CHAPTER 1:
INTRODUCTION
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The role of animals in explaining the past culture of human societies is of high importance in which the science of archaeozoology is one of the most important interdisciplinary subjects of research. It is not an overstatement to say that nothing has influenced human life, thought, opinion, and performance as greatly as animals have. The study of archaeozoology is based on skeletal experiments, and the analysis and the study of the physical remnants of faunal presence in past societies.

In the present research, issues of Iron Age archaeozoology are addressed where the researcher talks about the study of animal remains from different aspects. This means that mere direct study of animals including skeletons and fossils is not of primary concern- instead the study will look at both the direct presence of animals, including remains resulting from buried bones or human hunting, as well as the indirect presence of animals including artifacts and paintings that display the presence of animals or quasi-animals (chimeric or mythological elements such as Griffins) by men. Such studies of animal paintings and motifs are indeed related to archeology and history of art.

Therefore, the study of the culture of Iron Age of Gilan is based on two parts; animals in physical archeological contexts, and in the history of art oriented-archeology. However, the main goal of this research is to explain and study the culture of Iron Age of Gilan by examining the strong evidence of animal remains and motifs which have been so far neglected in the archeology of the region. The study comprises seven chapters, as outlined below:

First Chapter is the research framework that includes introduction, statement of problem, research aims and objectives, scope of research, review of the related
research (along with tables), research problems and ambiguities in the archeology of the region, research methodology and research hypotheses.

**Second Chapter** is about the physiographic features of Gilan which include the location of the provinces, Geology, Climate, Temperature and Rainfall, Water Resources Condition, Soil Condition, Vegetation and Animals life (floral and faunal) at present in the Gilan.

**Third Chapter** is about Settlement, Burial and Subsistence Patterns (livelihood) in Iron Age of Gilan. Here for the first time in history of the archeology of Gilan province, a tri-lateral classification including Roudbar cultural sphere (Sefidrood), Deilaman and Amlash cultural sphere (Polrood), Tavalash cultural sphere (Shafarood and Karganrood) was proposed, and settlement and burial patterns were compared in each of these spheres.

Based on all the discoveries of bones and artifact assemblages that have been made in Gilan and are introduced in this chapter, it can fairly said that Iron Age inhabitants had lived life through hunting, farming and animal husbandry, with a fair amount of balance between the vegetarian and non vegetarian means of consumption where meat and dairy products supplied significant means of subsistence. Livestock was the essence of the economy for the Iron Age inhabitants of Gilan and farming and hunting methods appeared in the later stages. Reliance on livestock and pastoral life had played an important role in the way of people’s living, beliefs and houses in Iron Age of Gilan.

**Fourth Chapter** is about The Fauna in the Iron Age of Gilan. This chapter is also one of the main parts of the study that specifically addresses the animals in the Iron Age of Gilan. So, this chapter reviews the faunal history based on published faunal reports, that are divided into two sections; firstly the evidence of direct presence of animals in
Iron Age in Gilan (bones, fossils, horns, etc). In this section are introduced skeletal evidence of animals especially those of horses from the sites like Marlik, K laouraz, Ghale Kouti and Lasulokan, Ghias Abad, Maryan, Toul, Tomajan, Shahran, Sandas, Siah Bill and Jamshid Abad.

Secondly, the symbols (in the form of terracotta figurine, zoomorphic motifs on ceramics, seals, metals etc) of different animals are potential indicators of animal presence either out of memory or in recognition to their physical presence at the site. Eventually, all points to being an indirect presence of animals at Iron Age sites. This is indeed an important piece of evidence besides the skeletal remains which could be either the food refuse or an evidence of coexistence both in and around the settlements.

It is obvious that the decoration of animal forms and shapes is the consequence of their economic, socio-religious and mythological significance beyond just the food value and therefore their depiction is a direct testimony of the place that these animals occupied in the minds and surroundings of their landscape. Abundant signs of animal presence can be observed in Iron Age of Gilan through potteries, figurine, Rhytons and decoration on ceramic, metal and stone objects, about two hundred animal related objects which have been amply illustrated with suitable examples.

**Fifth Chapter** is about Comparison of the Iron Age animal findings elsewhere in Iran with Gilan findings and Chemical analysis of bone samples of Gilan Iron Age, so this chapter divided two section, firstly is mentioned about direct and indirect animal representation of some Iron Age sites in outside of Gilan (other area in Iran) like: 'Hasanlu', 'Kordlar Tape', 'Sagz Abad', 'Ozbaki', 'Khorvin', 'Ghaytariyeh', Gholi Darvish', 'Sialk', 'Gohar Tape', 'Tape Kalar', 'Lema', 'Ziviyeh' and 'Sorkhdam', that they have been Compared with Iron Age Animal remains in Gilan.
The second section offers for the first time, detailed chemical analyses of skeletal data from three Iron Age sites in Gilan. The values of trace elements like Sr/Ca, Z, Cu and also the fluorine values were obtained using X-ray Fluorescence and Mass Spectrometer and to see if any interpretations regarding the diet could be offered. It is noteworthy to mention here that this is the first ever approach undertaken with regard to Iron Age samples from Gilan province in Iran.

