 64.

Taxila that he built a Buddhist shrine there.[48] The *Milindapañha* (V.331), the *Mahābhārata* (11.47.15–31) and other sources provide information about Bactrians and persons from other parts of Central Asia who reached or lived in India. The situation was similar in the cities of Central Asia. Buddhist missionaries and pilgrims, merchants, representatives of the Kushan administration, soldiers and possibly craftsmen from India settled in the Central Asian towns and travelled beyond the borders of the Kushan state. In the finds at Termez we see evidence of scribes who had an excellent knowledge of north-western Prakrit and a thorough command of written Kharoṣṭhī. It is not possible to say whether they were Indians or Bactrians who had been well schooled in these languages, but in view of the role played by north-western Prakrit in the administration of the Kushan state and the life of the Buddhist communities, it seems probable that they included both local inhabitants and Indians. In both Central Asia and India, Sanskrit written in Brāhmī script is found.[49]

There are noticeable similarities in architectural styles. Some of these are due to the fact that in both India and Central Asia there was a Hellenistic element in the substratum of Kushan culture. A particularly striking example is provided by the form of stone columns, even though during the Kushan period the form of columns in India and Central Asia developed in substantially different ways. Other similarities were due to the spread of Buddhism in Central Asia and the adaptation to Buddhist religious architecture which, under the influence of local architectural and building traditions, assumed new forms and incorporated design solutions that were unknown in India. The synthesis of Iranian, Central Asian and Indian architectural and religious ideas gave fresh impetus to the concept of a shrine with corridors, and we know that Indian experts went to Central Asia to design and build Buddhist shrines.[50]

The *Sūtrālaṃkāra* (IV.21) tells the story of a pious artist from Puṣkalāvatī whojourneyed to the land of Aśmaka (land of stone) where he decorated a Buddhist monastery. Tradition has it that the *Sūtrālaṃkāra* was the work of the famous Aśvaghoṣa, a contemporary of Kanishka or of Kumāralāta, the founder of the school of Sautrāntika, which also dates to the second century A.D. and this should be the content of the story. The toponym 'land of stone' refers to somewhere in the north-west, probably in Central Asia. Some elements of Central Asian architectural and building styles made their way into India,[51] and decorative art in architecture reflected the synthesis that was occurring between the Indian, Bactrian

[48] Konow, 1929, pp. 74–5; Litvinsky, 1968, pp. 13–14.
[49] Vorob'eva-Desyatovskaya, 1974, pp. 118–20;
[50] Litvinsky and Zeimal, 1971, pp. 113, 145.
[51] The Pādatāḍitaka (§52) tells of the embellishment of the courtesans' district with a 'mobile sanctury from north Bactria', cf. M. Ghosh, 1975 p. 131.

and Hellenistic-Roman styles.[52] The construction of Buddhist religious buildings greatly affected the appearance of Indian and Central Asian cities, Buddhist stupas giving some of them a very characteristic vertical skyline. Common features can be observed in the nature and design of municipal service systems. Taxila, Dalverzin-tepe and the Chim-kurgan site all have the same type of underground sewerage system.

Cities were still political and administrative centres as hitherto, but their role as the focal point of handicrafts and economic life in general increased considerably. Merv, for example, possessed copper and bronze works, bone-carving workshops, armouries, flour mills, textile, ceramics and other industries, as also did Termez, Samarkand, Toprak-kala, Dalverzin-tepe and other cities of Central Asia. In ancient India, according to the written sources, various groups of the population, including craftsmen, had their homes in strictly delimited areas of the city. Their workshops were located in their houses. The streets of Taxila were lined with rows of buildings whose lower floors contained ateliers or shops facing the street. The same was true of Bhita and in Central Asian towns such as Toprak-kala, Merv and Saksan-Okhur.

