CHAPTER III

ORIGIN, GROWTH AND DEVELOPMENT OF THE MUSLIM TOWNS IN INDIA

1.0.0. INTRODUCTION:

The history of the Muslim towns planning and their development in India specially in Gujarat is yet to be discussed from the architectural and strategic point of view. Though a few scholars showed a little interest in this subject, this is insufficient. Among these scholars Ghosh¹, Bedge² and Prof. Mehta³ have briefly discussed the subject but the former two scholars concentrated on older period not the one that is discussed here. Ghosh has given an idea about the ancient towns of India on the basis of archaeological evidence but his study covered only pre-Muslim period; while Bedge followed a stereotype description quoting theories from ancient Indian literature which is far from archaeological evidences. Prof. Mehta tried to give a good idea about the Muslim towns and

* The words town and city used in the present work are of European origin which are equivalent to Rajdhani, Shahar, Gillah, Casbah in the medieval period in India. The main functions of these towns and cities were administrative, commercial, military as well as industrial in nature.
their architecture in his paper "Muslim Towns and Architecture in Western India". The objectives of the present chapter is to discuss in brief the town planning of the Muslim in India specially in Gujarat with the help of data collected by the investigator.

3.1.0 Town Planning in Ancient India

Before discussion of the Muslim town planning the investigator intends to focus on ancient Indian town planning in brief. Ancient Indian literature like Kautilya's Arthasastra, Bhigusamhita, Samurtaśeadhikarana, Samaranaga, Sutradhara, Aparajitapuchchha, Visvakarma Vastusastra, Mayamatam, Naradasilpassastra, Sukranitisara, Vaikanasagama, Citralaksana, Kasyapa silpa, Bakaladhikarana, Prehaladatansatra, etc., have partly discussed this subject, but from a different viewpoint. Besides this literature Visvakarma Vastusastra described as many as twenty types of towns. They are - (1) Padmanagara, (2) Servatobhadra, (3) Visvesabhadra, (4) Karmanagama, (5) Prastanagama, (6) Swastika, (7) Chatumukha, (8) Sripratisthita, (9) Balideva, (10) Prana, (11) Devanagara, (12) Vaijayanta, (13) Batahisedama, (14) Jelangara, (15) Guhanagara, (16) Astamakha, (17) Nandyasvarta, (18) Rajdhani, (19) Girinagara and (20) Manusagama. The description of these early cities in literature follows a stereotyped tradition and their archaeological evidence is insufficient and only a few types could be traced.
3.1.2. **Origin, Growth and Development of the Towns**

The history of town planning in India is of pre-historic origin. It will be very difficult to ascertain the actual date from when it came into existence. Generally towns and cities evolved quite naturally, consciously and unconsciously after a long period of social evolution.

Man as a social being, seeks the companionship and association of his fellowmen, kins, friends and similarly, he wants mutual protection. This phenomenon gave birth to families and villages in the earliest period of humanity. In the Vedic literature (Rg. Veda onwards) the word 'grama' is frequently used which appears to have been village. Usually village grew up on a site that offered natural protection such as - elevated terrain, islands or surrounding with barricades and moats.

With the press of civilization man began to worship some cults of natural objects. This religious belief in one of the important factors for the development of the towns and cities in ancient India. Most of the ancient towns of India grew up around the worshipping sites. A large number of religious sites attracted the people. They came for worship and congregation. Trade and commerce gradually flourished there, civilization spread rapidly and cities in the real
sense of the word naturally evolved. The next important factor which is responsible for the growth and development to towns, is the geographical position of the town. Water is the main cause of life without it lives can not survive. So in the ancient period village and towns were generally developed either on the banks of the rivers or lakes to a great extent. King and rich people helped the cause of charity by constructing tanks or water reservoirs which supplied water for human beings, beasts and birds alike. Over and above these, there were big wells dug up for this purpose to remove water scarcity. In Gujarat hundreds of such big step walls were found during the course of exploration and most of them were constructed during the medieval period. Besides religious and commercial factors, sometimes kings or his viceroys were motivated either by the political factor or humanitarian one or to commemorate their names and fame with new constructions. These phenomena led to the growth of a number of towns and cities in India during the Muslim period.

3.1.2. Growth of the Muslim Towns and Forts:

The rise of Islam in the very beginning of the seventh century A.D. (610 A.D.) is an outstanding event in the world history. Within a century Islam spread over three continents—Asia, Africa and Europe. During the first century of the Islamic era, the whole Sassanian Empire and the east and
South-eastern provinces of the Byzantine Empire fell into the hand of the Muslims.

