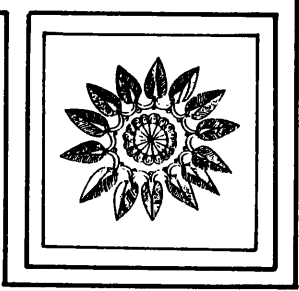
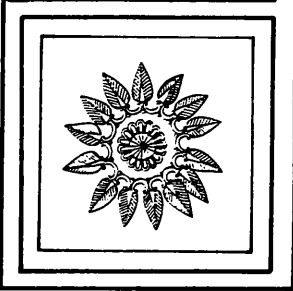
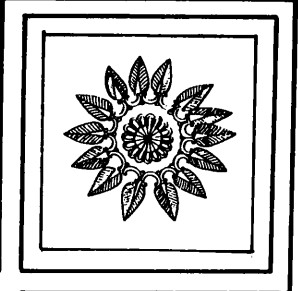
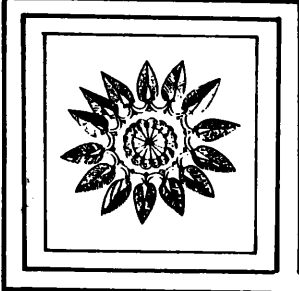


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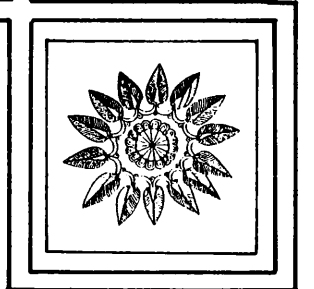
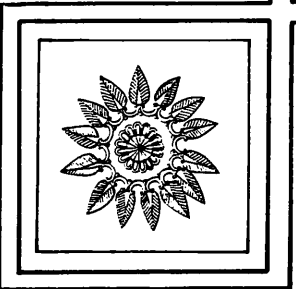
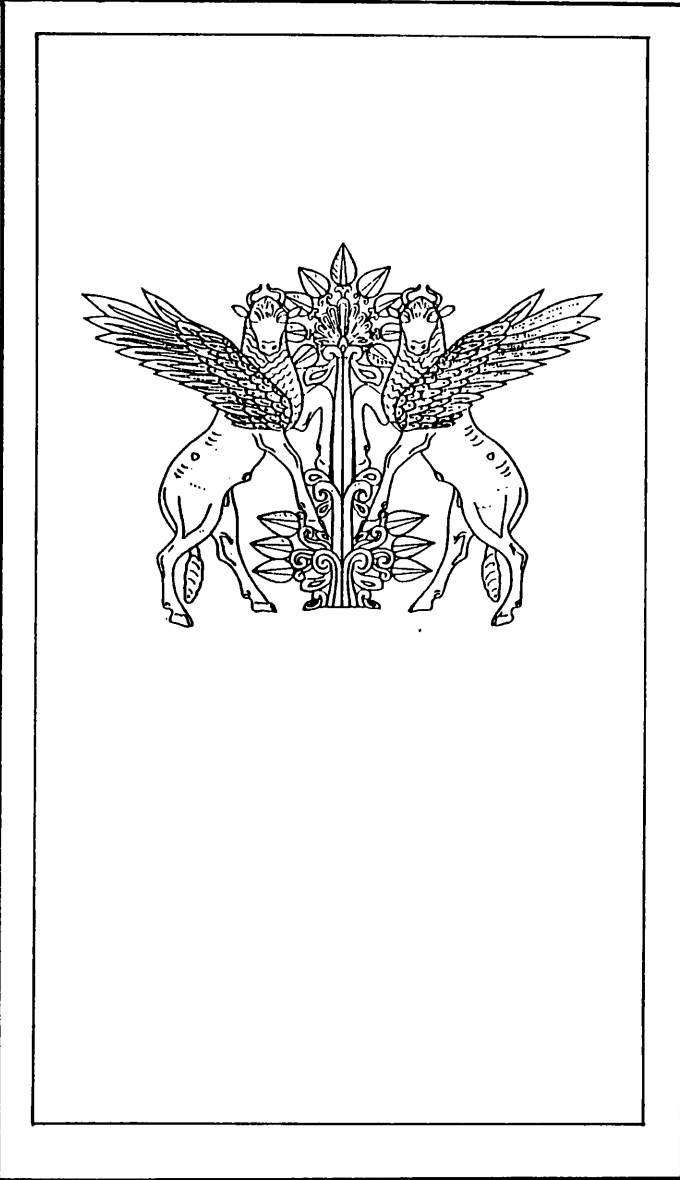
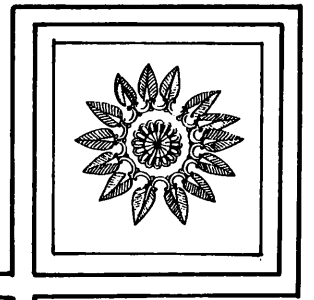
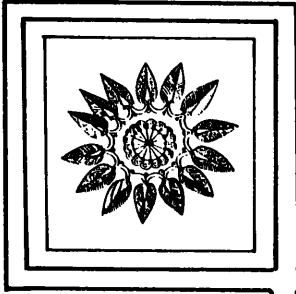
The Complete Excavation Report

Volume 1 Text













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The Complete Excavation Report

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Volume 1 Text

# Dedication

To My Mother,  
Whose Love, Care, Generosity, and Devotion Have Never Been Exhausted



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MARLIK  
The Complete Excavation Report

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Ezat O. Negahban

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# Abbreviations

- AJA* American Journal of Archaeology. The Journal of the Archaeological Institute of America.
- Iranica Antiqua*
- JAOS* Journal of the American Oriental Society
- JGS* Journal of Glass Studies
- JNES* Journal of Near Eastern Studies
- MAOG* Altorientische Gesellschaft, Berlin
- MDP* Mémoire de la Mission Archéologique de Perse
- MVAG* Mitteilungen der Vorderasiatisch = Aegyptischen Gesellschaft
- OR* Orientalia
- QDAP* Quarterly of the Department of Antiquities in Palestine
- RA* Revue d'Assyriologie
- ZA* Zeitschrift für Assyriologie und vorderasiatische Archéologie

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The course of the Marlik excavation was rather unusual since, in order to protect the extremely rich finds of the royal tombs from being plundered by illegal diggers and smugglers, the expedition team had to remain at their work for fourteen uninterrupted months under severe and hazardous conditions. The sincerity, devotion, and close cooperation of all the members of our team under these extremely difficult conditions made the success of our task possible. The devoted and unremitting work of the members of the expedition staff, Mr. Seyfollah Kambakhsh-Fard, Mr. Iraj Mafi, and Mr. Mahmood Kordavani, who were with the excavation from the beginning, and Mr. Reza Mostofi, Mr. Jahangir Yasi, Mr. Mahmood Aram, Mr. Reza Memar-Zahadani, Mr. Said Ganjavi, and Mr. Morteza Rostami, who joined us during the course of the excavation, were essential in overcoming the severe problems faced by the expedition, and I would like to express my extreme gratitude to each of them. I would also like to thank Mr. Homer Mushul, Mr. Reza Mahdavi, Mr. Sadegh Malek Shamirzadi, Mr. Hormoz Sobati, and Mr. Abdolmajid Arfai, students of the Department of

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# Preface

One of the most debated questions in the history and archaeology of Iran involves the reconstruction of movements of tribal groups speaking Indo-Iranian languages onto the Iranian plateau in the second millennium B.C. The comparative study of these languages which began in the eighteenth century gave rise to various inferences involving areas of origin (generally southern Russia), directions of migration (south from the Caucasus, east from Central Asia, or from both directions separately), and date of separation of one dialect from another (generally estimated as second millennium B.C. or earlier).

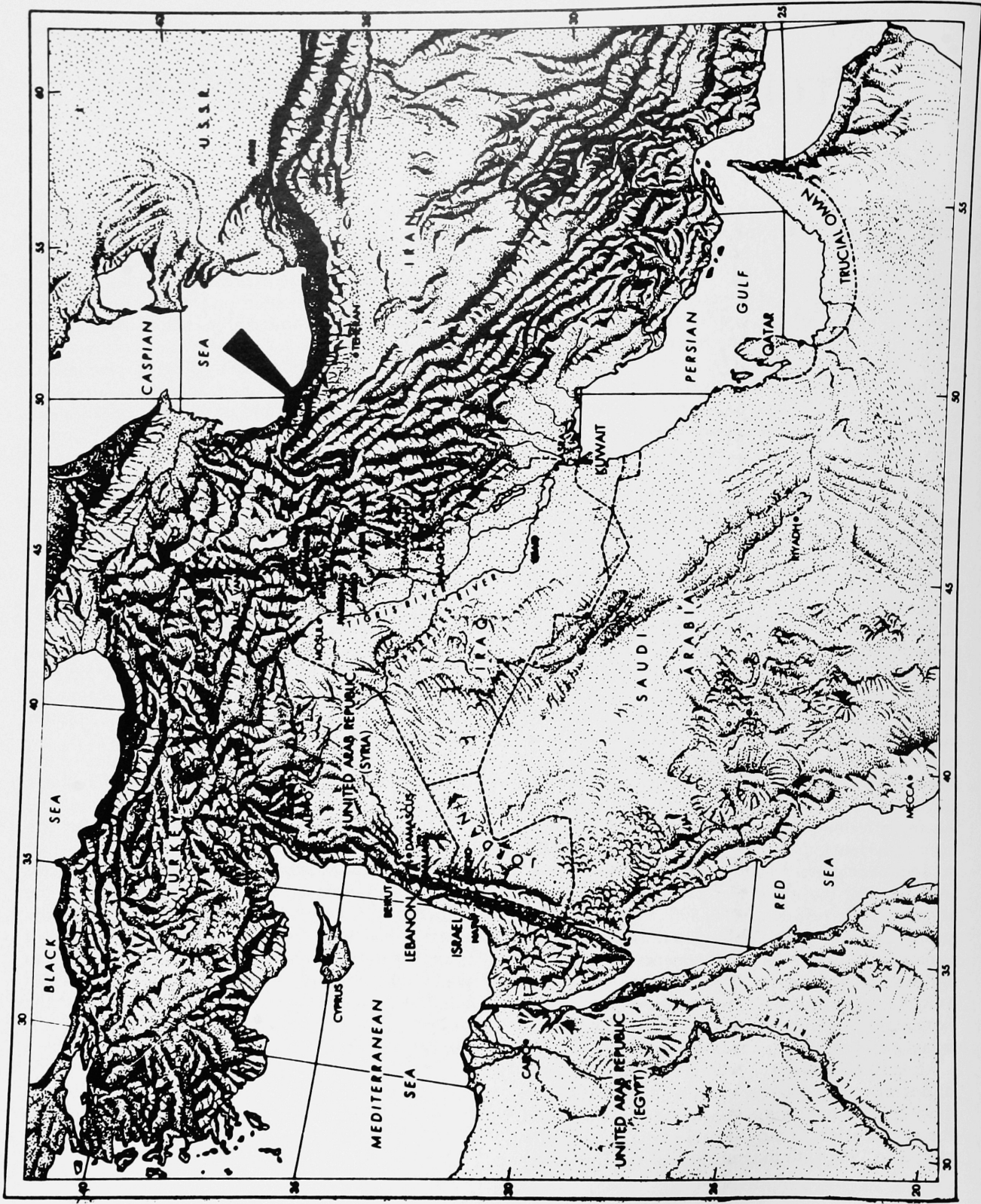
The archaeological evidence needed to test these linguistic speculations was largely absent in Iran until well after World War II. Prior to 1957 the Bronze Age in the north (3rd and early 2nd millennium B.C.) was known through the University Museum's excavations at Tepe Hissar (near Damghan) and at Tureng Tepe (near Gurgan). The following Early Iron Age (ca. 1500/1400–1200/1100 B.C.) was known primarily from 15 graves excavated at Tepe Sialk (near Kashan), 14 graves excavated at Khurvin (west of Tehran), and unpublished material from Murteza Gerd (near Rayy). These excavations indicated that the painted pottery traditions of the Bronze Age had been displaced in western Iran by gray-black pottery assemblages. Pottery made with this firing technique was known at Tepe Hissar as early as the late fourth millennium B.C. It became the predominant pottery at that site around 3000 B.C. and was still the main ware when the site was abandoned around 1700/1600 B.C. Thus the archaeological evidence, limited as it was, suggested some kind of east to west movement in the second millennium. The nature of this change remained, however, problematic since more than one explanation was possible and the relation of the material to the Caucasian area was unclear.

After 1957 new surveys and excavations were undertaken in western Iran aimed at the development of stratified regional sequences and the exploration of single periods. This activity started in 1956 with the initiation of the University

Museum's Hasanlu Project in southwest Azerbaijan and was soon followed by expeditions led by Austrian, Belgian, British, Canadian, French, German, and Japanese excavators. In 1961 the first major post-War excavation project was undertaken by the Iranian government at the site of Marlik Tepe near the Gohar Rud in Gilan province northwest of Tehran. The expedition, led by Ezat O. Neghaban, made the first controlled excavations and survey in the widely looted area and uncovered the so-called "Royal Tombs," the subject of the present volume. Aside from the extraordinary artifacts recovered, the excavation established for the first time in a context of associated materials for an otherwise blank area on the archaeological map. The cemetery area is adjacent to routes northward to the Caucasus and eastward to northeastern Iran—a highly strategic location in relation to movements of trade and tribes. Since they date to the Early Iron Age of the later second millennium B.C. and later, the contents of the tombs also fill a chronological gap in this region. Thus Marlik provides a major piece of evidence relevant to the whole problem of reconstructing the events of the second millennium on the plateau.

It is for these reasons—the intrinsic value of the objects themselves, the light their association sheds on the cultural practices of the period, and the implications of their location and date for the broader interpretive questions outlined above—that the University Museum with the help of the Getty Trust has undertaken to publish the contents of the cemetery in one place, even though much of the material has been presented piecemeal elsewhere. It is the further analysis of the total assemblage, as well as the contents of the individual tombs, which will ultimately clarify our understanding of the second millennium events—an analysis which it is our hope the present publication will facilitate.

Robert H. Dyson, Jr.  
Director Emeritus  
University of Pennsylvania Museum



Map 1. Topographical Map of Near East

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# Foreword

In the fall of 1961 a survey team from the Archaeological Service of Iran, under my direction, came to the region of Rahmatabad of Rudbar in Gilan as the first step in a projected archaeological survey of Iran (Map 1). We began our work in Gilan, first, because of the almost complete lack of scientific knowledge about the ancient history of the area and, second, because of the extensive illegal digging and antique smuggling being carried on there. For several decades objects discovered through clandestine digging in the highlands of the Elburz Mountains, in the two provinces of Gilan and Mazandaran, had been appearing on the antiquities market under the general term "Amlash," derived from the name of the small market town to which they were taken to be sold to dealers. Little was known about these objects—neither their exact places of origin nor the context in which they were found. Our survey team was eager to identify the archaeological remains of this region in order better to protect them from illegal digging and at the same time to learn more about the little-known ancient culture represented by this Amlash material.

The highlands of the Elburz Mountains have fertile soil and plentiful rainfall, in contrast to much of the Iranian Plateau and consequently this area has been very productive agriculturally, in ancient as well as in modern times. The areas of lower altitude are under intense cultivation, while the higher slopes are covered with brush and trees. This has affected the condition of the ancient remains in several ways. The presence of natural forests has meant that most building has always been done with wood, sometimes on a low stone foundation, and these ancient wooden buildings, and thus the traces of ancient settlements, have almost completely disintegrated and disappeared. Any ruins still preserved are now covered with brush and greenery and for this reason are difficult to find; when found, they are so entirely overgrown that digging a test trench is often necessary to produce enough material for the nature of the remains to be identified.

Most of the archaeological objects discovered in this large area, perhaps as many as 95 percent, come from graves and tombs that are often excellently preserved under their cover of overgrowth. The presence of these ancient tombs with their rich and

varied contents has led to the extensive illegal digging and antiquities traffic to which I have referred.

After our archaeological team had been working for more than two weeks and had surveyed many mounds, we entered the valley of the Gohar Rud, Crystal River. This beautiful valley contained five rather noticeable mounds, Pileh Qal'eh, Jazim Kool, Dura Bejar, Zeinab Bejar, and Marlik (or Cheragh-Ali Tepe, after its last owner). We proceeded to survey these mounds, eventually reaching Marlik, a large, apparently natural mound with a rocky crest, surrounded by olive groves and wild pomegranate bushes and overlooking the rice paddies that blanket the lower slopes of the valley. The surface of Marlik was covered by bush and contained few archaeological traces, although on one slope it bore the scars of several ditches cut by unsuccessful antique hunters.

We proceeded to cut a test trench here that, during two days of excavation, yielded a variety of interesting objects including small bronze figurines of cows, two cylinder seals, and fourteen gold buttons. Despite the natural appearance of the mound, the discovery of these objects gave an indication of its possible archaeological importance and pointed to the need for immediate scientific excavation because the site would have been quickly looted had we left it. We promptly completed the required formalities and organized an excavation that continued from November 1961 to October 1962.

As we began our work, we had, of course, little idea of what exactly lay below the surface of the mound. Gradually we began to realize that Marlik Tepe contained an ancient cemetery, the Royal Cemetery of a long-forgotten kingdom. Scattered over the crest of the mound were fifty-three tombs filled with a fascinating variety of gold, silver, bronze, and pottery objects, testifying to the wealth and sophisticated craftsmanship of a 3,000-year-old culture.

The tombs of Marlik were formed by building connecting walls of broken stone and clay mortar between the large natural rocks of the mound. Some of these tombs were very roughly constructed, while others were made with slightly more care. For the most part, the natural stone of the surrounding area was used in building these connecting walls, but for

some of the tombs slabs of yellowish stone had been brought from the head-waters of the Gohar Rud, about 15 km away. Often this yellowish stone was found only in a single wall or in slabs placed at the bottom of the tomb, but some of the richest tombs in terms of contents were built entirely of this special stone.

In most of the tombs the skeletons had disintegrated, but those few tombs that still contained skeletons revealed an elaborate burial ritual in which the body had been carefully laid out on a long stone slab and surrounded by precious and useful objects that their owner would need in his life thereafter. Whether or not a skeleton still remained, the tombs were filled with a wide variety of objects: ritual vessels, figurines, jewelry, weapons and tools, domestic utensils, and, in some, models and toys.

The people of Marlik, who left no written records except for two broken cylinder seals (477 and 478), seem to have belonged to that group of Indo-Iranians, possibly Marda or Amarda, who entered Iran and settled along the northern slopes of the Elburz Mountains and the southern shores of the Caspian Sea during the second half of the second millennium B.C. They established a strong and flourishing kingdom in this area and used the mound of Marlik for their Royal Cemetery for at least two or three of the centuries between the fourteenth and tenth centuries B.C.

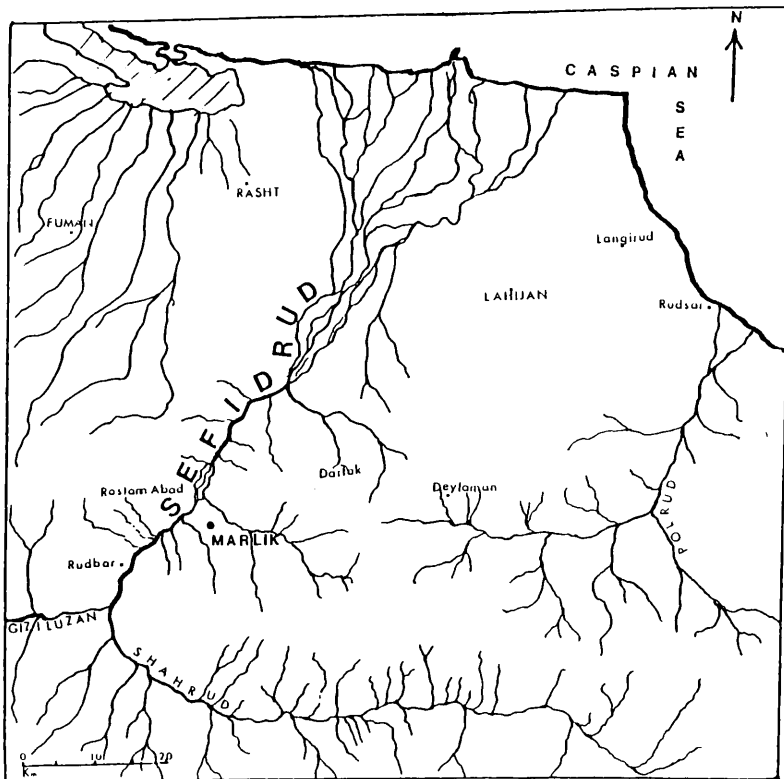
At the end of this period the Marlik people apparently left the area, moving, I believe, to Sialk, near Kashan, where Sialk Cemetery B (Sialk VI) has produced many similar and sometimes identical objects to those found at Marlik, particularly in bronze vessels, weapons, tools, and kitchen utensils, which undoubtedly were produced by the same culture as were the artifacts of Marlik. Sialk Cemetery

B belongs to a slightly later date than Marlik, to the early first millennium B.C., and it seems likely that, under pressure from the west, probably from the Assyrians, who made repeated military expeditions in this direction to gather booty and expand their empire, the people of Marlik left their home in the highlands of the Elburz Mountains and moved away toward the east and southwest, settling temporarily at Sialk. Ultimately they were absorbed by the Medes, who, along with other Indo-Iranian tribes, formed the powerful Medean kingdom in the early first millennium B.C.

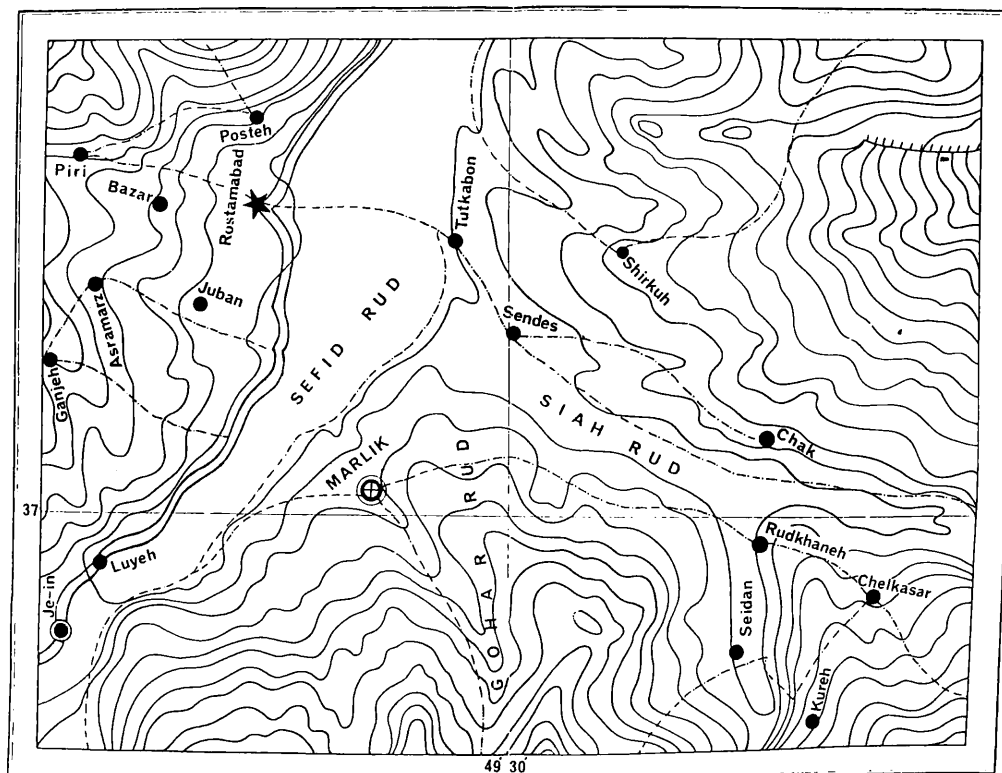
The Royal Cemetery left behind at Marlik remained intact until the present day. Presumably, while the Marlik people controlled the area they were powerful enough to protect the tombs and their valuable contents, although it often happened in ancient times that tombs were looted within a generation or two of the time they were filled, so strong was the lure of the valuables they contained. That the tombs of Marlik remained untouched even after their owners left is particularly unusual. It may be that the circumstances of the migration of these people from the region around Marlik were so abrupt and catastrophic that no one remained who remembered the tombs and what they contained. In any event, the cemetery, containing no monumental or even noticeable architecture, and dug into the top of a natural rocky mound that must soon have been overgrown with brush and weeds, sank into the oblivion in which it remained until the present day, when its discovery and painstaking excavation are only beginning to provide our first systematic information about an almost forgotten ancient civilization.

Ezat O. Negahban





Map 2. Gilan Province



Map 3. Gohar Rud Region

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# Introduction

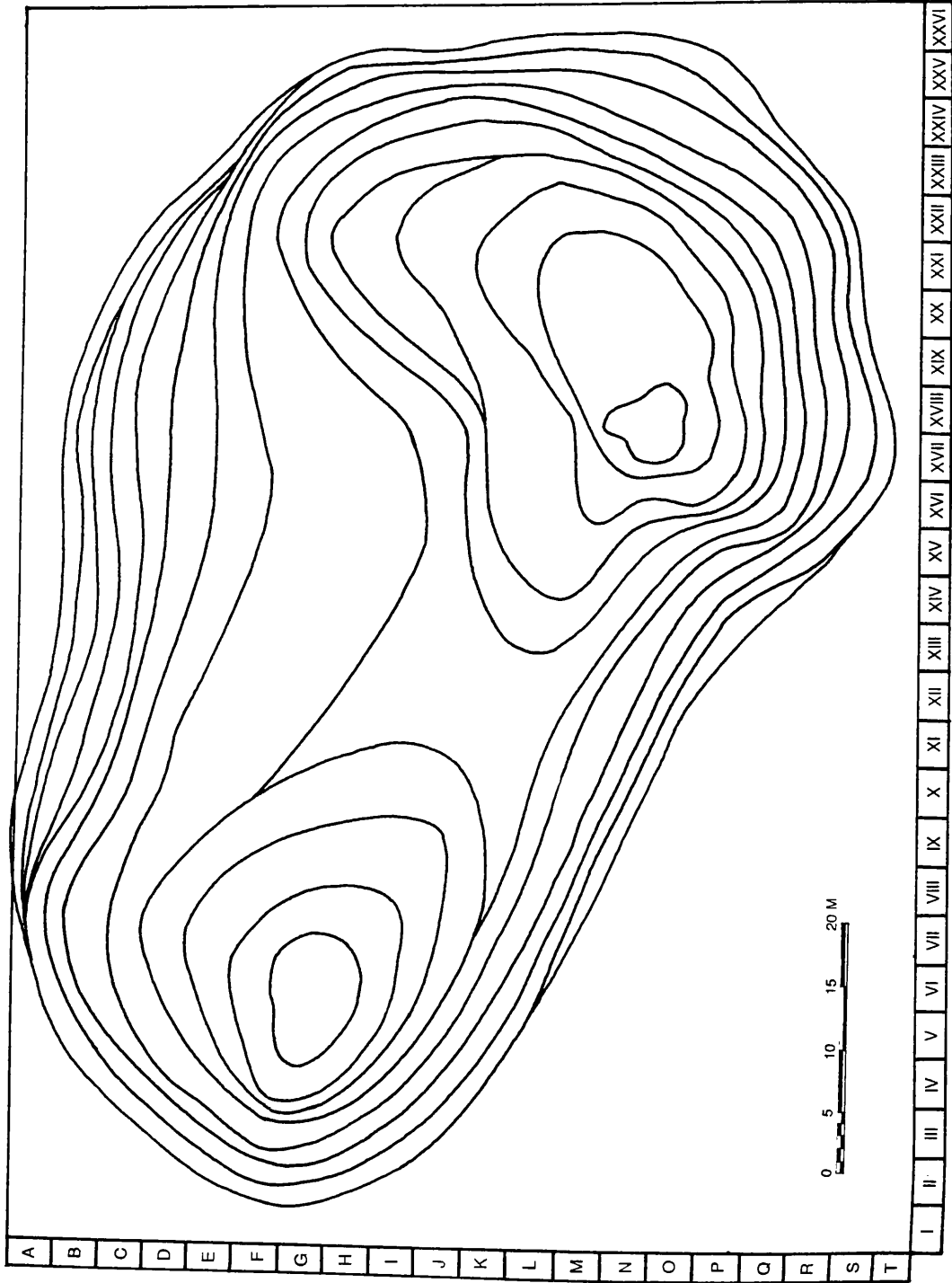
The province of Gilan lies on the northern slopes of the Elburz Mountains, extending to the Caspian Sea, between 49° and 51° Longitude East and about 36° North Meridian (Map 2). The climate of this region is quite different from that of the rest of the Iranian Plateau, which suffers from a shortage of water. Gilan receives precipitation from clouds that rise from the Caspian Sea to move southward until they are blocked by the Elburz Mountains, causing them to release up to forty inches of rainfall annually throughout the region. This ample precipitation produces a band of lush green vegetation that extends nearly 800 km along the southern shores of the Caspian from Astara, on the Iranian-Russian border in the west, to Behshahr, at the southeastern corner of the Caspian Sea. The green belt occupying the flat plain between the southern shores of the Caspian and the foothills of the Elburz range varies in width from 2 to 50 km. The land is very productive agriculturally, with fertile fields of rice, tea, citrus fruits, and vegetables. In the past silk was also produced here, and in ancient times Gilan lay on the Silk Road from China to the west. Any undeveloped land is covered by thick forest.