**Sixth Chapter:** This chapter is a key part of the investigation that includes Myth and beliefs about animals in Gilan and the surrounding regions and understanding cultural, social and religious traditions of Iron Age of Gilan. It also describes the ethnographic parallels in addition to the continuations of ancient traditions in present day village communities to understand the temporal and special stretch of traditions (in any) to understand the cultural dynamics of the settlements. There are few local legends popular among the ethnic groups living in the province of Gilan for centuries together; whose subject matter is monkey, hog, and composite ones like cow-fish etc. The crux of legends seems to correspond with the archaeological interpretation of artifacts and possibly offer a meaningful window to the origins of such legends.

Finally, the **seventh chapter** includes discussion and conclusions of the study.

The hypotheses presented in this research highlight the human-animal relationship in the Iron Age of Gilan and offer fresh insight into the role of man as a predator and domesticator of fauna, and his appreciation for the importance of these animals. Attempts were made to study, investigate, classify and test human and animal data and to provide explanations and reasons for each of the premises hitherto not elaborated upon in the archaeology of the region.
1.1 Statement of subject and Importance of the Research:

The Iron Age is considered as one of the most obscure periods of world archeology particularly in West and South Asia and Europe. Therefore, addressing the issue of Iron Age archaeology requires detailed archeological studies. Generally, the features of the Iron Age can be identified based on studies of the following issues:

- Open immigration and the subsequent intensification of cultural displacement,
- Distribution of urban population and shrinking large urban cores,
- Development of outdoor burials rather than elaborate tombs,
- The building of large fortified constructions in some areas,
- The use of iron and the advancement of technology in the production of pottery and metallurgy,
- Diversity of traditions and customs particularly related to those of disposal of the deads (burial customs) despite its differentiation from other areas in the past.

Substantial works are still needed to be carried out to understand the diverse spectrum of Iron Age culture, as in addition to the lack of intensive research in the Iron Age overall, there are more complexities and uncertainties at the regional level. One such region is the Gilan province in Iran, which the researcher has worked on. The ambiguities and uncertainties of the Iron Age of Gilan are summarized as following:

- Lack of understanding of settlement patterns in the Gilan Iron Age,
- Prevailing confusions regarding ceramic typology, namely the so-called gray ware and tube porcelain and their relationship with those found in association with the relics of the immigrant communities,
• Ambiguity in the tri-lateral division of the Iron Age culture of Gilan, despite the fact that the division is almost accepted in other parts of the country,

• compared to the Iron Age evidence in surrounding region, the site in Gilan are lesser understood and hence the onus is to bring clarity of chronological, and material evidence that could be established as being a typical of Gilan.

• Subsistence, food, human-animal interaction and the issues of symbols and mythology, related to Iron Age of Gilan; it has greater uncertainty than that of other parts of Iran.

The above problems can be seen in the archaeology of the Iron Age of Gilan. One of the most remarkable features in the region is that most of the mountains in the province are rich in graves and cemeteries dating back to Iran’s pre-Islamic period, specially the Iron Age. Such a feature cannot be seen in any other parts of Iran even in Mazandaran that has similar geographical features.

• The writer as a native of Gilan province who has spent much of his life in the province and is closely familiar with the native language and the local culture.
• The primary research activities of the author have focused in the Cultural heritage Organization of Gilan province.

• A large number of Iron Age sites have been explored and examined in Gilan province in the last ten years under the supervision of the author.

• The researcher has to his credit a dissertation he completed for M.A Archaeology in Tehran entitled “The Analytical Study of Jamshid Abad Iron Age Cemetery Data in Gilan”. This has equipped him with a clear understanding of the problem of research, research methodology and archaeological potential of the region.
• The researcher has had the opportunity to contribute several archeological reports, research papers in national and international journals on Gilan Iron Age, being closely associated with archaeological investigations of the region under his direction.

The many advantages of research experience in the field of Iron age Archaeology in Gilan make it an opportune endeavour to embark on yet another most important issue as to the exploitation of animal and biological resources by the inhabitants of Iron Age Gilan, and how deep the animal manifestations left their signatures in the archaeological record.

Before the 1960s, plant and skeletal remains that were obtained from archaeological excavations have not been considered by archaeologists of any consequences. The publications of the results of studies on the remains of ancient plants in Jamo Shanidar and Zavishami in Iraqi Kurdistan and the Alikoush and Tepe Sabz in southwestern Iran are some of the rare publications that have highlighted the importance of these studies. Nowadays, archaeologists are aware of the importance of the discovered bones and plant remains in studying the subsistence economy and livelihood of societies in many cases. In this regard, the analysis and interpretation of biological remains of antiquity using techniques of molecular biology known as molecular archeology and extracting and analyzing DNA from skeletal and plant remains has become popular.

Thus, regarding the importance of the study and classification of animal remains including bones, fossils and animal motifs on clay, metal or anything related to the animal presence on one hand and considering the extent of the animal discovery of the Iron Age in Gilan which had been almost neglected on the other hand surely paves the way for addressing animal issues in Iron Age Gilan. The study of the presence of animal life, which directly or indirectly exists through visualization in animal images and motifs connected to human artifacts, plays an important role in clarifying the
hidden aspects of the past human culture with special reference to its interactions with animals. In this context, livelihoods, life style, type of food, and even religious beliefs and traditions related to animals have been shaped which can be studied using the premises of social and historical sciences.