The fort of Khaybar was conquered by the Muslims during the lifetime of the Prophet(s) and during the time of the four pious Khalifahs many strongholds and fortified towns of Syria, Egypt, Iran and Persia had come under the banner of Islam. Some of these forts and towns of the conquered lands were repaired, rebuilt and used by the Muslims.

The Islamic culture has always been primarily urban. When Prophet Muhammad(s) migrated from Makka to Yathrib, the latter was given the name as madinat-un-Nabi or the city of the Prophet and he brought its inhabitants under a charter. This charter ultimately helped the warring tribes and clans to live under certain urban conditions. The rapid political success of Islam against the Byzantine and Sassanian powers ultimately brought it to close contact with these cultures which resulted in the accretion of concepts, techniques and styles from them. Thus the early urban architecture of the Muslims reflects the Perso-Byzantine influence on them.

These early Islamic forts and towns can be divided into two major groups - the fortified forts and towns and the open towns. The former group can be again sub-divided into
two sections - the fort only for the military use and the
towns which had been used for both military and civil
administration. The open towns were generally used for
public administration and commercial activities.

The early Islamic towns of Iraq and Egypt like Basra,
Kufa and Mustat were primarily used for military purpose.
But in the later period, the Islamic cities that grew up in
the subjugated lands and also in the frontiers served both
military and civil administrative purposes. Al Waladhari
relates that during the Khilafat of Hazrat Uthman (644-656 A.D.)
there was someone in charge of the Fortress of Armenia.9
near al Kharma is another early example of the Muslim fort
architecture. It is a square fort with half round towers
at the corners and half round towers in the centre of the
curtain walls.10 The gate-house is flanked by quarter-round
towers. Possibly it might have been used as a caravansarai
as well as fortress. It is reasonable to assume that the early
Muslim fortress architecture followed the older prevailing
types of military architecture, with a few exception in some
cases.

The Islamic military and defensive architecture
consists of three major components - walls, towers, and gates.
Besides these, sometimes it was well protected by ditch and
some of those were provided with catapults. The natural
defence was also utilized.
Walls and Towers

The early Islamic forts were enclosed by massive walls which were strengthened by bastions, ramparts and towers. The ramparts and towers were generally constructed at the corners of the fort but in the case of largest forts, they can be seen in between the intermediate places. The outer face of the walls were always higher and in some places battlemented; a rampart-walk can be seen beside the battlement. In some cases arrow-loops were also found in the walls. From a purely architectural point of view much can not be said about these walls and towers. Mostly they are massive constructions built in materials characteristics of the region in which they are found such as unbaked brick or packed earth in eastern Iraq, stone in Syria and Palestine and various mixtures of brick and stone in Spain. Similar features also occur in India.

Gate

Gate is an important characteristic of the fort architecture. Strong gates are essentially guarded against the attacks of the enemy. We learnt from the history of Islam that when the fort of Qaybar was besieged by the Muslims, they had to wait till its one of the gates of the fort was broken by Hazrat Ali.
There were two types\textsuperscript{12} of gates predominant in the Muslim fort architecture - the straight, and another with barbican. The former was primarily a passageway provided with massive doors while the latter had obviously been used for defensive purpose. The bent entrance was constructed in left-hand direction. This type of gate is very useful for defence strategy. At Champaner such type of gate exists.

\textit{Note:}

The most was constructed around the fortified towns and for defence. The early example of it was the ditch constructed during the time of the battle of Khandaq. The city of Baghdad was also protected by a defensive most.\textsuperscript{13} Similar example occurs in India as observed in the case of fort of Khudawand Khan at Surat which was protected by a deep most about 20 Ms. broad.

During the time of the Umayyads especially in the Khalifat of Abdul Malik (685-705 A.D.) and Al-Walid (705-715 A.D.), the Islamic architecture began to evolve with the assimilation of the Byzantine and Persian influences. With the fusion of these two styles it took a new shape according to need of the Islamic architecture. The secular buildings of the period were given importance besides religious constructions. The earliest example of the secular architecture is the city of Wasit built in Iraq in 702 A.D.\textsuperscript{14} The ideas developed in Wasit
by the great Umayyad governor, al-Majjaj, culminated a few decades later in the foundation of Baghdad in 761–62 A.D. Baghdad, the city of al-Mansur was circular in plan, roughly one and a half kilometer in diameter. It was surrounded by a mighty wall with four axial gates bearing the names of the province or cities towards which they led. A deep moat around the wall strengthened its protection. Each of the gate was provided by a draw-bridge in left hand direction which bears the strategy of the architect. Baghdad was followed by a number of cities developed in the subsequent period.