A second belt extends parallel to the first, from the southwestern to the southeastern corners of the Caspian Sea. This belt varies in width according to the natural formation of the land, beginning at the foot of the mountains and extending southward as they rise to higher altitudes, and includes the hilly region between the plain and the mountains. This land is also productive agriculturally, yielding wheat, barley, orchard fruits, vegetables, and olives, with hazel nuts, pomegranates, and figs also found in some parts. A third belt covers the highlands and the heart of the northern slopes of the Elburz Mountains with its many gorges and ravines. Here the land is mostly covered by deep forests to an altitude of about 8,000 feet, with, above the tree line, bare and rugged mountain peaks that are sometimes covered with snow throughout the year. In this region farming is

carried out in the valleys, wherever water is available. The higher altitudes provide rich grazing land for cattle, sheep, and goats, and the forest areas supply a variety of wood products, which are very important to the local economy.

The southern part of the Caspian zone, located mainly in the provinces of Gilan and Mazandaran, is connected to the Iranian Plateau by two natural passes. The Firouz Kouh Pass on the east is reached from Tehran by a route that bypasses the town of Demavend, continues to Firouz Kouh, and proceeds through steep gorges to the northern slopes of the mountains and the town of Amol in Mazandaran. The second and better natural pass is located farther to the west; it travels northwest from Tehran to Karaj and then on to Qazvin, continues northward through steep gorges over the summit of the Elburz Mountains, and descends to the small town of Manjil. Here the two large rivers of the Shahrud, coming from the east, and the Qizil Uzun, coming from the west, merge into the Sefid Rud (White River), which irrigates this prosperous valley, flows on to the rich plain of Rasht (the capital city of Gilan), and eventually empties into the Caspian Sea. This second pass, with its rich food and other natural resources, was the most important route in ancient times connecting the western part of the Iranian Plateau to the Caspian Sea. As a result of the abundance of water from the Sefid Rud and its smaller tributaries, the broad valleys on the northern slopes of the Elburz Mountains have been very rich in produce and animal husbandry since ancient times. During the past fifty years new passes have been opened (including the Chalus and Haraz roads from the plateau to the Caspian), through the use of modern road construction techniques involving tunnels and bridges, but these are not natural passes and were not available in ancient times.

Although the lower altitudes of the Sefid Rud region are rather sultry and humid during the summer, the highlands of this part of Gilan have a



*Map 4. Topographical Plan of Marlik Tepe*



mild climate, which makes the area very pleasant for summer living amid the scenic mountains with their snow-capped summits. The inhabitants of the area have adapted to this situation by moving with their animals to higher altitudes, where rich grazing can be found in the summer, and returning to the lower altitudes for the winter.

The mound of Marlik is located in the valley of the Gohar Rud, one of the small tributaries of the Sefid Rud, in the region of Rahmatabad (Map 3). The mouth of the Gohar Rud is on the southeastern side of the Sefid Rud valley, opposite the small town of Rostamabad and about 14 km north of the larger town of Rudbar (Rudbar-i-Zeitoun). The Gohar Rud Valley, about 1 km across at its widest point, extends northward for 15 km. Marlik is located on the western side of the valley, about 1.5 km from the junction with the Sefid Rud (Map 3). The largest village in the valley, Nesfi, is about 700 m south of Marlik (Color Plate VI A; Pl. 1A).

The Gohar Rud Valley is extraordinarily scenic, with several small villages and their outlying fields located mostly in the lower, or northern, part while the upper, southern end is covered with scattered trees. The fertile lower land is covered with rice paddies (Pl. 1B) interspersed with olive groves (Pl. 1C), with small fruit orchards near the settlements. At higher altitudes the slopes on both sides of the valley are devoted to rainfall farming of wheat and barley. Undeveloped land is covered by sporadic zarbin trees, a type of evergreen (Pl. 1D), along with wild bushes. On its northeastern side the valley is dominated by the majestic mountain peak of Dolfak, which may be snow-capped throughout the year (Color Plate VI B).

Rain in this region usually comes down in the form of a very mild drizzle, which provides plentiful moisture without producing flooding. This accounts for the name of the Gohar Rud (Crystal River), which remains a very clear stream as it winds down through the steep valley over many small waterfalls. Along its banks bands of tall reeds with fluffy flower heads contribute their beauty to the scene. The Gohar Rud Valley has several natural hills with conical peaks, which at first glance look very much

like artificial archaeological mounds. Some, although not all, of these natural hills were used by the ancient inhabitants of the region as burial grounds. Scattered over the lower part of the Gohar Rud Valley on the western side are five such conical projecting mounds containing ancient remains (Pl. 2A): Marlik, the most important (Pl. 2B); Zeinab Bejar; Dura Bejar; Pileh Q'al'eh (Pl. 2C); and Jazim Kool.

As a result of its natural advantages (including a mild climate, fertile soil, and abundant water), this area has been a base for the rulers of northern Iran since ancient times (Color Plate VII A). During the Marlik period the Gohar Rud served as a burial site for the inhabitants of the area. Most of the valley is covered with ancient burials, and it seems to have had a special religious importance, with the crest of Marlik itself reserved for interments of the ruling class and the rest of the valley allocated to less important burials. This suggests that the political center of the Marlik culture must have been located nearby, for although some ancient peoples carried their important dead long distances for burial, this was not true for ordinary persons. Our excavation concentrated on the crest of Marlik Tepe, but after our excavation had been halted and we were forced to leave the valley, the whole area was plundered by clandestine diggers seeking the objects contained in these lesser graves.

Marlik Tepe is located in the middle of the lower part of the Gohar Rud Valley. Although at first glance it appears to be a large artificial mound, it is in reality a natural rocky hill with two high points on its crest, one on the southeastern and the other on the southwestern side. Dug into the top of this mound were fifty-three roughly constructed tombs of broken stone and mud mortar that were built among and between the large natural boulders (Pl. 2D). The crest is encircled by an irrigation ditch, which supplies water to the surrounding olive groves. The area above the irrigation ditch has a length of about 135 m east-west and a width of about 80 m north-south, with the higher southwestern peak about 11 m above the surrounding irrigation ditch and the lower southwestern peak about 8 m above (Map 4).



## II

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# Excavation

Although Iran was exposed to serious archaeological activity as early as the latter part of the nineteenth century, it was some time before the discipline of archaeology developed within the country. A law governing the regulation of antiquities was passed by the Iranian Majlis in the early 1930s, leading to the formation of the Archaeological Service of Iran, located in the Ministry of Education, and later to the construction of the Iran Bastan Museum in Tehran; nevertheless there was still little systematic activity in survey, excavation, and field-work. The Antiquities Law was not really enforced, neither to prevent clandestine digging nor to control the antiquities trade, which encouraged the illegal digging and the consequent illicit transfer of antiquities and items of cultural property out of the country.

An important reason for this neglect was that, on a national scale, the number of systematically trained archaeologists, at first zero, was still during the 1940s so limited that most of the positions in the Archaeological Service, from general director down to the technical levels, were occupied by nonspecialists. Since the Archaeological Service was part of the Ministry of Education, these nonspecialists were most often former teachers who wanted to escape the drudgery of classroom teaching to find easier jobs and managed, through connections, to get themselves transferred into Museum and Archaeological Service positions, which naturally they regarded as sinecures, worthy of little time or effort.

While the service was filled by these untrained and uninterested people, the Antiquities Law permitted commercial excavation, under which half of the finds would go to the person paying for the excavation, who could dispose of them in the open market. These commercial excavations required the attendance of a representative of the Archaeological Service, but because the teachers-turned-archaeologists were not willing to go into the countryside to work at remote sites in dirty and difficult conditions, the

Ministry of Education, under pressure from the commercial diggers, agreed that the schoolmaster in each district would be considered a representative of the Archaeological Service, with the power to certify the findings of the commercial excavations. The commercial diggers were very happy with this situation because the local schoolmasters were always too busy to attend the digs, in which they had little interest in any case, and at the end of the season they would automatically supply the required certification on the unsupported statement of the digger. To illustrate the iniquitous results of this situation, prior to the year I began to work with the Archaeological Service more than 100 commercial licenses had been issued for excavations and 96 of these received a certificate from the local schoolmaster stating that nothing of antiquity was discovered at the site. Anyone familiar with the nature of the archaeological sites of Iran, and indeed throughout the Near and Middle East, can understand how unlikely it was that these certificates were accurate.

The existence of extensive illegal digging in many rich archaeological sites, together with this type of commercial digging, which was allied with a degree of corruption in the Archaeological Service, created a situation that was unbearable to any honest Iranian. In 1960 the director of the Archaeological Service of Fars Province, a famous national patriot and poet, Mr. Fereidoun Tavolloli, wrote several articles exposing this desperate situation of corruption and the consequent plundering of the national heritage. As a result of these articles the Royal High Inspecting Office became concerned and decided to take serious steps to clean up the Archaeological Service. Dr. Khosrow Behrun, High Inspector of the government, was appointed to carry out these changes. Among the many improvements he initiated, the granting of commercial licenses was discontinued and those commercial licenses already granted were canceled.

In the mid 1950s I returned from study in the

United States to teach in the Department of Archaeology of the University of Tehran, and in 1960, as part of the reorganization plan initiated by Dr. Behrun, I was appointed Technical Director of the Archaeological Service. I was naturally anxious to cooperate in cleaning out the corruption and turning the energies of the service toward a more rational and more scientific program for the control and protection of the archaeological resources of the country. I felt that a necessary first step toward this objective was for the Archaeological Service to carry out archaeological surveys throughout Iran to give us some idea of the extent, type, and location of archaeological sites. However, since the Archaeological Service had not been accustomed to carry out such independent scientific work, as a newcomer to the service I felt it necessary to proceed rather carefully, and I was on the lookout for an opportunity to initiate this survey in an area that would be certain to bring interesting results.

One area for which a scientific survey was critically needed was the highlands of the Elburz Mountains, which, even though commercial digs had been canceled, by the beginning of 1961 was saturated with illegal excavators. Ancient sites full of documentary material and precious objects—all of great value both for history and as part of the national heritage—were being looted and despoiled by illegal antique hunters. During this period much archaeological material with great historic interest but no commercial value was completely destroyed. The news of these illegal digs was first carried to the Archaeological Service by some of the same persons who had previously held commercial licenses and who were either shocked by the scandalous activities of the illegal diggers or, more likely, disturbed by the competition. In any case reports began to come to the Archaeological Service of the tremendous scale of the destruction that was occurring. Among those reporting these activities was Mr. Salmon Door-Andish, who came frequently to our offices bringing reports of the extent of illegal digging, particularly in Gilan. At the same time other antique dealers who wanted a monopoly of the excavation in parts of this area repeatedly made attempts to obtain commercial licenses so that they might become rich through the destruction of part of the precious national heritage belonging to all Iranians.

The Archaeological Service carried out an extensive correspondence with various government organizations in an attempt to stop this illegal digging in the highlands of the Elburz Mountains. Unfortunately, because of the limitations on the activities and powers of government organizations as well as because of the poor roads and communication in this mountainous area, we had little success. At this time, during the summer of 1961, I began to receive a number of unfavorable reports from local

schoolteachers concerning the activities of some members of an Archaeological Service team working in the highlands of Gilan, and the Ministry of Education instructed me to investigate this matter and if necessary make a trip to the region to report on the situation.

Since this was my first opportunity to become involved in the fieldwork of the Archaeological Service, before I left I looked through the file of illegal excavations in Gilan province, selecting those of importance to be investigated during my trip. I was particularly interested in the region of Rahmatabad (Map 2), which I had earlier decided was the most important area to be considered for a serious survey and possible subsequent excavation because it had been the focus of much competition between various antique hunters, clandestine excavators, smugglers, and local landlords, all striving for rights to work in the area. I collected the files of several of the most interesting archaeological sites in the region of Rahmatabad, including Rashi, Juban, Khaskool, and Cheragh-Ali Tepe, since I hoped to be able to combine a quick survey of this area with my mission of bringing the discredited expedition back to Tehran. As I studied this material, I saw that the site that had occasioned the most complaint reports and quarrels between people in the locality, particularly landlords and antique dealers, was the mound of Cheragh-Ali Tepe, which had already attracted my attention.

After I had arrived in Gilan, contacted the expedition, and arranged for its termination, I made my way to Rasht and began the return journey to Tehran with some of the younger members of the team, who were former students of mine. When we arrived at Rostamabad in the region of Rahmatabad near the town of Rudbar, we stopped at a coffee shop. Here I gathered together the five expedition members who were making the trip back with me and told them that I wanted to send them on another mission. Two of the members, whose health was not good, wanted to continue on to Tehran, but three of them, Mr. Seifollah Kambakhsh, Mr. Iraj Mafi, and Mr. Mahmood Kordovani, were willing to follow my instructions. I quickly wrote three letters authorizing them to make a two-week archaeological survey and investigation in the area, and I discussed with them the important sites, including Cheragh-Ali Tepe, about which many complaints had been received.

I returned to Tehran where I eagerly awaited news from the survey team. After ten days, Mr. Kambakhsh called to tell me that after surveying the region and investigating various sites about which there were records of illegal digging, they had come to Cheragh-Ali Tepe in the Gohar Rud valley (Map 3). There, in a test trench, they had found a number of interesting and valuable objects including fourteen gold buttons, two cylinder seals, and a number of bronze animal figurines. He went on to say that since these

objects had been found the team had been having problems with the local landowners, who claimed shares in the finds, and also with antique hunters and dealers, who wanted to evict them from the site so they could plunder it at will. I told him to get some gendarmes to guard them, which he had already done. I also told him not to leave the mound, whatever the difficulties and dangers, but rather to cease surveying and to wait there, trying to avoid severe clashes with those persons opposed to the excavation by keeping them hoping for some favorable solution to their demands while I carried out the preparations for a major excavation to be started as quickly as possible.

The next morning, as I was putting together my proposal for the excavation, I was asked to go to the office of the General Director of the Archaeological Service, Mr. Nahvi. When I arrived, he said that he had been informed of some finds made by our team working in Gilan, and that several landlords and antique dealers had phoned asking for permission to excavate the site, or to have a joint excavation with the Archaeological Service, paying all the expenses in order to share in the finds. I told Mr. Nahvi that I was in the process of preparing a report to him proposing a major excavation of the mound of Cheragh-Ali Tepe, an excavation that I felt should be carried out by the government—that is, by the Archaeological Service and the Institute of Archaeology of the University of Tehran—with a recommendation that all expenses be paid by the Archaeological Service.

Mr. Nahvi was not happy with this suggestion. He pointed out that with all the financial problems of the Ministry of Education he hesitated to propose any additional expenditures. I repeated that I would send him my proposal and he should not delay in passing it on to the Ministry, since this was a valuable opportunity for the Archaeological Service to conduct a major independent excavation. I finished my report and sent it to the General Director's office. After waiting two days, I called the secretarial office of the Ministry of Education to inquire about its progress and learned that the report and proposal had not yet arrived. Controlling my impatience, I called Mr. Nahvi to ask whether he had any questions about the report, and he replied that if I agreed to a cooperative project with persons willing to pay all the expenses for a share in the finds according to the antiquities regulations, he was sure that the proposal would be approved by the ministry. I rejected this idea at once and requested permission to contact either the minister or his administrative under-secretary about the excavation, but Mr. Nahvi quickly replied that that was not necessary and he himself would manage the preliminary contact to smooth the way before formally sending on the proposal for excavation.

The next day Mr. Kambakhsh telephoned from Rudbar to say that the team was under great pressure from local landlords and other important and influential persons who claimed shares in the site and that some of the illegal diggers and landlords were even threatening to force the team to leave the mound. I again told him not to leave the site under any conditions and promised to contact the central headquarters of the gendarmerie in Tehran to have them instruct the local office in Rudbar to support and protect the team in this difficult situation.

I waited several more days hoping that the General Director would send my excavation proposal on to the Office of the Minister, but I knew that I was coming to the point where the opportunity of carrying out the excavation might be lost if I waited any longer, and so I decided to contact the ministry official directly myself. I called Dr. Ghafouri, Under-secretary of the Ministry of Education, and went to his office that same night. I described to him in detail the excavation of the test trench at Cheragh-Ali Tepe, and the discovery of valuable objects there, detailing the talks with Mr. Nahvi, the difficulties the survey team was suffering at the site, and the importance of immediate action before a unique chance was lost. Dr. Ghafouri asked how much the excavation would cost, and I was able to assure him that it would be a minor item, not more than \$2,500 to \$3,000 per month (200,000 to 250,000 rials), for all the expenses including the extra salaries of the staff. He immediately took me to see the Minister of Education, Mr. Mohammad Derakshesh, who had been anxious to see and question me after he had seen my report on the trip to the highlands of Gilan and the return of the troubled expedition.

I went through the whole story again while the Minister listened attentively, and as I expressed my feeling about the importance of the site and the necessity that it should be excavated by a national Iranian team, I could see that the proposal appealed to him. He asked why I had not sent a report on this project to him, and I explained that my report had been stopped in the office of the General Director of the Archaeological Service, because of the expense involved or perhaps for other reasons. He then turned to Dr. Ghafouri and asked whether the project could be financed, and Dr. Ghafouri assured him that if I kept to my promise to restrict expenses within the limits I had given him, he would be happy to arrange the financing. Mr. Derakshesh turned to me and said, "What are you waiting for? You should begin at once. What do you need now?"

I asked him to issue an order for my mission to carry out the excavation of Cheragh-Ali Tepe and orders for my three team members as well. Since it was late in the evening and the typist had gone home, these orders were handwritten in beautiful Persian by the calligrapher of the ministry, who was

still in his office. Mr. Derakshesh signed them and handed them to me, instructing his secretary to send letters to the gendarmerie and the local Department of Education in Gilan instructing them to support this government project and provide necessary facilities. I went home, quickly packed some clothes, and left the same evening for the site.

As I drove through the night, I tried to organize my thoughts on the excavation and the coming confrontation with the local people who wanted a share in the finds. I decided to begin work as soon as I arrived so that I could face the opposition with a project already underway. According to the Law and Regulation of Antiquities of Iran there was no profit or share due anyone, as antiquities were the national property of all Iranians, but the widespread illegal digging had brought about an atmosphere in which antiquities were felt to belong to anyone capable of enforcing his claims. I decided to try to avoid any involvement by the excavation team in the question of claims by blankly replying to all questioners that we had been ordered to excavate the site by the Ministry of Education, which they should contact about any problems they might have.

I breakfasted in Qazvin and drove on to Rudbar. The road between Qazvin and Rudbar is quite different in setting and climate from the flat, dry expanse between Tehran and Qazvin. As I left Qazvin, the road closely followed the rolling hilly slopes, which were sprinkled with patches of greenery and wild flowers, particularly near the famous Quin Pass, a gateway to the rugged Elburz Mountains about 30 km from Qazvin. After crossing the high passes of the Elburz, I descended to the small towns of Loshan and Manjil, where the modern Sefid Rud Dam is located. From this point on the scenery changed, and green valleys began to appear on each side of the river. When I reached Rostamabad, I asked about the survey team and was told to retrace my path almost a kilometer to a very small coffee shop opposite the mouth of the Gohar Rud, where I could park my car and cross the Sefid Rud by boat.

The basin of the Sefid Rud is nearly half a kilometer wide at this point. Most of the riverbed was dry at this time of year, with water flowing through a small section near the southern bank. Although it was dry and brown on this side of the river, with no trees near the road, the opposite bank, where the Gohar Rud joined the Sefid Rud, was quite lush and green. The owner of the coffee house pointed out to me the majestic mounds of Cheragh-Ali (Marlik) and Pileh Q'al'eh, surrounded by olive and evergreen trees, and told me that the government team was stationed up there near the village of Nesfi.

Cheragh-Ali Tepe was a high conical mound with a rounded top. As I stood looking at it with high hopes about my future work there, I had no idea that this mound would become an inseparable part of my

future life, in security and in danger, in prosperity and in adversity, in progress and in retreat, for several decades to come. I liked the appearance of the mound from first sight and, looking back after twenty years, despite all the problems that have confronted me in connection with the excavation from the first moment I placed a pick in the mound, have never regretted my choice. The excavation of Marlik affected my profession and my life strongly, benefiting as well as endangering my archaeological career ever since, but altogether making an exciting and challenging existence. The excavation of Marlik was important in paving the way for national archaeological activity in Iran, and its success gave me the opportunity to support many archaeological projects in later years. It became a powerful resource for me to utilize in solving many problems in Iranian archaeology, a resource that I was to call upon many times.

It was nearly noon when I crossed the river. On the way I talked to the oarsman, Mashadi Aghajan, who owned a teahouse beside a small olive grove at the mouth of the Gohar Rud, operated by members of his family. After alighting on the opposite bank, I asked the way to the camp of the survey team, and Baba, the son of Mashadi Aghajan, a strong man with a cheerful face, came forward and offered to guide me, explaining that he had worked there for several days during the digging of the test trench. He picked up my small bundle of belongings and started off as I followed carrying my briefcase.

We ascended a narrow winding path through olive groves and dried rice paddies. After climbing for nearly a kilometer, we met Mr. Kambakhsh, the head of the survey team, who was followed by a man with a canvas knapsack on his back. As we greeted each other, I could see in his face the strain he had been under. He turned and introduced Shaban Kouchekpour, whom he had hired as a bodyguard. Mr. Kouchekpour, a well-muscled local wrestler, from morning to night carried the precious finds of the test trench in the knapsack on his back, since there was no safe place to leave them. I told Mr. Kambakhsh that I had obtained official permission to excavate the mound, and, as we discussed the situation, we reached the camp where the other members of the team, Mr. Kordovani and Mr. Mafi, awaited us.

Cheragh-Ali Tepe appeared to be rather deserted, covered with scattered purplish broken stone and boulders and sporadic wild thorn bushes. On the eastern side of the mound a partly destroyed stone room held some piles of rice straw in one corner. The tent of the survey team was not far from this half-destroyed room, which was being used by the three gendarmes assigned to protect the camp (Color Plate VII B). Traces of disturbances and digging by clandestine excavators could be seen on

the northern slope as well as some other parts of the mound. After a quick glance at the test trench, we retired to the tent, where I was shown the objects already found—gold buttons, bronze animal figurines, and cylinder seals—as the team members described the difficulties that they faced with local landlords, clandestine diggers, and antique dealers.

Without further delay, we sent Shaban to Nesfi to tell the workers to begin digging immediately after lunch. In the afternoon I made a detailed survey of the mound and decided to open two trenches. The first, Test Trench I (Map 5), on the northern slope of the mound, was a continuation of the test trench already begun by the team. The second, Test Trench II, would be on the eastern side of the mound. We outlined the areas for these two trenches with cords and trench pegs so that when the workers arrived they could start to work at once. Next I decided to make a topographic map of the mound with a systematic grid division of the crest down to the surrounding irrigation ditch. When Shaban returned with six workers, they were put to work in the two test trenches, and I felt more at ease since the excavation was now underway. The next morning we registered about thirty workers from Nesfi and from other small villages in the valley, and put them to work.

I next decided to go to Rudbar to call Mr. Nahvi, General Director of the Archaeological Service, to inform him that the excavation had begun and to let him know how to get in contact with us. Several local people were waiting at the edge of the mound hoping to discuss their claims, but I told them that I had to go to Rudbar and they would have to contact me later. In this way I postponed any possible confrontation with them until the excavation was clearly recognized to be established. I told my colleagues not to get involved in any discussion of their claims, but simply to tell inquirers that they had no responsibility and all questions should be directed to me. I also instructed the gendarmes not to let anybody come on the dig and disturb the work, and to make sure that any visitors had the permission of the team to approach.

I left the mound, descended to the Sefid Rud, crossed the river, and went to Rudbar to contact the Archaeological Service by telephone, but since the line was not open, I had to drive on a further 20 km to Manjil, where I informed Mr. Nahvi that I had started excavation the day before. He was shocked and surprised, as I explained that I had obtained the necessary permission directly from the Ministry of Education. I went on to invite him to visit the excavation at any time. On my way back from Manjil I stopped at the gendarmerie station in Rudbar to present a copy of our excavation permit and to ask for more protection, as well as to greet the director, Major Golbang, who had already given much needed support to the survey team. Unfortunately, he

remained in the area for only about three months at the beginning of our work, during which we found him very helpful, fighting wholeheartedly against smugglers and clandestine diggers. His removal was sad news for us and signified a great loss of protection for the excavation.

When I arrived back at the mound, I decided to make a general survey of the Gohar Rud valley. I was accompanied by two workers who were very informative about the character and activities of influential landowners, and about the relations among various local families, both friendly and hostile. Throughout this tour of the valley I observed the traces of illegal trenches. At the mound we continued to be besieged by persons pressing claims to the finds; in fact so many of them came that I insisted they select a few representatives to speak for them. Even these representatives—the ex-kadkhoda (village leader), the present kadkhoda, and a local landlord—had no title to Cheragh-Ali Tepe, but each claimed to have protected the mound from clandestine digging and to have been responsible for the fact that it was so little disturbed. After questioning them, I learned that the actual owners of the mound were the heirs of Cheragh-Ali, two daughters and a son, none of whom had made any attempt to cultivate the mound, which had been deserted for several years.

According to the Law and Regulation of Antiquities, all objects found in government excavations belonged to the nation, and the only compensation paid would be to the owners of the land. If it was farming land, they received twice the value of a year's production. The law stipulated that after the excavation was over the land should be returned to its original condition unless the government decided to make it a national monument, in which case the price of the land would be paid to the owners according to an evaluation by three experts.

The false claimants besieging the mound continued to believe that somehow they could take advantage of the situation and gain part of the valuable finds for themselves. Because the only way to pursue their claims with the government was through ownership of the land, each tried to curry favor with the daughters and son of Cheragh-Ali. This caused an uproar in Nesfi for several weeks, reports of which we would get daily from our workers. The three owners became the focus of interest, each being contacted by different persons, but it proved very difficult within the psychology of the village and its kinship systems to come to any kind of firm agreement. Since in these small villages there was much intermarriage between families, so that in actuality each person was a relation to some degree of everybody else, in a few days the whole village was in a commotion, swirling around the heirs of the deceased Cheragh-Ali. The situation in the village at least kept some of the claimants from coming around

the mound to bother the survey team. Others, however, came every day and caused disturbances to our routine, pressing their claims or trying to list each object found. Their presence interfered with the progress of our work, so I again instructed the gendarmes not to let any person enter the excavation ground without permission. This decreased the number of our visitors, but those who came were brazen and stubborn, arguing with the gendarmes

and insisting on coming onto the dig.

