CHAPTER THREE

THE TOWNSCAPE OF ROHTAK

The term 'townscape' or 'urban landscape' is used to denote the physical forms and arrangement of the space and buildings in an urban area (43). The term has also been used as a synonym of morphology (44), a term borrowed from the biological sciences and defined as, "the science of form and structure of plants and animals as distinct from consideration of functions" (45). The shape of the urban area and its segments have been considered as the prime aspects of morphological studies in Urban Geography.

In geography the term 'morphology' is defined as "the science of form and structure and developments which influence the form" (46). In Urban Geography the "morphological studies often deal with development of forms and pattern of the present city or other urban areas through time, in short with evolution" (47). Essentially, it is the study of the forms of utilisation of urban space. Temporally, the study of morphology of an urban place has two aspects:

a. Evolution of the present townscape, and
b. the present townscape itself.

The diachronic utilisation of space and modification of the previously built-up area is a process universally mediated by culture. A study of the evolution helps in the delineation
of areas of urban space, perceived, structured, and utilised according to the value systems unique to the dominant cultures in the past. There can be two kinds of studies of the spatial manifestations of cultures with reference to time, synchronic and diachronic. These studies help in the identification of different cultural landscapes in a city.

The cultural institutions operating as physical landscape expressions of value systems and modes of living determine the physical-spatial characteristics of a settlement. For example, the institution of caste is a fundamental element of social organisation of the Hindus. This gives shape, with its notions of purity, pollution, and hierarchy, to a system of 'social space' which partially accounts for the physical-spatial form of areas in the city. Similarly, cultural practices give rise to some diagnostic landscape features. Hindus believe that the dead be cremated, Muslims and Christians that they be buried. In one area of the city there may not be burial grounds, in others, these will be landmarks.

The existing townscape is an aggregate of townscales distributed in different parts of the town. It is also the cumulative result of the operation of different cultural processes during distinct historical periods. The distinctive landscapes of different areas have been created by cultural groups which inhabited them during different time periods.
The different landscape segments are integrated to form the present townscape. They reveal different morphological attributes in terms of streets and houses. The discussion on the evolution and attributes of the existing townscape has been attempted within this framework.

**SOURCES OF DATA**

Following types of data have been used in the discussion of the evolution of the townscape:

1. archaeological,
2. numismatic, and
3. contemporary historical and literary works.

The available archaeological and numismatic evidence relates to an excavation site, Kokra Kot, to the north of the city, but suffers from two limitations:

a. the excavations are vertical and confined to a small section only, and

b. the dates of the various historical periods are yet to be precisely determined.

The contemporary historical and literary data was found to be of greater use than the other two because of its easy availability and viability of cross checking by field enquiries. However, this information, although extensive, is reliable only since the advent of the British in 1803 A.D., and is mainly found in the District Gazetteers of 1883-84 and 1910. This information
was corroborated and supplemented by the identification of features through field work. The period prior to this is lacking in definite information except for stray mentions of the city.

METHODOLOGY

The discussion is arranged into two parts:

a. evolution of the present townscape, and
b. the present townscape of the city.

The significance of the study of the evolution is derived from the fact that once a site is occupied, the established arrangement acts as an extremely conservative influence upon its subsequent development (48). Further, the contemporary scene is often dotted with relict features such as forts, tanks, and religious or institutional structures, which form the most enduring part of the actual fabric of old established towns (49). These relict features have been found to be of considerable help in the reconstruction of the townscapes by Watson in his study of Halifax, Nova Scotia (50).

Following the common practice (51) adopted by the Indian Urban Geographers, the evolution of the townscape of Rohtak has been studied through the following periods:

1. Ancient Period (till the close of the 12th century A.D.) (52).

2. Medieval Period (13th century to the 18th century A.D.) (53).
3. Modern Period (since the 18th century A.D.) (54).

However, due to the lack of detailed information about the Ancient and much of the Medieval Period, maps could be prepared only from the 18th century onwards. These maps were prepared on the basis of the relict features and the form the city had during that period.

Following Johnson's definition of urban morphology (55) the study of morphology of Rohtak has been attempted in terms of the characteristics of the following elements:

i) streets and their arrangement in a street system (56);
ii) plots and their aggregation in street blocks (57);
iii) buildings.

EVOLUTION OF THE TOWNSCAPE

The Ancient Period (from the earliest times till the close of the 12th century A.D.)

The earliest mention of Rohtak is found in the Mahabharata (58). The Rohitika of Mahabharata has been identified with the modern city of Rohtak (59). Later mentions of the city occur in Al Biruni's writings (60) of the 11th century (61) and Kalhana's Rajatarangini (62) of the 12th century A.D. (63).

At the time of the advent of the cultural era of Painted Grey Ware and Iron, the region of Rohtak was inhabited by people identified as the early Aryans (64), who later (65) spread to other parts of Haryana. It is conjectured that the general region around the city was settled during one of these expansions and the present nucleus of the city was probably
established during the Iron Age (66) (circa 1000 - 200 B.C.) (67).

That the city soon acquired importance is indicated by the discovery of coins from Kokra Kot located to the immediate north of the present city (Fig. 20). The excavations suggest the site to be a coin mint (68). The coins have been dated to 200 B.C. to 200 A.D. (69). Evidently, the site was settled much earlier than 200 B.C.

Bohtak was located in the Kurv kingdom (Fig. 2), one of the Mahajanapadas (70) in the Pre-Buddhist as well as Buddhist periods (71) and, due to its location at the southern edge of the Kurv janapada (Fig. 2), functioned as a frontier post. It was also the economic capital of the surrounding region referred to as Babudanaka (72) (an agriculturally prosperous region) (73). Its location on an important trade route called Uttarapatha (74) (Fig. 2) helped in its development as a trading centre and a halting place. This route, known to Panini (75), was important and carried a large number of articles of trade (76).

The next definitive information about the city is found in the 12th century when it became a part of the empire of the Hindu King Prithviraja III (77) who constructed a fort here.

Although in origin a Hindu city Bohtak attracted other religious groups throughout its history.

Jainism became a dominating religion in the city between the 7th century A.D. to about the middle of the 12th century.
Rohtak at the end of the 18th Century

KOKRA KOT

VISHNU TEMPLE

1 DELHI GATE
2 SALARAN GATE
3 DERI GATE
4 BADRI GATE
5 DHOBI GATE
6 BANSA GATE
7 SITLA GATE
8 REWARI GATE
9 HARIA GATE
X PROBABLE LOCATION OF THE INN
==== FINE GRAIN MARKET

SOURCE: DISTRICT GAZETTEER 1883-84, AND FIELD WORK
This is supported by the discovery of a stone figure of Parsvanatha from the city (78), and also the visit of Jain missionaries around 1140 A.D. (79).