Raqqa, the next important city of the Abbasid period, founded by Harun-ar-Rashid was the result of the direct impact of the capital of Baghdad. Another important town of the Abbasid period was Samarra, developed in the 9th century A.D. along the banks of the river Tigris. It was founded by al-Mutasim in 836 A.D. He built for himself a palace there "with barrack for two hundred and fifty thousand soldiers and stables for a hundred and sixty thousand horses." Thus the trend of the civil and military accommodation within the same enclosure which started here was followed by the later towns in the subsequent centuries.

From the tenth century onwards the central power of the Abbasid Khalifah began to degenerate and take into consideration, the weakness of the central power, a large number of local dynasties of the far regions who had paid nominal homage to the Khalifah by sending them endowments and
presentations became almost independent. These local
dynasties were frequently fighting with one another and
these disintegration of the rulers ultimately gave birth
to military architecture almost to every urban centre.
This evolved system of the Islamic cities kept up its
consistency until aerial raids made such defences superfluous.

3.2.0. The Growth of Muslim Towns in Gujarat and their
architecture:

The cumulative power of Islam had its strong impact
on Indian culture. The early Islamic Arabs who used to
visit the ports and towns of India for trade and commerce had
required their own housing and place for offering religious
prayers. The inscriptions indicate their presence and the
rulers who tried to help the Muslim by protecting them and
giving suitable donations. 17 This phenomenon led to the
growth of the Muslim secular and religious architecture in
Indian ports and towns.

The contact of the Muslim with Gujarat was an old
one (as has already been discussed in the Chapter II). And
with the establishment of the Muslim power towards the end of
the thirteenth century the art and architecture of Gujarat
entered into a new phase. The early part of this phase can
be marked as the phase of demolition of the old structures and
reconstruction of new monuments according to the need of the
Muslims. The building of this period can be called the building of the "transitional phase" which were constructed for religious need rather than architectural beauty.

When Musaffar Shah asserted independence in 1487 A.D. and established the Musaffarshah dynasty the constructional trend of the Muslim architecture turned into a new direction. Two Sultans of remarkable quality of this dynasty (Sultan Ahmad Shah I (1411-1442 A.D.) and Sultan Mahmud Begarsh (1458-1511 A.D.) had not only strengthened the Muslim rule over Gujarat, but also under their patronage, architecture, specially fortified town adorned with beautiful and splendid buildings which are exceptionally rich in architectural material and craftsmen reached its zenith. The style of architecture which grew up under this dynasty can be called Gujarat style of architecture. But some scholars like Brown called this flourished architecture under the Musaffar shahi dynasty as "Provincial style of Gujarat", but if we judge the pros and cons, facts and figures of the so called 'Provincial style of Gujarat' a few specimen will be the outcome of it which represented no special style but combination of two styles (local and Islamic) and can be marked as the "transitional phase" of the Gujarat style. The Jam mosques of Bharuch and Cambay are the best examples of this phase (fig 6.3 and 7.8). Secondly, the flourishing architecture under the Musaffar shahi dynasty in no way be
called the "Provincial style of Gujarat", because it had developed under an independent dynasty and not under a provincial governor or viceroy appointed by any centre outside the state.

It is found from the analysis that the towns or cities under study have three main features: (1) the presence of a Jami mosque, (2) an Idgah and (3) Sebarstan (graveyard). These are usually well distributed in the town or city. The Jami mosque is seen in the settlement itself, while the Idgah and Sebarstan (graveyard) occupy the fringe of the settlement or are at a little distance from it. Depending upon the economic condition of the settlers, the construction of these structures are simple or elaborate, but they invariably follow certain regulations. The mosque and Idgah are the places of performing prayers - the former being used for Friday prayer including daily prayers and the latter used for I'd prayer twice in a year. The Sebar has its longer axis in the north and south according to religious belief of the Muslims. The graves (labars) are generally covered with pebbles and distinguished by headstone but the graves of males have Turban like head.

The growth and development of the Muslim town in Gujarat can be divided into two phases on the basis of archaeological evidence. The first phase can be marked as the phase
of destruction and damage of the old towns. The damage of this phase has left archaeological strata in the older settlements of Anshilwad Patan, Baroda, Champaner and other towns; while the next phase indicates new construction either on the same spot or on a new area near by old habitats.