This commotion concerning the claims eventually died down somewhat, but we never were free from trouble caused by individuals who hoped somehow to benefit from the riches we were uncovering on the mound, and we had to be continually on the alert to protect the excavation and even our own lives (Color Plate VIII A).

## *Test Trenches I and II*

After studying the mound, I had decided to begin excavation by opening two test trenches that I hoped would reveal the nature of the archaeological remains. At the same time we would also make a topographical map of the mound to which we would apply a grid division to be followed in future excavation. Test Trench I, on the northern slope of the mound, was supervised by Mr. Seifollah Kambakhsh, and Test Trench II, on the eastern slope, by Mr. Mahmood Kordovani; Mr. Iraj Mafi worked with me in hiring the workers and collecting needed identification to process their wages.

Test Trench I followed the course of the original test trench dug by the survey team, which, since it had already produced some interesting material, we expected would yield more objects and possibly some architecture as well. However, we uncovered neither architectural remains nor antiquities during the first two days, except for some sporadic broken pieces of pottery and, rarely, some small broken pieces of bronze, with neither the pottery nor bronze representing enough of any item to reveal its shape or purpose.

Test Trench II, on the eastern slope of the mound, in the course of a day reached the natural rock formation, which, although it was not solid but rather decayed and consequently not difficult to dig into except for some larger solid pieces of stone, nevertheless clearly constituted the original untouched core of the mound. We decided to extend our trench northward on the surface rather than to dig deeper into this decayed rock. Again no traces of objects or architectural remains appeared for three days, so that we had nearly reached the point of abandoning the trench when a very rough wall appeared with one face almost clear and the opposite face obscure. At first we thought it might be a very thick fortification wall, since it was located at the edge of the mound, but efforts to find the opposite face were unsuccessful. We continued to work along this roughly constructed single-faced wall for nearly 2 m, until we were quite certain that it backed against the natural rocky surface and that we were working

inside a roughly constructed enclosure dug into the mound. Eventually this wall met a second wall at a right angle, forming a corner, which made it certain that we were working inside an enclosed structure. We cleared the limitations of this enclosure and saw that it was a rather large rectangular construction with some irregularities on the northern side. This ultimately proved to be Tomb 50 (Map 5).

Although this test trench was not productive of objects and had no discernible relation to the first test trench excavated during the survey, the appearance of this rectangular enclosure indicated that Cheragh-Ali Tepe was not a completely natural rocky mound but contained remains of some sort of ancient construction. We decided to continue to dig in this area according to our grid arrangement (Map 5), which made these Trenches XXII K and XXIII K and XXII L and XXIII L. From this point on the excavation followed the normal course from the top surface down. As we proceeded downward, some traces of a solid rectangular platform appeared inside the enclosure, in the eastern part, with its northern side attached to the northern wall. This platform was paved on top by broken pieces of stone, with large pieces of rock in some parts (Pl. 3A). At the northwestern corner traces of a hearth with ash and charcoal were found on the floor, which was higher here than in the remaining area. As we reached the floor at the northwestern corner, traces of some objects also appeared.

By this time our team consisted of the four staff members (Pl. 3B) and nearly thirty workers (Pl. 3C, Color Plate VIII B), established in a camp at the site (Pl. 3D). Among these workers were some who had been employed by clandestine excavators in the region and were accustomed to dig as fast as possible seeking for objects of high value, which in this area were usually made of metal, with no concern for pottery or other materials that had little commercial value. Since the rest of the workers considered these men experienced in excavation, they followed their lead, attempting to show that they were hard workers by digging rapidly and directly to depth. It was a



major task for our excavation team to teach them how to dig, and to show them that our concern was not mainly to find valuable objects but to carefully note and preserve every single fragment as well as the constructional remains. Gradually the workers became trained and the excavation settled to a more normal, even course. Ultimately, we worked at Marlik for fourteen continuous months, from the early half of 1961 to the late fall of 1962, in the process uncovering fifty-three tombs containing the immense number of objects described in this excavation report.

At the same time that we worked at Marlik, we opened several trenches in other parts of the Gohar Rud valley (Map 3), to gain more information about the nature of the archaeological remains in the area. The most important of these subsidiary excavations was in the high mound of Pileh Q'al'eh, about one-half kilometer east of Marlik (Pl. 4A). There we uncovered the topmost level and dug a test trench on the western slope, which revealed three major constructional levels and seventeen strata from the top of the mound to virgin soil. Strata 1-7 covered a period from the early second to the late second millennium B.C. Strata 8-13 covered a period from the late second to the early first millennium B.C., contemporary with the Marlik Royal Cemetery, and included the first architectural level on the mound. Strata 14-15 represented debris of the second architectural level, which falls between the Marlik and Sassanian periods. Stratum 16 contained the latest architectural period, a Sassanian fort on the top of the mound, which can be dated, according to objects found, to the second to the sixth century A.D. Stratum 17 represented repair on the Sassanian fort and its continued use until the early Islamic period, nearly the eleventh century A.D. (Color Plate IX A).

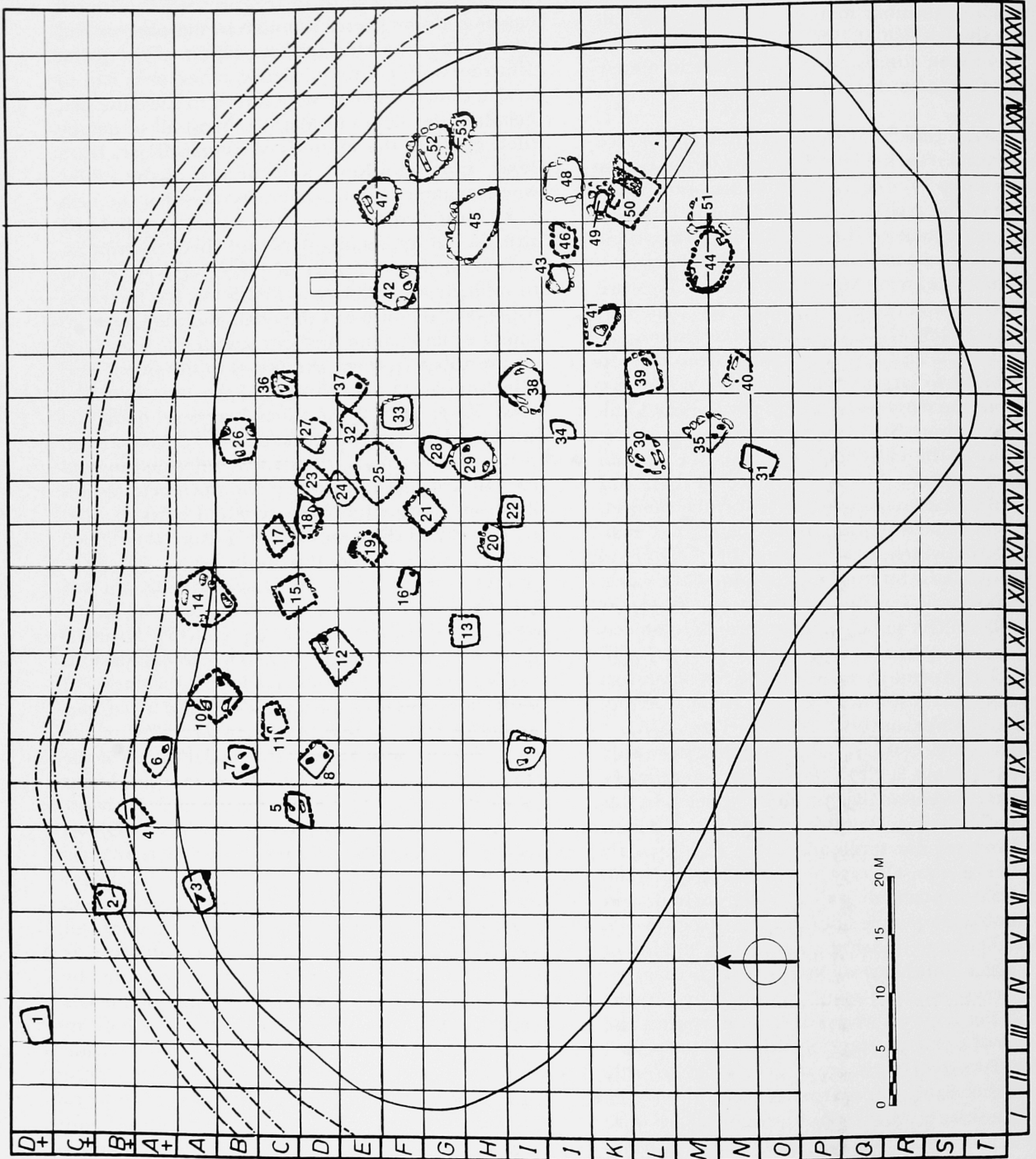
Another trench was cut on the southwestern side of the valley, about 300 m from Marlik, where traces of previous clandestine digging could be seen. In this trench at Ali Karam Bagh remains of a well-constructed rectangular tomb appeared, with a partly preserved skeleton. Objects uncovered in this tomb suggest that it probably dates to the early period when the Marlik people settled in this region (Pl. 4B). A rather large trench was also cut on the top of Zeinab Bejar, southeast of Marlik, which revealed several graves without construction. The objects found in these graves were contemporary with the Marlik Royal Cemetery, possibly with its later period (Pl. 4C). Two trenches were cut on the eastern side of the Gohar Rud, across from Marlik, in an area called Gheshlagh, where clandestine diggers were several times surprised and chased by the gendarmes (Pl. 4D). In one trench two strata were uncovered, with upper and lower graves containing objects contemporary with Marlik, those in the upper level

probably representing its later period.

In the late fall of 1962, after a change of government that caused a change of personnel in the Ministry of Education, our excavation was forcibly terminated as a result of intrigues by influential persons in the government along with relatives of the royal family who were in league with the illegal diggers and smugglers. Although by this time we had practically completed the excavation of the Royal Cemetery on the crest of Marlik, other areas had to be abandoned when we were forced to leave the site, including the slopes of Marlik, almost all of nearby Pileh Q'al'eh, the mounds of Zeinab Bejar, Dura Bejar, and Jazim Kool, and the rest of the valley, which contained many scattered graves. For the next year I struggled to resume the excavation, fighting with the antique smugglers and their corrupt associates in the Ministries of Justice and Education until finally the Ministry of Education was forced to respond to the order of the Shah and the Queen to reinstate our team for further excavation.

Unfortunately, when I returned to the Gohar Rud valley after an absence of a year, I discovered that the whole lower part of the valley had been disturbed and plundered. Since it was no longer possible to carry out a systematic excavation, I decided to confine our activities to mapping and documenting this disastrous destruction of the cultural heritage. In a survey of the valley, we identified more than 2,000 large and small ditches dug in the hectic search for valuable objects after the government team was forced to leave. When we questioned some of our ex-workers from nearby Nesfi, they said that at times, when the weather was good, more than 400 persons had been employed in this clandestine digging, with the local gendarmes receiving a bribe of 5 rials per worker per day to look the other way. Most of the objects found were apparently smuggled out of the country and sold to museums and private collections abroad.

Thus, only the Marlik objects, now in the Tehran Archaeological Museum (Muzeh Iran Bastan), remain as an integral and cohesive group to document this once vital and flourishing culture. Several thousand objects were found in the fifty-three tombs of Marlik, of which a comprehensive selection is presented in the following chapters. Chapter by chapter these objects are compared to materials found at other sites in the Near and Middle East. In the final chapters of this report an attempt is made to throw some light on the Marlik culture, its origins, date, and place in the history of the ancient world, as well as its influence on subsequent cultures, and finally some suggestions are presented concerning the possible fate of this forgotten and vanished culture.



Map 5. Distribution of Marlik Tombs

### III

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# Tombs

## *Introduction*

The excavation of Marlik produced only tomb construction, with no other architectural remains. These tombs were filled with a rich and varied mass of objects, including jewelry, weapons, human and animal figurines, and ritual vessels, which showed that they belonged to a prosperous and well-established people who for some reason, possibly religious in nature, selected this site for their Royal Cemetery. The majestic rocky mound of Marlik (Map 4) is excellently situated in the middle of a beautiful green valley covered by wild shrubs, plants and flowers, rice paddies, wheat fields, olive groves, and fruit orchards, a panorama possibly appreciated as much by the ancient people who occupied this region as by the present-day viewer.

Marlik, although seeming at first glance to be an artificial mound of accumulated archaeological deposit formed over a long period of time, in actuality is a natural rocky mound of rather crumbly stone, extensively cracked, and scattered with stones and boulders. Into the crest of this natural rocky mound fifty-three roughly constructed tombs had been dug, filled with a wide variety of beautiful objects. Although the richest tombs were located on the top of Marlik, the whole lower valley of the Gohar Rud (Map 3) was essentially a contemporary burial ground for less important persons, attracted perhaps by the presence of the Royal Cemetery.

In contrast to the wealth placed in them, the tombs of Marlik were not well organized and were quite roughly and carelessly built. Although the people of Marlik did not fashion a well-developed constructional plan for the tombs, there seems to have been a precise pattern in their burial procedure that was similar for all classes of people: the royalty with much more precious objects placed in their tombs and the common people with similar objects of less valuable

material and a lower quality of workmanship.

The crude nature of the stone construction used for the tombs may possibly be related to the natural environment, which provided an abundance of wood for building. Today wood is still the most common constructional material used in the region. The people of Marlik may have had little experience in or need for stone construction except in their tombs, which they hoped would last for a long time. There is no obvious pattern to the tomb distribution on the mound. Apparently, the layout of the top of the mound with its scattered boulders and broken rocks guided the placement of the tombs (Map 5), which were built between and around the natural rock (Pl. 14B). The depth of the soil between the rocks also affected the placement of the tombs, which, consequently, vary between 1 and 3 m in depth, for there was little or no cutting down into the bedrock to produce a standard depth for the burials. Instead, natural surfaces were used, with walls built between rather large boulders in order to produce sufficient height for the tomb walls. Because the natural contour of the rock was followed, there is no particular geometric plan to the tombs, each of which has its own shape determined by the layout of the mound at the time of burial.

Some attempt was made to build rather rectangular tombs when the area in question permitted, as may be seen in Tombs 10, 13, 15, 21, and 23 (Map 5). These all fall in the category of medium to smaller tombs, which did not require much area and could be built in more open spaces (Pl. 5D). The larger tombs, which, based on their contents, seem to have belonged to the most important figures, neither follow any clear geometric shape nor have a common asymmetrical pattern. Each tomb was strongly affected by the configuration of the open area between

the large boulders, as can be seen in Tombs 14, 25, 26, 29, 38, 41, 42, 44, 45, 50, and 52 (Color Plate IX B).

The spaces between these large rocks and boulders were filled by roughly constructed walls (Pl. 15A and Ill. 1), often built of stone broken from the mound itself, an iron sulfate, purplish in color, put together with clay mortar. Little attention was given to the careful fitting of the stone, although attempts were made to give the inner facade a more level surface (Pl. 5C). Besides the stone from the mound itself, a special type of yellowish stone was also used in the walls or placed on the floor or on top of the tomb. These yellowish stone slabs, which are not native to the mound, were brought from an area about 15 km away, near the headwaters of the Gohar Rud.<sup>1</sup> This

stone, which splits according to its natural layers into fairly flat slabs, is much more solid than the stone from the mound and apparently had a particular meaning in the funerary pattern. In some of the tombs with very rich contents, entire walls were constructed of these yellowish stone slabs, with particular care given to the construction. In Tomb 36, which although small was crowded with many valuable objects, this yellowish stone was used in the walls and large slabs were placed on the floor of the tomb (Color Plate X A). The difficulty of transporting this yellowish stone from a long distance, especially in large slabs, seems to suggest the importance it had for the Marlik people. A piece of it was found in each tomb, if not incorporated in the walls, then placed on the bottom of the tomb.

### *Burial Procedure*

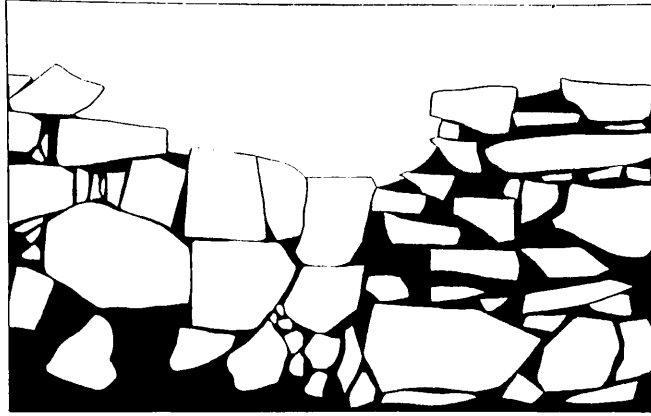
The skeletons in the Marlik tombs were not well preserved, particularly when they had been laid directly on the ground, because of the nature of the soil and the many cracks in the bedrock. In a few cases, however, fragments of bone or a crushed skull remained. In those tombs in which a large stone slab was laid on the ground underneath the body, the conditions for preservation were better and more of the skeleton remained, although still badly deteriorated. Enough traces of the body remained in some of the tombs to reveal the burial procedure, in which various objects were placed along with the deceased in the tomb. The body, dressed in ceremonial clothes with decorative buttons and other ornaments, was either laid on the floor of the already constructed tomb or placed on top of a large stone slab that lay on the floor, often at one side of the tomb (Pl. 15B).<sup>2</sup> Accompanying the body, in the case of females, were rings, earrings, necklaces, bracelets, and pins; in the case of males there were bronze weapons including swords, daggers, dirks, lances, arrowpoints, and maceheads, military equipment including quivers, helmets, protective bracelets, and belts and cymbals, along with a small amount of jewelry and valuables, with all these objects most often placed on or under the body (Pl. 13B).

Because the skeletons were so badly disintegrated that their sex could not be determined, I have taken the presence of much jewelry of a delicate nature combined with a limited number of weapons to indicate that the tomb belonged to a woman and the presence of a large and varied number of weapons with limited jewelry to indicate that the tomb belonged to a man. Some jewelry does seem to have been worn by men, however, since rings, earrings, hairholders, and necklaces were found in tombs that,

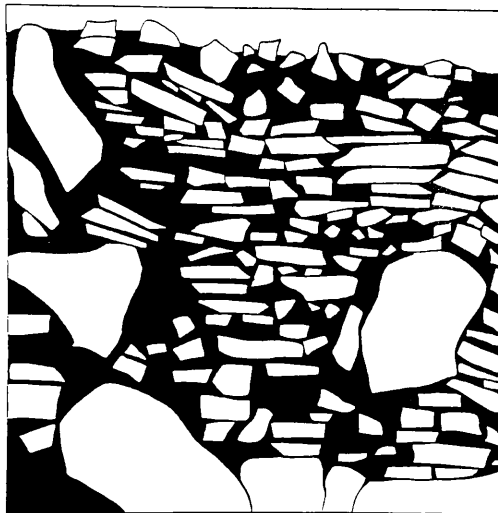
from the nature of the rest of their contents, seem definitely to belong to males.<sup>3</sup>

In addition to these categories (i.e., jewelry for women and weapons for men), there was a common pattern seen in the majority of the tombs of the inclusion of kitchen utensils and vessels of metal, pottery, and stone (Pls. 8A, 8B), which had originally held food; bones of birds and animals sometimes remained in the larger cooking pots. Also included in the tombs were pottery and metal figurines representing different types of domestic and wild game, zoomorphological vessels, possibly intended to hold sacred liquid or wine (Pl. 10A), and male and female human figurines, usually of pottery, which apparently represented gods and goddesses of fertility.

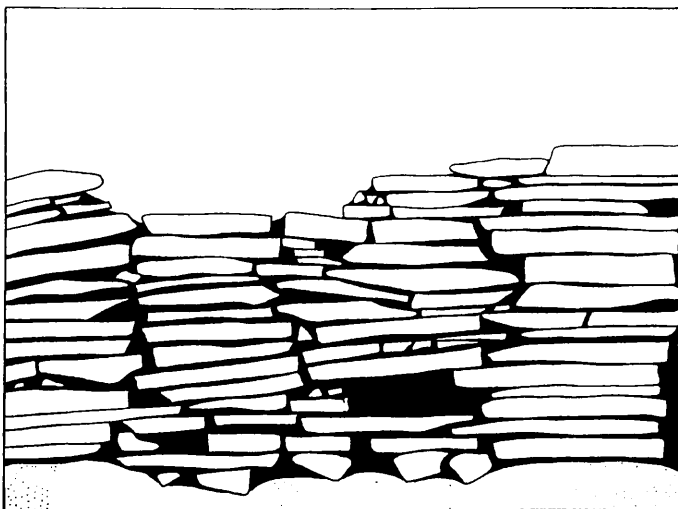
In some cases a large collection of these objects completely filled the tomb, laid above one another when the space on the floor of the tomb had been filled. Tomb 36 (Trench XVIII C) a small tomb measuring 2.0 m by 1.5 m, was packed with hundreds of interesting objects (Pl. 11A). In addition, in three instances part of the skeleton of the special horse of the deceased was found buried in a small adjacent tomb with a few items of horse trappings. After the funerary objects, possibly the finest of the belongings of the deceased, had been placed in the tomb with the body, the tomb was sealed with a thick layer (20–30 cm in depth) of rather soft brownish red soil, quite different from the natural soil of the mound, which is purplish in color. Often several fragments of the yellowish imported stone were placed on top of this soil layer, and then the whole tomb was covered by the original purplish soil of the mound mixed with small pieces of broken native stone. Because this general pattern held for most tombs, we gradually



0 1 Meter



0 1 Meter



0 1 Meter

*Illustration 1. Wall Construction Techniques*

learned that the brownish soil underneath these yellowish pieces of stone contained funerary objects, although of course there were some exceptions to this pattern, since this brownish soil was often mixed with the natural soil of the mound and many small pieces of broken stone were used as tomb fill. In some tombs the arrangement of the objects was badly disturbed by a different or slanting floor level, which was apparently the result of a major disturbance to the mound, possibly from an earthquake or the

sinking of the ground (Pl. 8D).

There was a degree of variation in individual tombs in the quality and quantity of objects employed in the burial procedure. For instance, in the richer tombs precious gold beakers were placed at the hand in front of the face of the deceased near his mouth (see Pl. 13B), whereas in the common tombs of Zeinab Bejar pottery vessels replaced the gold vessels. Nevertheless, the similarity in the burial pattern remained (Pl. 5A).

## *Tombs*

Although the tombs were not built according to a rigidly standardized pattern, they may be classified according to their size, construction, and contents into several discrete categories (even despite the fact that certain elements tend to overlap between the different categories). Since this cemetery apparently was in use for two or three centuries, the tombs must represent the development or decline of a culture with which they share some general characteristics.

Fifty-three tombs differing in size, shape, and quality and quantity of funerary objects were found at Marlik, scattered over the top of the mound and concentrated on the northern and eastern parts, although the highest parts of the mound fall in the western and southern sections. This concentration of tombs on the top part of the eastern slope of the mound may indicate some orientation in the direction of the rising sun, although that would be highly speculative. Certainly the importance of the solar disk is suggested by the many geometric rosettes, more than twenty-five, seen on the bases of decorative vessels found in the tombs, which seem to represent the sun as a possible element in the religious beliefs.

No particular tomb type is associated with a distinct part of the mound, and the distribution of the various tomb types is mixed throughout the occupied tomb areas, with the preponderance of tombs crowded in the mid-northern part of the top crest of the mound. The tombs may be divided into four groups—large tombs, medium-size rectangular tombs, small, irregularly shaped tombs, and tombs of horses. Although the tombs of each group are generally similar in terms of their construction and contents, minor differences may be related to the sex or position of the deceased. All the tombs certainly represent the same culture; however, they are not exactly contemporary but rather fit within a time range of two or three centuries. Tomb type may therefore not be used to indicate either contemporaneity or disparity in time.

### *TOMB 1*

Roughly rectangular tomb, about 3.5 m long, 2.5 m wide, and averaging 1.5 m in depth, located in Trench III D<sup>+</sup>. The walls consist of gravel mixed with small pieces of broken stone and clay mortar, with little effort to make them vertical. The contents include a considerable number of weapons and some jewelry and ornaments (Table 1), suggesting that the tomb's occupant was a warrior king.

### *TOMB 2*

Irregular small tomb, about 3.0 m long and 2.5 m wide, with an average depth of about 1.5 m, located in Trench VI B<sup>+</sup>. The bases of the walls are made of rather large broken stones held together with clay mortar, and the upper parts with small pieces of stone mixed with coarse clay. A large roundish boulder is located near the northeastern corner of the tomb. In contrast to the poor construction of the tomb are the valuable objects it contains (Pl. 5B). The contents include almost equal proportions of jewelry and weapons (Table 1), but the type of jewelry resembles that which may have been worn by men; therefore, this tomb may have belonged to a fairly rich king or prince.

### *TOMB 3*

Rectangular tomb, about 4.5 m long, 2.5 wide, and averaging 1.5 m deep, located in Trench VI A. The walls are constructed of broken stone with clay mortar in a fairly regular rectangular shape. The inner faces of the walls are fairly even, while the backs are packed by gravel and coarse filling, with no attempt to produce a leveled surface. Judging by the contents, in which weapons and tools predominate

(Table 1), this tomb seems to have belonged to a warrior.

#### *TOMB 4*

Somewhat irregular lozenge-shaped small tomb, about 4.0 m long, 2.5 m wide, and with an average depth of about 1.5 m, located in Trenches VIII A<sup>+</sup> and B<sup>+</sup>. The walls are made of broken pieces of local stone with clay mortar, and a large piece of boulder occupies the center of the tomb. There are no weapons or jewelry among the contents, which include some bronze hooks and a piece of stone shaped like a fish head (Table 1). Although it cannot be said that these objects connect the owner of this tomb with the occupation of fishing, they do suggest it as an interesting possibility.

#### *TOMB 5*

Rather large tomb, nearly 4.0 m long and 3.0 m wide, with an average depth of about 1.75 m, located in Trenches VIII C and D. The walls are constructed of rather large broken pieces of stone with some yellowish slabs of imported stone, and clay mortar. Two large pieces of rock disturb the level of the floor. The contents (Table 1) include objects that can be attributed to either men or women in almost equal quantity.

#### *TOMB 6*

Irregularly shaped tomb, about 4.0 m long north-west-southeast, 2.5 m wide, and with an average depth of about 1.5 m, located in Trenches IX/A<sup>+</sup> and X A<sup>+</sup>. Except on the western side, the walls are built of broken pieces of stone, with chipped stone fragments mixed in the clay mortar. A large piece of natural boulder is located in the southeastern corner of the tomb. Of note in the contents of this tomb are many bronze bells (Table 1), similar to those still used today in this mostly mountainous forested area, where they are suspended on the necks of animals, particularly mules. The sound of these bells informs the natives of the approach of a mule or mule caravan, suggesting that the owner of this tomb may have been connected with such caravans.

#### *TOMB 7*

Located in Trench IX B; contained very few objects when excavated. The only items of note were a bronze sword hilt which may have held an iron blade

and a large collection of broken pottery (Table 1). This paucity of objects raises the possibility that the tomb was looted at some unknown time in the past. Alternatively, the occupant may have been a person without much wealth.

#### *TOMB 8*

Fairly rectangular tomb, about 3.0 m long north-west-southeast, 2.5 m wide, and with an average depth of 2.25 m, located in Trench IX D. Its eastern wall is constructed of large broken stone and clay mortar, and its western wall of a mixture of chipped stone and clay. The contents of this tomb are very limited (Table 1), but it is the only tomb that produced some writing, which may be seen on two broken frit cylinder seals. These seals are in a rather bad state of preservation, particularly of the surface glaze. One had remaining traces of seven letters, and the other only two letters. Although these few letters did not have any particular meaning, they were identified by George Cameron as a type of writing that vanished after the time of Adad Nirardi II, around the late second millennium B.C.