There is no information about the layout of the city of this period, apart from the mention of the fort. However, probably the city did not radically differ in its layout from other cities of Chauhan Empire (80), and conformed to the principles of town building laid down by the canons of Hindu Architecture. This is supported by the identification of the following general features in the layout of the city (Fig.20):

1) the form of the city was squarish;
2) it was surrounded by a wall;
3) there were two main streets running east to west and north to south;
4) at the points of intersection of these streets with the wall were four gates (81);
5) many smaller streets and lanes branched off from the main streets;
6) the fort was located in the southeastern part of the city;
7) a Vishnu temple (82) was located to the northwest of the city; and
8) a temple of Siva (83) was located to the northeast of the city.

The site-form, the general plan of streets, and the location of the temples in the city suggest a strong resemblance to the Pandaka plan (84) of city layout prescribed by the canons.
of Ancient Hindu Architecture.

The Medieval Period (1206 - 1803 A.D.)

In the evolution of the townscape of Rohtak the Medieval Period begins with the establishment of the Muslim rule in the country in 1206 A.D. when the region around Rohtak was incorporated in the Muslim Empire.

The Medieval Period is divided into two parts:

A. The Delhi Sultanate Period (1206-1526 A.D.); and
B. The Mughal Period (1526-1803 A.D.).

The following factors operated in the Medieval Period and influenced the townscape by initiating the emergence of new areas and by modifying the previous Hindu townscape:

1. the dominance of Muslims as the ruling class of the city; and
2. the location of the city on the Delhi-Multan Road (85) which helped it to establish regional contacts with the two cities.

With the establishment of the Mughal Empire at Delhi in 1526 A.D., the political centre shifted from Multan to Lahore which formed the apex of the Delhi-Multan-Lahore triangle. Lahore was directly connected with Delhi. This resulted in the loss of the advantage of being on an important route, which the city had enjoyed earlier. However, the influence of the Muslims as the ruling class continued.
The importance of the city throughout the Medieval Period is indicated by its status as an 〈ota headquarter during the Delhi Sultanate Period (86), and as a naranah headquarter during the Mughal Period (87).

Throughout the Medieval Period the city continued to occupy its earlier site on a mound. There was no expansion of the site. The city was surrounded by a wall. Two roads running east-west and north-south divided the city into four almost equal parts. Gates were located where these roads met the wall. Other gates were located along the wall as well as inside the city. A fort was located in the southeastern part of the city. In the centre of the city, and at the junction of the two main roads, was located the Friday mosque or Jami. To the south of the fort and outside the wall was a sarai (inn). To the west of the fort was another mosque located at the southern margin of the city. The commercial activity in the city was organised along the flanks of the road running east-west. Outside the city wall the earlier Hindu religious structures continued to exist during this period (Fig. 20).

The two main roads which were initially constructed in the Ancient Period continued to exist during this period also. However, due to the increase in the population and the resultant expansion of the built-up area, a number of lanes and by-lanes emerged on the townscape. These branched off from the main road and connected the mohallas to the latter and to each other.
These were narrow and winding and were constructed more in response to the needs of defence and pedestrian movements.

The four parts into which the city was divided by the main roads contained the houses for the general public and a number of social, religious, and cultural institutional buildings. It was in these four parts that the newly arriving communities settled. These communities were generally from the lower strata of society and were previously prohibited from living inside the Walled City. Their entry to the Walled City initiated considerable in-filling as well as expansion of the built-up area.

The various communities inside the Walled City lived in socially and morphologically homogenous areas called mohallas. There was a sharp social and spatial segregation between the Hindu and the Muslim populations of the city and the two occupied different areas. Within the Muslim inhabited areas the segregation was manifested through the economic-social space (88). In contrast, the Hindu mohallas were arranged on the basis of the ritual-social space (89).

Some of the mohallas were also named after a locational characteristic (90) or after a prominent person (91).

The large Muslim population in the city helped the construction of many social, religious, and cultural institutional buildings. The most important among these, the Jami Masjid has survived to this day (92) (Photos 1 and 2).
As the name suggests (93) it was the main mosque. A sarai (inn) was constructed to the south of the fort and outside the city wall. It was meant for the travellers passing through the city. Another mosque, Lal Masjid (Photo 3), constructed near the sarai at the southern edge of the city wall (94) was also meant for the travellers. A number of small mosques are located in the city but the dates of their construction are indefinite.

The remains of the wall of the brick-fort (95) can be observed presently (Photos 4 and 5) at some places at its original site in the southeastern corner of the city. The fort was built by Prithvi Raja III and destroyed by Mohammed Ghori. Subsequently, it was rebuilt by the Sheikhs who settled in the city during the latter king's reign.

There were eleven gates (96) located along the city wall as well as inside it (Fig.20). The location and names of nine of these have been identified (Fig.20). Only remains of some of these gates can be seen today (Photos 6 and 7). The gates were named:

1. after the name of the city towards which the gate opened, for example, Delhi Gate. This principle was a carry over from the previous period (97), and indicated political, military, and economic linkages; and

2. after some characteristic of the gate or the area of its location, for example, Bansa gate was made of bamboo; Histla gate was named after the Hindu deity whose temple still faces the site of this gate; and Dhobi gate which enclosed an area inhabited by washermen (dhobi, is the occupational caste of washermen).
The gates along the city wall and inside the wall were points of entry and exit, as well as meant for providing protection.

The commercial activity in the city was organised along the flanks of the road running east to west. A fine-grain market called Vaiga Mandi was located in the eastern section of this road to the north of the fort. The main retail area called Bara Bazar was located along this road near the main mosque. The dealers in meat were concentrated at Qasai Chowk to the west of the main mosque.

The following striking similarities between the townscape of Rohtak and the townscape of a typical Muslim town (89) have been identified:

1. The location of the main mosque and the main commercial area in the centre of the city.

2. The segregation of communities on the basis of economic-social space. This is in contrast to the arrangement of mohallas on the basis of ritual-social space in Hindu cities.

3. The houses do not open directly on the main roads. Also, the houses located on the flanks of a street do not face each other. This feature has been identified in the mohallas formerly occupied by the Muslims.

The British Period (1803-1947 A.D.)

The British Period begins in 1824 when the district of Rohtak was created (99) and the city was made its headquarters. The Municipal Committee was established in 1867.
The advent of the British marked the beginning of a period of expansion of the built-up area formerly contained within the city wall. The expansion was initiated by the establishment of the Civil Lines and the construction of the Railway Station. The expansion in the built-up area of the city occurred in two directions, to the east and to the south of the Walled City. In the former it was due to the establishment of the Civil Lines, in the latter due to the construction of the Railway Station. The creation of improved transport links and the construction of mandis (wholesale markets) facilitated an increase and concentration of commercial activity in the city. The increased commercial activity and the economic and political stability also initiated a period of steady growth of the city population. During this period the city was provided with basic amenities which improved the living conditions.