1.2 Research Aims and Objectives:

Briefly the aims and objectives can be outlined as:

1. Introduction of the local aspects in Iron Age findings of Gilan: especially, local aspects of Animals representation.

2. To study and dividing the Iron Age of Gilan into similar cultures zone.

3. To understand the man- animal web of relationship during the Iron Age culture in Gilan and role of the fauna in sustainability of the culture complex.

4. To study the socio-economic and religious aspects of the contemporary society based on skeletal, Pottery and other material culture evidence.

5. To understand the complex world of symbols and its internationals in the light of a vast repertoire of animal manifestation in art and ceramics.

The purpose of this research is a better and comprehensive understanding of the Iron Age particularly with reference to the Gilan province. If the subject matter is animals in Iron Age of Gilan, it is so because it is thought that the more passivity of animal issue remains in the archaeological study of the region on one hand and it is thought that this study can explain and determine the culture of the Iron Age in Gilan more effectively due to the importance of the subject matter; animal and its untold facts on the other hand.
1.3 Research Scope:

The scope of the present study focuses on the Gilan province in the northern part of Iran. Of course, all parts of Gilan province do not have the spread of Iron Age sites but only small parts of the mountainous areas have yielded the remains of the Iron Age (Maps No.1.1, 1.2, 1.3).

In addition, few of them have been explored archeologically or works have been carried out through the illegal, accidental and unauthorized excavations and have been sent to museums. So far, about 37 members of the archaeological mission have conducted approximately 100 archaeological investigations in the Iron Age sites in Gilan. The finds have been registered and some of the excavations have been undertaken repeatedly over the years in an enclosure.

Map No. 1.1 Political Map of Iran showing all provinces, with Gilan highlighted
Map No. 1.2 Distribution of all townships and Iron Age sites in Gilan that are mentioned (more) in this research.

Map No.1.3 Satellite map showing part of Gilan with location of Iron Age sites that are mentioned (more) in this research.
Despite numerous Iron Age sites in Gilan and diverse exploration and studies, only about 10 sites have been considered viz.

Marlik (N 36° 54’ 54/4”) & (E 49° 33’ 26/4”),
Halime Jan (N 36° 57’ 28/5”) & (E 49° 34’ 30”),
Shahran (N 36° 56’ 12/3”) & (E 49° 32’ 55/8”),
Kalouraz (N 36° 55’ 12/4”) & (E 49° 29’ 6/3”),
Jamshid Abad (N 36° 56’ 15/7”) & (E 49° 30’ 31”),
Ghale Kouti, (N 36° 54’ 26”) & (E 49° 57’ 00”),
Boye (N 36° 51’ 34/4”) & (E 50° 06’ 20”),
Vaske (N 37° 32’) & (E 48° 50’),
Maryan (N 37° 51’) & (E 48° 40’),
Toul (N 37° 44’ 07”) & (E 48° 36’ 25”)

Some of these sites have impressive archaeological finds, but their documentation is lacking or incomplete with regard to the reporting of animal artifacts and material.

Even though only ten sites are considered for this study, a wider perspective of the Iron Age in Gilan in general is a broader canvas against which the interpretations are offered. Some of the sites, which were subject to unauthorized excavations or were exposed accidentally, also yielded a number of artifacts which have been housed in the museums and documentation center of Gilan, which are also referred in the present study.
It is interesting to note that many of the sites referred in the study are not single ancient hill sites but include sets of sites clustered under a single name. For example, Marlik includes sites such as Marlik (Charagh Ali Tepe) and Pila Ghale, Jazem Koul and Ghashlagh etc. Furthermore, Halima Jan includes rural areas of Halima Jan and Shahran Villages which themselves include smaller areas such as Shah Pir or Lame Zamin. In addition, Marian includes sites like Marian, Aghevlar and Tandevin. It is worth mentioning that this project has included the animal findings of Iron Age in the other regions of Iran and surrounding places for further comparison. Parallels with sites from South Asia and India have also been drawn in the course of this study.

Similar to present day pattern of settlement distribution in the provinces of Gilan and Mazandaran, where the villages and towns are sparsely located from one another; during the Iron Age too, the settlements and cemeteries were also probably scattered all over the mountains, except that the actual spread of the sites across the altitudes is not yet well understood.

1.4 Review of the Related Literature:

There already exists a large body of research carried out by previous scholars in the field of Iron Age in Gilan. However, the approaches of archaeological sciences have been seldom addressed and as a result not much is known about the faunal spectrum and chronology of the Iron Age with special reference to Gilan province.

While examining the literature on the archaeology of Gilan, one is confronted with a complete absence of any material referring directly or indirectly to the faunal elements or discoveries. Hence the present study claims to be a first ever approach in the archaeology of Gilan where animals are being considered as a part of a holistic approach to the subsistence and socio-economic and cultural interpretations. However, the actual skeletal record has not been examined by earlier scholars as extensively as it
should have been and as a result our knowledge about the faunal contribution in Gilan continues to be compromised to great extent.