#### *TOMB 9*

Located mainly in Trench IX I but continuing into Trench X I; contained no objects when excavated. This may indicate that the tomb was looted, either in antiquity or in the more recent past.

#### *TOMB 10*

Roughly rectangular tomb, about 4.5 m long and 4.0 m wide with an average depth of about 2.0 m, located in Trenches X A and B and XI A and B. The walls near the floor are made of large broken pieces of local stone, with much smaller pieces of broken stone mixed with clay mortar used on top (see Pl. 5C). On the floor of the tomb are three large boulders. The walls have a more even face toward the inside of the tomb, while the outside is backed to the mound, filled with coarse clay mixed with small pieces of gravel and broken stone. The contents include many pieces of jewelry with no weapons or figurines (Table 1), suggesting that the tomb probably belonged to a queen or princess.

#### *TOMB 11*

Located in Trench X C; contained only one object at the time of excavation—a pottery vessel with a spout (Table 1).

*TOMB 12*

Almost rectangular tomb, about 5.0 m long, 3.0 m wide, and 2.0 m in average depth, located in Trenches XI D and E and XII D and E. The walls, which are made from broken stone and clay mortar with a rather level inner face, are filled and back to the mound on the outer side. Two pieces of large broken rock were located in one corner of the tomb, but no trace of a skeleton was found. The contents of the tomb (Table 1) suggest that it may have belonged to a male figure, with a limited number of weapons and little jewelry except for two gold forehead bands and a gold pendant, both of which seem to have been worn by men as well as women.

*TOMB 13*

Roughly square tomb, 3.0 m long on each side and about 2.0 m deep, located in Trenches XII G and XII H. The walls are built of local broken stone with clay mortar, with the inner faces of the walls rather carefully constructed vertically, while the outer face is filled by gravel and coarse soil. The tomb contains no jewelry or ornaments and no metal vessels, but rather weapons, pottery vessels, metal and pottery figurines, two cymbals, and one bronze bell (Table 1). It seems that the owner of the tomb might have been a warrior associated with animals.

*TOMB 14*

Irregularly shaped tomb, measuring about 8 m north-south in length and 6 m in width, located in Trenches XII A and B and XIII A and B. The walls are constructed of rather large broken pieces of stone with clay mortar. Within the tomb are several large pieces of boulder, which could not have served as a platform because they are irregular in shape and do not have a flat surface. Although the tomb is large, the contents were not extensive and included mostly jewelry (Table 1).

*TOMB 15*

Roughly rectangular tomb, about 4.0 m long, 3.0 m wide, and averaging 1.5 m in depth, located in Trenches XII C and XIII C and D. The walls are constructed of rather large broken pieces of stone near the bottom and much smaller pieces above, mixed with coarse clay and pebbles. A solid piece of stone was located at the northern end of the tomb, with no traces of a skeleton or objects on it. The contents included mainly jewelry, suggesting that the tomb may have belonged to a queen, although a

number of weapons were also found in the tomb (Table 1).

*TOMB 16*

Irregular small tomb, about 2.5 m long, 2.0 m wide, and averaging 1.5 m deep, located in the southeastern section of Trench XIII F. The walls are crudely constructed of small pieces of broken stone and clay mortar. A large boulder disturbs the floor of the tomb. The contents (Table 1) can be attributed equally to a man or a woman.

*TOMB 17*

Roughly rectangular tomb located mainly in Trench XIV C but continuing into XV C. At the time of excavation, it contained five pottery vessels (Table 1).

*TOMB 18*

Irregular small tomb, about 3.0 m long and 1.5 m wide, with an average depth of 1.5 m, located in Trenches XIV D and XV D. The tomb construction is very poor, with the walls built of small broken pieces of stone mixed with clay mortar. Among the contents of the tomb, along with weapons and jewelry, are many pottery figurines of bulls (Pls. 6A, 6B), a model of oxen with a yoke, many vessels, and several bronze bells (Table 1), indicating that the owner was a king with an interest in agriculture and animal husbandry.

*TOMB 19*

Fairly small irregular tomb, about 2.5 m long northeast-southwest, 1.5 m wide, and averaging about 1.5 m deep, located in Trenches XIV E and F. It is constructed of broken local stone with clay mortar, and at one side of the tomb is a large piece of boulder. There is no stone slab in the tomb or any leveling of the floor. The contents of the tomb are predominantly delicate jewelry (Table 1), seeming to indicate that the owner was a queen or princess.

*TOMB 20*

Small tomb located in Trench XIV H. Its contents include several burnished or incised pottery vessels, fragments of several other pottery vessels, and two bronze bracelets (Table 1).



*TOMB 21*

Rectangular tomb, about 4.0 m long and 3.0 m wide, with an average depth of about 1.0 m, located in Trenches XIV G and XV G and F. The walls were constructed of broken stone and coarse clay mortar mixed with small pieces of stone (Map 7), and there was no paved floor or stone terrace in the tomb. Two bodies were buried on the floor of this tomb; their skeletons were well enough preserved to provide a rather clear view of the burial positions. The bodies had been laid parallel to each other, one behind the other, on their left sides with the heads toward the north and faces toward the east. The legs were turned toward the south with one bent at the knees and the other more contracted (see Pl. 6C), while the arms of the front skeleton were bent at the elbow. The only objects in the tomb were a pottery plate placed on the chest of the back skeleton and a broken bowl (Table 1).

## COMMENTS

Multiple burials have been found in other excavations in this region. A dual or multiple burial characterized by a different position of the skeletons and with funerary objects was found at Ghalekuti Tomb C-1<sup>4</sup> and at Ghalekuti I, Area G,<sup>5</sup> in the Dailaman region of Gilan in northern Iran.

*TOMB 22*

Small tomb located mainly in Trench XV I but overlapping slightly with Trench XIV I. It contained no objects upon excavation, suggesting that it may have been looted at some point in the past.

*TOMB 23*

Roughly rectangular tomb, about 3.5 m long, 2.5 m wide, and 2.0 m in average depth, located in Trenches XV D and XVI D. Its walls are built of broken stone and clay mortar, following the pattern of construction of other tombs of this type. Larger pieces of broken stone are found in the bottom of the walls, while smaller pieces were used above, mixed with clay, coarse pieces of stone, and pebbles or gravel. The contents include jewelry and vessels, without weapons (Table 1), suggesting that the tomb belonged to a queen or princess.

*TOMB 24*

Rather small irregular tomb, about 3.0 m north-east-southwest in length, 2.0 m in width, and averaging about 1.5 m in depth, located in Trenches

XV D and E and XVI D and E, with the largest part of the tomb in XV E. The walls, which are partly built of yellowish stone slabs with clay mortar, do not continue down to the bottom of the tomb (Pl. 7A). There was no trace of any platform or any leveling of the floor, and the skeleton is almost completely decomposed. The rich contents of the tomb include considerable quantities of both jewelry and weapons, as well as decorative metal vessels (Pl. 7B; Table 1). The tomb could be attributed to either a male or female member of the royal family, or it could have contained a double burial, consisting of one male and one female. Gold, bronze, and pottery figurines and a bronze humped bull mounted on four wheels suggest that the owner may have been a young prince or princess (Pl. 7C; Color Plate XXV B).

*TOMB 25*

Large, irregularly shaped tomb, about 6.5 m long, 5.5 m wide, and averaging 1.5 m in depth, located mainly in Trenches XVI E and F; roughly rectangular in shape with large round corners. The construction is very poorly executed, consisting mainly of rough coarse clay mixed with small broken pieces of the natural stone of the mound, although some parts are better constructed using broken pieces of stone. The tomb is rather large, but not very rich in contents (Table 1). Judging from the number of weapons, it seems to have belonged to a warrior. A model of an oxen team wearing a yoke may indicate that the deceased also had interest in agriculture.

*TOMB 26*

Six-sided tomb, with different measurements on each side, encompassing an area about 6.0 m long, 4.5 m wide, and 2.5 m deep, located partly in Trench XVII B and partly in XVI B (Map 5). The tomb incorporates three large boulders in walls that are roughly built of coarsely mixed clay and pieces of broken stone with some parts filled with mud and gravel (Ill. 1B and Pl. 8C). The contents of this tomb were badly disturbed when found, possibly by an earthquake or other natural action, and they were not in a horizontal layer as was the case in some of the other tombs. No skeletal remains were found except for small chips of somewhat perished bone visible in the filling. Because of the disturbed condition of the tomb, there was little evidence of the original orientation and layout of the body, and there was no stone slab or level platform arranged to hold it. However, the very rich and varied contents of the tomb indicate that it must have belonged to a powerful warrior, possibly a warrior king, with great physical strength, accustomed to using a large variety

of weapons (Table 1).

There was also a fairly rich collection of ornaments and jewelry in the tomb, but the emphasis seems to have been given to a number of heavy and varied weapons (Pl. 9B), including a dagger about 82 cm long, weighing 1,830 grams, which could have been used only by a truly fearsome warrior. Other weapons include twelve maceheads, twenty-five daggers, three large swords, fourteen spearheads, more than 200 arrowheads of various shapes and sizes, two large conical helmets, three wide bronze belts, a protective bronze wristlet, and a bronze quiver. Pieces of textile and fifty-eight large and small gold buttons indicate that the occupant of the tomb was buried in full ceremonial costume as was the occupant of Tomb 52. Tools and personal equipment including ear cleaners, needles, simple and decorative pins, chisels, sledgehammers, whetstones, and metal sticks may indicate other interests of the deceased (Pl. 9A). The existence of a rich collection of decorative jewelry and ornaments in addition to two gold vessels (Pl. 9C), with winged bulls in high relief, shows that the owner of the tomb must have been particularly wealthy and powerful.

#### *TOMB 27*

Small, rather unevenly rectangular tomb, 3.0 m long and 2.0 m wide, with an average depth of about 1.5 m, located in Trenches XVI D and XVII D. The tomb is roughly constructed of broken local stone and coarse clay mortar. Several large boulders form the foundation of the southern and eastern walls. This tomb was filled with objects, including jewelry, weapons, vessels, figurines, and a model of an oxen team pulling a plow (Pl. 10B, Table 1). The many weapons suggest that it belonged to a warrior king with an interest in hunting and agriculture.

#### *TOMB 28*

Located in Trench XVI G; contained no objects at the time of excavation.

#### *TOMB 29*

Large irregular tomb, measuring about 5.5 m north-south in length and 4.5 m in width, with an average depth of about 2.0 m, partially located in Trench XVI G but mostly in Trench XVI H. It is constructed of rather large pieces of broken boulders and clay mortar. Two large natural boulders disturb the floor of the tomb. The contents, in contrast to

the size of the tomb, are very limited, including only several weapons and pottery vessels (Table 1), suggesting that its owner was a warrior without much wealth.

#### *TOMB 30*

Oval-shaped tomb located in Trench XVI L. Among its contents are several pottery vessels and a number of objects made of bronze (Table 1).

#### *TOMB 31*

Medium-sized rectangular tomb located in Trenches XVI N and XVI O. It contained no objects at the time of excavation, suggesting that it may have been looted at some point in the past.

#### *TOMB 32*

Very small, irregularly shaped tomb, about 3.0 m long, 1.5 m wide, and averaging 1.5 m deep, located in Trench XVII E. The walls are made mostly of broken stone and clay mortar, but in some parts yellowish slabs of imported stone are also found (Ill. 1A). Several larger slabs of this yellowish stone were placed above and around each other on the floor of the tomb with crushed objects in between (Pl. 10C), suggesting that there may have been some sort of disturbance to the tomb to bring such disorder to the contents. This disturbance may have been an earthquake or other natural action with no connection to tomb robbery, for the valuable contents of the tomb remain. Another possibility is that the large slabs formed some sort of roofing to the tomb, which fell and crushed the objects beneath. Because a wide variety of jewelry is predominant in the contents of the tomb (Table 1), it may have belonged to a wealthy queen. The inclusion of gold forehead bands and gold leaves, which would have decorated a crown or diadem, supports this suggestion.

#### *TOMB 33*

Irregularly shaped tomb, about 3.5 m long and 3.0 m wide, with an average depth of about 2.0 m, located in Trench XVII F, extending slightly into Trench XVIII F. The walls are built of broken stone and clay mortar. Included among its contents are both jewelry and weapons in almost equal quantities (Table 1).

*TOMB 34*

Small tomb located in Trench XVII J; it contained no objects at the time of excavation.

*TOMB 35*

Roughly rectangular tomb located in Trenches XVI M-N and XVII M-N. It contained no objects at the time of excavation, indicating the possibility that it was looted at some point in the past.

*TOMB 36*

Fairly irregular small tomb, about 2.0 m long, 1.5 m wide, and 1.25 m in average depth, located in Trench XVIII C. Its walls are constructed completely of yellowish slabs of imported stone (Ill. 1c), and lying haphazardly on the floor were three large slabs of the same yellowish stone (Map 8, Color Plate X A). Although there were no skeletal remains, funerary objects filled the tomb, with no particular arrangement except that different types of objects were placed together or above one another. The rich and varied contents of the tomb include jewelry, figurines, vessels, tools, and equipment, with few weapons (Table 1), suggesting that the tomb may have belonged to a prominent queen or princess. The many figurines in gold, bronze, and pottery along with some gaming pieces, all apparently toys, suggest that it may have been the tomb of a young princess or queen of such importance that her tomb was filled with more than 200 valuable objects (Pl. 11B, 11C).

*TOMB 37*

Located in Trenches XVII-XVIII E, it contained only one object, a gold cup (Table 1).

*TOMB 38*

Roughly circular tomb located in Trenches XVII I and XVIII I; it contained no objects at the time of excavation.

*TOMB 39*

Roughly rectangular tomb, about 4.0 m long and nearly 4.0 m wide, with an average depth of about 2.0 m, located in Trench XVIII L. The walls consist of large broken stones near the bottom and smaller

ones higher up, mixed with clay mortar. A large oval boulder is located in the southeastern corner of the tomb. There was no trace of any funerary arrangement, and only four objects were found in the tomb, all rather decorative vessels (Table 1).

*TOMB 40*

Irregularly shaped small tomb, about 2.5 m long, 1.5 m wide, and averaging 1.5 m in depth, located in Trench XVIII N. The walls were built between large boulders with connecting walls of broken boulders and clay mortar; a large piece of boulder is located on one side of the tomb. Among the contents are a number of stone tools, including whetstones, pestles, and pounders (Table 1). No weapons were found in the tomb.

*TOMB 41*

Irregularly shaped small tomb, about 3.5 m long northwest-southeast, 2.5 m wide, with an average depth of about 2.25 m, located in Trench XIX K. The walls are constructed of large broken pieces of boulders with clay mortar, and a very large boulder is located in the middle of the tomb occupying most of the floor area. Among the contents of the tomb, consisting mainly of pottery vessels and gold jewelry, is one unique bronze spindle whorl (Table 1). The limited number of weapons in the tomb suggests that it belonged to a woman, possibly one connected with the production of yarn or textiles.

*TOMB 42*

Irregularly shaped tomb, about 5.0 m long and 5.0 m wide, with an average depth of 2.5 m, located in Trench XX F and includes part of the first test trench of the excavation, where the earliest finds from Marlik occurred. The lower portion of the walls is constructed of large broken pieces of local stone, with smaller pieces in the upper walls. No leveled floor or platform was found in this tomb, but three large irregular boulders disturb the evenness of the floor. The contents of this tomb (Table 1) do not include much jewelry, except for gold buttons, or many weapons, although two cylinder seals with hunting scenes may associate the owner with hunting.

*TOMB 43*

Small tomb located in Trench XX J; it contained no objects at the time of excavation.

*TOMB 44*

Rather large, roughly oval tomb, nearly 7.0 m long and 4.0 m wide, ranging in depth from about 2.5 m on the northwestern side to around 1.5 m on the eastern side, located in Trenches XX M and N and XXI M and N. The walls are constructed mainly from the original stone of the mound with the addition of a few pieces of imported yellowish stone. A rather large boulder, cracked from the middle, forms part of the northwestern wall (Pl. 12A). There is no evidence suggesting leveling or paving of the floor, nor was a stone slab placed for a burial terrace. However, two larger pieces of stone, one above the other, produce a sort of double step descending to the tomb (Map 5). There is almost no trace of a human skeleton except for very small chips of badly deteriorated bone, which turned to powder at the slightest touch. There was no evident burial pattern except for that revealed by the contents of the tomb, which were not arranged in a horizontal level but placed between large pieces of boulder. The contents included weapons, tools and equipment, bronze and pottery vessels (Pl. 12B), and a very limited amount of jewelry, suggesting that the tomb belonged to a warrior or warrior king (Table 1).

*TOMB 45*

Very large five-sided tomb, about 10.0 m long southeast-northwest, 5.0 m wide, and 1.5 m deep, located in Trenches XXI G and H and XXII G and H. It is poorly constructed, with the areas between the large pieces of stone filled by clay mortar mixed with small stone fragments. No trace of any leveled platform or stone slab was found in the tomb except for a large irregular piece of gypsum with a coarse and uneven surface, which might have served as some sort of paved floor for a small part of the tomb, although nothing was placed on it (Pl. 12C). No traces of bone were found in this tomb, nor is there any arrangement of the funerary objects. Therefore, any suggestion as to the nature of its owner relies solely on the contents, which include a great deal of jewelry, a limited number of weapons of an extraordinarily decorative nature, and several decorative metal vessels (Pl. 12D; Table 1). It might be suggested that the owner of this tomb was a rich and important queen who had a few decorative weapons for her personal defense and protection.

*TOMB 46*

Located in Trench XXI J; it contained no objects at the time of excavation.

*TOMB 47*

Rather large, irregularly shaped tomb, about 5.5 m long, 4.5 m wide, and ranging from 2.5 m deep on the western side to 1.5 m deep on the eastern side, located in Trenches XXII E and F. Its construction is similar to that of the other large tombs, with walls made from rather large broken pieces of stone and clay mortar. At the northern end of the tomb three large slabs of stone were placed on the ground, forming an even platform, which was extended by leveling the surrounding area (Pl. 13A). The body of the deceased was placed on this platform. Enough pieces of the badly preserved bone remained to identify the position and orientation of the burial.

On the terrace a row of five parallel large bronze daggers had been placed with their pommels toward the west and points toward the east. Opposite the daggers seven large and small bronze spearheads had been laid parallel to one another with their ends toward the east and points toward the west, with one bronze spearhead laid between these rows of daggers and spearheads at a 90° angle (Color Plate XI A). The body of the deceased had been placed on top of these special weapons, eternalizing his pride in his battle prowess and his fame as a warrior. The skeleton lay on its left side with knees half bent, head toward the north, and face toward the east. Although not well preserved, remnants of the skeleton included a crushed skull with some teeth in situ; the neck, backbone, and ribs quite decayed; some parts of the bones of the hand still evident, reaching toward or holding a gold beaker that may have held sacred water or wine; and the thigh and shin bones in a much better state of preservation than the rest of the skeleton.

On and around the upper torso were twenty-eight gold buttons originally attached to ceremonial burial clothing. Other jewelry and ornaments included earrings, beads of various materials, and pendants, all suggesting the wealth and power of the deceased. Scattered around the terrace were weapons and items of military equipment including maceheads, arrowheads, bronze belts, and a bronze quiver (Pl. 13D). On the western side of the tomb many pottery and bronze vessels were placed inside each other (Pl. 13C), possibly originally filled with food. Funerary objects placed in other parts of the tomb included jewelry, gold sheet, and bronze figurines, including a model of an oxen team wearing a yoke.

The contents of this tomb with its large quantity of weapons matched by a very rich collection of jewelry and ornaments (Table 1) raised the question of whether it was customary to put so much jewelry in the tomb of a warrior king or whether the tomb may have contained his queen as well. The lack of any evidence of a second skeleton in the tomb does not support the idea of a joint burial, however. Certainly

the arrangement of the weapons on the top of the terrace under the body of the deceased leaves no doubt that the tomb belonged to a very active and strong warrior who, as is evident from the rich and varied jewelry, was also very wealthy.

#### *TOMB 48*

Located in Trenches XXII-XXIII J; this tomb was devoid of contents at the time of excavation. This suggests the possibility that it may have been looted at some point in the past.

#### *TOMB 49*

Very small irregularly shaped tomb, about 1.5 m long, 1.0 m wide, and with an average depth of 1.0 m, located in Trench XXII K, adjacent to and actually encroaching on the northeastern corner of Tomb 50. The walls are crudely constructed of broken stone mixed with clay mortar built between several very large natural boulders. A bronze horse bit, horse teeth, and a horse neck bone were found in the tomb (Pl. 14A and Table 1).

#### *TOMB 50*

Almost rectangular tomb, somewhat distorted by the construction of a rather small horse tomb at one corner (Tomb 49), located in Trenches XXI K and L, XXII K and L and XXIII K and L. It measures 7.0 m long on one side, 5.0 m wide, and varies between 1.5 m deep on the eastern side and 1.0 m deep on the western side. The walls of this tomb are fairly carefully constructed with an almost vertical leveled facade. A rectangular terrace, about 3.0 m long northeast-southwest, 1.20 m wide, and 75 cm high, built of several large boulders with filling walls of yellowish stone slabs and clay mortar, is connected to the northern wall of the tomb (see Pl. 14B). Although the top of the terrace was partly leveled with stone slabs, no funerary objects were found on it. Located at the northwestern corner of the tomb, near the tomb of the horse, was a roughly constructed hearth consisting of several pieces of stone. Remains of ash and charcoal associated with the hearth indicate that cooking or burning took place during the burial ceremony. Although there were no stone slabs on floor of the tomb, it had been horizontally leveled.

Artifacts were scattered over the floor in a haphazard way (Pl. 14C), without any particular grouping of the objects such as was found in Tombs 52 and 47, in which each group of similar objects was

placed together in the tomb, with the body buried on top of the terrace in an organized manner. The mixture of different types of objects without arrangement in this tomb may indicate a disturbance during the burial procedure or even later by such an event as an abortive tomb robbery in ancient times; the lack of any skeletal remains or bone chips might support this possibility. Although there were no funerary objects on top of the terrace, a very large number of valuable objects were scattered on the floor around the terrace as well as throughout the rest of the tomb (see Table 1), including many different types of jewelry. Of special note is a collection of gold leaves that would have been used in a queen's diadem and seem to be particularly women's ornaments, which may point to the identity of the owner as a wealthy queen. The existence of some weapons may indicate that the owner of the tomb was a warrior as well as a queen, or there may have been a joint burial of a woman and a man in the tomb, with the great emphasis on the richness of the woman's funerary objects pointing to her as the essential figure in the ownership of the tomb.

#### *TOMB 51*

Small tomb, located in Trenches XXI-XXII M, adjacent to the much larger Tomb 44. Although it contained no objects indicating its function, it may have been a horse tomb as were two parallel examples (Tombs 49 and 53).

#### *TOMB 52*

Roughly oval tomb, oriented northwest-southeast and measuring about 7.0 m long and 4.5 m wide. It lies on the eastern slope of the mound with a depth varying from 2.5 m on the western side to 1.0 m on the eastern side. The tomb is located mainly in Trench XXIII G, with part of the tomb extending into Trenches XXIII F and XXIV G (Map 4). Connecting walls of broken stone and clay mortar were built between several large boulders (see Pl. 15C). These walls are almost even on the underface of the tomb but roughly built and backed into the mound on the outside, filled by gravel and dirt with no attempt to make them smooth or level. At the northwestern end of the tomb are two separate parallel small stone walls built to provide a firm foundation for a very long slab of yellowish imported stone, about 2.60 m long, 70 cm wide, and 20 cm thick, oriented in a northeast-southwest direction about 35 cm above the floor of the tomb (Pl. 15D). The unpaved floor was leveled by filling the spaces between the large pieces of stone with soil. The area

behind the long slab of stone was evenly paved by pieces of slab stone to enlarge the space for the body and funerary objects.

Judging by the contents of this tomb (Table 1), it apparently belonged to a warrior and hunter of great wealth who was buried according to an organized burial procedure based on traditional religious beliefs. On the leveled terrace, partly covered by the long stone slab, were placed special weapons of the deceased, including two large daggers or dirks and three large spearheads, with their points meeting in the center far enough apart to provide space for the body to be placed on top (Color Pl. X B, Pl. 16A). The body was placed over these special weapons, on its left side with the head toward the northeast, the face toward the south, the legs partially contracted, and the knees half bent (Pl. 16B). The skeleton was very badly affected by its long span of time underground, although the stone slab protected the body from below and kept it in much better condition than many others in the Marlik tombs.

Many textile fragments and gold buttons on top of and around the upper torso indicate that the body had been covered by elaborate burial clothing decorated by many gold buttons. Special weapons had been placed not only under the body but also in other parts of the tomb, including four bronze maceheads, two of which were behind the body on the terrace and two more under the long stone slab. Many bronze arrowpoints of various shapes, possibly having different uses in battle and in the hunt, were piled a short distance behind the skeleton on the terrace. Also behind its back was a gold bowl with designs of imaginary combined male and female deities, which was broken into two pieces, both badly damaged, about 70 cm apart. The condition of this gold bowl seems disproportionate to the possible damage caused by earth pressure, and it may have been destroyed or sacrificed by being cut into two pieces during the funeral ceremony. Gold, red carnelian, and shell beads, along with gold earrings, a gold chain, a gold hair binder, bronze buttons, and silver loops on and around the body (Pl. 16C), suggest that men as well as women used these ornaments, although possibly in lesser quantity.

Alongside and on the long stone slab were pieces of leather with many star-shaped small bone buttons and small bronze riveting pins, which were part of the decorative leather cover of a bronze quiver lying nearby. Under the stone slab were pottery figurines of humans and pottery vessels (Pl. 17A); bronze cymbals, belts, and small bronze tools and equipment were also placed on and under the stone slab. On the western side of the tomb were large numbers of pottery and bronze vessels, more than thirty in all, including two large bronze cooking pots that had originally been filled with food. Bird and animal bones were still in situ, indicating that the Marlik people believed it was necessary for food to be placed

in the tomb for use in the life hereafter. A bronze model of an oxen, yoke, and plow (Pl. 17 B) may indicate an interest in agriculture. On the eastern side of the tomb were twenty-four beautifully made cast bronze animal figurines, representing at least six species of wild and domesticated animals, which along with three pottery figurines suggest the deceased's devotion to hunting (Pl. 17C). Cooking equipment including a bronze ladle and skewer were also found in the tomb.

An adjacent small tomb, Tomb 53, apparently held the special horse of this warrior king, with a set of horse teeth, a bronze horse bit, and bronze loops constituting its contents (Map 5).

The orientation and position of this terrace, the placement of the deceased, the burial costume with its decorative buttons, the arrangement of the food supply along with cooking vessels and other kitchen equipment, the placement of the animal figurines, and the inclusion of a bronze model of a team of oxen wearing a yoke and plow all illustrate the burial procedure and reveal characteristics and interests of the deceased. The Marlik people held a belief in a continuation of life in the hereafter similar to what they had known in this world, and they felt it necessary to provide the same type of utensils, weapons, and other tools and equipment for that life, with an emphasis on those objects most representative of the role and interests of the deceased.

### *TOMB 53*

Small tomb, located in Trench XXIII-XXIV H, abutting the much larger Tomb 52. Its contents include a set of horse teeth, a bronze horse bit, and several bronze loops (Table 1), suggesting that the tomb originally contained a horse burial.

### *TOMB AT ALI KARAM BAGH*

Well-constructed rectangular tomb containing a partially preserved skeleton. contents include gold and carnelian jewelry (see Table 1 and also p 51).

### *TOMBS AT GHESLAH*

Several graves with large bracelets and an assortment of pottery (See Table 1 and p. 51).

### *TOMBS AT ZEINAB BEJAR*

Several burials with no discernible construction contained objects contemporary with Marlik Royal Cemetery (see Table 1 and pp. 51, 52).