The Civil Lines was established at a distance from the indigenous or the native parts. It occupied a flattish area to the east of the Walled City and contained the following buildings: (Fig. 21):

1. The District Court.
2. The Deputy Commissioner's Office.
3. The Tahsil Office.
4. The Police Station.
5. The Dak Bungalow.

330 956
6. The Post Office.
7. The Church.
8. The Station Garden or the Company Bagh (100).

In addition to these buildings the area also contained the residences of the British officials and their dependents.

The basic spatial unit in the Civil Lines was the compound containing either a residential or an office building. The bungalows located within a walled or otherwise demarcated compound formed the dwelling units peculiar to the colonial society in India. The detached bungalows, surrounded by large open space forming the compound, were sharply contrasted to the amorphous aggregates of houses in the Walled City.

The expansion to the south of the Walled City began after the construction of the Delhi-Bhatinda railway line and the Railway Station in 1896. Commercial activity in the city increased. A wholesale grain market was built in 1910. Its location to the north of the Railway Station was influenced by the availability of a large open space and the proximity to the Railway Station. The old wholesale grain market, Ganga Mandi, located inside the Walled City, also shifted to this wholesale market. Another wholesale market was established in 1910 on Jhajjar Road near the Railway Station. This market specialised in the wholesale trade in timber.

During this period the city also acquired basic urban amenities, such as, educational and medical institutions, electricity, piped drinking water, and sewerage.
The educational institutions in the city were established by governmental as well as non-governmental agencies. In 1360 the Municipal Committee established an Anglo-Vernacular School inside the Walled City (Fig. 21). In 1905, the Jain community in the city also established a Primary School inside the Wall (Fig. 22). These were the only educational institutions located inside the Walled City. The Industrial Training School established in 1907, an Inter College for Boys established in 1927 and raised to a Degree College in 1941, and a Girls' High School established in 1933 were located to the south of the Walled City adjacent to the city wall (Figs. 21 and 22).

Outside the Walled City ample space was available for the construction of educational institutions. However, these were located very near the city wall so as to be easily accessible to the major concentration of population located in the inner parts of the city.

Other amenities provided to the city during the British Period were:

1) A dispensary established by the Municipal Committee in 1867. It was located to the east of the Walled City. The dispensary was raised to the status of a hospital in 1910. The hospital was named after King George V.

ii) In 1910 a town hall was constructed near the hospital.

iii) In 1932 the city was provided with piped drinking water. Till its establishment the only sources of drinking water were ponds and wells.

iv) In the same year the city was also provided with sewerage facility through the construction of a disposal tank (Fig. 23), outfall drains and a main storm channel.

v) The city was provided with electricity in 1936. The
Fig. 22
Rohitak during 1900-1915 A.D.

SOURCE: FIELD WORK
Rohtak during 1915-1945

1. Power House
2. Rohtak-Panipat Railway Line
3. Water Works
4. Girls High School
5. Inter College for Boys
6. Walled City

--- City in 1945

Fig. 23
powerhouse was located to the southeast of the Walled City.

During the British Period the city expanded to the east and to the south. The expansion to the east was due to the establishment of the Civil Lines. In the intervening space were located the structures related to the urban amenities. These structures later initiated the extra-mural growth of the Walled City in this direction.

To the south of the Walled City, the expansion was due to the establishment of the Railway Station. In the space between the Railway Station and the Walled City was located the wholesale grain market, which initiated the extra-mural growth in this area. (Fig. 24).

Due to the expansion to the east and south of the Walled City, the Municipal Boundary of the city was revised first in 1897 to include the Railway Station, and then in 1922 to include the Civil Lines.

Post-Independence Period

During the years immediately following the Partition of the country in 1947 the townscape became both elaborate and complex. At the time of Partition an estimated 25,000 Muslims, who had formed about 50 per cent of the city's population, left the city and were replaced by a larger number of displaced persons originating in West Pakistan. These displaced persons were rehabilitated by two methods:

1) by allotting to them the houses owned previously
Rohtak during 1945-1950

Fig. 24

Rohtak

C GANDI CAMP
A ARYA NAGAR
VC VAISH COLLEGE
WALLED CITY
— CITY IN 1960

Mile
by the Muslims in the city; and

ii) by constructing new residential areas.

The former scheme implemented mainly in the Walled City while the latter changed the entire appearance of the city through the emergence of new residential areas (Fig. 25).

The social configuration of the city also changed in this period. The vacuum created by the departure of the Muslims was filled by the incoming displaced persons resulting in the elimination of physical religious segregation, although the basic caste structure of the Hindus did not change much.

The new residential areas were constructed by governmental and non-governmental agencies. The efforts of the former were directed towards meeting the requirements of different income-groups, while the initiative of the latter was motivated mainly by the laissez-faire economic forces.

The principal spatial equivalent of the high income-group mohalla established by the government in Rohtak, and in all towns of the region where displaced persons were rehabilitated, is the Model Town. The construction of this mohalla was started in 1953.

Another residential area Lal Chand Colony (Fig. 25) emerged in the same year. It was developed by a private coloniser.

The houses for the low and middle income-groups were constructed on the southern margins of the city on Jhajjar road.
(Fig. 25). The area is called Shivaji Colony.

A Women's College was established in 1969. It was located at the former site of the Boys' College (Fig. 23) which was subsequently moved to its new location (Fig. 25).

To facilitate further expansion of the Civil Hospital, the T.B. Clinic was moved to its present premises (Fig. 25) in 1960.

In the same year construction of a Medical College and Hospital was started in the eastern part of the city (Fig. 25). It started functioning in 1963 and helped the city in establishing one of its strongest contacts with its region.

A co-educational college to provide professional training in education was started in 1967 in the vicinity of the Model Town (Fig. 25). The college is named after Sir Chhotu Ram, a Jat freedom fighter and a minister in the undivided Punjab. This college attracts students from a wide area around the city.

In 1962 a new wholesale grain market was constructed near the Railway Station. The site was relatively open and better connected with the large-scale transportation linkages than the earlier one.

In 1966 the city became the highest level educational centre in the state with the establishment of Punjab University Regional Centre for Post-Graduate Studies. This has now been converted into a University.
Recently, a large number of residential areas have emerged in various parts of the city. Those which have already assumed a permanent form are Jagdish Rai Colony, Sant Nagar, Laxmi Nagar, Patel Nagar, Dev Colony, and Chhotu Ram Nagar. Moreover, construction of an urban estate in the vicinity of the Model Town has also started. These areas have been created through the process of infilling and expansion of the city site.

In 1976, a Radio Station started functioning in the city further extending and consolidating its regional relationships.

Thus, in the Post-Independence Period there has been a sudden spurt in the emergence of residential areas in the city, resulting both in in-filling and physical expansion of the city site. This has been partly due to the provision of certain services which added to the significance of the city as a regional centre.