Anshilwad Patan, the earliest capital of the Muslim from 1297 A.D. to 1411 A.D. was an open city which flourished about five hundred years before the conquest of the Muslims. It appears that the Khalji army moved from Modasa probably through Himmatnagar to the south-east of old Patan and possibly occupied the Shadhra area of new Patan. The archaeological excavation at Rajayadhi Fort at Patan conducted by the Department of Archaeology, M.S. University of Baroda, under the guidance of Prof. Mehta, represented some sculptural fragments which indicate that this old town was fortified for the first time after its conquest by the Khaljies. Possibly it was an irregular oblong fort with heavily enclosed royal-houses. The demarcation line of the fortification can still be traced in many places where the brick-hunters had stolen the bricks of the walls. The walls were provided with bastions. It appeared from the excavation that the base of the fortification wall was prepared by arranging the sculptured sand-stones and surkhi was used for levelling and arranging them. Over this foundation was raised the fort-wall of bricks cemented with
mud-mortar. This fort was possibly used in the 14th-15th centuries A.D. (The development of the Patan town is shown in the fig. 3.1).

In the 16th century A.D. when Patan came under the Baburi rule, a small fort was built in the Shadra area. The fortification wall of this fort was provided with bastions and burjs. An exploration was conducted by the investigator around the fortification walls which revealed an important feature of this fort. A small burj of this fort on the south of Kotiushah gate (fig. 3.1) is overlapped with a layer in the subsequent period which is now exposed when the other layer collapsed. The inner one was possibly built under the rule of the Baburi dynasty. Moreover, the graveyard near present power-house also supports this phenomenon. In the 18th century A.D. when the Seratha had established their power, they fortified the town by encircling the occupied area. There are two inscriptions fixed at Kotakul Sarwaja which record the date 1815 A.D. and 1865 A.D. respectively. The present fortified town is radial in form with irregular arc. It is also found from the spot study that the east and north-eastern walls are comparatively stronger than other sides. These walls were provided with more burjs and its ramparts used for defensive purpose specially for archer and lancer. Still some arrow-loops evidently bearing the war strategy of the medianal period can be seen.
The city of Ahmadabad was built by Ahmad Shah I in 1411 A.D. and he transferred his capital from Anahilwad Patan to Ahmadabad, as recorded by Mirat-i-Sikandari and Mirat-i-Ahmadi.22

The foundation of Ahmadabad is an important event in the history of Gujarat and Ahmadabad. The contemporary records are non-existent, but the records of Mirat-i-Sikandari and Mirat-i-Ahmadi point to the fact that the plan of the city was laid by four Ahmad who had not missed the afternoon prayer.23 This information leads to the speculation that the plan was laid by four persons standing at each corner. The human vision would act as a determining factor along with the topography considering the area covered in this operation. It is observed that one can clearly see that area up to Jawahar bridge from the same point up to Akhandanand hall and Mission Church is seen without any difficulty. Thus the clear vision for laying the plan would restrict the area from Hanek Burj to Jawahar bridge and from it up to Sidi Said mosque on the north and from Hanek Burj to Akhandanand hall and from this point up to the Sidi Said mosque. Thus both factors suggest that Ahmad Shah I laid out his town in the present day Ahadra area. This hypothesis suggests that the city of Ahmad Shah

* The conception of the development of Ahmadabad city is mainly based on Dr. Rania's paper 'Ahmadabad: a historical, topographical and toponomical perspectives'.
The development of Ahmedabad city is shown in the fig. 3.

In Muslim towns of Gujarat it is seen that the existence of the Juna mosque always outside the royal enclosure which confirms the above hypothesis and such feature is found at Ahmedabad, Bharuch, Cambay and Champaner.

If we carefully study the topography of the town it will give much information about the growth and development of the town. Abul Fazl notes in his Ain-i-Akbari that Ahmedabad..... is a noble city in a high stage of prosperity, situated on the bank of the river Sabarmati..... It has two forts outside of which are 360 quarters of a special kind which they called Pura, in which all the requisites of a city are to be found. At present time only 84 of these are flourishing.

Abul Fazl had collected the information received by him but Mirza Muhammad Ali, the author of Mirat-i-Ahmadli, who stayed at Ahmedabad notes that these puras were like a city.

* In Akbar Names, the number is given 360, Akbar Names, Eng. Trans. by Severidge, Vol. II, p. 12, and Tabakat-i-Akbari mentioned 360 puras.
The author of the Tazkirat-ul-Wulh relates that Usmanpur had at least one thousand shops including traders, artisans, craftsmen, government servants and military people of both Muslim and Hindu community until quarrels and mismanagement ruined them. Thus the information supplied by both the authors of the 16th and 18th century A.D. indicates that the pures were independent habitats around Ahmedabad.

The puras like Mirzapur, Janpur, Daryapur, Kalupur, Shanderipur, Sarangpur, Kaipur, Jaralpur, form a ring. All these puras ending name suggests their satellite or suburban character as noted by Abul Fazl and Ali Muhammad Khan. These puras would naturally develop at a little distance from the city. Many of them are named after different mirs who were active after 1411 A.D. and in the period of late 15th and early 16th century A.D.

