From the materials described and discussed in the previous chapters it will be evident that archaeological field work carried out in the district of Ahmedabad has revealed interesting results. The material and its analysis and sifting of the data leads to the following conclusions:

The Ahmedabad district which is a political unit of the State of Gujarat, situated in the western part of India, is an alluvial plain roughly covering the lower reaches of the river Sabarmati and its tributaries like Meshvo, Vatrak, etc. In itself this district can be divided in two main regions; (1) The plain of north and east, and (2) The low lying area around the Gulf of Cambay known as Bhāl.

**EARLY STONE AGE:**

Pre-history of Gujarat begins with Early Stone Age with the remains like stone tools collected from different river systems of the area, but in this district no tools of Early Stone Age are discovered. This is probably because the lower reaches of
Sabarmati, the main river of this district has cut its course in loose alluvium which has not exposed any gravels which reveal such tools.

In fact, no Early Stone Age tools are discovered from this region so far. This is due to the same reason as stated above. It is possible that during the Early Stone Age, this part of land was low-lying marshy area which was gradually filled up with the alluvium brought by the rivers like Sabarmati, etc. In fact no gravels are noted along the river courses of this district.

MIDDLE STONE AGE:

No tools of this age are discovered. This may be due to the reasons similar to those noted above. It is probable that they may be found with further research.

LATE STONE AGE:

It will be interesting to note that the earliest man of this district preferred to live along the banks of the rivers like Sabarmati, Meshvo, Vatrak, etc. or
on sand dunes formed around the ponds. He used geometric tools like lunates, trapes, etc. probably for hunting the animals who came to drink water at the ponds. He then possibly practiced some primitive type of agricultural activities. We do not have any direct evidence for agricultural activities, but on the basis of evidence collected from other parts of India and other middle eastern countries, this assumption is not untenable. The nearest contemporary neighbours of this microlithic age man were the people of Langhanj, an excavated microlithic site in the neighbouring district of Mehsana.

The microlithic tools include lunates, triangles, blades of various types, scrapers in different varieties like side and end scrapers, burins, etc. These tools were probably used as agricultural as well as hunting tools by hafting them on wooden or bone handles. In this way sickles, harpoons, etc. might have been prepared for agricultural as well as hunting purposes.

The material used for making these tools were agate, carnelian, chert, jasper, chalcedony, etc.
which were easily available from river beds. Hence the microlithic man had no need to go far off for his material.

Unfortunately, no evidences of the man himself or other animals could be gathered in the form of fossils, etc. This is because of the nature of the geological formation of the region, which is of alluvial plain and sand dunes. Hence, it is quite probable that the microlithic man migrated to this region during the Microlithic Age only.

After the Microlithic Age there is a wide gap in the time between the transformation from primitive microlithic culture to chalcolithic culture of the Harappan period. But thanks to the recent excavations conducted by Prof. R.N. Mehta at Kaneval near the Gulf of Cambay which has revealed interesting evidence of chalcolithic as well as microlithic communities living side by side on different mounds. This probably indicates at least contemporary contacts between these people. The sites of Ahmedabad district which are to the north of this site must have been contemporary
with these sites which is evident from typical chalcolithic pottery like dish-on-stand, bowls, basins, storage jars, etc. If the date of Langhanaj microlithic site is considered applicable to the microlithic culture of Ahmedabad district, then this gap seems to be filled up. The Harappan culture people were most probably outsiders. The distribution of Harappan sites on the South-west part of the district in and around Bhāl area suggests that they must have migrated from Saurashtra area where more than 100 sites have already been discovered. More sites are already discovered in the Kheda district around the Gulf of Cambay and its adjoining area. Thus, there is a kind of circular belt of sites around the Gulf of Cambay stretching from eastern Saurashtra up to the river Sabarmati and its adjoining area. Moreover, several sites are noted along the area of rivers Kim, Narmada and Tapi in southern Gujarat.

What happened to the microlithic people? Whether they were ousted by the migrating Harappan culture people or was there a diffusion of culture? It is quite possible that there was a diffusion of culture.
The presence of microlithic tools at some of these late and post Harappan sites indicates that there might have been some give and take policy. But the more technically advanced Harappans had an upper hand at least in technology like metallurgy and agriculture.