However, since the present townscape of the city is comprised of different segments which emerged during different historical periods and under different cultural influences, their morphological characteristics are also different even though the city functions as one unit. This will be evident from the following discussion of the morphological attributes of the various historical segments of the present townscape of the city.
THE EXISTING TOWNSCAPE OF THE CITY

On the basis of the evolution of the townscape the following major morphological segments have been identified in the city (Fig. 26):

1. The Walled City;
2. The British Period Accretion Area; and
3. The Post-Partition Expansion Area.

These morphological segments are internally uniform in terms of selected morphological attributes but differ from each other. The internal homogeneity is expressed in the attributes of the buildings and streets and the relationship between the two.

Generalities of Morphological Elements

Four types of streets (101) have been identified in Rohtak. The identification is based on the width, surface material, type of berm, street lights, landuse on the flanks, and the areas connected by the streets. The types of streets are (Fig. 27):

1) Arterial streets;
2) Sub-arterial streets;
3) Mohalla streets; and
4) Mohalla lanes.

The different types of streets have varying lengths in different segments of the city (Table 9). Mohalla lanes have
Rohtak
Morphological Segments

--- WALLED CITY
--- BRITISH PERIOD ACCRETION AREA
--- POST INDEPENDENCE EXPANSION
## Rohtak: Morphological Attributes

<table>
<thead>
<tr>
<th>Type</th>
<th>Walled City</th>
<th>E.P.A.A.</th>
<th>E.P.A.A. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streets Length in Yard (per acre)</td>
<td>3,050</td>
<td>4,400</td>
<td>2,9</td>
</tr>
<tr>
<td>Density (per acre)</td>
<td>14.1</td>
<td>11,990</td>
<td>4.6</td>
</tr>
<tr>
<td>Arterial</td>
<td>880</td>
<td>5,060</td>
<td>11,000</td>
</tr>
<tr>
<td>Sub-arterial</td>
<td>61</td>
<td>6.1</td>
<td>9,790</td>
</tr>
<tr>
<td>Mohalla streets</td>
<td>2,200</td>
<td>2,750</td>
<td>0.4</td>
</tr>
<tr>
<td>Mohalla lane</td>
<td>5,900</td>
<td>660</td>
<td>8.5</td>
</tr>
<tr>
<td>Total</td>
<td>12,980</td>
<td>41,390</td>
<td>16.1</td>
</tr>
<tr>
<td>Intersections Number</td>
<td>103</td>
<td>0.12 per acre</td>
<td></td>
</tr>
<tr>
<td>Source: Computed from Fig. 27</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
maximum length in the Walled City and arterial streets in the Post-Partition Expansion Area (Fig. 27), (Table 9). The varying density of road network in different segments is reflective of the planned and unplanned nature of the areas and the transportation efficiency of the street network. The highest density of street network occurs in the Walled City (Table 9) which has an amorphous street pattern (Fig. 28). The lowest density occurs in the planned Post-Partition Expansion Area (Table 9).

The areas of higher road density correspond to the areas of population concentration in Rohtak. The Walled City has the highest density of mohalla streets and lanes (Table 9). The somewhat comparable aggregate length in the Post-Partition Expansion Area is due to the large length of these streets in the Camp Area (Fig. 27) which is densely populated.

The attributes of other elements of morphology, namely, blocks, plots, and houses reflect the dominant cultural influence and the intensity of landuse in the areas of their location. The Walled City with the largest number of houses has the smallest area available for a house (Table 10) with a very small open space (102), if at all. Contrary to this the houses in the British Period Accretion and the Post-Partition Expansion Area not only cover larger areas but also have a large open space (Table 10). This open space is the largest in the British Period Accretion and is related to the colonial
TABLE 10

Rohtak: Morphological Attributes
Blocks, Plots, and Houses

<table>
<thead>
<tr>
<th>AREA</th>
<th>WALLTED CITY</th>
<th>B.P.A.1</th>
<th>P.P.E.A.2</th>
<th>ROHTAK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Element</td>
<td>Number</td>
<td>Average size</td>
<td>Number</td>
<td>Average size</td>
</tr>
<tr>
<td>BLOCKS</td>
<td>90</td>
<td>2.4 Acres</td>
<td>86</td>
<td>9.6 Acres</td>
</tr>
<tr>
<td>PLOTS</td>
<td>4,739</td>
<td>193.6 Sq.Yds.</td>
<td>3,490</td>
<td>1148 Sq.Yds.</td>
</tr>
<tr>
<td>HOUSES</td>
<td>6,775</td>
<td>145.2 Sq.Yds.</td>
<td>5,328</td>
<td>726 Sq.Yds.</td>
</tr>
</tbody>
</table>

1 British Period Accretion Area
2 Post-Partition Expansion Area

Source: Computed from Fig. 27 and data supplied by the Municipal Office, Rohtak
notions of the bungalow-compound complex. Somewhat similar values occur in the Post-Partition Expansion Area (Table 10), suggesting a hangover of the colonial influence.

THE WALLED CITY

The morphology of the Walled City is entirely different from that of the other segments in Rohtak. The Walled City is comprised of random accretions in the built-up area. The haphazard construction is related to the spatial decisions of the caste or kin or lineage groups and not of any city organisation. This is evidenced in the large number of gullies (narrow streets) named after a caste, a kin, lineage, or a person. The absence of centralised planning has resulted in the present general disorder and the amorphous street pattern in the Walled City.

Streets

The Walled City is overwhelmingly dominated by the mohalla lanes (Fig. 27). The lanes are sloping and tortuous because of its location on the mound. They are rarely more than 5 feet wide, and reflect the need for space for houses and the intensive landuse even at the cost of environmental sanitation. They are unsuitable for the modern vehicular traffic.

The mohalla lanes in the Walled City are brick, cement or stone covered. The street lighting is by naked electric bulbs.
fixed on poles or often fitted on the walls of the houses. The characteristic landuse on the flanks is open sewerage lines and water pipes. The mohalla lanes do not have well defined berms. Generally, the berm is defined by the outer walls of the houses. The houses open directly on the lanes (Photo 8).

The mohalla lanes form an irregular and amorphous pattern in the Walled City (Fig. 28). However, some patterns can be identified in different parts. The southwestern quadrant exhibits a parallel street pattern while in other areas the pattern is single or convergent (Fig. 28).

The irregular and amorphous street pattern in the Walled City is accompanied by the highest density of intersections in Rohtak (Table 9). These intersections have a great variety of angles (Fig. 28).

The mohalla streets in the Walled City have the smallest length in Rohtak (Table 9). The Walled City is divided into two almost equal parts by a mohalla street which runs through it from east to west (Fig. 27). Along a major part of the flanks of this street are located the shops which comprise two retail areas, Bara Bazar and Chaweli Market. A north-south running mohalla street is located in the southeastern part of the Walled City. This is called Qila Road and it contains shops on both flanks.