It is noted that Daryapur, Kalupur, Sarangpur are associated with the mirs who were active after 1411 A.D. Darya Khan was a friend of Mahmud Begar. His activities, therefore, will coincide with the later part of the 15th century A.D. If this feature is taken into consideration then Daryapur might have been developed after 1438 A.D.

Similarly Kalupur named after Aalu also a contemporary Amir leads to a similar conclusion. The Shanderipur was an older puro. Shaikh Ahmad Iraji had halted here as noted by
Ali Muhammad Shah. This fact indicates that Shanderipur might have existed as an independent pura possibly of old Neawal and then was engulfed in the expanding city.

Sarangpur is named after Malik Sarang who flourished during the time of Mahmud Begarah and his son Bazelfar Shah II. He was entitled Kiwan-ul-Wulk. Thus Sarangpur was developed in the late 15th century or early 16th century A.D. Mirat-i-Likandari relates that Sarangpur was developed outside the city. It suggests that Ahmadabad was terminated near Khadia.

Janalpur was developed beyond Gol Biraha that was the outskirt prior to possibly 1450 A.D. and it had developed after this date.

Shahpur which was named as Janipur in the reign of Aurangzeb, developed during the time of Mahmud Begarah. Possibly it was founded by Saha-ud-Din who built the mosque of Achutkoki.

Thus the toponomy of the areas from Janapur to Janalpur show some features that developed till the 16th century A.D.

It is interesting that the fort wall with different gates as noted by Mirat-i-Ahmedi covers an area in which many puras of the period of Mahmud Begarah are included. It raises an important question about its construction.
Examination of the fort line indicates that it is built of lakhori bricks of the Sauri dynasty. They are different from those that are found in Nampaler as well as in the old fort of Saroda and at Ahmadabad. If the materials are carefully examined it seems that this fort line at Ahmadabad was not existing during the 15th century A.D. when the constructions at the mentioned places were undertaken. At Ahmadabad the bricks of the mosque of Khan Jahan show similar features.

The upper brick work of the Sanak Surj is of Lakhori bricks and this feature continues in the wall of Shadra till one reaches the mosque of Khan Jahan and it also continues in Gujarat Club area. It is connected with the Sarai built by Nasir Khan in 1637 A.D. The main Shadra gate has also addition and alteration. The gate is closed from both ends and hence it does not represent the old gateway, but it was repaired in 1623 A.D. during the time of Emperor Jahangir as an inscription indicates. 27 most of the lines of wall of Shadra gate are destroyed, but the Sidi Said mosque stands on the old alignment. Its position clearly indicates that it was built at the time when Shadra as a royal residence might not have existed. This circumstantial evidence would indicate that it might have been built by Shaikh Said Al Naibani, a powerful Naibani nobleman in 980 A.H. (1572-73 A.D.). 28 The architectural character of Sidi Said mosque indicates that the fort wall was destroyed here.
The Ajmer fort line on the north also shows the same features as that of the other parts and also on the river side the situation is not different.

The walls existing in Khurpur, Javanpur, and Rayykhad areas are built of the late bricks. The gates like those of Dasyapur, Kalapur, Raipur, Javanpur, Khan Jahan, Khurpur are fairly connected with the later bricks from the base upwards. This construction, therefore, indicates that the present fort wall was built during the time of the Sabari dynasty. In the summer of 1921 A.D., parts of the Raipur gate had collapsed. This breakage indicated that the core of the wall was constructed of bricks of different periods. The earlier bricks of the sultanate period were mixed up with the bricks of later period in haphazard way. The cementing medium was sand. This feature was also repeated at Khurpur gate. Thus the core of Raipur gate confirms with the evidence noted elsewhere.

The Khan Jahan Darwaja shows bawzivan with two gates. There is a clear separation of the wall of the outer bawzivan and the main gate. These features with the bricks commonly used during the Sabari dynasty are later additions to the gate. Here the Khan Jahan mosque shows older characters that are contemporary to the time of Ahmad Begarsh. This fact along with a large Qabaristan at this place indicates that this was an outskirt during the time of Khan Jahan. The fort is later addition at this place.
If one considers the existence of the Rani Bibarai or Rani's mosque and mausoleum near Ascoliya gate, it is significant that the mosque was completed after the death of Shahjahan in 1511 A.D. The situation of this monument indicates that at the time of its construction it would have occupied isolated area on the outskirt of a town and would not have been inside the fort wall.