The archaeological explorations and excavations of Gilan began in the twentieth century by Jack De Morgan at a few sites in Talesh region in Gilan. From that time until 2006, at least 60 foreign and national missions (some of them over the years) have carried out archaeological investigations in the province, 37 of which (some of them spanning several years) worked on the Iron Age. Some of these missions have identified historical sites in addition to Iron Age sites (Table No. 1.1 and Chart No. 1.1).

Chart. 1.1 The distribution of archaeological sites in Gilan with reference to their proportions, which were excavated in last more than hundred years from 1901 to 2006

Jacques de Morgan conducted archaeological investigations in Talesh region in Gilan and assigned the cemeteries and cultural materials to the New Bronze Age and Old Iron Age (De Morgan 1905: 327). He believed that these objects and artifacts are
comparable to those of found in the erstwhile Soviet Union (presently, Talesh is a part of the Republic of Azerbaijan and shares a border with Gilan). Furthermore, de Morgan believes that all the ancient settlements spread across the province of Gilan belong to the ancient tribes that had come to Iran from both sides of Caspian Sea. Thus, he surmises that the evidence of the oldest inhabitants of Iran should be sought in Gilan.

Namio Egami (1965: 15) had conducted excavations and discoveries in the region around Dailaman at the sites known as Ghale Koti Kohpas, Lasulokan, Noruz Mahaleh, Khoramrood, and Hasani Mahaleh in the 1960’s and discovered a variety of artifacts and objects from the New Bronze Age and Iron Age deposits (second half of the second millennium BC. until Parthian period). In his Dailaman reports, he stated that the bones of small animals and birds were placed with beverages and food in some of the containers besides the bodies of the dead ones. Egami is of opinion that the first settlers of the south Caspian Sea were people who lived in these regions in Mesolithic Period for more than 12 to 10 thousand years. Then, they moved to the East and Turkmen desert. Afterwards, the Turkmen residents had made painted pottery and black pottery in both copper and stone periods. The black ware continued to be polished ware until the late Bronze period in these regions. Gray ware has been obtained in northern Iran (in cemeteries of regions like Amlash, Dailaman and Roudbar) which was quite comparable with the findings of the south Alborz regions emerging from the cemeteries of Khorvin, Ghaitariyeh, Pishva, and Kahrizak.

Kambakhsh Fard who investigated the regions between Sefidrood and Gilan Polrood in 1961, dated the cemeteries such as at Omam, Boye and Ghias Abad and Bonzamin to the 7th to 9th C. BC (Iron Age period, according to Median period). Considering the similarity of metal and ceramic artifacts, he concluded that the authors of these burials were Iranian or Median immigrants and ethnic groups coming from the eastern and
western regions of the Caspian Sea and the Caucasus, Azerbaijan to Iran around the first millennium BC. In most cases, the pottery, bronze and iron artifacts are comparable to the objects from tombs of Sialk in Kashan and bronze, iron findings in Luristan and Hasanlu V phase. He believed that the structure and architecture of Ghale Kouti graves is comparable to architecture of graves found during the period of active silk trade in the region. The iron tools, including axes and daggers, are related to the brachycephalic (round head) type which has a cover in the handle and hilt which curve inward (Kambakhsh Fard 1990: 23).

A scientific excavation conducted in Marlik and Pilla Ghale during 1961 and 1962 yielded a significant number of gold, silver, bronze cups, mosaic, porcelain and crockery. Various ceramic objects, golden and silver objects, cylindrical beads of stone and glass, stone tools made of flint and obsidian and anthropomorphic/zoomorphic figures, façade, pottery, bronze and metal, and hundreds of other objects have been obtained from the fifty three tombs discovered in Marlik or Cheraghali Sites.

Ezzatollah Negahban, Head of Marlik explorations stated that Marlik tribes came to settle on the heights of the Alborz mountains about the second half of the second millennium BC. For about a century, they made considerable progress and flourished in the field of arts and industries in the region between the fourteenth and tenth centuries BC. These tribes had established a strong and powerful rule in the region. The region under their control extended to all the northern slopes of the Alborz Mountains and southern borders of Caspian Sea, covering regions such as Talesh in Russia and Iran, the eastern part of Azerbaijan, Gilan and Mazandaran. Marlik tribes had established the production centre for metal industries, especially of bronze in which those products had been transported through trade or other ways to remote
regions in the west to the eastern coasts of the Mediterranean Sea and to Indus valley in the east (Negahban 1985: 169-259).