The mohalla streets in the Walled City are about fifteen
feet wide. These are cemented or metalled in parts. The street lighting is by naked electric bulbs. These streets are generally flattish. They do not have berms and have a direct relation with the buildings, commercial and non-commercial, on the flanks. They are higher in the hierarchy because a large number of mohalla lanes branch off from these streets to provide the link between the various mohallas and these streets.

The Walled City does not contain any arterial and sub-arterial roads. The arterial roads leading to Gohana, Jind, Delhi, and Hisar define the eastern, western, and southern edges of the Walled City respectively. The northern limit of the Walled City is defined by a sub-arterial road called Circular Road. It connects the arterial roads leading to Gohana and Jind. This road separates the sparsely populated area to its north from the Walled City and does not carry much intra-city traffic. Instead the inter-city vehicular movement to Gohana, Sonepat, and Delhi is directed to this road and forms the bulk of traffic carried by it.

The Walled City ideally illustrates the traffic separation according to the hierarchical order of streets. The arterial streets carry dense and varied traffic, and also receive in their flow pedestrians, cyclists, carts and several kinds of motorised vehicles from the adjacent mohallas and tributary lanes. The sub-arterial streets connect the adjacent arterial roads. The mohalla streets do not carry many motorised
vehicles while the *mohalla* lanes carry a dominantly pedestrian traffic.

Street Blocks

The street blocks in the Walled City have the smallest average size in Rohtak (Table 10). Within the Walled City central parts are characterised by smaller blocks. This is related to an early occupancy of the site and subsequent segregation of the Hindu community from the Muslims in the Medieval Period. The small size of blocks, a high concentration of population, and high land values, reflect the intensive use of land. In the Walled City in general, and in its central parts in particular, a single street block often comprises a full *mohalla*, the basic morphological-functional unit in an Indian city.

Plots

The intensive use of land in the Walled City is also reflected in the smallest average size of plots (Table 10). The location of small plots corresponds closely with the areas of small street blocks, high population concentration, and high density within the Walled City. The areas of small plots are surrounded by the areas of larger plots because the latter emerged on the townscape at a later stage. Consequently, the lack of space was rarely felt by these late settlers. Moreover, it was the local Hindu community which separated itself from the Muslims and caused a very intensive use of land in the central Hindu occupied areas.
The plots are generally rectilinear and provide street frontage to houses along the streets. This shape is created by the sub-division of the same house into separate units. However, precise data for this are not available.

Buildings

The Walled City has the maximum number of houses among all the morphological segments in the city. However, the average size of a house in the Walled City is smallest in Rohtak (Table 10) indicating a very high density of houses (31 houses per acre) and an intensive use of land.

The actual size of the house in the Walled City varies in different parts. It is influenced by the location, available area, and the land values.

The dominant construction material used in the houses of the Walled City is small fire-baked bricks and mortar. The roof is supported by horizontal wooden beams. The outer walls are often of exposed bricks (Photo 9).

In the houses constructed at a later date the size of the brick increases and cement replaces mortar. The outer walls are plastered. The roof is supported by iron lintels.

Due to extensive repairs and modifications in the houses, the original architectural attributes are almost untraceable today except through such indicators as the house facade, its constituent features, and the ground plan. These are among the more stable elements of a house.
The additions, if any, to the houses in the Walled City are vertical. This is due to the extremely restricted scope for horizontal expansion. Generally, the older houses have the original layout but are in a poor condition of preservation due to lack of repairs. Such houses are generally located in the central parts of the Walled City (Photo 10). The ground plan of a traditional house in the Walled City has the following features (Fig. 29):

The house opens directly on the mohalla street or lane. The outer windows of the house open on the street which forms the only open space and thus the source of light and air (Photo 11). The entrance to the house is through a corridor located between two rooms. The rooms are meant for receiving visitors. These rooms also have a direct entrance from the lane as well as the corridor. These rooms form an essential feature of the traditional house for maintaining the privacy of the household. The traditional house is an integrated whole with an inward orientation inside of the corridor. This feature in the ground plan is an influence contracted during the Medieval Period and reflects the working of the principle of separation and privacy (103).

The corridor opens on to a courtyard around which all the units of the occupancy, living rooms, kitchen and bath are located. A large number of living rooms are necessary in view of the large joint families. All the doors and windows of various rooms open in the courtyard.
ROHTAK
Generalised Ground Plan of a Traditional House
in the
Walled City

SOURCE: FIELD WORK
The upper stories of these houses are an exact replica of the ground floor arrangement. However, a minor selection is sometimes made in the location of stairs (104) (Fig. 29 marked 1).

The use of metal is highly restricted in the traditional houses. Two common uses identified are:

i) the use of iron as bars and grills in the windows and ventilators;

ii) the use of a fabricated structure of iron bars to cover the courtyard in the place of roof, but only on first or second floor. This is essential to let in light and air to the ground floor.

In Muslim houses metal is used for enclosing the small extended terraces on the first and second floors. Iron grills are generally used for this purpose (Photos 12, 13, 14 and 15).

Due to the intensive use of land and cultural values the pent house and the service lane is absolutely lacking in the Walled City. These houses are built in a continuous series with common boundary walls. The houses have flat roofs. The windows and ventilators generally have a tilted cover of iron or tin to provide shade from direct sun rays or rainfall (Photo 15).

The Walled City has the highest but a terraced skyline (Photos 16 and 17) because only vertical expansion is possible.

The ground plan and layout of buildings in the Walled City is uniformly congested. The uniformity is entirely due to the small amount of land available.
BRITISH PERIOD ACCRETION

The British Period Accretion Area is comprised of the following two segments differentiated on the basis of morphological characteristics:

i) The eastern accretion; and

ii) The southern accretion.

The first accretion in the city site was to the east of the Walled City. It was initiated by the location of the Civil Lines. The second accretion was located to the south of the Walled City. It was initiated by the Railway Station which acted as the nucleus. Morphologically, the eastern accretion area, which emerged due to the establishment of the Civil Lines exhibits a greater impact of the colonial cultural notions than the southern accretion which is more akin to the indigenous parts of the city.

The British Period Accretion Area has the minimum street length in the city but a moderate density of intersections (Table 9). Within this area a greater length of streets and density is to be found in the southern accretion (Table 11) indicating a more intensive use of land. This is suggested by the smaller street blocks, plots, and houses (Table 11). The southern accretion today houses part of the main commercial area and has a high density of population.