## Chapter III Notes

1. This yellowish stone comes from a mine about 15 km south of Marlik, beyond the village of Soughestanak at a much higher altitude than Marlik and about four hours walking distance from it. This area serves as a summer camp for the inhabitants of the valley from late spring to early fall.
2. Traces of well-woven textile fabric to which many gold buttons had been attached were found in several tombs. In

Tomb 52, Trench XXIII G, more than fifty gold buttons lay on the disintegrating skeleton along with textile fragments.

3. The gold bust of a king (Color Plate XXII E,F) has pierced ears with gold earrings. In Tomb 47, Trench XXII E, which apparently belonged to a male, jewelry was found (see Fig. 6).
4. Egami, Fukai, and Masuda 1965: Pl. LXXI.
5. Fukai and Ikeda 1971: Pl. LVI.

Table 1. Tomb Groups

Tomb #	Description	Cat. #	Marlik #
1	Bronze Vessel Fragments	60	1396 M
1	Pottery Ram Figurine	110	759 M
1	Red Carnelian Necklace	252	1426 M
1	Bronze Bracelet	356	758 M
1	Bronze Bracelet	358	715 M
1	Gold Hair Binder	404	1072 M
1	Gold Button	418	1035 M
1	Cylinder Seal	473	1091 M
1	Bronze Sword	669	740 M
1	Bronze Sword	671	751 M
1	Bronze Sword	711	742 M
1	Bronze Dagger	719	738 M
1	Bronze Dagger	720	750 M
1	Bronze Dagger	721	752 M
1	Bronze Dagger	724	739 M
1	Bronze Spearhead	743	756 M
1	Bronze Spearhead	744	757 M
1	Bronze Spearhead	762	755 M
1	Bronze Spearhead	804	741 M
1	Bronze Spearhead	805	746 M
1	Bronze Spearhead	806	747 M
1	Bronze Spearhead	807	748 M
1	Bronze Spearhead	808	749 M
1	Bronze Spearhead	809	754 M
1	Stone Mortar and Pestle	901	710 M
1	Bronze Skewer	928	753 M
1	Gold Forehead Band	-	1071 M
1	Red Carnelian Necklace	-	1425 M
1	Frit Beads	-	1427 M
1	Stone Beads	-	1428 M
2	Gold Beaker	14	610 M
2	Bronze Vase Fragment	47	712 M
2	Gold Pendants	196	644 M
2	Gold and Black Bead Necklace	217	1202 M
2	Red Carnelian Necklace	237	1412 M
2	Gold-Capped Agate Center Bead	319	1070 M
2	Gold-Capped Agate Center Bead	320	1069 M
2	Gold Horse Head Bracelet	345	608 M
2	Bronze Bracelet	356	642 M
2	Gold Earring	371	1065 M
2	Gold Inlaid Belt Buckle	447	609 M
2	Cylinder Seal	469	1094 M
2	Cylinder Seal	471	1093 M
2	Spouted Pot	575	1297 M
2	Bronze Dagger	714	736 M
2	Bronze Dagger Hilt	722	1528 M
2	Bronze Dagger Hilt	723	1491 M
2	Bronze Dagger	725	1502 M
2	Bronze Spearhead	729	1482 M
2	Bronze Spearhead	748	737 M
2	Bronze Arrowhead	862	1525 M
2	Whetstone	892	620 M
2	Whetstone	896	621 M
2	Stone Mortar	904	709 M



Table 1. continued

Tomb #	Description	Cat. #	Marlik #
2	Bronze Chisel	934	640 M
2	Bronze Adze-Ax	939	641 M
2	Bronze Beads	-	643 M
3	Red Carnelian Necklace	224	682 M
3	Bronze Bracelet	356	720 M
3	Bronze Bracelet	356	721 M
3	Cylinder Seal	476	1096 M
3	Jar	501	673 M
3	Plate	630	707 M
3	Lamp	637	1533 M
3	Bronze Dagger	716	719 M
3	Bronze Dagger	718	1501 M
3	Bronze Spearhead	745	716 M
3	Bronze Spearhead	746	717 M
3	Bronze Spearhead	747	718 M
3	Bronze Spearhead	800	713 M
3	Bronze Spearhead	803	714 M
3	Whetstone	898	711 M
3	Stone Mortar	903	708 M
3	Stone Pestle	905	614 M
3	Stone-Grinding Set	908	706 M
3	Gold Bracelet	-	1033 M
3	Gold Button	-	1034 M
4	Bronze Bowl	29	631 M
4	Bronze Plate	33	723 M
4	Cylinder Seal	470	1089 M
4	Cup	554	629 M
4	Spouted Bowl	612	626 M
4	Whetstone	893	630 M
4	Bronze Hook	920	633 M
4	Frit Chariot Knob	958	628 M
5	Bronze Jar	38	1399 M
5	Bronze Jar	40	1400 M
5	Bronze Vessel Base	51	1392 M
5	Bronze Vessel Base	52	1393 M
5	Bronze Vessel Fragments	53	1397 M
5	Bronze Chalice	56	1325 M
5	Bronze Vessel	57	1391 M
5	Pottery Humped Bull Figurine	92	617 M
5	Red Carnelian Necklace	238	1418 M
5	Red Carnelian Necklace	250	1415 M
5	Shell and Bone Necklace	309	1416 M
5	Shell and Bone Necklace	309	1419 M
5	Shell and Bone Necklace	309	1456 M
5	Gold Pomegranate Beads	327	1201 <sup>a</sup> M
5	Gold Four-Sided Beads	330	1201 <sup>b</sup> M
5	Gold Olive-Shaped Beads	335	1201 <sup>c</sup> M
5	Gold Earrings	371	1066 M
5	Gold Earrings	371	1067 M
5	Gold Earrings	371	1068 M
5	Gold and Bone Buttons	440	1201 <sup>d</sup> M
5	Cylinder Seal	480	1166 M
5	Bottle	493	1300 M

Table 1. continued

Tomb #	Description	Cat. #	Marlik #
5	Jar	526	672 M
5	Cubic Jar	537	616 M
5	Cup	557	1269 M
5	Cooking Pot	563	1274 M
5	Shallow Bowl	597	681 M
5	Bronze Dagger	726	1500 M
5	Bronze Spearhead	739	666 M
5	Bronze Spearhead	740	667 M
5	Bronze Spearhead	758	664 M
5	Bronze Spearhead	759	663 M
5	Bronze Spearhead	761	668 M
5	Bronze Spearhead	810	665 M
5	Bronze Spearhead	811	669 M
5	Iron Spearhead	820	670 M
5	Bronze Shield	867	647 M
5	Bronze Belt	885	1512 M
5	Whetstone	898	622 M
5	Bronze Gears(?)	931	1079 M
5	Bronze Bell	951	1080 M
5	Bronze Bell	952	1081 M
5	Bronze Vessel	-	1389 M
5	Pottery Vessel	-	1270 M
5	Pottery Vessel	-	1271 M
5	Pottery Vessel	-	1272 M
5	Pottery Vessel	-	1273 M
5	Pottery Vessel	-	1275 M
5	Pottery Vessel	-	1276 M
5	Pottery Vessel	-	1277 M
5	Pottery Vessel	-	671 M
5	Shell and Bone Necklace	-	1420 M
5	Red Carnelian Necklace	-	1447 M
6	Bronze Jar	37	619 M
6	Gold Pendants	181	1198 M
6	Bronze Pendant	269	634 M
6	Bronze Pendant	270	1018 M
6	Bronze Bracelets	356	1021 M
6	Bronze Arrowhead	836	636 M
6	Whetstone	893	657 M
6	Bronze Hook	919	632 M
6	Bronze Bell	953	1016 M
6	Bronze Bell	954	1032 M
6	Bronze Bell	955	1017 M
6	Bronze Bell	956	1019 M
6	Bronze Bell	957	1020 M
6	Bronze Arrowheads	-	635 M
6	Bronze Arrowheads	-	637 M
7	Bronze Sword Hilt	673	1490 M
7	Bronze Arrowhead	848	1523 M
8	Cylinder Seal	477	1167 M
8	Cylinder Seal	478	1168 M
8	Plain Bowl	591	1285 M
8	Bronze Blade	916	1011 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
10	Red Carnelian and Transparent Stone Necklace	257	1194 M
10	Fired Clay Necklace	306	1083 M
10	Gold Flat Discoid Bead	331	1192 <sup>a</sup> M
10	Gold Spiral Beads	332	1192 <sup>b</sup> M
10	Gold Wide Ring-Shaped Bead	334	1192 <sup>c</sup> M
10	Gold and Lapis Lazuli Earrings	365	960 M
10	Gold Earring	366	964 M
10	Gold Earring	375	961 M
10	Gold Earrings	384	962 M
10	Gold Button	415	959 M
10	Gold Pin	454	1193 M
10	Gold Pin	458	957 M
10	Gold Pin	458	958 M
10	Bronze Pins	463	1027 M
10	Cylinder Seal	472	1092 M
10	Cylinder Seal	483	1097 M
10	Cylinder Seal	484	1098 M
10	Jar	496	1282 M
10	Bronze Chisel	937	1028 M
10	Bronze Mirror	971	1029 M
10	Pottery Vessel	-	1280 M
10	Pottery Vessel	-	1283 M
10	Pottery Vessel	-	1284 M
10	Carnelian, Agate, and Glass Necklace	-	1183 M
11	Spouted Pot	580	1279 M
12	Gold Pendant	186	1064 M
12	Basin	618	676 M
12	Vase	632	722 M
12	Bronze Spearhead	786	683 M
12	Bronze Spearhead	787	684 M
12	Bronze Spearhead	788	685 M
12	Bronze Arrowhead	856	1526 M
12	Bronze Arrowhead	861	1521 M
12	Bronze Ear Cleaner	967	1024 M
12	Gold Forehead Band	-	1084 M
12	Gold Forehead Band	-	1085 M
13	Bronze Figurine of Mule and Rider	80	931 M
13	Bronze Male Figurine	81	932 M
13	Pottery Humped Bull Figurine	95	1278 M
13	Bronze Humped Bull Figurine	121	1075 M
13	Bronze Humped Bull Figurine	122	1076 M
13	Jar	505	618 M
13	Jar	530	623 M
13	Elongated Pitcher	541	627 M
13	Cooking Pot	564	1291 M
13	Spouted Pot	578	1298 M
13	Plain Bowl	591	1286 M
13	Spouted Bowl	607	1302 M
13	Spouted Bowl	615	1296 M
13	Basin	620	583 M
13	Plate	629	1303 M
13	Sieve	636	1304 M
13	Bronze Dagger	707	727 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
13	Bronze Dagger	715	743 M
13	Bronze Dagger	717	726 M
13	Bronze Spearhead	742	745 M
13	Bronze Spearhead	756	744 M
13	Bronze Pomegranate Bell	946	933 M
13	Bronze Cymbal	984	612 M
13	Bronze Cymbal	984	613 M
13	Pottery Vessel		1290 M
13	Pottery Vessel		1292 M
13	Pottery Vessel		1293 M
13	Pottery Vessel		1294 M
13	Pottery Vessel		1295 M
13	Pottery Vessel		1301 M
13	Pottery Vessel		1334 M
14	Red Carnelian Necklace	240	1422 M
14	Red Carnelian and Transparent Stone Necklace	258	1423 M
14	Shell and Bone Necklace	309	1424 M
14	Gold Centerpiece Beads	313	547 M
14	Fired Clay Beads	342	1478 M
14	Gold Earring	379	551 M
14	Gold Earring	384	1204 <sub>a</sub> M
14	Gold Diadem	403	1204 <sub>b</sub> M
14	Gold Piece	468	1204 <sub>c</sub> M
14	Cylinder Seal	485	1099 M
15	Gold Pendant	187	554 M
15	Gold and Lapis Lazuli Pendant	197	553 M
15	Red Carnelian Necklace	239	1421 M
15	Gold Spacer Bead	314	555 M
15	Gold Center Bead	317	556 <sub>a</sub> M
15	Gold Vertical-Ribbed Bead	329	556 <sub>b</sub> M
15	Bronze Bracelets	356	689 M
15	Gold Earring	379	557 M
15	Gold Earring	379	558 M
15	Gold Diadem	397	560 M
15	Gold Diadem	400	559 M
15	Gold Hair Binder	405	561 M
15	Bronze Button	435	680 M
15	Gold Sheet	467	552 M
15	Jar	497	1287 M
15	Pitcher	539	675 M
15	Pitcher	539	677 M
15	Spouted Bowl	608	1306 M
15	Bronze Spearhead	749	697 M
15	Bronze Spearhead	751	701 M
15	Bronze Spearhead	768	698 M
15	Bronze Spearhead	789	699 M
15	Bronze Spearhead	790	693 M
15	Bronze Spearhead	818	692 M
15	Bronze Arrowhead	825	1522 M
15	Bronze Arrowhead	831	1524 M
15	Bronze Arrowhead	858	1527 M
15	Bronze Adze-Ax	939	700 M
15	Pottery Vessel		674 M

*Table 1. continued*

Tomb #	Description	Cat. #	Marlik #
16	Gold and Frit Necklace	<b>206</b>	195 M
16	Gold and Red Carnelian Necklace	<b>212</b>	192 M
16	Gold, Agate and Red Carnelian Necklace	<b>216</b>	1436 M
16	Red Carnelian Necklace	<b>222</b>	193 M
16	Red Carnelian Necklace	<b>231</b>	199 M
16	Red Carnelian and Agate Necklace	<b>262</b>	1073 M
16	Red Carnelian Beads	<b>339</b>	1476 M
16	Gold Earrings	<b>384</b>	197 M
16	Hematite Macehead	<b>665</b>	196 M
16	Bronze Dagger	<b>700</b>	695 M
16	Bronze Dagger Hilt	<b>701</b>	1499 M
16	Bronze Spearhead	<b>755</b>	694 M
16	Iron Spearhead	<b>819</b>	696 M
17	Jar	<b>531</b>	1299 M
17	Spouted Pot	<b>579</b>	1288 M
17	Shallow Bowl	<b>598</b>	1381 M
17	Shallow Bowl	<b>604</b>	1224 M
17	Jar	-	1289 M
18	Bronze Cooking Pot	<b>22</b>	172 M
18	Pottery Humped Bull Figurine	<b>85</b>	491 M
18	Pottery Humped Bull Figurine	<b>86</b>	493 M
18	Pottery Humped Bull Figurine	<b>87</b>	494 M
18	Pottery Humped Bull Figurine	<b>88</b>	495 M
18	Pottery Humped Bull Figurine	<b>89</b>	496 M
18	Bronze Model of Oxen with Yoke	<b>133</b>	487 M
18	Red Carnelian and White Stone Necklace	<b>259</b>	488 M
18	Bronze Bracelet	<b>356</b>	492 M
18	Gold Button	<b>431</b>	490 M
18	Double Jar	<b>534</b>	611 M
18	Plain Bowl	<b>592</b>	1223 M
18	Shallow Bowl	<b>596</b>	1225 M
18	Plain Bowl	<b>601</b>	1222 M
18	Shallow Bowl	<b>602</b>	1336 M
18	Shallow Bowl	<b>603</b>	1329 M
18	Plate	<b>627</b>	1544 M
18	Bronze Dagger	<b>705</b>	513 M
18	Bronze Dagger	<b>706</b>	514 M
18	Bronze Spearhead	<b>750</b>	512 M
18	Iron Spearhead	<b>822</b>	1487 M
18	Whetstone	<b>898</b>	503 M
18	Bronze Pomegranate Bell	<b>945</b>	498 M
18	Bronze Pomegranate Bell	<b>946</b>	499 M
18	Pottery Vessel	-	1226 M
18	Pottery Vessel	-	1227 M
18	Pottery Vessel	-	1228 M
18	Pottery Vessel	-	1229 M
18	Pottery Vessel	-	1230 M
19	Pottery Humped Bull Figurine	<b>90</b>	501 M
19	Pottery Humped Bull Figurine	<b>91</b>	517 M
19	Pottery Humped Bull Figurine	<b>96</b>	502 M
19	Pottery Humped Bull Figurine	<b>99</b>	516 M
19	Gold and Red Carnelian Necklace	<b>204</b>	478 M
19	Gold, Agate and Red Carnelian Necklace	<b>211</b>	479 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
19	Gold and Red Carnelian Necklace	213	486 M
19	Red Carnelian Necklace	247	472 M
19	Red Carnelian and Whitish Stone Necklace	260	477 M
19	Hematite Necklace	278	481 M
19	Lime Necklace	304	480 M
19	Agate Bead	343	484 M
19	Gold Earring	374	482 M
19	Gold Earrings	384	483 M
19	Bronze Rings	394	468 M
19	Bronze Ring	395	1465 M
19	Bronze Pin	464	475 M
19	Bronze Pin	464	476 M
19	Jar	506	500 M
19	Jar	525	1249 M
19	Plain Bowl	590	1248 M
19	Spouted Bowl	607	1246 M
19	Basin	621	1247 M
19	Stone Mortar and Pestle	902	604 M
19	Stone-Grinding Set	910	473 M
19	Bronze Hook	917	469 M
19	Bronze Hook	918	600 M
19	Bronze Adze-Ax	939	485 M
19	Pottery Vessel	-	1251 M
19	Stone Macehead	-	603 M
20	Bronze Bracelet	356	1008 M
20	Bronze Bracelet	356	1009 M
20	Jar	495	1261 M
20	Pot	559	1265 M
20	Pot	560	1266 M
20	Pot	561	1267 M
20	Jar Fragments	-	1262 M
20	Jar Fragments	-	1263 M
20	Jar Fragments	-	1264 M
21	Plain Bowl	589	1339 M
21	Plate	625	1543 M
23	Bronze Pot Handle	26	508 M
23	Gold Pendant	185	448 M
23	Gold Pendant	189	548 M
23	Gold and Red Carnelian Necklace	255	447 M
23	Black Material Pendant	282	1459 M
23	Gold Center Bead	316	450 <sub>a</sub> M
23	Gold Flat Discoid Beads	331	549 M
23	Gold Spiral Bead	332	450 <sub>b</sub> M
23	Gold Earrings	370	1203 <sub>a</sub> M
23	Gold Earring	376	449 M
23	Gold Earrings	380	451 M
23	Gold Earring	381	452 M
23	Gold Earrings	382	550 M
23	Gold Diadem	398	453 M
23	Gold Piece	468	1203 <sub>b</sub> M
23	Stamp Seal	487	679 M
23	Jar	528	678 M
23	Bronze Lids	-	509 M
23	Bronze Loops	-	510 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
24	Gold Bowl	4	13 M
24	Silver Cup	18	14 M
24	Bronze Plate	31	661 M
24	Bronze Tumbler	31	728 M
24	Frit Jar	65	30 M
24	Pottery Humped Bull Figurine	94	1252 M
24	Pottery Mule Figurine	104	1111 M
24	Pottery Bear Figurine	111	155 M
24	Pottery Bear Figurine	112	1112 M
24	Bronze Humped Bull Figurine Mounted on Wheels	118	15 M
24	Gold Tiger Head	154	2 M
24	Gold Necklace	158	12 M
24	Gold Necklace	169	3 M
24	Gold Pendant	174	1a M
24	Gold Pendant	178	17 M
24	Gold Pendants	193	9 M
24	Gold Pendant	198	1b M
24	Gold Pendants	200	10 M
24	Black Material Pendant	281	407a M
24	Frit Pendant	294	407b M
24	Gold and Bronze Animal Head Bracelet	347	646 M
24	Gold Bracelet	353	4 M
24	Silver Bracelet	354	5 M
24	Gold Earring	378	11 M
24	Gold Button	419	6 M
24	Gold Button	419	7 M
24	Gold Buttons	428	8 M
24	Shell Buttons	444	16 M
24	Jar	511	60 M
24	Jar	512	142 M
24	Spouted Bowl	607	144 M
24	Bronze Macehead	643	120 M
24	Bronze Spearhead	733	169 M
24	Bronze Spearhead	760	171 M
24	Bronze Spearhead	764	170 M
24	Bronze Spearhead	770	1488 M
24	Bronze Spearhead	785	168 M
24	Bronze Arrowhead	824	56 M
24	Bronze Arrowhead	829	328a M
24	Bronze Arrowhead	837	328b M
24	Bronze Arrowhead	844	328c M
24	Bronze Arrowhead	845	328d M
24	Bronze Arrowhead	850	328e M
24	Bronze Arrowhead	857	328f M
24	Whetstone	893	648 M
24	Bronze Ladle	926	166 M
24	Bronze Skewer	928	55 M
24	Bronze Adze-Ax	939	121 M
24	Bronze Cymbal	980	167 M
24	Bronze Cymbal	980	662 M
24	Pottery Vessel	-	1253 M
24	Pottery Vessel	-	1254 M
24	Pottery Vessel	-	1255 M
24	Pottery Vessel	-	1256 M
24	Pottery Vessel	-	1257 M
24	Pottery Vessel	-	1258 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
24	Pottery Vessel	-	1259 M
24	Pottery Vessel	-	1260 M
25	Bronze Cup	35	229 M
25	Bronze Model of Oxen with Yoke	132	227 M
25	Gold and Fired Clay Bead Necklace	218	226 M
25	Red Carnelian Necklace	226	225 M
25	Bronze Bracelet	355	231 M
25	Beaker	547	1313 M
25	Plain Bowl	600	173 M
25	Basin	619	238 M
25	Bronze Sword with Iron Blade	672	228 M
25	Bronze Dagger	703	233 M
25	Bronze Dagger	704	511 M
25	Bronze Spearhead	753	235 M
25	Bronze Spearhead	754	234 M
25	Bronze Arrowhead	833	237 <sup>a</sup> M
25	Bronze Arrowhead	849	237 <sup>b</sup> M
25	Bronze Belt	884	1511 M
25	Bronze Ingot	974	230 M
25	Bronze Spearhead	-	236 M
26	Gold Pot	1	31 M
26	Gold Beaker	8	29 M
26	Bronze Jar	39	44 M
26	Bronze Mountain Goat (?) Figurine	146	32 M
26	Gold Tiger Heads	153	20 M
26	Gold Pendant	177	66 M
26	Gold Pendant	183	62 M
26	Gold Pendant	184	63 M
26	Gold Pendants	201	28 M
26	Gold Pendants	201	68 M
26	Gold Pendant	202	19 M
26	Red Carnelian and Glass Necklace	264	1443 M
26	Glass Necklace	283	70 M
26	Glass Necklace	284	25 M
26	Gold and Black Centerpiece	310	22 M
26	Gold Center Bead	318	67 M
26	Gold Globular Beads	333	27 M
26	Gold Globular Beads	333	69 M
26	Red Carnelian Beads	338	24 M
26	Gold Button	410	64 M
26	Gold Button	411	23 M
26	Gold Buttons	419	18 M
26	Gold Buttons	419	26 M
26	Gold Button	421	1190 M
26	Gold Buttons	429	21 M
26	Gold Buttons	430	65 M
26	Bronze Pin	451	71 M
26	Bronze Pin	461	37 M
26	Bronze Pins	461	72 <sup>a</sup> M
26	Jar	517	51 M
26	Spouted Bowl	607	580 M
26	Vase	633	578 M
26	Bronze Macehead	638	80 M
26	Bronze Macehead	640	78 M



Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
26	Bronze Macehead	641	76 M
26	Bronze Macehead	642	77 M
26	Bronze Macehead	651	33 M
26	Bronze Macehead	652	79 M
26	Bronze Macehead	653	75 M
26	Bronze Macehead	656	34 M
26	Bronze Macehead	657	82 M
26	Bronze Macehead	658	83 M
26	Bronze Halberd	659	45 M
26	Limestone Macehead	660	81 M
26	Bronze Dagger	668	91 M
26	Bronze Sword	670	1503 M
26	Bronze Dagger	677	53a M
26	Bronze Dagger	678	88 M
26	Bronze Dagger	679	39 M
26	Bronze Dagger	680	46 M
26	Bronze Dagger	681	146 M
26	Bronze Dagger	688	53b M
26	Bronze Dagger	694	58a M
26	Bronze Dagger	695	58b M
26	Bronze Sword	709	86 M
26	Bronze Spearhead	730	90 M
26	Bronze Spearhead	734	1481 M
26	Bronze Spearhead	763	54 M
26	Bronze Spearhead	769	89 M
26	Bronze Spearhead	816	40 M
26	Bronze Arrowhead	826	41a M
26	Bronze Arrowhead	827	41b M
26	Bronze Arrowhead	828	41c M
26	Bronze Arrowhead	830	41d M
26	Bronze Arrowhead	835	41e M
26	Bronze Arrowhead	838	1181a M
26	Bronze Arrowhead	841	41f M
26	Bronze Arrowhead	843	1181b M
26	Bronze Arrowhead	847	1181c M
26	Bronze Arrowhead	854	41g M
26	Bronze Arrowhead	859	41h M
26	Bronze Quiver	872	1517 M
26	Bronze Belt	875	200 M
26	Bronze Belt	876	1504 M
26	Bronze Belt	882	1184 M
26	Bronze Wristband	888	93 M
26	Bronze Helmet	889	92 M
26	Bronze Helmet	890	145 M
26	Whetstone	897	43 M
26	Bronze Pipe Stick(?)	924	35 M
26	Bronze Ladle	926	584 M
26	Bronze Skewers	927	50 M
26	Bronze Chisel	933	189 M
26	Bronze Fingernail Cleaner	961	72b M
26	Bronze Ear Cleaner	963	42 M
26	Bronze Ear Cleaner	964	187 M
26	Bronze Needles	970	87 M
26	Bronze Cymbals	979	36 M
26	Textile Fragments	987	57 M
26	Bronze Spearhead		159 M