Ali Hakemi’s excavations in 1967 and 1968 in areas such as Nesfi, Naveh, Joboun and Ganjpar areas and Kafarkash are one of the largest discoveries in the area of Roudbar in Gilan. Excavations at the site of Kalouraz yielded variety of vessels and cups made of gold, silver and bronze, which were classified as belonging to the first half of the first millennium BC. Figures of a lion, antelope, deer and birds like eagle are embossed on a cylindrical vessel of gold. Along with the skeletons of horses at Kalouraz, objects made of bronze, gold and silver and various other objects including bronze and iron rods and circular bronze plates sewn on leather headband, pearl buttons or parts of saddles decorated with lots of stone and bronze bells of different size and shape were obtained. Among the objects discovered, a horse necklace made of metal that depicts a hunting scene is the most impressive one. The necklace consists of three parallel rows of oval-shaped metal rods that have been fastened by some clips. Due to the profusion of discoveries related to the horse burial in Kalouraz, Hakemi had concluded that this region belonged to tribes which have a passion for animals, especially horses for their natural attributes. According to the historical sources, Scythian tribes known as "Masazhet" and "Derbik" had spread into the northwest territories at the same period of time, and it is thus extremely likely that the burials at Kalouraz belonged to these same tribes, which were known for their love for gold and animals, in particular the horses that were such an important part of their nomadic lifestyle (Hakemi 1964).

In 1969, Abdolhossein Shahid Zadeh explored other areas like Shimam, Shahrani and Halime Jan and discovered many different agate, lapis, glass-paste and metal necklaces, engraved cylinders and seals, container pottery through exploration and
excavation, during which a number of graves dated to the early first millennium BC were excavated. He suggests that these works belong to Mard tribes. He wrote that the people of the Mard tribe, like other ancient tribes along the Caspian coast, were burying their dead with special rituals which originated from the ancient Aryan rituals of Mithraism (Shahid Zadeh 1968).

Mahmoud Mossavi had reviewed and excavated Ghale Kouti Komoni, Miarkashe, Zargarchashme, Lashkastan, Sanjed Dareand, Shahjan areas near Komen village in later half of seventies in which the significant findings belonging to the pre-Islamic cemetery particularly the Iron Age came to light. He came to a general conclusion that unlike other contemporary cemeteries in the regions of Dailaman and Roudbar, the poor quality and general scarcity of material at the Eshkavar graves point to its primitive nature in comparison to Roudbar and Dailaman in Gilan (Mossavi 1991: 527).

Both Shahran and Halime Jan villages are located in a valley called Dare Shahran on the east bank of the Sefidrood in Rahmat Abad district in Roudbar city. Some excavations had been conducted by a Japanese delegation headed by Shinji Fukai of the University of Tokyo from 1976 to 1978 in Shahran and Halima areas. The historical periods of the sites in Halima Jan are as follows: Jangal Ashor Mohammad (late second millennium), Barnjzar Ziaei (Sassanid era), Gachsar Nahd Ali (Parthian and Sassanid), Razak area (Sassanid era), Rodkhan Bar (second half of the second millennium BC), Gorosh (the 8th & 7th century BC) and works belonged to Shah Pir cemetery (both the Parthian and Sassanid eras). According to the present researcher, the graves of Shah Pir are like a pit dug at a depth of 1 to 1.5 meters from the surface. The history of the above graves dated back to the earlier Parthian periods or 1 to 3 BC. This chronology and classification are based on two types of objects and artifacts
discovered at the site- one is a kind of eye nut and the other a type of ceramic ware (cup).

However, according to Fukai’s investigations the historical period of the cemeteries of Shahran village has been announced as the following: Emamzade Mohtasham (Sassanid era), Pain Mohale cemetery of Shahran city (prehistoric and early first millennium), Lame Zamin graveyard (second millennium BC).

In Lame Zamin, twelve graves were discovered in a two hundred square meter area in which many gray and red ceramic wares with round bottom and great bins had been found as grave goods. Furthermore, some ceramics in the form of humanoid effigies were discovered in the same tombs. The significant point was only copper objects were found in the graves of Lame Zamin (Fukai 1982: 82).

From 1979 to 1992, almost all archaeological work on Pre-Islamic Iran had stopped in the wake of the Iranian Revolution of 1979, which had led to a ban or restriction on all archaeological work in the country.

From 1992 to 1994, Khalatbari conducted the first Archaeological work in Post-Revolutionary Iran, in Shafarood Valley in Rezvanshahr city of Gilan particularly in Vaske and Mianrood areas. In a short overview of the history of Vaske cemetery, he believes that its history goes back to the Parthian (Arsacid) period on the basis of burial patterns, the widespread use of iron, and some features of the pottery types in the cemeteries (Khalatbari 2000: 21-20).

In addition to this, Khalatbari has headed the excavations at Maryan, Aghevlar, Tandevin and Toul located in Karganrood valley in Talesh city in the northwest of Gilan between 1999 and 2004. Regarding the skeletons discovered from Tandevin and Marian cemeteries, the osteologist of the excavation team believes that most of the
skeletons are of brachycephalic types and only a few skeletons had belonged to dolichocephalic or Mesocephalic. Furthermore, the average age among the men was 55 years and it was 65 years for that of the women. He also believes that the local residents of the region have not been invaded by alien tribes for a long time since the evidences of trauma and injuries associated with war are relatively low in comparison to the artifacts discovered from the site. Present researcher prefers to date Tandevin cemetery between 1250 BC to 1300 BC (Iron Age). However, features such as regular structured graves, extensive use of bronze, silver, and especially Iron, it would seem that the Marian belonged to cemetery Iron Age periods IV, or the Parthian period respectively (Khalatbari 2004: 186).