When Barangpur is observed, the Sidi Bashir's mosque stands outside the fort. If Barangpur be considered to have extended to this place then an anomaly is created that the fort wall has cut across Barangpur that was outside the town. Mirat-i-Sikandari relates that Malik Barang founded a suburb of that name on the eastern side of Ahmedabad. He built a mosque on 5th Jamadi-ul-Awal, 865 A.H. (17th February, 1461 A.D.29). Therefore Barangpur would have been an independent pargha till that time. Shahjahan had been troubled by Humayun. The sources of this period are silent about this fort, so one does not know whether it was existing at this period.

Archaeological factors and literary references tend to surmise that the fort wall was built after 1514 A.D. and possibly after 1536 A.D. The political condition of Gujarat deteriorated after the death of Shahjahan and it became bone of contention between different nobles and Ahmedabad also
was involved in this struggle for at least half a century. The Portuguese piracy was rampant on the western coast and Gujarat had to build a defensive fort at Surat. At Champener also the fort wall was strengthened by a brick barbican after 1536 A.D.

Significantly Mahmud Begarh shifted his capital from Ahmadabad to Champaner in 1484 A.D. with this change, Ahmadabad suffered from political and administrative neglect. It was protected by Khafiz Khan from the unsocial elements. Later on this role was played by Malik Sarang. On their own, they could not have built the fort wall. Thus archaeological relics and circumstantial historical evidences are against the theory that the outer fort was built during the time of Mahmud Begarh.

Another important historical point requires clarification that in 1572 A.D. Akbar visited Ahmadabad without any battle. But in the following year he conducted his army towards Gujarat and this expedition was fast and the engagement was on open ground. He had crossed the river at a distance of about a Koss* from the city as noted by Abul Fasil. This

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* One Koss equals 200 jarib; each jarib being equal to 25 yards and one yard is equal to 42 inches (Alm-i-Akbari).
crossing was possibly in Shahi bagh area and therefore would be on the Dadheshwar side. The struggle continued for the whole day without any reference to the fort. Akbar occupied the palaces after the war. Khwaja Nissamuddin in his Tabqat clearly indicates that after the defeat, Mirza Imed-ul-Mulk came from the lanes to open area for fighting with Akbar. This report clearly informs that at this time between Shadhra and Shahi bagh there was no fort line.

The entry of Muzaffar Shah III in 1582 A.D. in Ahmedabad through Raykhad gate as noted by Mirat-i-Ahmadi might require interpretation. The records indicate that he entered through Raykhad gate and took possession of his ancestor's palaces. If one assumes that this action took place at the present day Raykhad gate, then the natural question would be, was Shadhra fort abandoned without any struggle? This feature would account for utter weakness of organisation of Akbar. However, if this would be a gate in the Shadhra fortification near Raykhad cross road then one can realise that in the struggle the success of Muzaffar Shah would have forced the remnants of the Baburi army to submit or retreat. It is interesting to know from Mirat-i-Ahmadi that when Muzaffar Shah attacked Ahmedabad it was protected by Sher Khan, son of Ittimad Khan and Mir Masum Bukhari, Faisullah Beg Aqa, Zaim-ud-Din Khattu and Muhajid Khan Gujarati guarded the gates. Muhajid Khan was in charge of Raykhad gate and the other three might be in charge of other gates.
This arrangement by Itimad Khan indicates that the city had only four gates and Rayagadh or Rayakhad should be near the Rayakhad cross road. Thus the outer fort would not be needed for the explanation of this struggle. The archaeological relics prove such a situation would have been responsible for the planning of fight at Meenagar and Sarkhej area by Musaffar Shah when the forces of Akbar came to retrieve Ahmadabad. Under these conditions and consequences upon the defeat of Musaffar, Akbar would require better control and therefore he would have taken some steps to strengthen the outer fortification. Akbar's assistant Kalyanrai had fortified Cambay. The fort of Baroda was strengthened by an outer ring of Baburi dynasty and therefore one would reasonably argue that the outer fort line at Ahmadabad would also have been the work of late 16th century A.D.

Ahmadabad continued to be a prosperous city in the 16th century A.D. though the capital was shifted to Champaner. Mahafis Khan and Malik Sarang maintained order in the city. However, the Bhadra area which was the political centre seems to have suffered. Parts of the old fort wall of Bhadra were destroyed and Sidi Said's mosque was built.

After Akbar's conquest Ahmadabad became the capital of the Subah of Gujarat. As a centre of the Subah it attracted some attention. The Baburi dynasty concentrated its activities in the Bhadra area. Here the old palaces were
demolished and new Sarais and buildings cropped up. Jahangir records that the old buildings were destroyed and Mubarak Khan got them removed and new buildings with balcony towards the river were constructed.