In Ahmedabad district sixteen Harappan sites are discovered. All these sites are confined in the Bhal area along the Gulf of Cambay which is a low lying area of black soil producing today wheat and cotton.

Almost all sites are situated in this region. Many of them are near natural ponds or some small streams or river. The mounds are generally very low, rising to an average height of two-three meters from the surrounding ground level. At some place like Vagad, Bhimnath, Padana, Alau, Akru, etc. the mounds are almost completely obliterated due to continuous tilling of land and removal of earth along with pottery from the site. In fact at some sites like Bhimnath, Akru, Alau, etc. cart loads of pottery were removed to make land more fertile and tillable. At some sites digging of ponds or road laying activities have almost destroyed
the site. In such circumstances, it is difficult to trace the exact extent and actual original topography of the site. But, in spite of these handicaps these chalcolithic sites have revealed the following characteristics:

1) Low profile
2) Smaller extent (from 50 meters to 25 meters)
3) Location near river, stream or pond
4) No evidence of use of burnt bricks
5) No indication of fortifications
6) Prominence of late Harappan and post Harappan pottery.
7) No collection of copper objects from surface
8) Only one 'City' site of Lothal and all other sites are smaller
9) Presence of microliths nearby
10) Absence of floral or faunal motifs on pottery.

From a close study of the above characteristics it is evident that basically these chalcolithic people were rural communities who might have been agriculturists and cattle breeders, living in small settlements and a few living in larger settlements. Use of copper must have been limited or restricted for special objects like weapons and tools etc. Their houses might have been
huts like those found at Kanewal and Zekhdia. But the contemporary or slightly earlier habitations at Lothal, Deshalpur and Surkotda indicate some advance in town-planning and house building. Lothal, which is extensively excavated and partly published gives a somewhat detailed account about its planning and architectural remains.

**ARCHITECTURE:**

The architectural wealth of Ahmedabad district begins from the Harappan site of Lothal which was an important trading part in eastern part of Saurashtra peninsula. But, unfortunately, after the end of this civilization, there is a long gap of more than two thousand years, after which we have the Brahmanical temples of Chaulukyan style.

The architectural remains at Lothal clearly indicate a well planned habitation of merchants, artisans and other people. It had well-planned habitation covering about 300 meters x 400 meters area. It seems that the town was built on a higher level than the surrounding plain. Its lanes,
According to Shri S.R. Rao, the excavator of the site, Lothal, were planned with a market, bead factory, storage houses, etc. on one street and habitation houses in other part of the town. All the structures were built of burnt bricks and mud mortar, like the houses at Harappa and other major Harappan sites. Residential houses at Lothal also have three to five rooms and a drainage system.

The so-called dockyard at Lothal seems to be a tank because the burial ground of the city is at a lower level than this which is an impossible matter. Moreover, the levels of inlet and outlet of water are such that the tide water cannot enter this tank.

The acropolis is 117 meters east-west and 136 meters north-south with an important structure in it, probably belonging to the ruler according to Mr. S.R. Rao.

WARE HOUSES:

This so-called ware house is situated south of the acropolis block. Its importance is clear by its 4 meter high platform and built up area of 1930
square meters. It was composed of grid pattern passage and 3.6 square meters cubical blocks of mud bricks, which, according to Shri Rao, supported the canopy overhead. The passage between these cubicals were brick paved. There was arrangement for closing this structure by inserting a wooden door or plank in grooves at the northern end of north-south passage.

The total carpet area of this structure after deducting the coverage of walls and cubical platforms comes to about 1200 square meters including the passage. Hence, the storage capacity of this warehouse was very limited if the total measure of Lothal town is taken into account. Moreover, no positive evidence to prove this claim is obtained from the structure of floor itself. The cubicals which are supposed to store the goods are arranged in grid pattern which will make the transport very difficult in small passages which were only one meter wide.