Table 1. continued

Tomb #	Description	Cat. #	Marlik #
26	Bronze Vessel	-	49 M
26	Pottery Vessel	-	52 M
26	Bronze Arrowheads	-	74 M
26	Bronze Spearhead	-	465 M
26	Bronze Cymbal	-	73 M
26	Bronze Cymbal	-	38 M
26	Bronze Ladle	-	48 M
26	Whetstone	-	47 M
26	Whetstone	-	84 M
27	Gold Cup	2	150 M
27	Bronze Cup	34	151 M
27	Bronze Cup	36	1161 M
27	Bronze Pot with Spout	41	1401 M
27	Bronze Pot with Spout	43	154 M
27	Pottery Humped Bull Figurine	83	156 M
27	Pottery Humped Bull Figurine	84	182 M
27	Bronze Model of Oxen with Yoke and Plow	129	59 M
27	Gold Pendant	179	126 M
27	Gold Pendants	192	125 M
27	Gold and Red Carnelian Necklace	208	116 M
27	Frit Necklace	293	117 M
27	Gypsum Necklace	298	574 M
27	Gold Lion Head Beads	325	127 M
27	Gold Pomegranate Beads	327	124 M
27	Gold Globular Bead	333	128 <sup>a</sup> M
27	Gold Olive-Shaped Beads	335	128 <sup>b</sup> M
27	Gold Earrings	363	122 M
27	Gold Hair Binder	405	123 M
27	Gold Button	424	138 M
27	Bronze Button	433	139 M
27	Bronze Button	434	180 M
27	Frit Buttons	442	183 M
27	Gold Sheet	466	1212 M
27	Stamp Seal	488	601 M
27	Jar	504	118 M
27	Jar	508	148 M
27	Jar	509	147 M
27	Cup	556	149 M
27	Cup	558	1162 M
27	Spouted Pot	573	1323 M
27	Vase	634	1536 M
27	Limestone Macehead	661	119 M
27	Bronze Dagger	689	141 M
27	Bronze Dagger	697	160 M
27	Bronze Dagger	698	161 M
27	Bronze Spearhead	752	504 M
27	Bronze Spearhead	757	158 M
27	Bronze Spearhead	813	1545 M
27	Bronze Arrowhead	851	181 M
27	Bone Arrowheads	863	179 M
27	Bronze Model of Bow	865	157 M
27	Bronze Quiver	869	1514 M
27	Stone Mortar and Pestle	900	575 M
27	Bronze Fingernail Cleaner	961	140 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
29	Chalice	548	1538 M
29	Spouted Bowl	607	1314 M
29	Spouted Bowl	614	1088 M
29	Bronze Dagger	693	466 M
29	Bronze Dagger	699	464 M
29	Bronze Spearhead	767	463 M
29	Bronze Spearhead	814	467 M
30	Bronze Bowl	28	658 M
30	Bronze Bracelet	356	1010 M
30	Bronze Rings	396	1007 M
30	Round Pot	567	1352 M
30	Spouted Bowl	616	577 M
30	Spouted Bowl	617	1539 M
30	Bronze Dagger	708	724 M
30	Bronze Pomegranate Bell	946	686 M
32	Gold Cup	5	321 M
32	Gold Bowl	13	515 M
32	Bronze Pot	55	178 M
32	Pottery Humped Bull Figurine	97	262 M
32	Pottery Humped Bull Figurine	98	263 M
32	Gold Necklace	163	291 M
32	Gold Pendants	199	310 M
32	Gold and Red Carnelian Necklace	205	299 M
32	Gold and Red Carnelian Necklace	210	298 M
32	Gold-Capped Red Carnelian Necklace	254	318 M
32	Frit Necklace	288	130 <sup>a</sup> M
32	Frit Necklace	289	1437 M
32	Gold Centerpiece	311	296 M
32	Black Gold-Capped Center Bead	321	300 M
32	Black Gold-Capped Center Bead	321	301 M
32	Gold Lion and Mountain Goat Head Beads	324	1195 M
32	Gold Pomegranate Beads	326	302 M
32	Gold Pomegranate Beads	326	303 M
32	Gold Truncated Conical Beads	336	137 M
32	Frit Beads	341	135 M
32	Gold Rings	392	320 M
32	Gold Ring	393	1197 <sup>a</sup> M
32	Gold Diadem	402	1175 <sup>a</sup> M
32	Gold Diadem	402	1197 <sup>b</sup> M
32	Gold Button	425	297 M
32	Frit Button	443	136 M
32	Gold Leaves	446	1175 <sup>b</sup> M
32	Gold and Bronze Pins	450	322 M
32	Gold Piece	468	1197 <sup>c</sup> M
32	Cylinder Seal	481	1169 M
32	Cylinder Seal	482	130 <sup>b</sup> M
32	Jar	507	152 M
32	Jar	518	286 M
32	Jar	529	153 M
32	Bronze Spearhead	771	134 M
32	Bronze Belt	874	133 M
32	Bronze Needles	970	129 M
33	Gold Necklace	168	264 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
33	Gold Pendant	170	268 M
33	Gold Pendant	182	265 M
33	Gold and Red Carnelian Necklace	209	266 M
33	Gold Bracelet	349	274 M
33	Gold Bracelet	349	275 M
33	Gold Bracelet	352	276 M
33	Gold Bracelet	353	267 M
33	Gold Earring	360	269 M
33	Gold Button	420	270 M
33	Gold Button	420	271 M
33	Gold Button	420	272 M
33	Gold Button	420	273 M
33	Gold Button	420	278 M
33	Gold Button	420	279 M
33	Gold Button	420	280 M
33	Gold Button	420	281 M
33	Gold Button	420	282 M
33	Jar	510	288 M
33	Jar	513	283 M
33	Jar	530	284 M
33	Jar	530	285 M
33	Cup	557	287 M
33	Gold and Bronze Handle	674	289 M
33	Bronze Dagger	682	331 M
33	Bronze Dagger Hilt	692	1498 M
33	Bronze Dagger	696	324 M
33	Bronze Sword	710	330 M
33	Bronze Blade	728	333 M
33	Bronze Spearhead	765	290 M
33	Bronze Spearhead	766	332 M
33	Bronze Spearhead	815	325 M
33	Bronze Arrowhead	846	326 <sup>a</sup> M
33	Bronze Arrowhead	852	326 <sup>b</sup> M
33	Bronze Pipe Stick	923	329 M
33	Bronze Skewer	928	334 M
33	Bronze Skewer	928	335 M
36	Gold Cup	6	354 M
36	Gold Cup	10	352 M
36	Gold Bowl	11	353 M
36	Gold Beaker	12	355 M
36	Bronze Bowl	27	412 M
36	Pottery Female Figurine	70	1120 M
36	Pottery Female Figurine	71	1117 M
36	Pottery Female Figurine	72	379 M
36	Pottery Male Figurine	73	378 M
36	Pottery Male Figurine	74	518 M
36	Pottery Male Figurine	75	1113 M
36	Pottery Figurine of Male Charioteer	77	519 M
36	Bronze Female Figurine	78	381 M
36	Bronze Female Figurine	79	380 M
36	Gold Bust	82	356 M
36	Pottery Stag Figurine	101	505 M
36	Pottery Stag Figurine	103	377 M
36	Pottery Mule Figurine	105	1124 M
36	Pottery Ram Figurine	106	506 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
36	Pottery Ram Figurine	107	1118 M
36	Pottery Ram Figurine	108	1123 M
36	Pottery Ram Figurine	109	1125 M
36	Pottery Leopard Figurine	113	1119 M
36	Bronze Humped Bull Figurine	115	386 M
36	Bronze Humped Bull Figurine	116	387 M
36	Bronze Humped Bull Figurine	117	388 M
36	Bronze Stag Figurine	134	390 M
36	Bronze Antlers	142	367 M
36	Bronze Antlers	142	368 M
36	Bronze Antlers	142	369 M
36	Bronze Antlers	142	370 M
36	Bronze Antlers	142	371 M
36	Bronze Mountain Goat Figurine	143	389 M
36	Bronze Mountain Goat Figurine	144	391 M
36	Bronze Mountain Goat Figurine	145	392 M
36	Bronze Ram Figurine	149	393 M
36	Ram Figurine	156	376 M
36	Gold Necklace	162	446 M
36	Gold Necklace	164	358 M
36	Gold Pendant	173	366 M
36	Gold Pendant	175	359 M
36	Gold Pendant	176	1199 <sup>a</sup> M
36	Gold Pendant	194	435 M
36	Gold Pendant	194	436 M
36	Gold Pendant	194	437 M
36	Gold Pendant	194	443 M
36	Gold Pendant	203	1480 M
36	Red Carnelian Necklace	230	383 M
36	Red Carnelian Necklace	263	444 M
36	Silver Chain	265	373 M
36	Bronze Necklace	266	1450 M
36	Bronze Necklace	267	1449 M
36	Bronze Necklace	268	1448 M
36	Bronze Pendant	271	433 M
36	Bronze Pendant	272	1460 M
36	Bronze Pendant	274	415 M
36	Bronze Pendants	276	1457 M
36	Black Stone Pendant	279	374 M
36	Black Stone Pendant	280	426 M
36	Gypsum Pendant	302	406 M
36	Gold Centerpiece	312	1196 M
36	Gold Lion Head Bead	322	375 M
36	Gold Pomegranate Bead	327	1479 M
36	Gold Pomegranate Beads	327	445 M
36	Gold Spiral Bead	328	1199 <sup>b</sup> M
36	Gold Spiral Bead	328	441 M
36	Gold Truncated Conical Beads	336	1199 <sup>c</sup> M
36	Glass Frit Bead	340	1477 M
36	Gold Lion Head Bracelet	344	357 M
36	Bronze Bracelet	356	414 M
36	Bronze Bracelet	356	425 M
36	Bronze Bracelet	356	690 M
36	Bronze Bracelets	356	691 M
36	Bronze Circlet	357	688 M
36	Gold Earring	362	365 M

Table 1. continued

Tomb #	Description	Cat. #	Marlik #
36	Gold Earring	364	364 M
36	Gold Earrings	384	442 M
36	Bronze Earrings	386	1470 M
36	Bronze Earrings	387	1471 M
36	Gold Ring	388	360 M
36	Gold Ring	390	361 M
36	Gold Ring	390	362 M
36	Gold Ring	391	363 M
36	Bronze Ring	395	1463 M
36	Bronze Rings	396	1461 M
36	Bronze Rings	396	1462 <sub>a</sub> M
36	Bronze Rings	396	1464 M
36	Bronze Hair Binder	408	1466 M
36	Bronze Hair Binder	408	1469 M
36	Bronze Hair Binder	408	428 M
36	Gold Object	432	438 M
36	Gold Object	432	439 M
36	Gold Object	432	440 M
36	Frit Button	441	432 M
36	Bronze Fibula	448	1472 M
36	Bronze Pins with Gold Covers	455	385 M
36	Bronze Pin	456	1475 M
36	Bronze Pin	459	384 M
36	Bronze Pin	459	410 M
36	Bronze Pin	462	703 M
36	Bronze Pins	463	1473 M
36	Bronze Pin	464	411 M
36	Bronze Pin	465	1474 M
36	Bronze Pin	465	702 M
36	Cylinder Seal	479	1165 M
36	Stamp Seal	486	405 M
36	Stamp Seal	489	1390 M
36	Stamp Seal	490	1170 M
36	Double Jar	533	1218 M
36	Chalice	549	1221 M
36	Cup	555	424 M
36	Cooking Pot	563	1240 M
36	Round Pot	566	1219 M
36	Spouted Pot Fragment	581	1237 M
36	Decorated Bowl	586	1242 M
36	Spouted Bowl	609	1231 M
36	Vase	631	576 M
36	Vase	635	1241 M
36	Bronze Arrowhead	855	402 M
36	Bronze Ladle	925	397 M
36	Bronze Skewer	928	434 M
36	Bronze Bell	948	403 M
36	Bronze Bell	949	382 M
36	Bronze Spool	959	430 M
36	Bronze Spool	960	429 M
36	Bronze Fingernail Cleaner	961	404 M
36	Bronze Ear Cleaner	965	431 M
36	Gold Needle	968	413 M
36	Gold Needles	969	372 <sub>a</sub> M
36	Bronze Needles	970	372 <sub>b</sub> M
36	Bronze Tweezers	973	61 M

Table 1. continued

Tomb #	Description	Cat. #	Marlik #
36	Bronze Ingot	975	416 M
36	Bronze Ingot	976	417 M
36	Bronze Ingot	976	418 M
36	Bronze Ingot	976	419 M
36	Bronze Ingot	976	420 M
36	Bronze Ingot	976	421 M
36	Bronze Ingot	976	422 M
36	Bronze Ingot	976	423 M
36	Bronze Plaques	977	1214 M
36	Bronze Cymbal	981	398 M
36	Bronze Cymbal	981	399 M
36	Bronze Cymbals	981	400 M
36	Bronze Cymbal	981	401 M
36	Bronze Cymbals	982	409 M
36	Pottery Vessel	-	1220 M
36	Pottery Vessel	-	1232 M
36	Pottery Vessel	-	1233 M
36	Pottery Vessel	-	1234 M
36	Pottery Vessel	-	1235 M
36	Pottery Vessel	-	1236 M
36	Pottery Vessel	-	1238 M
36	Pottery Vessel	-	1239 M
36	Pottery Vessel	-	1243 M
36	Pottery Vessel	-	1244 M
36	Pottery Vessel	-	1245 M
36	Pottery Animal Figurine	-	1131 M
36	Bronze Animal Figurine	-	394 M
36	Bronze Models of Oxen with Yokes	-	395 M
36	Bronze Model of Oxen with Yoke	-	396 M
36	Gold Buttons	-	1036 M
36	Silver Pin	-	704 M
36	Bronze Ring	-	427 M
36	Red Carnelian and Agate Beads	-	1137 M
36	Whetstone	-	520 M
36	Bronze Buttons	-	1462 <i>b</i> M
37	Gold Cup	7	1132 M
39	Silver Cup	20	546 M
39	Bronze Cup	48	1185 M
39	Bronze Vase	49	1213 M
39	Bronze Vessel Fragment	50	1213 <i>a</i> M
40	Bronze Humped Bull Figurines	123	85 M
40	Frit Necklace	291	1444 M
40	Frit and Lime Necklace	295	1441 M
40	Frit, Lime, and Clay Necklace	296	1440 M
40	Gypsum Necklace	297	1442 M
40	Gypsum Necklace	300	1446 M
40	Gypsum Pendant	301	1458 M
40	Fired Clay Necklace	306	1077 M
40	Shell and Bone Necklace	309	1451 M
40	Gold Earrings	384	1187 <i>a</i> M
40	Silver Earring	385	1187 <i>b</i> M
40	Plain Bowl	601	1382 M
40	Plain Bowl	601	760 M

Table 1. continued

Tomb #	Description	Cat. #	Marlik #
40	Plate	628	336 M
40	Whetstone	893	649 M
40	Whetstone	894	655 M
40	Whetstone	895	656 M
40	Stone Pestle	906	651 M
40	Stone Pestler	907	652 M
40	Stone Pounder	911	650 M
40	Stone Pounder	912	653 M
40	Stone Pounder	913	654 M
40	Bronze Comb(?)	972	660 M
40	Bronze Ingot	976	730 M
40	Bronze Ingot	976	732 M
40	Gold Necklace		1078 M
41	Frit Jar	68	1086 M
41	Frit Jar	69	1087 M
41	Gold Lion Head Beads	323	1200 <sup>a</sup> M
41	Bronze Buttons	437	995 M
41	Gold Pins	449	1200 <sup>b</sup> M
41	Jar	527	1351 M
41	Spouted Pot	572	1312 M
41	Plain Bowl	591	1350 M
41	Plain Bowl	591	1385 M
41	Iron Spearhead	821	991 M
41	Iron Spearhead	823	1520 M
41	Bronze Spindle Whorl	921	735 M
41	Bronze Cymbal	985	734 M
42	Bronze Plate	32	186 M
42	Bronze Vase	54	98 M
42	Bronze Vessel	58	1394 M
42	Gold Button	413	244 M
42	Gold Button	413	245 M
42	Gold Button	413	247 M
42	Gold Button	413	248 M
42	Gold Button	413	249 M
42	Gold Button	413	250 M
42	Gold Button	413	252 M
42	Gold Button	413	253 M
42	Gold Button	413	259 M
42	Gold Button	422	254 M
42	Gold Button	422	255 M
42	Gold Button	422	256 M
42	Gold Button	422	257 M
42	Gold Button	422	258 M
42	Cylinder Seal	474	1090 M
42	Cylinder Seal	475	1095 M
42	Whetstone	898	174 M
44	Bronze Cooking Pot	23	176 M
44	Bronze Vessel Fragments	59	1395 M
44	Bronze Vessel	61	1398 M
44	Red Carnelian Necklace	234	1406 M
44	Red Carnelian Necklace	235	1407 M
44	Red Carnelian and Black Stone Necklace	261	1408 M
44	Fired Clay and Gypsum Necklace	307	1439 M



Table 1. continued

Tomb #	Description	Cat. #	Marlik #
44	Bronze Bracelets	356	731 M
44	Gold Earring	367	348 M
44	Bronze Pin	452	344 M
44	Jar	530	1324 M
44	Cubic Jar	536	597 M
44	Spouted Bowl	607	1311 M
44	Basin	621	1122 M
44	Basin	622	1121 M
44	Bronze Macehead	644	109 M
44	Marble Macehead	662	143 M
44	Limestone Macehead	663	108 M
44	Bronze Dagger	712	342 M
44	Bronze Dagger	713	343 M
44	Bronze Spearhead	736	341 M
44	Bronze Spearhead	737	339 M
44	Bronze Spearhead	801	340 M
44	Bronze Spearhead	802	346 M
44	Bronze Spearhead	812	1489 M
44	Bronze Spearhead	817	349 M
44	Bronze Arrowhead	832	177 M
44	Bronze Shield	866	337 M
44	Bronze Belt	883	1507 M
44	Whetstone	899	350 M
44	Bronze Skewer	929	351 M
44	Bronze Adze-Ax	939	106 M
44	Bronze Adze-Ax	939	596 M
44	Bronze Bell	942	338 M
44	Bronze Pomegranate Bell	944	729 M
44	Bronze Fingernail Cleaner	961	345 M
44	Bronze Plaques	978	1012 M
44	Bronze Vessel	-	347 M
44	Pottery Vessel	-	1322 M
44	Frit Necklace	-	1409 M
44	Bronze Pins	-	595 M
44	Bronze Needles	-	593 M
44	Bronze Adze-Ax	-	107 M
44	Whetstone	-	594 M
45	Gold Beaker	9	201 M
45	Silver Spouted Pot	16	162 M
45	Silver Spouted Pot	17	163 M
45	Silver Beaker	19	202 M
45	Bronze Pot with Spout	44	1403 M
45	Mosaic Vase	62	1114 M
45	Mosaic Beaker	63	1115 M
45	Mosaic Chalice	64	1116 M
45	Gold Necklace	159	224 M
45	Gold Necklace	166	474 M
45	Gold Necklace	167	462 M
45	Gold and Red Carnelian Necklace	207	457 M
45	Red Carnelian Necklace	221	219 M
45	Red Carnelian Necklace	227	220 M
45	Red Carnelian Necklace	229	223 M
45	Red Carnelian Necklace	243	221 M
45	Red Carnelian Necklace	246	459 M
45	Red Carnelian Necklace	249	222 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
45	Red Carnelian Necklace	251	1417 M
45	Gypsum Necklace	299	1445 M
45	Silver Animal Head Bracelet	346	458 M
45	Gold Bracelet	353	203 M
45	Gold Bracelet	353	460 M
45	Gold Earring	370	461 M
45	Gold Earrings	384	218 M
45	Gold Diadem	402	1207 <sub>a</sub> M
45	Gold Button	409	217 M
45	Gold Button	412	214 M
45	Gold Button	412	215 M
45	Gold Button	412	216 M
45	Gold Button	414	207 M
45	Gold Button	416	208 M
45	Gold Button	417	205 M
45	Gold Button	417	213 M
45	Gold Button	423	209 M
45	Gold Button	423	210 M
45	Gold Button	423	211 M
45	Gold Button	423	212 M
45	Gold Piece	468	1207 <sub>b</sub> M
45	Gold Piece	468	1216 M
45	Basin	621	1215 M
45	Bronze Macehead	639	164 M
45	Decorative Dagger	667	165 M
45	Bronze Dagger	702	232 M
45	Bronze Skewer	930	598 M
45	Bronze Chisel	935	638 M
45	Gold Button	-	206 M
45	Silver Bracelet	-	204 M
47	Gold Beaker	3	761 M
47	Bronze Cooking Pot	24	1061 M
47	Bronze Situla	46	992 M
47	Pottery Stag Figurine	102	819 M
47	Bronze Humped Bull Figurine	119	240 M
47	Bronze Humped Bull Figurine	120	241 M
47	Bronze Model of Oxen with Yoke and Shaft	130	767 M
47	Bronze Stag Figurine	138	243 M
47	Bronze Stag Figurine	139	242 M
47	Gold Necklace	165	261 M
47	Gold Pendant	171	833 M
47	Gold Pendant	172	1210 <sub>a</sub> M
47	Gold Pendant	180	1210 <sub>b</sub> M
47	Gold Pendant	195	314 M
47	Red Carnelian Necklace	219	312 M
47	Red Carnelian Necklace	241	1429 M
47	Red Carnelian Necklace	253	1430 M
47	Bronze Pendants	273	408 <sub>a</sub> M
47	Glass Necklace	285	784 M
47	Glass Necklace	286	785 M
47	Glass Necklace	287	1431 M
47	Glass Necklace	287	1432 M
47	Frit Necklace	290	132 M
47	Gold Spacer Bead	315	1211 <sub>a</sub> M
47	Gold Vertical-Ribbed Bead	329	319 <sub>a</sub> M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
47	Gold Four-Sided Bead	330	319 <i>b</i> M
47	Gold Flat Discoid Beads	331	1211 <i>b</i> M
47	Gold Globular Beads	333	319 <i>c</i> M
47	Gold Wide Ring-Shaped Bead	334	1211 <i>c</i> M
47	Gold Olive-Shaped Beads	335	1211 <i>d</i> M
47	Gold Bracelet	353	292 M
47	Gold Earring	361	295 M
47	Gold Earrings	383	836 M
47	Gold Diadem	402	1211 <i>e</i> M
47	Gold Hair Binder	404	832 M
47	Gold Button	426	838 M
47	Gold Button	426	839 M
47	Gold Button	426	840 M
47	Gold Button	426	841 M
47	Gold Button	426	842 M
47	Gold Button	426	843 M
47	Gold Button	426	844 M
47	Gold Button	426	845 M
47	Gold Button	426	846 M
47	Gold Button	426	847 M
47	Gold Button	426	848 M
47	Gold Button	426	849 M
47	Gold Button	426	850 M
47	Gold Button	426	851 M
47	Gold Button	426	852 M
47	Gold Button	426	853 M
47	Gold Button	426	854 M
47	Gold Button	426	855 M
47	Gold Button	426	856 M
47	Gold Button	426	857 M
47	Gold Button	426	858 M
47	Gold Button	426	859 M
47	Gold Button	426	860 M
47	Gold Button	426	861 M
47	Gold Piece	468	1211 <i>f</i> M
47	Bottle	491	994 M
47	Bottle	492	1532 M
47	Jar	514	766 M
47	Jar	516	1375 M
47	Jar	520	763 M
47	Jar	526	1378 M
47	Pitcher	538	765 M
47	Round Pot	569	829 M
47	Spouted Pot	577	1377 M
47	Decorated Bowl	586	1031 M
47	Spouted Bowl	607	764 M
47	Bronze Macehead	645	771 M
47	Bronze Macehead	646	770 M
47	Bronze Dagger	675	1492 M
47	Bronze Dagger	676	1493 M
47	Bronze Dagger	683	775 M
47	Bronze Dagger	684	1494 M
47	Bronze Dagger	685	1495 M
47	Bronze Dagger	690	780 M
47	Bronze Dagger	691	1060 M
47	Bronze Spearhead	731	1484 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
47	Bronze Spearhead	<b>732</b>	1485 M
47	Bronze Spearhead	<b>772</b>	772 M
47	Bronze Spearhead	<b>773</b>	773 M
47	Bronze Spearhead	<b>774</b>	774 M
47	Bronze Spearhead	<b>775</b>	776 M
47	Bronze Spearhead	<b>776</b>	777 M
47	Bronze Spearhead	<b>777</b>	778 M
47	Bronze Spearhead	<b>778</b>	779 M
47	Bronze Spearhead	<b>779</b>	781 M
47	Bronze Spearhead	<b>780</b>	782 M
47	Bronze Spearhead	<b>781</b>	783 M
47	Bronze Spearhead	<b>793</b>	1053 M
47	Bronze Spearhead	<b>794</b>	1054 M
47	Bronze Spearhead	<b>795</b>	1055 M
47	Bronze Spearhead	<b>796</b>	1056 M
47	Bronze Spearhead	<b>797</b>	1057 M
47	Bronze Spearhead	<b>798</b>	1058 M
47	Bronze Spearhead	<b>799</b>	1059 M
47	Bronze Arrowhead	<b>840</b>	769 <sup>a</sup> M
47	Bronze Arrowhead	<b>853</b>	769 <sup>b</sup> M
47	Bronze Quiver	<b>873</b>	1518 M
47	Bronze Belt	<b>877</b>	1505 M
47	Bronze Belt	<b>878</b>	1506 M
47	Bronze Belt	<b>886</b>	1513 M
47	Stone Pipe Stick	<b>914</b>	323 M
47	Bronze Pomegranate Bells	<b>943</b>	239 M
47	Gold Ear Cleaner	<b>962</b>	294 M
47	Bronze Ear Cleaner	<b>966</b>	1006 M
47	Bronze Cymbals	<b>986</b>	768 M
47	Pottery Vessel	-	1003 M
47	Pottery Vessel	-	1373 M
47	Pottery Vessel	-	1374 M
47	Pottery Vessel	-	1376 M
47	Pottery Vessel	-	1380 M
47	Gold Button	-	246 M
47	Gold Button	-	251 M
47	Gold Button	-	260 M
47	Gold Bracelet	-	293 M
47	Gold Tiger Heads	-	830 M
47	Gold Tiger Heads	-	831 M
47	Gold Ram's Head Bead	-	835 M
47	Bronze Bracelet	-	837 M
47	Bronze Beads	-	408 <sup>b</sup> M
47	Bone Button	-	1433 M
47	Bronze Spearhead	-	1483 M
49	Bronze Horse Bit	<b>941</b>	327 M
50	Silver Pot with Gold Spout	<b>21</b>	277 M
50	Bronze Tumbler	<b>30</b>	175 M
50	Frit Jar	<b>66</b>	94 M
50	Frit Jar	<b>67</b>	103 M
50	Bronze Stag Figurine	<b>135</b>	539 M
50	Bronze Stag Figurine	<b>136</b>	540 M
50	Bronze Stag Figurine	<b>137</b>	541 M
50	Gold Necklace	<b>160</b>	567 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
50	Gold Pendants	188	529 M
50	Gold Pendant	190	308 M
50	Gold Pendant	191	564 M
50	Red Carnelian Necklace	220	537 M
50	Red Carnelian Necklace	225	542 M
50	Red Carnelian Necklace	228	571 M
50	Red Carnelian Necklace	232	572 M
50	Red Carnelian Necklace	233	545 M
50	Red Carnelian Necklace	242	1434 M
50	Red Carnelian Necklace	245	191 M
50	Red Carnelian Necklace	248	568 M
50	Transparent Stone Necklace	277	1435 M
50	Frit Necklace	292	544 M
50	Shell Necklaces	308	573 M
50	Gold Bracelet	350	532 M
50	Gold Bracelet	351	533 M
50	Bronze Bracelet	355	523 M
50	Bronze Circlet	357	99 M
50	Gold Earring	368	535 M
50	Gold Earrings	369	526 M
50	Gold Earring	370	527 M
50	Gold Earring	370	528 M
50	Gold Earrings	370	534 M
50	Gold Earring	370	536 M
50	Gold Earring	373	317 M
50	Gold Earrings	377	306 M
50	Gold Earrings	377	307 M
50	Bronze Earrings	387	1082a M
50	Gold Rings	389	565 M
50	Gold Diadem	399	531 M
50	Gold Diadem	401	563 M
50	Gold Diadem	402	1208a M
50	Gold Diadem	402	316 M
50	Gold Hair Binder	404	304 M
50	Gold Hair Binder	405	309 M
50	Bronze Hair Binder	407	1082b M
50	Gold Button	418	311 M
50	Gold Button	418	313 M
50	Gold Button	418	315 M
50	Gold Leaves	445	562 M
50	Gold Leaves	445	566 M
50	Gold Leaves	445	934 M
50	Gold Pin	453	570 M
50	Gold Pin	457	569 M
50	Bronze Pin	464	190 M
50	Bronze Pin	464	530 M
50	Gold Piece	468	1208b M
50	Jar	519	96a M
50	Pitcher	539	1354 M
50	Pitcher	539	198 M
50	Round Pot	568	522 M
50	Dizie	570	1355 M
50	Dizies	571	521 M
50	Bronze Macehead	654	113 M
50	Bronze Macehead	655	114 M
50	Limestone Macehead	664	115 M