Large numbers of objects and cultural materials were found in the cemetery at Toul in Gilan, mostly made of clay, bronze, iron, silver, glass-paste, onyx, stone, bone, bone, etc. The social and political role of the women in that society was also identified. While exploring the Toul area, within a large grave stone of $2 \times 2 \times 13.60$ m dimensions in which it had a chamber with $2 \times 1 \times 2$ m dimensions in the distal part, where a woman’s skeleton had been laid to rest. According to the researcher the significant social and political roles of women is evident from the rich grave goods and elaborate burial arrangement compared to other burials, which point to the special status the woman might have enjoyed in the community. This has implications for women's superior social or political role (status).

The most important evidence that comes from the ancient site of Toul is a bronze bracelet whose inner edge is engraved with Urartu cuneiform. The discovery of Urartu cuneiform inscription indicates that the residents of the region had reached the stage of writing and composition in the eighth century BC (Iron Age II). The text of inscription from Toul in Gilan also assigns the establishment of this cemetery to the eighth century BC (Khalatbari 2007: 27).
Fallahian (2003: 224) has offered ten explanations to support his hypothesis that the graves belonged to the first phase of Iron Age. The reasons are as follows:

1) Absence of iron

2) Findings are similar to those found at Lame Zamin and Dailaman Ghale Kouti that were previously associated with First Iron Age

3) Deep dug pits graves

4) The discovery of a special kind of tube porcelain

5) Button base dishes

6) The discovery of a particular kind of ceramic cup in this period

7) The discovery of a type of round pottery with three stand bases.

8) No pale brownish pottery

9) Absence of the Zebu (Bos indicus) motifs, but the presence of certain types of anthropomorphic figures from the early Iron Age periods

10) The discovery of specific type of daggers which actually belonged to the late second millennium BC.

For the first time since Islamic Revolution, a joint delegation of Japan and Iran headed by Jebrael Nokande from Iran and Otsu Tadahiko, Japan during 2001 to 2004, had conducted an archaeological investigation in the western coast of Sefidrood, excavating Jalaliea mound in Rostam Abad in Gilan. Chorpe, Joboun, Shimam and Dogamian Valley are some of the important valleys in the region where select sites related to Iron Age have been identified. The most important areas that had been discovered and explored included: Chorpe, Malga, Fildeh, Sharef, Sorkhan, Loya, Karki, Dogahe, Darastan., Kharcharak, Kharpin Dozbare and Gazkoul in which the
objects dated back to the period between the Iron Age to Islamic periods such as Seljuk and Ilkhanid eras (Nokande & Fahimi 2003: 29).

In late 2002 and early 2003, almost all the parts of Amarlu located on the banks of the Shahrood River in Roudbar city in Gilan province had been studied and explored by a team headed by the present researcher. This project identified 60 cultural and historical sites of Islamic periods, Iran's pre-Islamic and especially pre-historic periods for the first time. It has been announced in the results of the mentioned survey that Amarlu region was considered as the archetype of pre-historic habitation caves as well as the core area of a unique culture with alternating cultural layers from Pre-Islamic cultures such as Mian Kolan, Siapas and Karmak. In addition, it was said that most of the identified cemeteries belonged to the Iron Age, as unlike the hills and the rivers in areas that are located in low plains, Iron Age cemeteries are generally located in areas with high altitudes between 1000 and 1800 m (Fallahian 2005: 207).

In 2004, the Khosro Khani area, located in the suburbs of Dailaman city, had been explored and excavated by the present researcher's team. Although in previous years the area has faced unauthorized exploration and excavation by treasure hunters and the layers were intensely affected, but nonetheless, exploring the area shown that these graves belonged to the Iron Age and the Parthian period (Fallahian 2004: 122).

In 2005 and 2006, Mohammad Reza Khalatbari had re-excavated Tepe Jalaliyeh located in Rostam Abad city in Roudbar, which had once been tentatively studied and explored by a joint committee of Iran and Japan in 2002. Unlike the discoverers of the site which assigned the earliest findings of this hill to the Parthian period, he considered the oldest architectural artifacts related to Iron Age in this stage of his exploration and claimed that it is the earliest discoveries which belong to the Iron Age settlements in Gilan (Khalatbari 2007: 24).
1.5 Research Limitations and Problems:

Certainly, detailed reports and information obtained from various sources including actual discoveries of Iron Age in Gilan, particularly those of animal presence at such sites, will be useful in providing a rich source of data and to achieve the aims of the present thesis more successfully. However, the reports and documents of related animal discoveries in Gilan are not satisfactory due to two reasons which can be considered a major hindrance. Those two reasons are:

- Hitherto, the excavators did not give adequate importance to animal bones or the artistic manifestations of animals in the archaeological record.

- Secondly, in some cases, skeletal remains are not accessible for study in spite of their being recorded and preserved in the centre of documents or museums by investigators.

The archaeological map of Gilan has gaps and ambiguities in terms of the spread of sites which needs to be taken into consideration while looking at site formation process and the current research problems regarding the Iron Age sites in Gilan province.

The archaeological research in Gilan has not yielded much evidence of Paleolithic, Neolithic and Chalcolithic periods which can be attributed largely to the lack of field investigations undertaken so far. However, save in the case of sites like in Amarlu region which are located in the semi-arid highlands of southern Gilan and represent a continuum of cultures from Palaeolithic to Chalcolithic. In addition, the pre-Sasanian historical heritage in the plains of Gilan Province has not been widely explored yet.