Whatever it may be, this structure is quite a big structure in the acropolis area near the so called dockyard which may be in reality a tank.
Thus, the covering drainage system, well planned houses, markets, bead factory and even ware house suggest an urban habitation which depended on the surrounding smaller habitations for its economy and trade. Gold and other ornaments indicate prosperous community which had contacts with far regions of India for metals and semi-precious stones.

Thus the story of architecture of Ahmedabad district begins from about 2300 B.C. and ends about 1750 B.C. After this date we have a wide gap upto the advent of the Chaulukyas of Patan, who were great patrons of architecture.

The household pots and pans of Harappan people included dish-on-stand, bowls, dishes, basins, globular pots, etc. They also had storage jars of considerable size indicating storage of grains etc. Presence of lamps indicates use of some oil and thereby even oilseeds. Their ornaments included copper and shell ornaments while the city people like those of Lothal used gold, silver and even semi-precious stone for jewellery and big varieties of beads.
The people of Lothal had very long distance contacts as far as the Gulf countries. They were good metallurgists, bead makers, goldsmiths and ivory and bone carvers. They could plan their city with a good efficient road pattern with regular drainage system. This clearly indicates a flourishing town which might be drawing its business from surrounding village sites of Ahmedabad and Bhavnagar districts.

Extensive explorations of northern part of the district have not revealed a single Harappan chalcolithic site in this area but only microlithic sites. The region is a sandy plain with dunes and only the Bhāl region of low lying area with black soil has revealed the Harappan sites. This clear-cut characteristic probably indicates that the Harappan preferred land with fertile soil and water for drinking and other purposes. Presence of such ponds will also insure fishing and hunting of animals and birds, for food. Moreover, cattle breeding also needs water.

Their religion as suggested by Rao must have been arranged around the worship of the mother Goddess etc. with belief in life after death. Some sort of animal
and tree worship was also popular as indicated by a number of unicorn seals with manger in the front of the unicorn. Presence of small objects like the "Parthiva lingas" may be prototypes of Shiva lingas which gradually became a major important symbol of lord shiva of Hindus.

The typical burial system of two persons is also a unique feature. But as claimed by Mr. Rao, this may not be a "Sati" system. Similarly, the hearths are claimed to be "Yagna Vedika" which is a far fetched claim, because if it was a Vedika then there must be other supporting evidences also to connect the people of Lothal with Vedic Aryans.

The gradual transformation of Harappan culture to the lustrous red ware culture is evident at least in pottery and decline in the prosperity and technology. But the end of this post Harappan culture is still a problem of Indian archaeology. But the presence and continuation of other coarse wares, black and red ware etc. in post Harappan chalcolithic culture is probably a survival of some traces in later cultures.
Following this also, one encounters a long gap of about thousand years, before one comes across the iron using people of early historic period dated to the beginning about 6th century B.C.

What happened during this period cannot be attested with archaeological evidences. Although it may be noted that Puranas like Vayupurana, Matsya Purana and Epic like Mahabharat mention Anarta which is generally accepted to be North Gujarat. These Puranas also mention various tribes like the Bhrigus, Haihayas, Sharyats, etc. who were living in regions of Saurashtra and North Gujarat etc. which were adjoining regions of Ahmedabad district.

The black and red pottery which continues right from chalcolithic period and gradually becomes coarser and coarser and survives even during historic period indicates survival of some people or at least a tradition which is revealed at sites like Nagara.

In such circumstances it is possible that there was a slow but gradual transformation of cultures from microlithic to iron using culture. But in the present
state of our knowledge, it is not possible to establish complete links between these cultures. It seems that with the advent of iron from about 1000 to 600 B.C., there was a marked increase in agricultural products, subsequently resulting in overall prosperity and progress in technology. Due to this now we find many early historic sites and other sites of subsequent period. There are also the evidences of western contacts in the form of Roman Amphora from sites like Sanand. Associated with this is a red pottery known as red polished ware. But in the field of pottery, except red polished ware, there was a marked decline in the standard of their sturdines and decorations. The artistic decoration of chalcolithic period are no more found at all. No doubt, incised, embossed and finger tip decorations were there, but much limited. It seems that with the increase in production of food, population must have been increased. Now we find bigger archaeological sites, some of them measuring 200 meters by 200 meters. Antiquities like semi-precious stones, beads, etc. discovered from Nagara, Baroda, Vadnagar, Amreli, etc. also indicate progress in the art of bead making.
There is no direct evidence like inscriptions etc. to prove that rule of Mauryan or other subsequent early historic dynasties. But as already stated above in Chapter II, the presence of Asokan, Kshatrapa and Gupta inscriptions in Saurashtra indicate firm and well established political organisation in Gujarat.