Streets

The British Accretion has arterial streets leading to
<table>
<thead>
<tr>
<th>Element</th>
<th>Southern Accretion</th>
<th>Eastern Accretion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Length in yards</td>
<td>Number</td>
</tr>
<tr>
<td>1. Streets</td>
<td>9,020</td>
<td>-</td>
</tr>
<tr>
<td>1) Arterial</td>
<td>1,320</td>
<td>-</td>
</tr>
<tr>
<td>11) Sub-Arterial</td>
<td>3,960</td>
<td>-</td>
</tr>
<tr>
<td>111) Mohalla street</td>
<td>2,640</td>
<td>-</td>
</tr>
<tr>
<td>11v) Mohalla lane</td>
<td>1,100</td>
<td>-</td>
</tr>
<tr>
<td>2. Blocks</td>
<td>-</td>
<td>57</td>
</tr>
<tr>
<td>3. Plots</td>
<td>-</td>
<td>1,926</td>
</tr>
<tr>
<td>4. Houses</td>
<td>-</td>
<td>3,419</td>
</tr>
</tbody>
</table>

Source: Computed from Fig. 27 and data supplied by the Municipal Office, Rohtak.
Sonepat, Delhi, and Jhajjar. Those leading to Sonepat, and Delhi have a greater length passing through the eastern accretion (Fig. 30). The third binds the southern accretion in the east (Fig. 31).

The streets are black-topped, generally in good surface condition, with neon street lights, and are about 50 feet wide. The berm on both sides is *kaccha* and varies in width from less than 6 feet on both sides in densely populated areas to more than 10 feet towards the peripheries. The landuse on the berms is mainly comprised of irregular rows or clusters of shops. The road leading to Jhajjar is a commercial street with a continuous row of shops. The shops along Delhi Road are irregular.

The sub-arterial streets in the British Accretion Area have a greater total length and density in the southern accretion (Table 11). These act as connecting links between Jhajjar Road, the Railway Station, the godowns, the grain markets, and the Walled City (Fig. 31). In the southern accretion they run parallel to each other (Fig. 31). In the eastern accretion they make a scissor-shaped pattern and join the arterial streets (Fig. 30).

The sub-arterial streets are about 30 feet wide, black-topped, and in moderately good surface condition. In the two accretions these have different landuse on the flanks. In the eastern accretion the only landuse on the flanks, about 10 feet
wide on each side, is comprised of a small cluster of shops at the intersections. In contrast, the flanks in the southern accretion are highly congested especially on the Railway Road and Mal Godown (Goods Godown) Road. This is due to the location of commercial area on the Railway Road accompanied by a high density of population. As a result of this intensive use of land the berm along these streets is narrow and is encroached upon by temporary extensions of shops and the houses on the flanks.

The mohalla streets have a larger extent and higher density in the southern accretion as compared to its eastern counterpart (Table 11). These are between 10 to 15 feet wide, black-topped, and lack berms in the southern accretion where houses open directly onto them (Photos 18 and 19). Their main function is to connect the mohallas to each other and to the sub-arterial streets. In the eastern accretion also they serve as connecting lines. Generally, they are wide enough to carry light vehicular traffic.

The mohalla lanes also have a greater extent and density in the southern segment of the British Period Accretion Area (Table 11). As an essential feature of the unplanned indigenous areas their extent in the eastern accretion is restricted to the indigenous mohallas only. These are wider and better laid in comparison to their counterparts in the Walled City. However, the function performed is the same.
Their small extent in the eastern accretion is related to the different mode of transport and colonial notions of living which do not perceive a direct relation between the houses and the street.

Street Blocks

The British Period Accretion Area has almost the same number of street blocks as the Walled City but with an average size four times larger than that in the latter. (2.4 acres compared to 9.6 acres, Table 10). Within the British Period Accretion Area the southern segment has more blocks but a much smaller average size compared to the eastern accretion (Table 11).

In both these segments of the British Period Accretion the shape of street blocks is rigidly geometrical. The common shapes identified are square, rectangular, and triangular (Figs. 30 and 31).

The street blocks in the British Period Accretion Area form a linear pattern due to their location along the arterial and sub-arterial streets (Figs. 30 and 31).

Plots

The plots in the British Period Accretion Area are larger than those of the Walled City (Table 11). Among the two segments the larger plots are in the eastern accretion (Table 11). In this part the plots are generally single building units housing the various administrative offices and the residences of the high officials. They were constructed
during the British Period. The single building units emerged on the townscape as an essential element of the colonial cultural notions of living.

The shape of the plots is rigidly geometrical in the eastern accretion and less so in the southern segment. This is related to an intensive use of land and a lack of general planning in the latter area.

The plots make a linear pattern in the eastern accretion and form a series along the arterial and sub-arterial streets. In the southern accretion a series is not so much evident as is the compactness of the plots forming the street block.

Buildings

There are more buildings in the southern than in the eastern segment. The computations reveal the open space around a building to be the same in the two areas. However, there is an almost complete absence of open space around a building in the southern accretion because the area around one of the major depressions located in this segment is almost vacant but is included in the total area of the segment. Contrary to this, the open space around a building in the eastern accretion is related to the colonial notions of living in a bungalow with a compound.

The following features have been identified in the generalised ground plan of a house constructed during the
British Period as the residence of British administration officials (Fig. 32):

The house is surrounded by an enclosing wall and does not open directly on the street. There is a driveway connecting the house to the street.

The house front consists of a covered verandah. The windows and doors of the front rooms also open on the verandah.

Between the enclosing wall and the house is an open space extending on all sides (Photos 20 and 21). The front yard has the driveway and entrance to the house. The open space on the sides of the house serves as the entrance and exit to the rear.

The verandah leads to a room generally used for receiving visitors. This room is connected on the sides with two other rooms, one on each side. It also has an approach to the back yard.

The room adjoining the kitchen is generally used as a dining room. The two rooms on the opposite side serve as living rooms and have an attached bath and lavatory.

One set comprising of a room, bath and lavatory is separated from the main house and is generally meant for servants. It has a separate approach.

The material used for construction is fire-baked brick and red mortar or cement. The outer walls are generally plastered.
Generalised Ground Plan of British Period House
The roofs are flat and brick covered. The tiles are also used for covering the roof which is supported by iron lintels.

The outer walls of the roof have a brick or stone grill about 3 feet high (Photo 22).

These houses are generally singular function buildings housing an official residence or an administrative office. Two types of tenures can be identified, government owned in the case of official buildings and private owned in the case of other houses.

The additions to the original structure are generally made in the private owned houses and only in the form of an attic.

The architectural design, as evidenced from the house facade, style of the roof, windows and doors is distinctly colonial.

Generally, the buildings have regular layout. Some, because of additions made to adapt to changes in functions, have irregular ground plans.

POST-PARTITION EXPANSION AREA

The Post-Partition Expansion Area in Rohtak is more akin to the British Period eastern accretion in the attributes of the morphological elements than to the Walled City or the British Period southern accretion. The entire area that has developed during this period is comprised of mohallas having a
planned layout. Many of these mohallas were established by the government for the rehabilitation of the different economic groups of the displaced persons originating in West Pakistan. The layout of these mohallas was prepared by various government agencies. In the case of mohallas developed by private colonisers the layout was planned according to the recommendations of the planning authority and approved by it before the construction was effected.