Table 1. *continued*

Tomb #	Description	Cat. #	Marlik #
50	Basalt Macehead	666	607 M
50	Bronze Spearhead	741	111 M
50	Bronze Arrowhead	834	112 <sup>a</sup> M
50	Bronze Arrowhead	839	112 <sup>b</sup> M
50	Bronze Quiver	870	1515 M
50	Bronze Quiver	871	1516 M
50	Bronze Skewers	928	97 M
50	Bronze Adze-Ax	939	110 M
50	Bronze Cymbal	983	524 M
50	Bronze Cymbal	983	525 M
50	Bronze Cymbals	983	605 M
50	Gold Hair Binder	-	305 M
50	Fossil	-	543 M
50	Gold Button	-	606 M
50	Pottery Vessel	-	95 M
52	Gold Bowl	15	762 M
52	Bronze Cooking Pot	25	1062 M
52	Bronze Cooking Pot	25	1063 M
52	Bronze Pot with Spout	42	1402 M
52	Bronze Pot with Spout	45	822 M
52	Pottery Male Figurine of Archer	76	821 M
52	Pottery Humped Bull Figurine	93	818 M
52	Pottery Stag Figurine	100	820 M
52	Pottery Dog Figurine	114	815 M
52	Bronze Humped Bull Figurine	124	806 M
52	Bronze Humped Bull Figurine	124	807 M
52	Bronze Humped Bull Figurine	124	808 M
52	Bronze Humped Bull Figurine	124	809 M
52	Bronze Model of Oxen with Yoke and Plow	131	817 M
52	Bronze Stag Figurine	140	794 M
52	Bronze Stag Figurine	140	799 M
52	Bronze Stag Figurine	140	800 M
52	Bronze Stag Figurine	140	814 M
52	Bronze Horse Figurine	148	786 M
52	Bronze Horse Figurine	148	787 M
52	Bronze Horse Figurine	148	798 M
52	Bronze Horse Figurine	148	810 M
52	Bronze Leopard Figurine	150	795 M
52	Bronze Leopard Figurine	150	796 M
52	Bronze Leopard Figurine	150	797 M
52	Bronze Leopard Figurine	150	811 M
52	Bronze Dog Figurine	151	788 M
52	Bronze Dog Figurine	151	789 M
52	Bronze Dog Figurine	151	790 M
52	Bronze Dog Figurine	151	791 M
52	Bronze Boar Figurine	152	792 M
52	Bronze Boar Figurine	152	793 M
52	Bronze Boar Figurine	152	812 M
52	Bronze Boar Figurine	152	813 M
52	Gold Necklace	157	802 M
52	Gold Necklace	161	1205 M
52	Red Carnelian Necklace	236	1410 M
52	Shell and Bone Necklace	309	1411 M
52	Gold Globular Beads	333	1206 <sup>a</sup> M
52	Gold Three-Ring Reel Beads	337	1206 <sup>b</sup> M

Table 1. continued

Tomb #	Description	Cat. #	Marlik #
52	Gold Earring	372	803 M
52	Gold Earring	372	804 M
52	Gold Earring	372	805 M
52	Gold Button	427	862 M
52	Gold Button	427	863 M
52	Gold Button	427	864 M
52	Gold Button	427	865 M
52	Gold Button	427	866 M
52	Gold Button	427	867 M
52	Gold Button	427	868 M
52	Gold Button	427	869 M
52	Gold Button	427	870 M
52	Gold Button	427	871 M
52	Gold Button	427	872 M
52	Gold Button	427	873 M
52	Gold Button	427	874 M
52	Gold Button	427	875 M
52	Gold Button	427	876 M
52	Gold Button	427	877 M
52	Gold Button	427	878 M
52	Gold Button	427	879 M
52	Gold Button	427	880 M
52	Gold Button	427	881 M
52	Gold Button	427	882 M
52	Gold Button	427	883 M
52	Gold Button	427	884 M
52	Gold Button	427	885 M
52	Gold Button	427	886 M
52	Gold Button	427	887 M
52	Gold Button	427	888 M
52	Gold Button	427	889 M
52	Gold Button	427	890 M
52	Gold Button	427	891 M
52	Gold Button	427	892 M
52	Gold Button	427	893 M
52	Gold Button	427	894 M
52	Gold Button	427	895 M
52	Gold Button	427	896 M
52	Gold Button	427	897 M
52	Gold Button	427	898 M
52	Gold Button	427	899 M
52	Gold Button	427	900 M
52	Gold Button	427	901 M
52	Gold Button	427	902 M
52	Gold Button	427	903 M
52	Gold Button	427	904 M
52	Gold Button	427	905 M
52	Gold Button	427	906 M
52	Gold Button	427	907 M
52	Gold Button	427	908 M
52	Gold Button	427	909 M
52	Gold Button	427	910 M
52	Gold Button	427	911 M
52	Gold Button	427	912 M
52	Gold Button	427	913 M
52	Gold Button	427	914 M
52	Gold Button	427	915 M

Table 1. continued

Tomb #	Description	Cat. #	Marlik #
52	Gold Button	427	916 M
52	Gold Button	427	917 M
52	Gold Button	427	918 M
52	Gold Button	427	919 M
52	Gold Button	427	920 M
52	Gold Button	427	921 M
52	Gold Button	427	922 M
52	Gold Button	427	923 M
52	Gold Button	427	924 M
52	Gold Button	427	926 M
52	Gold Button	427	927 M
52	Gold Button	427	928 M
52	Bronze Buttons	436	948 M
52	Bronze Button	438	1467 M
52	Bronze Buttons	439	1468 M
52	Bronze Pin	465	943 M
52	Bronze Pin	465	945 M
52	Bronze Pin	465	946 M
52	Bronze Pin	465	947 M
52	Gold Piece	468	1206 <sup>c</sup> M
52	Jar	515	1315 M
52	Jar	521	1342 M
52	Jar	521	1349 M
52	Jar	524	1319 M
52	Pitcher	539	1358 M
52	Cooking Pot	562	1308 M
52	Cooking Pot	563	1309 M
52	Dizie	571	1321 M
52	Spouted Pot	574	816 M
52	Decorated Bowl	585	1030 M
52	Bowl with Tripod Base	587	975 M
52	Plain Bowl	588	1333 M
52	Plain Bowl	591	1348 M
52	Shallow Bowl	595	1307 M
52	Shallow Bowl	595	1337 M
52	Spouted Bowl	606	969 M
52	Bronze Macehead	647	953 M
52	Bronze Macehead	648	954 M
52	Bronze Macehead	649	955 M
52	Bronze Macehead	650	956 M
52	Bronze Dagger	686	1496 M
52	Bronze Dagger	687	1497 M
52	Bronze Spearhead	782	823 M
52	Bronze Spearhead	783	824 M
52	Bronze Spearhead	784	825 M
52	Bronze Arrowhead	842	951 <sup>a</sup> M
52	Bronze Arrowhead	860	951 <sup>b</sup> M
52	Bronze Quiver	868	1026 M
52	Remains of Quiver Cover	868	1530 M
52	Bronze Belt	879	1509 M
52	Bronze Belt	880	1510 M
52	Bronze Belt	881	1508 M
52	Bronze Belt	887	1519 M
52	Bronze Helmet (?)	891	826 M
52	Bronze Spatula	922	965 M
52	Bronze Ladle	926	949 M
52	Bronze Skewer	928	950 M



Table 1. continued

Tomb #	Description	Cat. #	Marlik #
52	Bronze Gear(?)	<b>932</b>	944 M
52	Textile Fragments	<b>988</b>	1529 M
52	Bronze Pendant	-	1189 M
52	Pottery Vessel	-	1316 M
52	Pottery Vessel	-	1317 M
52	Pottery Vessel	-	1318 M
52	Pottery Vessel	-	1320 M
52	Pottery Vessel	-	1347 M
52	Pottery Vessel	-	1360 M
52	Pottery Vessel	-	1361 M
52	Pottery Vessel	-	1362 M
52	Pottery Vessel	-	1363 M
52	Gold Hair Binder	-	801 M
52	Gold Button	-	925 M
52	Gold Button	-	929 M
52	Gold Buttons	-	952 M
52	Bronze Beads	-	966 M
52	Pottery Vessel	-	970 M
52	Pottery Vessel	-	971 M
52	Pottery Vessel	-	982 M
52	Pottery Vessel	-	985 M
52	Pottery Vessel	-	986 M
52	Pottery Vessel	-	987 M
53	Bronze Horse Cheekpieces	<b>940</b>	538 M
Ali Karam Bagh	Gold, Agate and Red Carnelian Necklace	<b>214</b>	1177 M
Ali Karam Bagh	Gold, Agate and Red Carnelian Necklace	<b>215</b>	1404 M
Ali Karam Bagh	Red Carnelian Necklace	<b>223</b>	1405 M
Ali Karam Bagh	Red Carnelian Necklace	<b>244</b>	1178 M
Ali Karam Bagh	Red Carnelian, Agate and Transparent Stone Necklace	<b>256</b>	1180 M
Ali Karam Bagh	Shell Button	<b>444</b>	1454 M
Ali Karam Bagh	Jar	<b>502</b>	1328 M
Ali Karam Bagh	Spouted Pot	<b>584</b>	1341 M
Ali Karam Bagh	Plain Bowl	<b>591</b>	1340 M
Ali Karam Bagh	Bronze Spearhead	<b>735</b>	1160 M
Ali Karam Bagh	Flint Arrowheads	<b>864</b>	1217 M
Ali Karam Bagh	Bronze Chisel	<b>936</b>	1163 M
Gheshlagh	Bronze Bracelets	<b>356</b>	1049 M
Gheshlagh	Bronze Bracelets	<b>356</b>	936 M
Gheshlagh	Bronze Bracelets	<b>359</b>	1048 M
Gheshlagh	Jar	<b>503</b>	1338 M
Gheshlagh	Jar	<b>528</b>	1346 M
Gheshlagh	Mug	<b>553</b>	1041 M
Gheshlagh	Cooking Pot	<b>563</b>	1327 M
Gheshlagh	Round Pot	<b>566</b>	1364 M
Gheshlagh	Round Pot	<b>566</b>	1542 M
Gheshlagh	Round Pot	<b>568</b>	1038 M
Gheshlagh	Dizie	<b>571</b>	1025 M
Gheshlagh	Dizie	<b>571</b>	1039 M
Gheshlagh	Spouted Pot	<b>582</b>	1043 M
Gheshlagh	Shallow Bowl	<b>599</b>	1369 M
Gheshlagh	Spouted Bowl	<b>610</b>	1331 M
Zeinab Bejar 1	Jar	<b>499</b>	1015 M
Zeinab Bejar 5	Plate	<b>624</b>	1014 M

Table 1. continued

Tomb #	Description	Cat. #	Marlik #
-	Bronze Humped Bull Figurine	125	942 M
-	Bronze Humped Bull Figurine	126	941 M
-	Bronze Humped Bull Figurine	127	1128 M
-	Bronze Humped Bull Figurine	128	1130 M
-	Bronze Stag Figurine	141	940 M
-	Bronze Horse Figurine	147	1129 M
-	Bronze Bird Figurine	155	1186 M
-	Bronze Pendant	275	939 M
-	Lime Necklace	303	1438 M
-	Lime Necklace	305	1179 M
-	Shell and Bone Necklace	309	1455 M
-	Silver Animal Head Bracelet	348	1188 <sup>a</sup> M
-	Silver Hair Binder	406	1188 <sup>b</sup> M
-	Bronze Pin	460	1004 M
-	Bronze Pin	460	1005 M
-	Bottle	494	1110 M
-	Jar	498	1106 M
-	Jar	500	1534 M
-	Jar	522	1133 M
-	Jar	523	1105 M
-	Jar	526	1100 M
-	Jar	526	1101 M
-	Jar	526	1305 M
-	Jar	532	456 M
-	Cubic Jar	535	454 M
-	Elongated Pitcher	540	455 M
-	Pitcher	542	579 M
-	Pitcher	543	582 M
-	Pitcher	544	976 M
-	Pitcher	545	977 M
-	Pitcher	546	1541 M
-	Mug	550	1042 M
-	Mug	551	1332 M
-	Mug	552	1344 M
-	Round Pot	565	993 M
-	Spouted Pot	576	1102 M
-	Spouted Pot	583	930 M
-	Shallow Bowl	593	1535 M
-	Shallow Bowl	594	984 M
-	Shallow Bowl	605	1108 M
-	Spouted Bowl	611	1356 M
-	Spouted Bowl	613	1023 M
-	Plate	623	1537 M
-	Plate	626	980 M
-	Iron Blade	727	188 M
-	Bronze Spearhead	738	1486 M
-	Bronze Spearhead	791	1052 M
-	Bronze Spearhead	792	1051 M
-	Stone-Grinding Set	909	185 M
-	Flint Saw	915	1531 M
-	Bronze Adze-Ax	938	102 M
-	Bronze Adze-Ax	939	184 M
-	Bronze Pomegranate Bell	946	937 M
-	Bronze Bell	947	938 M
-	Bronze Bell	950	1127 M
-	Frit Beads	-	131 M

## IV

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# Metal Vessels

### *Introduction*

Many objects left by early man illustrate his delight in producing beautiful things. Striking cave paintings, delicately incised bone and wood utensils, and finely worked stone implements, remaining from the very early stage of development when he was still a cave dweller, all clearly reflect this inclination. At different stages of human development, various materials have been given a preponderant role, receiving the attention of the most highly talented artists and craftspersons, perhaps because the materials were recently discovered or developed, because they were more suitable for particular techniques, or because they were considered to be of intrinsically greater value. Various materials might also be used at the same time, with masterpieces of art produced in different mediums during the same period.

As man left behind a food-collecting way of life and settled in early agricultural communities, he began to have more leisure time to devote to the decoration of the objects he produced, and the graceful stone bowls, often engraved with geometric patterns, that have been discovered in many prehistoric excavations are fine examples of his artistic talents. In addition to the traditional raw materials of stone, wood, and bone, man, in the early village communities, learned to make pottery and soon, in addition to making vessels for practical use, began to produce pottery vessels with painted, incised, and applied designs. The painted pottery of the sixth and fifth millennium B.C. in Iran presents a magnificent illustration of the artistic capabilities of early man, and the graceful stylized designs of plants and animals on this early pottery have never been surpassed.

Following this period of great creativity in pottery making, early man gradually turned his attention to a new material, metal. As early as the Paleolithic era, in the course of experimenting with various stones to

make tools, utensils, and ornaments, he had become acquainted with stones bearing metal ores, and during the late Neolithic period he learned techniques for separating the metal from its ore and processing it into useful forms.<sup>1</sup> This development took place very early in Iran, where traces of cold-hammered copper have been found at Deh Luran in Khuzistan dating to the eighth millennium B.C.<sup>2</sup> Primitive drills consisting of a very small piece of copper installed at the end of a bird bone appear at Zaghe, in the Qazvin Plain of the central plateau, dating to about the late sixth millennium B.C.,<sup>3</sup> and by the late fifth millennium B.C. copper was being smelted at Tell-i-Iblis near Kerman.<sup>4</sup> At Qabrestan in the Qazvin Plain, a few kilometers from Zaghe, crucibles for smelting copper and molds for casting it have been found that date from the second half of the fifth millennium B.C.<sup>5</sup>

From this early beginning, man engaged in a long process of development in metallurgy. Eventually metal became a very important material for the application of his artistic talents, to a certain extent displacing such accepted materials as wood, bone, stone, and pottery, and by the middle of the second millennium B.C. metal was of the utmost importance in the production of tools, weapons, and utensils as well as decorative objects including decorative vessels.

Precious metal increased the decorative value of a vessel, and decorative vessels in precious metals reflected the wealth and power of the political center that produced them. During the latter part of the second millennium B.C. one of these strong political centers, possessed of enough wealth to enable its outstanding artists and craftspersons to fashion many beautiful works of art in precious metals as well as in other materials, was centered in Gilan in northwestern Iran.

Marlik, the Royal Cemetery of this ancient kingdom, produced beautiful metal vessels in gold, silver, and bronze. The sizes and shapes of these vessels, which include cups, bowls, pots with long spouts, beakers, and vases, are varied. Vessels range from plain and unadorned to pieces with a highly elaborate, even narrative, design. These designs occur in a variety of techniques: dotted (Pl. 18, 4), linear-engraved (Pl. 19, 7), and low- and high-relief repoussé (Pl. 19, 8), the latter exhibited in some vessels of a particularly sophisticated form in which an animal head is projected outward in the round from the body of the vessel (Pl. 21, 13). The designs vary from extremely simple and crude patterns to highly elaborate naturalistic or stylized renderings of real mythical animals and humans (Pl. 24, 21). Usually the designs encircle the vessel in one or more registers with a single repeated motif (Ills. 2–12), but sometimes the motifs are varied, and these varied motifs may or may not possess an identifiable connection to our eyes. Some more elaborate vessels contain different segments of a single story with a coherent theme, forming a narrative in several parts (Pl. 22, 14).

One uniform characteristic of the designs on these Marlik vessels is their fluency, the quality of alertness and vitality conveyed. Nothing is static: an antelope leaps (Pl. 23, 20); a unicorn prances (Pl. 20, 9); winged bulls and phoenixes stride (Pl. 21, 12); a lion

paces (Pl. 24, 21); an archer pulls on his bow; an eagle stretches his wings (Pl. 21, 11); a ewe nuzzles her newborn kid (Pl. 22, 14). Although many of these motifs can be traced through a long period of time in the ancient world and over a wide geographic area, here they appear still fresh and vibrant, never weakened or devitalized.

A band of geometric decoration, bordering the main design, usually surrounds the rim and base of each vessel, most often a coil (Pl. 23, 19) or guilloche band (Pl. 19, 8). Most of the vessels also contain a geometric rosette on the bottom, varying from very simple (Pl. 20, 10) to extremely elaborate forms (Pl. 19, 8). A very few vessels exhibit some other design on the bottom: a woven reed pattern (Pl. 22, 14), a motif of curving inter-laced triangles (Pl. 20, 9), or a circular design of birds.

The condition of the metal vessels varies. Some are intact and almost in their original form; others are now scattered fragments from which little of the original design can be reconstructed. Even those vessels still in good condition are somewhat deformed from earth pressure. The metal vessels of Marlik have been grouped, first of all, by the metal of which they are made—gold, silver, or bronze—and then the vessels in each grouping have been separated roughly into several divisions according to the technique and complexity of their designs.

### *Gold Decorative Vessels (1–15)*

Many of the decorative metal vessels found at Marlik are made of gold, in a wide variety of shapes including cups, pots, beakers, bowls, and vases. The gold is made of varying alloys, and both the softness of the metal and the color vary from vessel to vessel. Some of the gold vessels, made of a reasonably hard alloy with fairly thick walls, have remained almost intact (Color Plate XIX). Others, made with a higher percentage of gold in the alloy, were softer and more suitable for elaborate designs because the metal could be more easily hammered into shape by the goldsmiths. Because of the softness of the metal and the thinness of the walls, however, they did not hold their shape against the earth pressure and were found crushed or badly deformed.

The gold vessels have been divided into several groups. The first group contains two plain undecorated, or almost undecorated, vessels—a cup (1) and a pot (2)—which although simple are beautifully proportioned and worked. The cup is completely plain, but the pot, with its long spout missing, has very simple bands of decoration near the rim and base.

The second group of gold vessels has crude dotted designs. Of the two vessels in this group (3 and 4), the first has designs so obscure that they can hardly be identified, while the second vessel has dotted designs that, although still crude, are clearly recognizable. Both these vessels have dotted bands around the rim and base and a dotted rosette on the bottom.

Several gold vessels have designs in simple linear engraving. Three small cups (5, 6, and 7) fall into this group, all beautifully shaped and narrower at the rim than in the body, which balloons outward. Two of these vessels have fine gadroons converging to form rosettes on the bottom half of the vessel, while the third has a graceful animal design.

The largest group of gold vessels, with designs in a finely detailed, elaborate style, includes some of the most beautifully decorated metal vessels found at Marlik. Cups, vases, and bowls have designs that cover the body of each vessel and include both natural and mythical figures, animal and human. Most often these elaborate gold vessels have intricate guilloche bands encircling the rim, other intricate bands encircling the bottom, and a beautifully detailed

rosette on the base. This group includes 8–15 (ills. 2–12).

## PLAIN GOLD VESSELS (1–2)

### 1 Gold Pot

31 M Ill. 12; Fig. 1; Pl. 18

About 9 cm high and 7.7 cm in diameter at the mouth, found in Tomb 26 (Trench XVII B). It has a convex globular shape with an outward-turning unreinforced rim and base. The gold is light yellow and rather hard, and the pot is almost intact except for its missing spout, which had been separately made, apparently of a different material, and riveted to the body. A projecting elongated triangle, pointing downward and located opposite the spout, is the only decoration on the body of the vessel, which otherwise has a blank, smoothly polished surface. A band of crosshatching encircles the pot below the rim, and near the base, at the narrowest part of the pot, is another decorative band, this one of parallel elongated S shapes.

#### COMMENTS

Silver,<sup>6</sup> bronze,<sup>7</sup> and pottery vessels were found at Marlik in this same “teapot” shape, and some of them also had spouts made of a different material than the body of the vessel.<sup>8</sup>

### 2 Gold Cup

150 M Pl. 18

Small gold cup, about 5 cm high and 6 cm in diameter at the mouth, found in Tomb 27 (Trench XVII D), in several pieces and incomplete. It is made of thin sheet gold and has a rather straight neck with a slightly outward-turning unreinforced rim and a globular body with no flattening at the bottom. The surface of the cup is polished and completely undecorated.

## GOLD VESSELS WITH DOTTED DESIGNS (3–4)

### 3 Gold Beaker

761 M Ills. 8, 11, 12; Fig. 1; Pl. 18

About 13.5 cm high and approximately 13.5 cm across the somewhat deformed mouth, found in Tomb 47 (Trench XXII E). It is a rather tall vessel with a slightly thickened rim and small flat base, its shape that of a truncated cone. It contains a crude design, made of punched dots, divided vertically into several sections by parallel dotted lines. Concentric dotted circles, zigzags, lozenges, and angular dotted lines fill the surface of the vessel, sometimes forming rather obscure figures that, with a little imagination,

may be viewed as snakes, snails, mountain goats, and camel heads, irregularly arranged. Three parallel dotted lines, the lower two of which form a band of open chevrons or herringbones, and the top a simple dotted line, encircle the vessel near the rim. A band of open chevrons also encircles the vessel at the base. On the bottom is a simple, slightly irregular circle divided by straight dotted lines into ten uneven sections, the simplest form of the geometric rosette that is found on most of the Marlik vessels.

### 4 Gold Bowl

13 M Ills. 3, 4, 9, 10, 11, 12; Fig. 1; Pl. 18

About 9 cm high and 5.5 cm in diameter at the base, found in Tomb 24 (Trench XV E), slightly broken and crushed from earth pressure. The bowl has a simple rim with no reinforcement and a small, flat ring base. The fairly crude naturalistic design, rendered in slight relief, is repeated three times. It consists of a humped or winged mountain goat facing a tree, with three standing birds filling the empty spaces. The mountain goat, shown in profile, is standing next to the tree with its muzzle touching one of the branches. Its head is plain except for a dotted oval encircling the round eye and simple lines indicating the nose and mouth. Its ear is an upward-projecting pointed semioval with a line down the middle. From its forehead springs a large backward-curving horn filled with straight vertical lines interspersed with horizontal lines, the divisions perhaps indicating the age of the animal. Under its neck is a pointed beard, and at the nape is a mane composed of slightly elongated triangles decorated with dots. At the shoulder is either a greatly exaggerated hump or, possibly, wings. The hump or wing is an elongated half oval divided by parallel vertical lines interspersed with parallel chevrons. The body hair is shown by parallel bands of short straight or wavy parallel lines, varying in direction on different parts of the animal. The short tail and hooves are plain. The tree which the mountain goat is facing, although somewhat naturalistic, is symmetrical in form. It can be identified as a fir, locally called *zarbin*, which covers the hills around Marlik. Its bark is indicated by short irregular horizontal lines, and branches, filled by parallel chevrons, sprout thickly along the trunk. Standing birds, possibly eagles with hooked beaks and round eyes, appear as filling motifs above the mountain goat, below it, in front of it, and between the goat and the tree. Parallel wavy lines indicate the neck feathers, and parallel herringbone bands the wing feathers. The disproportionately large legs point straight downward, their wrinkled skin shown by short horizontal lines and the claws by vertical lines.

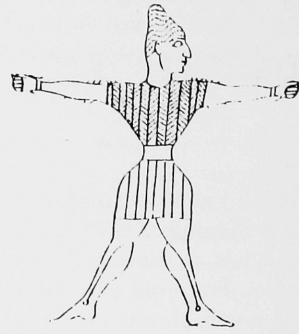
This whole design is bordered near the rim by a thick band of short straight lines and near the base by two bands of parallel short, open crescents pointing in alternate directions. The base of the bowl con-



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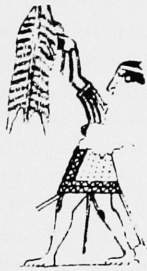
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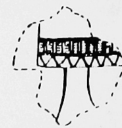
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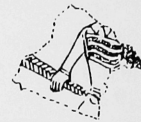
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Illustration 2. Human Motifs on Marlik Metal Vessels

tains a double-petaled rosette, with an inner rosette of eleven petals around a central circle, and an outer rosette of sixteen petals. All the petals are decorated by lines or groups of dots. Three and sometimes four bands of parallel short curving lines, alternating in direction, surround the entire design.

## GOLD VESSELS WITH SIMPLE LINEAR DESIGNS (5-7)

### 5 Gold Cup

321 M Ills. 5, 11; Fig. 2; Pl. 19

Fragments of rather soft and very thin gold, incomplete so that exact measurements of the cup cannot be determined. It was found in Tomb 32 (Trench XVII E) and has a narrow straight neck, a rim reinforced by rolling, and a globular body. It contains a design, in simple but fluent linear style with very slight projection, of a seated bull or cow, apparently repeated at least three times around the vessel, with the remaining part of the cup containing one complete figure and part of another. The nostrils, muzzle, and eye of the bull are outlined, and small chevrons on the jowls indicate folds of skin. From the forehead a horn curves forward and upward, while the ear points backward. A heavy mane ends in a small hump. A prominent dewlap with a serpentine outline, filled with curving lines, extends from the throat down the chest. The body hair is shown by parallel wavy lines. The fore- and hind legs of the resting bull, tucked under his body, are more deeply outlined. The remainder of the vessel's body is plain and polished, with no filling motifs. The short straight neck of the cup contains a fish bordered above and below by double wavy lines, which represent water. The head of the fish is separated from the body by a crescent, and the eye is a small circle. The scales of the body are shown by overlapping semicircles. Two double circles, one with a handle and one without, appear in front of the fish. Possibly they represent a hook or trap for catching the fish, or they may be religious symbols or the maker's marks.

Several broken pieces of the base remain. It seems to contain a central eight-petaled rosette encircled by a straight line, with a concentric double circle at the center. Around this central rosette is, apparently, a decorative band of several, possibly eight, smaller sixteen-petaled rosettes encircled by a line surrounded by another outer decorative band formed of many half petals. This, then, although much broken and fragmented, is one of the most intricate and beautiful of the rosettes on the bases of the Marlik vessels.

#### COMMENTS AND COMPARISONS

Fish similar to those on the neck of this cup appear

in a row around a shield discovered in Luristan and dated by the Godards to the tenth to ninth centuries B.C.<sup>9</sup> Another similar fish design appears on the base of an electrum beaker found in northwestern Iran and dated to the ninth to eighth centuries B.C.<sup>10</sup> A fish design connected with the body of a lion can be seen on a silver scabbard from the Litoj Treasure, considered by Culican to be Medo-Scythian, dated to 600 B.C.<sup>11</sup>

### 6 Gold Cup

354 M Ill. 11; Fig. 2; Pl. 19; Color Plate XII A

About 3.5 cm high with a diameter of 8 cm at the base, found in Tomb 36 (Trench XVIII C). The gold is yellowish and rather soft, and the cup has been crushed and flattened horizontally. The short, straight, wide neck, bent inward, is plain, with a rim reinforced by a wirelike rolled edge. The rounded body is also plain on top, but below, as it curves inward, deep gadroons, forming a large sixteen-petaled rosette, surround a smaller sixteen-petaled rosette, originally projecting slightly outward but now crushed inward, which becomes the base. This inner rosette surrounds a plain circle.

#### COMMENTS

A bronze vessel in the Adam Collection, similar in shape, has a plain rim, a body decorated with narrow parallel gadroons, and a flat base with a rosette on the inside.<sup>12</sup> Similar rosettes also appear on pyxis lids found in the Southeast Temple, or Palace of Ashurnasirpal (883-859 B.C.), at Nimrud.<sup>13</sup>

### 7 Gold Cup

1132 M Ill. 12; Fig. 2; Pl. 19

About 4 cm high and 9 cm in diameter at the mouth, found in Tomb 37 (Trench XVIII E). The cup, in almost perfect condition, has a rim reinforced by rolling, a rather long vertical neck, and a short carinated body with a convex base. A thick band of plain guilloche encircles the neck, with each twist emphasized by small circles. The lower neck and shoulder are plain and polished. From the point at which the body curves inward, gadroons form a rosette of forty-four large petals, which are overlapped by an inner smaller rosette also made of forty-four petals. This forms the base, of which the central part is missing.