The outer fort is clearly noted during the period of Jahangir when Prince Khurram revolted against him. A bilingual inscription found near the Gaekwad Haveli supplies information that Shafi (Safi) Khan Bakhti-ul-Mulk built the wall on the 1st of Rabii-ul-Awwal in the year 1038 A.H. (16th February, 1619 A.D.) under the supervision of Saiyed Kamal Junairi. The Sarmagpur gate and Daryapur gate are also noted in this struggle. This feature shows that the outer fort was in existence in the period of Jahangir in Hijri 1033 (1623 A.D.).

During the time of Jahangir a palace was constructed in Khempur and the garden house of Shahi bagh was also laid down. In Shadra area Namans was built. Shah Jahan's Subedar Asam Khan built a palace and Sarai by destroying parts of the fort wall.

Aurangzeb had spent good amount for repairs of the fort and various structures. During the later period of Aurangzeb new buildings in Shahi bagh area were built by the Prince Asam Shah. They are existing to this day. The other aspect of their development are the garden-houses around the city and a few suburbs also developed.
These garden houses are named as 'Bagh'. They have structural remains and good trees, shrubs and water facilities. Unfortunately none of them are in a state of preservation as originally planned.

The area of Khampur and Mirzapur seems to have developed in this period. Some of the older areas were renamed. Khadiya had become Akbarabad. Similarly Jahangirpur, Harpur, Jamipura show such features. However, it might be noted that the Baburi dynasty had concentrated much of its efforts around Agra, Fatehpur Sikri, Delhi, and not to that extent in the far off capital of a province. Ahmedabad had therefore to be contented with Sarais and Hammams. Shah bagh and such other construction during the period of the Baburi rule from 1573 to 1707 A.D. in an undisturbed state. It is also noted that no mosque which could be compared to those of Agra or Delhi developed in this town during this period.

Like Ahmedabad, Champaner was also developed by the side of the Rajput-Champaner. But of the lower part of this city grew up for the first time after 1484 A.D. when Mahmud Begarag conquered Champaner.

It is observed from the exploration conducted by the investigator that the well planned city of Champaner grew up in the form of rectangular, but lower area of it took the form of radial pattern. The rectangular fort which is about
one km. in length and about 300 m. in breadth forms the royal enclosure of Hissar-i-Khas.

The whole area within the fortification of Hissar-i-Khas can be divided into two parts - (1) the western part and (2) the eastern part. The western part covered an area of royal enclosure including its garden on the westernmost part. At present the buildings of the royal enclosure are completely ruined but some structures of the garden like water pools, wells and semi-underground structure with air cooling devices are very interesting relics.

On the east of this garden is the palace complex, now in ruins. The royal palace was enclosed by a massive wall with a gate having five arch openings. It would be very difficult to give an idea about the plan of the palace complex until a horizontal excavation is carried out on the site.

To the east of this palace complex is the outer area of the royal citadel. Possibly it might have contained offices, etc. At present most of the earlier relics have been covered by new habitations. The Jami mosque is situated within this area and just outside the citadel to the east. It was the largest centre of the city from where the radial roads run in different directions. It is observed from the excavation carried out by the Department of Archaeology.
M.S. University of Baroda, under the guidance of Prof. Mehta that the roads are connected with correct angles of 90°, 45°, 30°, etc. It seems that nine principal roads divided the city into eleven sectors. The roads terminated at the gates of Hissar-i-Am that protect the lower town. Different sizes of compounds and structures were built in these sectors. Some of the compounds measures about 250 x 200 Ms. They show clear outlines with entrances from the main roads. The planning of the structures within this compound shows usually a rectangular pattern. The compounds were featured with stables, garden with fountain, Hauz and other facilities.

The gardens were supplied with water from the wells. In the course of exploration, the investigator noticed various kinds of wells, such as circular wells with various dimensions, circular wells with steps inside and step-wells. Besides these there are some artificial tanks and ponds.

It is observed that the suburbs of Chempasar city grew up on the east and north-east side of the Hissar-i-Am. These suburbs were brought under protection by the walls of Sultan's fort, which spread over an area about ten Ks. from the fort. The presence of gardens and garden-houses in these indicate that the capital along with its suburbs were adequately planned.
Another noteworthy point is that the religious structures, such as mosques, mausoleums and qubbers, were distributed over the city and its suburbs. These monuments of this city are not comparable with any other monuments of Gujarat for their architectural designs and splendid stone carving works. (Development of the Champaner city is shown in the fig.3a6).