The similarities in the attributes of the elements of morphology in the Post-Independence Expansion Area and the British Period eastern accretion are evident in the small extent of mohalla lanes, a comparable density of intersections (Table 9), and a comparable average size of street blocks, plots, and houses (Table 10). The notion of a single house unit, with some open space between the street and the house prevails uniformly in all the mohallas in this area. Even in the monotony of the regimentation of houses there is a similarity, although due to different reasons, between the British Period eastern accretion and this area.

Streets

The Post-Partition Expansion Area has 12,980 yards of streets of all types and a network density of 8.5 yards per acre, the lowest in the city (Table 9). It has a density of intersections of only 0.09 per acre, which is comparable to the British Period Accretion Area and far less than that of the Walled City (Table 9).
The arterial streets leading to Jhajjar, Sonepat, * and Delhi run through parts of this area (Fig. 27). The \textit{kaccha} berm on the flanks of these varies from 10 feet in densely populated areas to about 15 feet on each side in others. All these are black-topped, good in surface condition, and generally neon lighted, 60 feet wide streets. These streets are main connecting links and carry all types of traffic. Irregular rows or clusters of shops flank the roads.

The length of the sub-arterial streets in the Post-Partition Area is comparable to the British Period Accretion (Table 9), but the larger extent of the former area gives a lower density (Table 9). These streets are generally 30 feet wide with \textit{kaccha} berms varying from 5 feet on both sides in densely populated areas to about 10 feet in others. These streets generally do not have a gradient. Their main function is to connect the various \textit{mohallas} to the arterial streets.

Along the flanks of these streets is found a cluster of shops at the intersections. These are also used for dumping building material for houses (Photo 23).

These are black-topped streets with naked electric bulb street lights. These often make right-angled T-shaped intersections with the arterial streets (Photos 24 and 25). The traffic carried by these generally lacks the heavy vehicle component.
The mohalla streets in this part have the lowest density in the city although their length is more than that in the Walled City (Table 9). These are generally 15 feet wide and have kaccha berms with varying width even within the same area (compare Photo 23 and 24). Although black-topped, the surface condition of these is generally poor (Photo 26). The street lighting is by naked electric bulbs on poles.

These streets connect the houses and mohallas with each other and with other areas. They are generally flattish and make sharp intersections with each other and with the sub-arterial streets. They generally do not carry heavy vehicular traffic due to their exclusive location within the residential areas.

Since the relationship between the houses and mohalla streets is not direct, the flanks of these streets give a vacant look. The general use is the open sewerage lines or a cemented, tiled or brick covered approach to the houses. The parking of vehicles or piling of material for house construction is also common. Due to a planned layout these streets make geometric patterns. The following types of mohalla street patterns have been identified in the Post-Partition Expansion Area:

1. Rectangular and Oval Radial

In the western block of Model Town the street pattern rectangular while in the eastern block it is oval and radial.
2. **Parallel and Regular Rectilinear**

The parallel street pattern has been identified in Gandhi Camp (Fig. 34) located west of the Rohtak-Gohana Railway line. Gandhi Nagar to its east has regular rectilinear street pattern (Fig. 34).

3. **Convergent**

This street pattern occurs in Shivaji Colony (Fig. 35 A) and the D.L.F. Colony (Fig. 35 B).

The mohalla lanes in the Post-Partition Area have the smallest extent in the city (Table 9) and are highly restricted in their location (Fig. 27). These occur in Gandhi Nagar to the east of Rohtak-Gohana Railway line and in Jhang Colony to the west of the Model Town (Fig. 27). These are high density, low income-group areas. The lanes here are less than 10 feet wide, black-topped, and have very narrow kaccha berms. The flanks are lined by open sewerage and are also used by the elders for taking rest on charpoy (beds) and as playground for children.

**Street Blocks**

The Post-Partition Expansion Area has 168 street blocks with an average size of 9.0 acres (Table 9).

The street blocks have geometrical shapes, the most on being square, rectangular, rectilinear and occasionally -circular. These are located in a series.
Rohtak
Street Pattern in D.L.F. Colony and Shivaji Colony

Fig. 35
Plots

The Post-Partition Expansion Area has 5,615 plots with an average size of 1,306.8 square yards (Table 9). These plots are generally rectilinear and divide the street blocks into two equal parts.

Buildings

There are 6,647 houses in this area with an average area of 1,064.8 square yards per house (Table 9), which is the highest in the city (Table 9). Most of the houses have only one storey. The differences in design have generally been introduced in government constructed houses covering 250 to 300 square yards. A privately constructed house has an area of 400 to 500 square yards. A large number of house designs can be observed within a small area. The government constructed houses have brick exposed outer walls similar to the traditional house in the Walled City. These houses have more amenities compared to houses in other areas and have complete electrification, municipal water supply, sewerage, and open spaces.

The ground plan of a government constructed house has the following common features (Fig. 36):

The relationship between the street and the house is not direct. There is an intervening space (street berm) between the boundary wall of the house and the street, and between the actual building and the boundary wall (Photos 27, 28, 29 and 30).
ROHTAK

Ground Plan of a Govt. Built House in Post-Independence Area

SOURCE: FIELD WORK
This is, apparently, a hangover of the British Period layout of houses. The houses are generally built in sets of two, (Fig.36) thus, providing open space on three sides of each house. The entrance to the house is through a verandah which is connected to other rooms also. The rooms are interconnected and open onto the courtyard which serves as the back entrance to the house. The courtyard has kitchen at one and bath at the other end. In most of the houses the lavatory is shifted to the back yard beside the bath room. The open space in most of the houses is *kaccha* but occasionally it is completely or partially covered with bricks. The outer walls of the houses are plastered occasionally. In the houses where this has not been done or in the houses constructed at an early date, the structure looks decaying (Photo 31).

These houses are single storied. The flat roof is supported by wooden lintels and does not have raised side-walls. It is earth covered and often weeds or blades of grass growing on the roof are visible from the street. The doors and windows are double panelled and of wood. The windows have bars (Photos 27, 28, 29, and 30). The electric wiring inside the house is open.

The generalised ground plan of a privately constructed house reveals the following features (Fig.37):

These houses do not open directly on the road but through an open space inside as well as outside the boundary.
ROHTAK

Generalised Ground Plan of Privately Built House in Post-Independence Area

SOURCE: FIELD WORK
wall. The enclosing area is squarish while the house itself is rectangular. The open space in front is generally cemented or brick covered while the back yard is only partially floored. The roof is flat, brick covered with raised side-walls or grills (Photos 23 and 33). It is supported by iron or wooden lintels. The doors and windows are wooden and double panelled. The ventilators are located just above the doors or windows. All the outer windows and ventilators have projected roofs comprised of a cement slab or bricks plastered with cement (Photos 23 and 24). The electric wiring inside the house is open.