After the Harappan town of Lothal there is a very long gap of nearly 2500 years after which we have only architectural remains. These are the Chaulukyan temples, tanks etc. The smaller number of temples in this district is probably due to iconoclast activities of the Muslim rulers of Ahmedabad, which was the capital of the district and the State.

The unique twin temples on the Munsar tank at Viramgam are typical examples of Chaulukyan architecture with curvilinear Shikhara with Urushringas, dome with bellshaped decoration, Kakshasanas under Mandapa, decorated pillars, architraves, ceiling and Mandovara with niches containing the images of various Gods and Goddesses.
The smaller temples which number to 352 on the 
bank of the Munsar tank, are smaller replicas of typical 
Chaulukyan temples. Unfortunately, most of them are 
damaged and images from them are removed or destroyed. 
But Vaishnava temples were on the north bank of the 
tank which was built according to the Vastushastra rules. 
The Munsar tank was contemporary with the famous 
ShastraRagina tank of Patan which is now completely silted. 
As this area of Ahmedabad district is a plain country 
of sandy nature, almost whole of this district is having 
tanks belonging to various periods from Chaulukyan upto 
Sultanate period and even later upto Mughal times. The 
famous tank of Malav at Dholka and the Munsar tank of 
Viramgam are the best examples of scientifically planned 
tanks with beautiful ghats and temples.

The Malav tank of Dholka is another typical example 
of Waghela architecture. Its angular plan, central 
shrine, approached by a bridge from the bank, etc. 
indicate that the tradition of Shastralinga and Munsar 
was continued even in the Waghela period. Its repairs 
etc. were continued even in Muslim period. Prof. 
R.N.Mehta's study of this tank refuting the proclaim
related with Minaldevi, the mother of Siddharaja, is an interesting study of its kind. Recent excavations and explorations conducted by Prof. R.N. Mehta have revealed interesting information about this tank. But the Shastralinga tank was fed by river Sarasvati, while here the Kunsar is fed by surrounding area rain water.

The sculptures of this district are mainly in the medium of sandstone. But a few marble and schist sculptures are also found. The sandstone must have come from Saurashtra region or the eastern hilly region of Gujarat. Schist and marble must have been brought from Abu region.

The sculptures are mainly religious sculptures of various Gods and Goddesses mainly of the Brahmanical religion and few sculptures of Jain religion also. Some of the images bear inscriptions ranging between 11th and 13th century A.D., Thus, they can help in dating on stylistic ground

Following important images are found from this district:
(1) Brahma
(2) Brahma-Savitri
(3) Vishnu-standing as well as seated
   a) Yoganarayana
   b) Vaikuntha
   c) Lakshmi Narayan
   d) Various incarnations of Vishnu like, Varha, Narsimha, Krishna, etc.

In addition to these, various forms like Shridhara, Madhava, Purushottama, Upendra, Achyuta, are also discovered.

Vishnu images have beautiful semi-conical Kirita-mukuta and other ornaments like girdle, necklace, bracelets, mala etc. with pearl strings and other decorations.

The facial features are sharp with long pointed nose, square prominent jaws, big eyes, thin lips and squarish but round face. The limbs are long and slim. The broad shoulders and slim waist give a good manly posture to the God, while shapely female deities represent divine beauty. The overall representation in traditional but artistic and impressive. The
weapons and other objects like Shankha, Chakra, Gada, Padma, Mala, etc. held in hands are in traditional forms which are standardized and stylised to some extent.

All these physical features, postures, weapons and objects are made exactly according to the iconographic texts of the Brahmanical faith.

Shaiva sculptures from Ahmedabad district are in many varieties. As such we have various forms of Siva, such as Samhara and composite images. Coupled images are with Uma and other Gods like Ganesh, etc.