The next important city is Baroda which grew up on the bank of the river Vishvanitri. It is observed from the archaeological excavation at Akota that the ruins of the earliest city lies underneath this place. The archaeologists are of opinion that this town had developed a suburb on the eastern bank of the river Vishvanitri comparatively on a high land which was known as Vadapadraka, or a village full of banyan trees. This Vadapadraka remained at its highest position until the foundation of the present city of Baroda by Khalil Khan in 1511 A.D.35 The excavation carried out by the Department of Archaeology, M.S. University of Baroda, at present Medical College area had yielded a large quantity of shards of so called Muslim glazed ware along with a gold Mohar of Sultan Firoz Shah Tughluq which indicate that until the foundation of the present city of Baroda (1511 A.D.), the Vadapadraka was the administrative seat of the Hindu and the early Muslim rulers. The presence of Navalakhi Vav and other archaeological mounds in this area confirm this hypothesis.
In 1511, when Khalil Khan became the Sultan of Gujarat, he built the Patalagram city (Baroda) on a suburb of the old town of Vadapadraka at a distance of about one Km to the east, and fortified it. It is a square city about one Km on its each side. The city is divided into four equal parts by two roads crossing at right angle at Vadodra. During the rule of the Adud dynasty when the population of the city increased, the southern suburbs of the city like Navapura, Jahangirpura, Mughalwada and Surhanpura were brought under protection by a fortification wall. The raid of the Marathas was also an important cause of the fortification. This fortification made the city into an irregular rectangular pattern (Development of Baroda city is shown in the fig. 3.5).Thus it indicates that the Muslim builder did not follow any certain rules and regulations for building their fortification whenever they felt necessity to protect their subjects from external attacks, fortified the town or city according to its habitats developed on its fringe. This phenomenon is clearly seen at Bharuch, Surat, Champaran and Cambay. (It is noted here that the town planning and architecture of the selected towns and cities will be described in the subsequent chapters).

3.3.0. Major findings:
The above discussion leads to the following major findings:
1. The growth and development of the town and city are influenced by the religious, social as well as commercial factors.

2. The development of urban patterns depend on the geographical location of the concerned area. The town or city developed on the bank of the river, took the form of linear pattern but in some cases, if the town grew up at the bend of the river, it took the form of radial pattern.

3. The pre-muslim towns allowed the growth of Muslim quarters and religious buildings.

4. Initially political conquest of towns had led to the destruction of some parts and then building of other parts.

5. The new Muslim settlements were confirmed to the building of residential quarters, mosques, Idgah and qabarstans. They constitute the minimum Islamic elements of the settlement.

6. The Muslim towns of administrators and rulers were built to protect them in their administrative centres. Due to this feature the forts at Anahilwad Patan or Ahmedabad show identical features with local differences. This feature contrasts with the open capitals of the Chaulukyas and the Parmars.
7. It is proved that the fort of Kajgadhi at Paten which opened up to now was fortified by the Khaljia for the first time. Subsequently a small fort was built at Bhadra area under the rule of the Baburi dynasty when the former fort was abandoned.

8. The outer fortification wall of Ahmadabad city was built under the rule of the Baburi dynasty and hence the accounts of the author of Mirat-ul-Ahsami appears to be exaggerated and therefore not widely accepted by the scholars.

9. A variety of plans—square, rectangular, linear and radial were used in the planning of cities, according to topography and geographical set-up.

10. The residential quarters also followed different plans and patterns. They indicate that the houses of the rich had spacious garden and sufficient space for servants, stables and other amenities. But these were limited or almost absent in the houses of the poor classes. Even the basic building material was also different. The houses of the rich were built of stones and backed bricks of good quality while the houses of the poor were built of rubble and bricks of low quality.

11. The aquatic constructions of water reservoirs, tanks, wells, step-wells and water cisterns are significant activities in these towns. These amenities for pleasure are interesting features of Gujarat towns.
12. The Islamic towns or cities represented three main features:
   (a) The presence of a Jami mosque,
   (b) Idghah and
   (c) Labarstans.
   Besides these, Kazaabs, Khanaqahs, Jamat Khanas and Mawali Khanas are also significant architectural relics in the Islamic towns.

13. The building materials were usually acquired or produced locally, but use of particular stones indicate movement over considerable distance.

14. The towns showed different tendencies of growth, decay, destruction and regeneration with the lapse of time. Those that had only administrative functions collapsed when the functions ceased but those with agricultural, and other economic base continued to survive.
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3. S.B. Mehta, "Muslim Towns and Architecture in Western India", in research paper presented to the Seminar on Islam's contributions to the Culture and Civilisation of the World (with special reference to India), 1981.


15. *Dixie.*


31. Chagnetai, *Specia*, p.38, and pl. XVC

32. Henta, *Specia*.

33. The excavation report of Champaner is under preparation.

34. Like Prof. Subbarao & Prof. Henta.


36. B. Subbarao, *Jarsa through the ages*, p.121.