The most common modifications to the original ground plan are an additional bath and lavatory and the construction of a garage (Photo 32). In some houses an additional room is constructed either on the top floor or on any side of the house.

SUMMARY

The city originated sometime during the Iron Age. The excavations near the site of the city suggest it to be an important seat of power and a frontier post in the Ancient Period. The factors that contributed to its political, strategic, and economic importance in this period were its location on an important route called Uttarapatha, on the southern edge of the Kuru Jangala, a thickly forested part of the Kuru Kingdom, and its status as the economic capital of the surrounding agriculturally prosperous region called Bahudhanvaka.
The dominating cultural influence in the Ancient Period was Hinduism but the city attracted other religions as well, specially Jainism. At the end of the Ancient Period the town plan of Rohtak revealed the influence of the Hindu canons of architecture and town planning through the form of the city site, the layout of streets, location of city gates and the temples. These features of the town plan resemble the Dandaka plan proposed by the ancient Hindus. Also, these features are identifiable even today and have survived the Muslim influence in the Medieval Period.

The Muslim cultural influence in Rohtak, as over a large part of the country, lasted for about six centuries, first under the Delhi Sultanate (1206-1526 A.D.) and then under the Mughal Kings (1526-1803 A.D.). Being the culture of the ruling class, Islam brought into very sharp focus the social, economic and religious differentiations. The people of the lower economic strata for the first time settled inside the Walled City. There was segregation of communities on the basis of economic-social space in the Muslim areas and on social-ritual space in the Hindu mohallas. This is traceable even today in the form of mohalla names. A large number of mosques were constructed. The increase in the population within the Walled City lead to an infilling and an increase in the built-up area.
The growth in the population and the expansion of the city in the Medieval Period was induced by the location of the city on the politically and strategically important Delhi-Multan Road, and its status as an ista headquarter during the Delhi Sultanate. Later, the status of the city as the headquarter of an economically prosperous parekhanah sustained its growth during the Mughal Period.

The advent of the British in 1803 A.D. marks the beginning of a period in which the city started expanding outside the wall. The expansion was initiated by the status of the city as a district headquarter and the consequent establishment of the Civil Lines to the east of the Walled City. The introduction of the railway and the construction of a Railway Station to the south of the Walled City lead to extramural expansion. The construction of the railway helped a concentration of trade and commerce in the city and in the establishment of strong regional links between Rohtak and the surrounding region.

During this period the urban amenities and services attained a higher level. Its regional relations, specially in the fields of education and general medical care, were strengthened.

During the British Period the townscape of the city comprised of two distinctly different segments, (i) the
indigenous and (ii) the Civil Lines laid out according to the colonial cultural notions of living. The former area represented by the Walled City was comprised of the townscape evolved under the mixed influence of Hindu and Muslim cultures. It was further divided into parts inhabited dominantly by either Hindus or Muslims.

The segregation between the Hindus and Muslims on the one hand and between them and the British on the other was removed after the Partition of the country in 1947 with the arrival of displaced persons and the departure of the Muslims and the British. This changed the religious composition of the city. The basic caste structure of the Hindus did not change much.

The addition of a large number of displaced persons to the city population resulted in the emergence of a large number of residential areas developed by the government and private colonisers. The government constructed residential mohallas meant for different income-groups of displaced persons. In comparison the development of areas by the private colonisers was motivated by the forces of the laissez-faire economy.

In recent years there has been considerable expansion of the city, horizontally and vertically. This expansion has been accompanied by a further addition to the infrastructure of amenities and services acquired by the city during the
British Period. Presently the city functions as the highest level education and medical centre of the state and has considerable economic importance.

However, the functioning of the city as one unit does not imply an internal homogeneity in terms of the elements of its morphology. The different morphological segments that evolved at various time periods exhibit different attributes. Internally, each of these segments is a homogenous area but differs from others in terms of the attributes of elements of its morphology. The three morphological segments identified are, (i) the Walled City; (ii) the British Period Accretion Area; and (iii) Post-Independence Expansion Area. The three segments are characteristic of the colonial district headquarters towns in India.

Like the walled parts in other Indian cities, the Walled City in Rohtak is characterised by random accretions in the built-up area, an amorphous street pattern, high land values, an intensive use of land, and a large concentration of population.

The Walled City does not contain any arterial and sub-arterial streets. It has the highest length of narrow, tortuous mohalla lanes which carry only the pedestrian traffic. The lanes emerged long before the introduction of the modern means of vehicular traffic. The need for space generated by
the high concentration of population resulted in an intensive use of land. A direct relationship was established between the houses and the lanes. The lanes are the only open spaces inside the Walled City and all the outer windows of houses open into them for light and air. Inside the house the courtyard is the only source of light and air. The ground plan of the traditional joint-family house has a large number of living rooms. Also, there is a sharp separation of the social and domestic parts.

The Civil Lines in Rohtak, as in all colonial district headquarters towns in India, is located at a distance from the Walled City. The location of the Civil Lines away from the Walled City was not based on religious or economic considerations but was related more to the colonial notions of environmental sanitation and the desire on the part of the members of the colonial society to recreate their own culture.

The wide streets in the Civil Lines are related to the extensive use of vehicles by the members of the colonial society, and the need to have more open spaces. Wide tree-lined streets and the compound in the bungalow-compound complex became characteristic of the Civil Lines in all the colonial district headquarters in India.

The streets and houses in the Civil Lines are connected by a driveway. This preserves privacy. The colonial bungalow-compound complex is divided into separate functional units.
A typical bungalow in the Civil Lines consists of a low, one storey, spacious building internally divided into separate rooms meant for different purposes, living, dining, receiving visitors. A verandah surrounds the entire building or a part of it. The bungalow is invariably situated in a large walled or otherwise demarcated compound which has its main exit to the road on which it is situated.

The development of transport technology, specially railways, prompted a rapid suburban growth in Rohtak and in most of the Indian cities. This removed the physical demarcation of the indigenous parts by the city wall. In Rohtak the extramural growth due to the introduction of railways was to the south of the Walled City. Morphologically, this area is very similar to the Walled City except for wider and better surfaced roads.

The Post-Independence Expansion Area is characterised by (i) the overwhelming influence of the displaced persons; and (ii) a hangover of the colonial notions of living.

The former is revealed in the large number of residential areas that were constructed for different economic categories of displaced persons by the government and private colonisers in Rohtak. These mohallas have a regular layout of streets and houses. The continuation of the attributes of wide, tree-lined streets, an indirect relationship between the house and the street, an open space on all or at least three sides of the house, and the internal division of the houses into
separate functional units, when viewed against the closely packed houses and narrow and winding streets of the Walled City, represents one of the striking aspects of westernisation of Indian cities in the Post-Independence Period. Also, the patterns of landuse introduced during the British Period have continued during the Post-Independence Period and form the base of the morphology of planned areas in Rohtak and in other Indian cities.