Thus, the lack of substantial evidence of pre-Iron Age works throughout the province of Gilan (apart from small Amarlu region) and the lack of the required discovery of
traces of pre-Sassanid period of the plains leaves a major lacuna in our understanding of cultural continuity in this part of Iran.

The settlements of the Iron Age in Gilan apparently seemed smaller and less significant, but the numerous cemeteries scattered in the mountains of Gilan show that a huge population had chosen Gilan for settlement. Despite this situation, there remains uncertainties in the archeology of the region compared to other regions of Iran even in this period, in which the most important ones are:

1) The lack of extensive explorations and excavations of habitational remains from this period.

2) The lack of understanding of the archeological finds of the Iron Age of Gilan.

Although one must admit that the surveys and excavations conducted in Gilan were inadequate, this lacuna is not only limited to the archaeological investigations, but also being a feature of archaeological studies in other parts of the country as well.

1.6 Research Methodology:

In order to understand the temporal and spatial stretch of the culture sequences, it becomes essential that the Pre-Islamic periods are also examined for a better resolution in terms of the abandonment of a site or arrival at the site of non-indigenous peoples. Research methodology is outlined as the following:

- It reviews all archaeological reports of pre-Islamic sites (especially Iron Age) of Gilan: Including archived reports and published reports in the form of books and articles and detailed reports about animal discoveries. This has enabled a clear and
holistic perspective of the Iron Age sites and clues to identify the problem of research that is elaborated in forthcoming pages.

• Includes examining archaeological assemblage especially the ceramics, figurines, other objects and animal material from the Iron Age sites that are housed in the Museums of Rasht, Tehran and other museums within the region.

• Inter and intra-site comparisons of the archaeological assemblages will allow to understanding the cultural dynamics of the Iron Age sites in Gilan and mutual relationships (if any).

• The animal representation on ceramics or any other archaeological artefacts will allow the importance of symbols and its relevance to the myths that may have played centre stage in creating the array of symbols in archaeological materials.

• The chemical analysis of bones will throw light on the diet of faunal and human elements and ecology of the Iron Age sites. It is the first ever attempt with respect to Iron Age sites in Gilan and hence assumes great significance and opens fresh avenues for future research in the field of Palaeobiochemistry of skeletal record in Iranian Archaeology.

1.7 Research Hypothesis:

Hypotheses raised in this research about the role and place of animals in the Iron Age of Gilan offer a completely new perspective. In order to prove these hypotheses, an attempt has been made to study the objects and animal symbols in the region and surrounding areas as much as possible. These hypotheses are as follows:

• The economy of the Iron Age of Gilan was primarily pastoral, involving the exploitation of domestic livestock.
• The symbiotic coexistence of interaction of humans and animals goes back to ancient times whose manifestations are evident in the form of zoomorphic objects, and their structural context. These provide the key to understanding the multiple levels of man-animal interactions since prehistoric time.

• The importance of cattle in some parts of Gilan was the direct consequence of the usefulness of this animal for primary and secondary products such as meat and milk, the ability to transport people and goods, ploughing the fields, and so on which makes it much more economically viable compared to other animals.

• The artistic manifestation of composite human-animal motifs has their roots in long-term and multidimensional memory of animals in the minds of ancient communities.