In all we have following iconographic forms of Shaiva images from Ahmedabad district:

1) Sada Siva
2) Uma-Maheshwara
3) Andhakasuravada Murti
4) Gajantekavada Murti
5) Ardhanarishvara

All these images are in sandstone belonging to 11th to 13th century A.D. The Uma-Maheshwara images in Alingana pose are artistically made with Uma seated on the left thigh of Maheshwara and looking at the God. The left hand of the God is holding the breast
of the Goddess. The Jata Mukutas of the God and the Goddess are very artistically executed. Other ornaments like necklace, bracelets are very beautiful.

The Samharamurti, like Andhakasuravada are vigorous and forceful depicting fierce mood of the God in typical killing postures with weapons.

One of the image of Shaiva Acharya Gorakshanatha is a clear indication of the presence of Natha Pantheon in Ahmedabad district.

It is a well known fact that Chaulukyas of Gujarat were Shaivas and patronized the religion. No doubt, kings like S Kumarpala had patronized Jaina religion with much force and enthusiasm. But Siddharaja who was a Shaiva was a great patron of Jainism and particularly Jain scholars like Hemachandracarya.

The presence of Matruka figures like Indrani, Maheswari, Agneyi, etc. is an indication of Matruka cult. It is a well known fact that some kind of mother Goddess cult was current in the Indus civilization which continued in Kushan and subsequent periods and survived even during Chaulukyan and later periods.

The Matrukas from Ahmedabad district are in sand stone and in somewhat damaged condition. Inspite of
this their pose and child held in their hands are clear. Even the branches of various trees in background are depicted clearly. Ornaments like Aksamala, necklace, etc. and weapons like trident etc. are visible along with vehicles like elephant, bull, ram, etc.

Similar figures of Matrukas are found from Vijapur, Vadnagar, Modhera, etc. indicating wider spread of this sect in other parts of Gujarat and mutual cultural and religious contacts. The presence of Surya image and a panel of Navagraha are interesting part of the sculptural and iconographic wealth of Ahmedabad district. The solar deity Surya known in the Vedas as Savitri, Pusan, Bhaga Mitra, etc. is being worshipped in India right from the Vedic period. The presence of the image of this God clearly indicates the tradition of Sun worship in the Ahmedabad district.

The medieval temple at Kudhana in the Viramgam Taluka of Ahmedabad district is an important evidence of sun worship.

The standing erect Samabhanga pose of God, ornaments, mukuta and whole boots are typical Chaulukyan in style.
The Jain images discovered from this district are only five. They are Mahavira, Parsvanath, Chakresvari, etc. Tirthankar images clearly depict the Srivatsalan-chhana on their chest with marked spiralled hair and seats. They indicate presence of Jainism in this region between 11th and 13th century A.D.

The Indian sub-continent seems to have offered ideal living conditions to man from earliest periods of history. The fertile soil, perennial rivers carrying large amount of fresh water and the climate were most welcome to the early man and we find indications of human activities in the presence of stone age tools on most of the river banks. The Ahmedabad district also recapitalized this general pattern which is found in the rest of Gujarat and the sub-continent of India. The earliest evidence indicating activities of man in the Ahmedabad district, however, is from the microlithic period. This is followed by Harappan and post Harappan settlements. Subsequent to this, is the iron using community of earlier century of the Christian era. In fact from this period onwards we have a more or less complete sequence of human activities right upto the present time.

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-318-
REFERENCES

1) Sophie Ehrhardt, Excavation at Langhanaj
Kenneth A.R. Kennedy.

2) Shastri K.K., Puranman Gujaratani -
Adima Jatio "Vidyapitha" Vol.V. p.140

3) Dr. R.N. Mehta } Excavation at Nagara, p.34
Dr. D.R. Shah

4) Dr. R.N. Mehta } Excavation at Nagara, p.135
Dr. D.R. Shah

5) Bendapadi Subbarao, Baroda through the ages, p.74

6) B. Subba Rao, Excavation at Vadnagar, p.33


8) Dr. R.N. Mehta, Medieval Archaeology, p.129