## Craftsmen and guilds

Indian craftsmanship during this period was highly specialized. Among the variouscategories of metal-workers, the *Milindapañha* mentions blacksmiths, goldsmiths, silversmiths, lead-workers, tinsmiths, coppersmiths, iron-workers, metallurgical craftsmen, and even gold assayers.[53] The *Mahāvastu* (III.113.442–3) mentions tin-smelters, skilled lead-workers, copper-smelters, etc. Crafts involved in the production of weapons were of special importance. The sources do not speak of 'armourers' in general, but refer separately to makers of bows and makers of bow-strings.[54] The sources of this period mention (and in some cases even list) a large number of trades. The *Mahāvastu* (III.113.442–3) refers to thirty-six types of craftsman. The *Milindapañha* lists seventy-four kinds of occupation, most of them in the productive category. The *Jātakas* mention the names of eighteen guilds (*śreṇi*) of craftsmen and merchants.[55] The number eighteen is the traditional figure, but a comparison of various sources indicates that there were as many as thirty guilds.

[52] Sharma, 1968, pp. 34–5.
[53] Horner, 1964, Vol. II, p. 171–2; See also Puri, 1965, pp. 110–11; Adhya, 1966.
[54] Horner, 1964, Vol. II, pp. 171–2;.
[55] This number is cited in the *Mahāvastu*. The term *śreṇi*, already present in the Vedic literature, had the general meaning of 'group'. By the time of the *Kauṭilya* it meant specifically 'corporation' or 'guild' (Kane, 1941, p. 66).

There is some reason to believe that all members of a guild lived in the same area; for example, there are references to an ivory-carvers' street (*Jātakas* 1.320; II.197), a carpet-makers' village, a potters' village, a weavers' village and a stone-polishers' village.[56] The *Jātakas* refer often to the *vaḍḍhakigama* (carpenters' village). One of them had a population of 500 carpenters and another 1,000, in which there was one chief for 500 carpenters. They collected wood from the forest to make the wooden components for different types of buildings. When their work was completed, they went to the forest again to collect more raw material.[57]

Professions were hereditary; thus, in the Pali texts, the word 'son of a smith' issynonymous with the word 'smith'. This is also borne out by epigraphic materials. References to the hereditary nature of the crafts arc found in the writings of Kālidāsa. The heads of the guilds were noted by a number of terms: *pramukha* (chief), *mahattama* (head man), *jyeṣṭhaka* (senior). According to the inscriptions, an elder was known as the *śreṣṭhin* (best one). In theory, only a person who had achieved the highest level of skill in his trade could become an elder. The guild heads had their own personal seals bearing their name and the title of *śreṣṭhin*; they were assisted by agents and a secretary (*kāyastha*). The guild heads regulated working conditions and rates of pay. In consultation with the heads of other guilds, they raised or lowered their prices, depending on circumstances. In many cases the elder managed the funds of the local branch of the guild, the guild assuming aggregate liability for all its members. The head was in charge of security and had a special armed detachment to protect guild property and funds and to escort caravans. The guilds probably had special premises for their administrators, and special banners and ceremonial badges that members wore on festive occasions.

Some guilds were very rich and possessed real-estate, including some buildings and large temple-complexes. In the first century A.D., some skilled ivory-carvers from Vidiśā (near Bhopal) donated money for building the *toraṇa* of a stupa at Sanchi, one of the great masterpieces of ancient Indian sculpture. In the fifth century A.D., silk-weavers from Daśapura had sufficient resources to build the Sun Temple there, and thirty-five years later paid for necessary repairs. An inscription from Nasik mentions a potters‘ guild, an oil merchants‘ corporation and a water-carriers' guild, all of which had made large financial donations. The head of the guild enjoyed high social status and was sometimes a dignitary of the royal court. The state supported the guilds and protected their rights and property. In written sources rulers are warned not to interfere with the customs of the guilds, and

[56] Geiger, 1960, p. 104.
[57] Misra, 1975.

to confirm their status. The ruler should only interfere if their usages and procedures were violated.