• Environmental conditions were one of the most congenial factors in maintaining animal wealth and cultural stability. Animals as sacrificial offerings, pets, domestic animals for economic sustenance and aspects like taboo etc. can be best explained by the multiple layers of the web of relationships that man has to share with animals since time immemorial. For example, birds and fish images along with the body of other big animals displayed in a region where the appropriate conditions were managed for living and hunting. In cases, the manifestation of these differences is known and documented in the amount and manner of the presence of these animals including burial or displaying them as effigies.
<table>
<thead>
<tr>
<th>Number</th>
<th>Name of Historical Place</th>
<th>Township &amp; District</th>
<th>Period</th>
<th>type of research</th>
<th>Year of Field work (AD)</th>
<th>Nationality of researchers</th>
<th>supervisor</th>
<th>type and Language of Reports</th>
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<tr>
<td>1</td>
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<td>Talesh, Central area</td>
<td>2nd millennium and 1st millennium BC</td>
<td>Exploration and Excavation</td>
<td>1901, 1902</td>
<td>France</td>
<td>J. Demorgan</td>
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<td>Siahkal, De ylaman</td>
<td>Iron Age, Parthian, Sassanid</td>
<td>Exploration</td>
<td>1960, 1964 &amp; 1966</td>
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<td>N. Egami</td>
<td>Perfect, (English)</td>
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<td>2nd half of the 2nd millennium BC</td>
<td>Exploration and Excavation</td>
<td>1961</td>
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<td>Iron Age to Islamic Period</td>
<td>Exploration</td>
<td>1961, 1962</td>
<td>Iran</td>
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<td>Perfect, (Persian &amp; English)</td>
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<td>Iron Age &amp; Parthian</td>
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<td>1966</td>
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<tr>
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<td>Excavation (trading)</td>
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<td>Language</td>
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<td>Roudsar, Rahim Abad</td>
<td>Iron Age, Parthian &amp; Sassanid</td>
<td>1975 to 1978</td>
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<td>1976 to 1977</td>
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<td>19</td>
<td>Siboun</td>
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<td>1983</td>
<td>M. Mousavi</td>
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<td>1st half of the 1st millennium BC</td>
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<td>Iran</td>
<td>M.D. Rouhani &amp; F. Towhidi</td>
<td>Primary</td>
<td></td>
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<tr>
<td>21</td>
<td>Shahran, Estalkhjan &amp; Jamshid Abad</td>
<td>Roudabr, Rahmat Abad</td>
<td>1st millennium BC, Achaemenid, Parthian &amp; Islamic</td>
<td>Excavation 1986 to 1989</td>
<td>Iran</td>
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<td>Primary</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>West side of Sefidrud</td>
<td>Roudabr, Central Area</td>
<td>from Iron Age to next</td>
<td>Excavation 1990</td>
<td>Iran</td>
<td>M. Khalatbari</td>
<td>Primary</td>
<td></td>
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<td>Iron Age</td>
<td>Excavation 1991</td>
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<td>Y. Kousari &amp; M. Khalatbari</td>
<td>Primary</td>
<td></td>
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<tr>
<td>24</td>
<td>Vaske &amp; Mianrood</td>
<td>Rezvan Shahr, Central Area</td>
<td>Iron Age, Achaemenid &amp; Parthian</td>
<td>Excavation 1992 to 1994</td>
<td>Iran</td>
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<td>Emergence Exploration 1996</td>
<td>Iran</td>
<td>R. Sadrekabir</td>
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</tr>
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<td>Talesh, Central Area</td>
<td>Iron Age &amp; Parthian</td>
<td>Excavation 1998</td>
<td>Iran</td>
<td>M. Khalatbari</td>
<td>Primary</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Maryan, Aghevar &amp; Tandavin</td>
<td>Talesh, Central Area</td>
<td>2nd and 1st millennium BC</td>
<td>Excavation 1999 to 2002</td>
<td>Iran</td>
<td>M. Khalatbari</td>
<td>Perfect, also Published</td>
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| 28  | Jamshid Abad | Roudbar, Central Area | Iron Age & Parthian | Excavation 2000 | Iran | R. Sadrekabir | Perfect, By Y. Fallahia
<table>
<thead>
<tr>
<th>No.</th>
<th>Location</th>
<th>Site</th>
<th>Period</th>
<th>Method</th>
<th>Year</th>
<th>Collaborators</th>
<th>Language</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>29</td>
<td>West side of Sefidrud &amp; Jalaliyeh hill</td>
<td>Roudbar, Central Area</td>
<td>from Iron Age to next</td>
<td>Exploration &amp; Excavation</td>
<td>2001 to 2004</td>
<td>Iran &amp; Japan, J. Nowkandeh &amp; O. Tadahiko</td>
<td>Perfect (persian &amp; English)</td>
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</tr>
<tr>
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<td>Rasht, Qazvin Highway</td>
<td>Roudbar, Rahmat Abad &amp; Bloukat</td>
<td>Iron Age, Parthian &amp; Islamic</td>
<td>short Exploration</td>
<td>2002</td>
<td>Iran, Y. Fallahian &amp; Sh. Ramin</td>
<td>Primary</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Shahrud River's district (Amarlo)</td>
<td>Roudbar, Amarlo</td>
<td>Paleolithic, Neolithic &amp; Iron Age to next</td>
<td>Exploration</td>
<td>2002 to 2003</td>
<td>Iran, Y. Fallahian</td>
<td>Perfect</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Toul-e Gilan</td>
<td>Talesh, Central Area</td>
<td>1st millennium BC (Urartu) and Parthian</td>
<td>Excavation</td>
<td>2003 to 2005</td>
<td>Iran, M. Khalatbari</td>
<td>Perfect (also Published)</td>
<td></td>
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<tr>
<td>33</td>
<td>Marlik precinct</td>
<td>Roudbar, Rahmat Abad</td>
<td>Iron Age</td>
<td>Excavation and organization</td>
<td>2003</td>
<td>Iran, R. Mostoufi</td>
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<td>Khosrokhani (Kharsakhan)</td>
<td>Siakal, Deylaman &amp; Pirkoh</td>
<td>Iron Age, Parthian &amp; Islamic</td>
<td>Excavation</td>
<td>2004</td>
<td>Iran, Y. Fallahian</td>
<td>Perfect</td>
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<td>35</td>
<td>Gas Route (Kiyabad to Baresar)</td>
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<td>Iron Age to next</td>
<td>Short Exploration</td>
<td>2004</td>
<td>Iran, Y. Fallahian &amp; M. Mirsalehi</td>
<td>Primary</td>
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<td>Ganjtape (Jalaliyeh)</td>
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<td>Iron Age, Achaemenid &amp; Parthian</td>
<td>Excavation</td>
<td>2005, 2006</td>
<td>Iran, M. Khalatbari</td>
<td>Primary</td>
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<td>2006</td>
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