The guilds in turn performed specific public duties. At the time of official cityceremonies, craftsmen and the heads of their guilds stood alongside the aristocracy and the Brahmans (*Mahāvastu* III.442). In one of the fables of the *Pañcatantra*, it is said that in Vardhamāna, 'royal and municipal affairs' were directed by Dantila, 'chief of the merchants', who 'meted out punishment and distributed awards'. From the text of the *Arthaśāstra* (XI.1.4) some scholars are of the opinion that the guilds provided soldiers. It is clear that armed detachments, who protected guild property in peace-time, were placed at the disposal of the state during war. It is also known from the epics that the guilds were regarded as one of the pillars of state authority.[58] The few literary sources that are available for Central Asia contain no information on craftsmen's guilds, though it is known that they existed in Iran under the Sasanians, and excavations in Central Asia show that the various groups of craftsmen, potters, millers and smiths were each established in clearly demarcated quarters of the city. It is possible that the organization of the guilds was not so formalized in Central Asia as it was in India.

The 'Palamedes inscription' at Surkh Kotal, written in Bactrian, included at the end the Greek name 'Palamedes' in the genitive. Harmatta[59] concludes that the signature was deliberately added by the architect, who was anxious to receive credit for his work. Harmatta also notes three Kharoṣṭhī inscriptions of the Kushan period from India to which, in his view, the persons in charge of construction had deliberately added their names. From all this he draws interesting conclusions about the growth of social awareness among the artisan and merchant classes in the Kushan state. The inscribing of architects' names on buildings was a reflection of the high social standing they enjoyed at that time.

The output of handicraft wares was abundant, varied and of the highest quality. This was made possible because of the high standard and complex technology of the equipment and tools available. The metal-working industry provided the city and rural areas with tools, household wares, ornaments and weapons. One branch, the jewellery trade, produced gold, silver, bronze and brass ornaments, with some decorative inlays. The jewellery and torcutics of the Kushan period were noted for their high artistic standard and many were genuine works of art. The textile, pottery, wood-working and other trades were very highly

[58] See Rhys Davids, 1901, pp. 862–7; Fick, 1920, pp. 275–80; Kane, 1941, pp. 66–9; Puri, 1965, pp. 106–7; Adhya, 1966, pp. 82–8; Upadhyaya, 1947, pp. 268–9; Chakraborti, 1966, pp. 315–28; Auboyer, 1965, pp. 102–5. Between the fifth and seventh centuries, legal documents indicate that the guilds had written statutes and were obliged to have their own premises where their members could meet. The sources of that time provide detailed descriptions of their functions, statutes and administration (Chakraborti, 1966, pp. 328–37).

[59] Harmatta, 1964, pp. 338–9.

developed; so, too, were the building trades and the related architectural and decorative arts – carving in stone and alabaster, wood-carving, painting, etc. The extraction of minerals was also widely practised; handicraft production in the various provinces of the Kushan Empire was very diversified and individual provinces were noted for producing specific types of articles. Local schools of craftsmen developed distinctive local styles, though some ware was common to several provinces.

## Trade and commerce

The high rate of marketable output of urban production, the need for exchange of goods between cities and their agricultural environment and territorial differences were the factors that led to the extensive growth of trade within cities and between the provinces of the Kashan state. According to Indian sources, there were two types of merchants: the *vaṇik* (those who had regular shops) and the *sārthavāha* (caravan traders). The caravan traders also had their elders. Because of poor roads and the dangers that might be encountered along them, including attacks by bandits, the caravan trade found that large, well-equipped and well-protected caravans were safest; the *Milindapañha* mentions a merchant who travelled to Pāṭaliputra with a train of 500 wagons. During the Kushan period, according to *The Periplus of the Erythrean Sea* and Indian sources, merchant vessels also sailed the high seas and, taking advantage of the monsoon winds, crossed the Indian Ocean.[60]

Trade between the different provinces of the Kushan state is well documented byarchaeological finds in Central Asia. Articles imported from the Indian provinces included ivoryware, precious stones, jewellery and other ornamental objects. But trade was not confined to the provinces as its maritime and overland routes linked the Kushan Empire to the Mediterranean, the Far East, the wooded steppes and South-East Asia. The movement of goods and cultural treasures was a two-way process, creating opportunities for cultural cross-fertilization in the areas of thought, art, architecture and material production.

[60] Puri, 1965, pp. 107–8; Frisk, 1974; Warmington, 1974; Thorley, 1969; Schmitthenner 1979.