## GOLD VESSELS WITH ELABORATE DESIGNS (8-15)

### 8 Gold Beaker

29 M Ills. 5, 10, 11, 12 Fig. 2; Pl. 19; Color Plates XII B and XIII

About 17.5 cm high and 14 cm across the flattened



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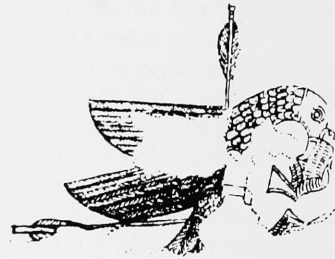
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*Illustration 3. Bird Motifs on Marlik Metals Vessels*



mouth, found in Tomb 26 (Trench XVII B). It is a tall beaker with slightly concave sides, a rim rolled for reinforcement, and a small projecting ring base. The gold of the vessel is rather pure and soft enough to be finely worked. The design, done in repoussé with details in delicate linear engraving, consists of four winged bulls in relief, their hollow heads projecting outward in the round. The soft gold of the vessel has been flattened by earth pressure, and there is now a pronounced bend in the body of the vessel between each pair of projecting heads. This beaker is certainly one of the most outstanding of the Marlik gold vessels, in both the sophistication of the technique and the beauty of the design. The winged bulls form two pairs, each pair symmetrically flanking a decorative palmette. Each bull is a lively, vigorous beast, standing on its hind legs and placing its forelegs on the branches of the tree. The heads of the bulls, shown in front view, are pushed out almost in the round, while the bodies appear in profile. These heads are finely modeled, with the eyes, nose, and mouth precisely detailed. The mane, covering the neck and spilling over the forehead, is formed of parallel wavy grooves covered with one or two rows of short straight lines. The curving horns and leaf-shaped ears are separately made and are attached with a circular wire at the base covering the juncture. The wings of the two pairs of bulls overlap on each side, one above the other, so that no blank spaces are left in the design. These wings are covered by four rows of wing feathers of varying size, from small feathers along the wing bone to very long feathers at the wing tip. Each feather contains a central dagger spine surrounded by fine straight lines. Parallel curving rows of fine elongated dotted short lines represent body hair, which curves in different directions to emphasize various parts of the body. The muscles and joints are more deeply outlined. The animal stands on its hind legs, with the male organ visible between them, one foreleg bent upward to rest on a tree branch and the other foreleg reaching downward to a lower branch. The long tail of the bull almost reaches the ground, ending in a fluffy bunch covered with rows of curving parallel elongated dots.

Located between the two antithetical bulls is a highly decorative large palmette. The stem is a tall column filled with fine lines, from which, low down, two spiral branches curl off. More spirals curl off the lowest branches, ending on each side of the tree in three large horizontal ovate leaves with central dagger spines and many fine veins. One of the bull's forelegs rests on the lower spiral branches, and the other foreleg is bent to rest on the upper smaller spiral branches. The tall stem ends in a crown of leaves and flowers, which reaches to the guilloche band encircling the rim of the vessel. The stem itself ends in two small spirals above the irregularly shaped leaves. A small bud between the spirals opens into a

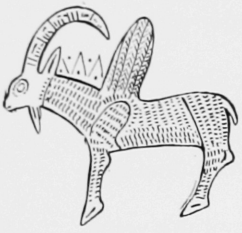
coronet of elongated petals, double-lined, from which spring small, thick double crescents, each holding a large ovate leaf with a dagger spine and fine veins.

Encircling the rim is a triple-lined guilloche band, and around the base, forming the ground on which the winged bulls stand, are overlapping semicircles, each filled with a central spine from which fine lines radiate.

A lovely design appears on the base of this vessel. An inner sixteen-petaled rosette is surrounded by sixteen double-lined petals. Around this small rosette is a circle of large leaves with dagger spines and many branching veins, like those found on the palmette, springing from the point of juncture of thick crescents whose ends turn inward. A small semicircle filled with a tiny circle is located on the inner side of the crescent junctures.

#### COMMENTS

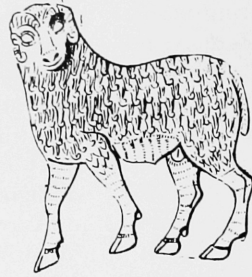
A cylinder seal with an antithetical design of bulls climbing both sides of the tree of life has been classified as Kassite, belonging to the second millennium B.C.<sup>14</sup> Several bronze rings, possibly from Luristan, with a similar composition of two animals on both sides of a tree of life, are dated to the thirteenth to eleventh centuries B.C.<sup>15</sup> Two bulls, without wings, climbing both sides of a decorative tree with similarly shaped leaves appear on a cylinder seal dated by Van Buren to the late second millennium B.C.<sup>16</sup> Another cylinder seal, with bulls flanking both sides of a decorative tree, very similar to the tree on the Marlik beaker, is classified by Weber as an Assyrian seal of the fourth quarter of the second millennium B.C.<sup>17</sup> A bronze quiver, possibly from Luristan, with an antithetical group of two winged bulls flanking a tree, has been dated by Godard to the twelfth to eleventh centuries B.C.<sup>18</sup> Porada dates a ring found in Luristan with an antithetical scene of two bulls on both sides of a tree<sup>19</sup> and a bowl with a similar scene<sup>20</sup> to around the twelfth to eleventh centuries B.C. A similar antithetical group on a relief from Carchemish is dated to around the beginning of the first millennium B.C.<sup>21</sup> Another example occurs on a royal garment of Ashurnasirpal (885–860 B.C.) in a stone relief from Nimrud (Calah).<sup>22</sup> A glazed brick, also found at Nimrud, contains a scene of two bulls climbing both sides of a sacred tree of life.<sup>23</sup> The inscription on this brick dates it to the reign of Shalmaneser III (859–824 B.C.). A bronze plaque found in Luristan with similar winged bulls is dated by Ghirshman to around the eighth to seventh centuries B.C.,<sup>24</sup> and a similar design with much more stylistic elaboration in the rendering of the tree appears on a gold pectoral found in Ziwiye<sup>25</sup> and now in the Tehran Museum. Although the antithetical group, the decorative coil band, and the details of the leaves all point to its relationship to the Marlik gold bowl,



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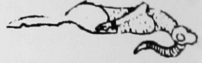
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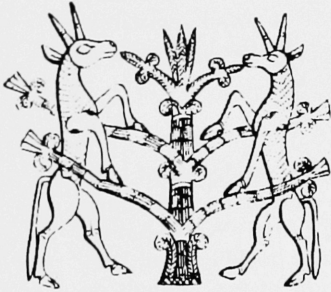
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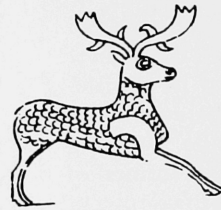
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*Illustration 4. Mountain Goat, Stag, and Ram Motifs on Marlik Metal Vessels*

its style reveals it to be a later continuation of this art, and it has been dated by Ghirshman to the seventh century B.C.

An embossed plaque in the collection of the Oriental Institute of Chicago contains a similar scene. Kantor, in a discussion of this plaque, suggests that antithetical animals flanking formal plants, particularly winged bulls in heraldic composition, have a close connection to Assyrian art.<sup>26</sup> She is quite right in the typological and stylistic analysis, but, considering the date of the Marlik Royal Cemetery, another ancestor of this plaque can be found in Marlik Gold Bowl 8. The wings of the bull, the heraldic composition, and the antithetical animals flanking a sacred or formal plant all appear in the Marlik vessel, which was not yet known at the time of her study. Thus, this Marlik bowl may possibly be considered a prototype influencing New Assyrian art. This suggestion is strengthened when the second half of the embossed plaque of Chicago, containing winged bulls in a recumbent position, is considered. The position of their hooves overlapping each other reminds one of Gold Cup 10, which shows recumbent mountain goats with the same composition of hooves above each other. The close relationship of the Marlik vessels with both sections of this plaque should lead us to consider seriously the possible influence of Marlik on the New Assyrians.

An important element in the composition of this scene is the central decorative tree. This motif, which is very familiar to students of ancient art and archaeology, has been interpreted as a sacred, formal tree of life, and it played an important role in ancient art for several millennia. One cylinder seal with a similar sacred tree is classified by Frankfort as an Assyrian seal of around the thirteenth to tenth centuries B.C.,<sup>27</sup> and another is classified by Porada as a mid-Assyrian seal of around the twelfth to tenth centuries B.C.<sup>28</sup> (although it is dated by Weber to the second quarter of the first millennium B.C.<sup>29</sup>). A rather closely similar formal tree appears on a seal from Assur, dated by Frankfort to around the end of the second millennium B.C., possibly not much later than 1000 B.C.<sup>30</sup> A bowl with leaves similar to those on the stem of the tree and surrounding the rosette on the bottom, said to have been found in the Kermanshah area along with two daggers, has been assigned to the second dynasty of Isin, around the twelfth to eleventh centuries B.C.<sup>31</sup> A similar decorative tree also appears on a vase fragment from Hasanlu.<sup>32</sup> Many examples of such stylized trees, some more and some less similar to the Marlik tree, occur on bronze vessels of the tenth century B.C. from western Iran.<sup>33</sup>

This type of decorative tree, forming the central element of a scene, occurred commonly in the decorative art of the first part of the first millennium B.C. throughout the Near and Middle East. An example on an Urartian helmet found in Karmir Blur, belong-

ing to King Arghisti of the eighth century B.C., is possibly a later derivative of the Marlik type.<sup>34</sup> Another possible derivative can be seen in a seven-petaled decorative plant that appears on a gold appliqué from Ziwiyé, dated around the eighth to seventh centuries B.C.<sup>35</sup> Several New Assyrian cylinder seals contain a similar decorative tree, one of which carries an inscription of Assur-Iddin (881 B.C.).<sup>36</sup> Another is classified by Frankfort as an Assyrian seal, dating to around 750–650 B.C.<sup>37</sup> A decorative tree of life with more and longer branches appears on a cylinder seal classified by Weber as an Assyrian seal of the second quarter of the first millennium B.C.<sup>38</sup>

This many-petaled decorative tree, or palmette tendril motif, has a long history of use in later cultures as well, again possibly showing the influence of Marlik design on the later art of the Assyrians, Scythians, Urartians, Medes, Greeks, and Achaemenids. The palmette tendril motif has also been found in peripheral regions of these powerful empires, including Altai in southern Russia, and it appears on objects from Pazyryk. Guitty Azarpay compares the palmette tendril design on a leather horse trapping from Pazyryk with other material excavated from the ancient world.<sup>39</sup> These palmette tendrils or hooks, which can be seen on several of the Marlik gold vessels, are one indication of a possible influence of the Marlik culture on Pazyryk art.

Many comparable examples of the guilloche band encircling the rim of this gold bowl are found in the art of the ancient Near and Middle East, of which only a few will be mentioned. A seal with a similar guilloche band is classified by Ward as Syro-Hittite, dated around the middle of the second millennium B.C.<sup>40</sup> Frankfort assigns other seals with guilloche bands to the First and Second Syrian group, dated around the middle of the second millennium B.C.<sup>41</sup> Two seals with guilloche bands are classified by Hogarth as Hittite, Class III group I, dated to the late second millennium B.C.<sup>42</sup>

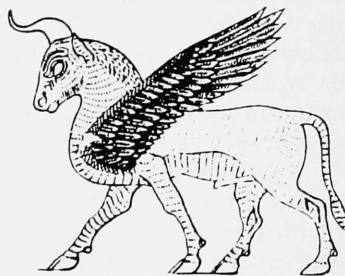
The Hasanlu gold bowl has an almost identical guilloche band encircling the rim. It has been dated by Ghirshman to around the ninth to eighth centuries B.C.,<sup>43</sup> by Porada rather earlier, to the twelfth to tenth centuries B.C.,<sup>44</sup> and by Dyson, its excavator, to the Hasanlu Button Base phase, with a carbon 14 determination of 1125 B.C. ±122 and 1042 B.C. ±120.<sup>45</sup> However, this carbon 14 date refers to the layer in which the vessel was found, and Dyson points out that iconographically we should accept its relationship to the Hurrian tradition, which gives the bowl a rather early date, since there is no doubt that, for whatever reason, Hurrian elements were influential in the art of the northern part of Iran for most of the late second and early first millennium B.C.<sup>46</sup> Guilloche bands also occur on many bronze vessels from western Iran, dated by Calmeyer to the tenth century B.C.<sup>47</sup>



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*Illustration 5. Cow Motifs on Marlik Metal Vessels*

The Kalardasht gold bowl exhibits particularly close similarities to this Marlik gold bowl, among them the guilloche band at the rim, the relief technique, and the hollow animal heads projecting outward in the round (although the Kalardasht heads are separately made and riveted to the body of the vessel), all suggesting that it was produced in the same tradition. The Kalardasht bowl has been dated by Ghirshman to the eighth to seventh centuries B.C.,<sup>48</sup> but Porada has given it a date in the thirteenth to twelfth centuries B.C.,<sup>49</sup> a difference of about half a millennium. However, considering the technique, style, and workmanship, I would suggest a date between these two extremes, i.e., the late second to early first millennium B.C., particularly because the Kalardasht bowl was found with a dagger typical of that time.

An engraved silver gilt mirror from Kelermes, Kuban, with the same guilloche design and rosette as well as several other motifs found on Marlik vessels,<sup>50</sup> has been dated by Rostovtzeff to the sixth century B.C.<sup>51</sup> If one accepts this date, which seems reasonable since the mirror contains some design elements related to Greek iconography, it would seem that this illustrates a Marlik influence on Scythian art. Considering the location and date of the Marlik culture, it would certainly be logical to find some Marlik influence on Cimmerian and Scythian art.

The design of the flower or plant field encircling the bottom of the Marlik bowl also occurs in the embroidery of the royal garment of Ashurnasirpal (884–859 B.C.) in an Assyrian palace relief, together with a selection of palmettes and sacred trees.<sup>52</sup>

The similarity of the design composition on a bronze plaque from Luristan<sup>53</sup> to this gold bowl from Marlik is marked, as is the relationship of the plaque to designs on Sialk Cemetery B vessel (for instance the curve, movement, and length of neck of a unicorn, which is also very similar to Marlik Gold Beaker 9<sup>54</sup>), illustrating a close contact between Marlik and Sialk Cemetery B on the one hand and between Marlik and Luristan on the other. This may mean, as I feel likely, that the people of Marlik, under attack from either the Assyrians or the Urartians, moved away in a southeasterly direction.

The unusual technique employed on this vessel, with the head of an animal pushed outward in the round from the body, can be seen on a gold cup containing gazelles found in a clandestine excavation and dated by Crawford to the ninth century B.C.<sup>55</sup> This cup also has guilloche bands around the rim and base. Wilkinson, who has studied this cup, says that the heads look at first as though they must have been hammered out from the body of the cup, but instead they were made separately and then fastened invisibly by a method much practiced in ancient Iran, colloid hard-soldering, a process involving a copper salt and glue.<sup>56</sup> In addition to the Kalardasht gold

bowl, a bronze cup discovered many years ago in Susa, the Elamite capital, is decorated with projecting animal heads; this vessel is dated to the reign of Untashgal, who ruled Elam from about 1234 to 1227 B.C.<sup>57</sup> This bronze cup contains two rows of animals with projecting heads, couchant bulls above and standing horses below. The same decorative technique occurs later in Urartian art, where a vessel with heads of an imaginary animal is dated to the early seventh century B.C., and a bronze pot, found in Altin Tepe near Erzincan, is dated to the seventh century B.C.<sup>58</sup>

## 9 Gold Beaker

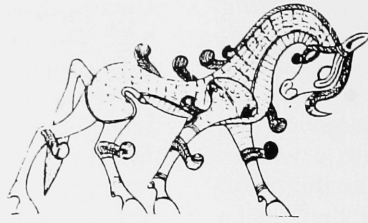
201 M Ills. 6, 9, 10, 11, 12; Fig. 3; Pl. 20, Color Plate XIV A-B

About 17.5 cm high and 10.5 cm in diameter at the base, found in Tomb 45 (Trench XXII H). The gold, yellowish in color, is rather hard, and consequently the vessel is well preserved. The tall beaker, with its slightly concave sides, has a rim rolled for reinforcement and a protruding ring base. The design on the vessel, done in repoussé with fine incised details, is divided into two registers, both containing the same motif, an extremely graceful and highly stylized unicorn (a stylized bull has also been suggested<sup>59</sup>), repeated three times, walking around the vessel, from right to left in the upper row and from left to right in the lower row. This is a very elegant animal with a long curved neck, slim waist, and powerful legs, which promenades with grace around the vessel.

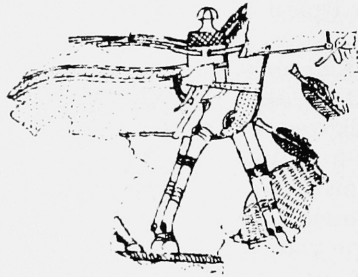
The unicorn has a long horselike head with a protruding round eye bordered by pronounced wavy eyebrows. The mouth and nose are finely detailed. A thick curving horn, finely pointed at the end, projects from the forehead. Most of this horn, except for the curving point, is covered with fine diagonal lines forming a thick double-herringbone band. Extending across the base of the horn is an elongated leaf-shaped ear. From behind the ear a thick projecting band decorated with many diagonal short lines extends around the neck to the throat where it forms a knot, possibly representing a bell or decorative ball hung under the neck. The very long neck, gracefully curved, is covered by a checkered pattern of rectangular grids separated by thick cross-bands of parallel fine short lines. This pattern continues across the unicorn's neck and covers his rump. Extending from the ear to the base of the neck is a narrow mane, covered with parallel diagonal lines, forming a thick cord that ends at the back in a curving ball. Three more curving balls on herring-bone bands spring from the back of the unicorn. Two lines forming a ridge separate the throat, covered by cross-rows of short lines, from the back of the neck, covered by the grid pattern already described. This pattern of short cross-lines extends across the chest and along the stomach, and another curving ball on a herringbone



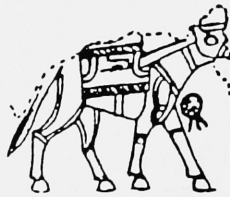
## III. 6



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*Illustration 6. Horse Motifs on Marlik Metal Vessels*

band springs forward from the chest. The approximately triangular shoulder area is covered with very fine dotted circles, intersected by a double, slightly curving line with parallel curving lines at the front and back points and at the base. The dotted circle pattern of the shoulder extends on the outside of the legs to the upper leg joint of the foreleg, and the checkered grid pattern of the back extends to the upper leg joint of the hind leg, which is deeply outlined. The insides of both opposing legs are correspondingly covered with rows of dotted lines. The leg joints are encircled with several rows of curving lines, and the hock and hoof are also outlined by curving lines. Springing from the knee joints are more curving balls on herringbone bands. The long tail springs upward and then falls down from a sharp bend. Double lines encircle the base and bend of the tail, which is filled with a dotted zigzag line. The end of the tail is covered with encircling curving lines and then falls in a long shaggy point, filled with slightly curving vertical lines. The male organ is a projecting thick curving band under the body.

A filling design, used above the unicorns, is an eight-petaled rosette similar to the wild morning glory.<sup>60</sup> Around the rim is a thick, intricate triple guilloche band, and around the middle of the vessel, separating the two registers and forming the ground on which the upper row of unicorns parades, is a double cord or open herringbone band. Around the base, forming the ground for the lower row of unicorns, is a single coil band of triple parallel lines. The base of the vessel contains a rather unusual design of intricate interlocking triangles with curving points, wrapped together in a circle.

Porada praises the workmanship of this beautiful gold beaker, saying that "such stylistic features as the articulation of the animal body by lines that recall a harness, or varying 'patternization' of different parts of the body, can be traced more directly to what we have called here the elegant, decorative and abstract style of Marlik."<sup>61</sup>

#### COMMENTS

The main motif of this vessel, a highly stylized unicorn, is unusual, and only a few closely related examples can be cited. The unicorn, although an imaginary figure, is represented in ancient mythology as the aristocrat of beasts, fearless, courageous, proud, and strong but gentle, the protector of other animals. Franklin Dove, in a discussion of the unicorn, says: "According to typical descriptions, he had the head and neck and fine-boned graceful legs of the horse; the beard and divided hoofs of (the) capridae; the tail of the oryx; and a single spike springing from the center of the forehead twisted in spirals, as the tusk of the narwhal (*Monodon monoceros*)."<sup>62</sup>

A creature somewhat similar to the Marlik unicorn

occurs on some painted pottery of Sialk Cemetery B,<sup>63</sup> where the filling motif of a many-petaled rosette also occurs on pots with long spouts. A horse with a long curved neck, but with two horns, appears in a hunting scene on bronze bands found in Maral Dérésí, Caucasia, dated by Schaeffer to 1200 to 1000 B.C.<sup>64</sup> Found in the same tomb was a bronze plaque with a quadruple spiral design somewhat similar to the design on the base of this unicorn vessel, and it is obvious that a definite relationship exists between this tomb of Maral Dérésí and the Marlik Cemetery.

A horse is represented in a somewhat similar style on a silver beaker with appliqué electrum figures found in the Hasanlu excavation and dated to the early first millennium B.C.<sup>65</sup> Although it has been suggested that this beaker may be of Urartian origin, it seems more closely connected to Marlik, which had not yet been discovered when the original attribution was made. The appliqué design on the Hasanlu silver vessel is closely related to that of Marlik Pot 21, although the workmanship of the Marlik vessel is finer than that of the Hasanlu beaker. Porada suggests that although there is a similarity between both vessels, it should be noted that the style and workmanship are different, with the Marlik vessel being earlier than the Hasanlu beaker.<sup>66</sup> A similar unicorn horse appears on the lower register of a goblet in the Louvre.<sup>67</sup>

An embossed bronze quiver plaque from Surkh Dum in Luristan, containing a winged bull whose head and horn are similar to the Marlik unicorn, is dated by Porada to the early first millennium B.C.<sup>68</sup>

The guilloche band encircling the rim of this vessel has already been discussed in connection with Marlik Vessel 8. The second decorative band separating the two main registers, which contains a herringbone design, is also found on many comparable examples from various sites. A gold cup and plate from Ras Shamra, with designs in several registers, is dated by Schaeffer based on Egyptian comparisons to the time of Ramses (13th or 14th cent. B.C.);<sup>69</sup> the general composition of its design and the separating herringbone and coiled-serpent bands are somewhat similar to designs on Marlik gold vessels. Other designs on the Ras Shamra vessel, including an antithetical group of animals on both sides of a tree, a lion attacking a bull or deer, a decorative tree, and filling motifs that include rosettes, trees, and pomegranates, are all similar to designs on this and other decorative vessels of Marlik. The Marlik vessels on the whole represent a much higher artistic tradition, however. A similar herringbone band also appears on a gold dagger sheath in the Oxus Treasure, dated by Dalton to the Achaemenid period, the sixth to fourth centuries B.C., thus representing the continuation of this decorative motif into later times.<sup>70</sup>

The serpent coil or twisted decorative band encircling the base of this vessel has been found over



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*Illustration 7. Fish Motifs on Marlik Metal Vessels*



a long period and throughout a wide area. It can contain a single, double, or triple coil, or even more parallel coils. It is a motif with an extremely long history of use and consequently cannot be considered to have much comparative value, but a few close examples will be mentioned here. Seals with coil bands, classified by Frankfort as Mitannian, Assyrian, First Syrian, Second Syrian, and Palestinean, are dated to the middle to late second millennium B.C.<sup>71</sup> Another cylinder seal with a coil band is classified by Moortgat as an Assyrian glyptic of the thirteenth century B.C.<sup>72</sup> The excavation of Alishar Hüyük II produced a plaque with a coil band, dated to the Hittite New Kingdom, the last quarter of the second millennium B.C.<sup>73</sup> Cylinder seals with coil bands in the Ashmolean Museum are classified by Hogarth as Hittite seals, Class III, group 1–4, dated to the late second millennium B.C.<sup>74</sup> Among other objects with coil bands, Andrae dates a ring from Susa to the end of the second millennium B.C., an ivory plaque from Nimrud to the ninth century B.C., and a broken object, possibly from Cyprus, to the beginning of the first millennium B.C.<sup>75</sup> A coil band appears on a gold bowl obtained through clandestine excavation, dated by Goldman to the early first millennium B.C.<sup>76</sup> In addition to the coil band, this bowl has morning glory rosettes like the ones on the Marlik vessel. Coil bands occur on the edge of a stele of Untashgal, on a fragment of a blue cup from Hasanlu, and on a Ziwiye band, dated by Porada to the thirteenth, ninth, and eighth centuries B.C., respectively.<sup>77</sup> A large vessel from Caucasia with a coil band has been dated to the beginning of the first millennium B.C.<sup>78</sup> An ivory fragment of a box found at Hama has been dated to the ninth century B.C., and ivory fragments with coil bands were also found in the Northwest and Southwest Palaces of Ashurnasirpal (883–859 B.C.).<sup>79</sup>

Several objects recovered from unsystematic excavations, including a pectoral, gold plaque, and rhyton, all with coil bands, have been dated by Ghirshman to the ninth to seventh centuries B.C.<sup>80</sup> An incised panel from Kuyunjik in the Assyrian style, with a coil band, is dated by Barnett to the eighth century B.C.<sup>81</sup> Rostovtzeff assigns an iron ax with a wooden scabbard, sheathed in gold, from Kelermes, Kuban, to Scythian art of the sixth century B.C.<sup>82</sup> Other objects containing coil bands include the gold bowl of Kalardasht; two chalices, dated to around 1000 to 800 B.C. by Vanden Berghe<sup>83</sup>; an ivory plaque from South Russia, dated to the ninth century B.C. by Godard<sup>84</sup>; a bronze vase from Luristan dated to 1000 to 800 B.C. by Schaeffer<sup>85</sup>; a vessel from Trialeti, Kourgan XVII Caucasia, dated to 1200 to 1000 B.C. by Schaeffer<sup>86</sup>; stone reliefs and other objects from Carchemish, dated to the late Hittite period by Woolley<sup>87</sup>; and a silver disc from the Oxus treasure dated around the sixth to fourth centuries B.C. by Dalton.<sup>88</sup> The large number of comparable examples

from different localities, belonging to a range of a thousand years, reflects the popularity of this motif, but it should be noted that the most frequent usage occurs during the latter part of the second millennium B.C.

The rosette used as a filling motif in this design, an eight-petaled morning glory, has already been mentioned as it appears in conjunction with other motifs. It appears on various Assyrian objects including fragments of pyxis lids from the Southeast Palace of Ashurnasirpal at Nimrud.<sup>89</sup>

The base of this vessel contains a design of interlocking triangles. This particular pattern of interlocked and bisected spiral patterns is a special feature of Mycenaean art of the sixteenth century B.C.,<sup>90</sup> while interlocked spirals with filled interstices are found frequently in later Mycenaean art<sup>91</sup> and imitated in Egyptian painted ceilings.<sup>92</sup> A spiral quadruple pattern also appears on seals from Egypt dated to the Twelfth and Thirteenth dynasties.<sup>93</sup> More complex quadruple spiral designs on ceiling fragments of Archamenes are dated by Schliemann to around the fourteenth century B.C., while a similar pattern on a painted stucco ceiling in the palace of Knossos belongs to the late Minoan A period. Other examples of this motif occur on a painted vase found on the island of Pseira, dated to Late Minoan I, and on the back of a terracotta "pan" found at Syros, dated to the early culture of Cyclades.<sup>94</sup> A rather closely similar design occurs on the base of a goblet in the Louvre, classified as a North Iranian vase from the end of the second millennium B.C.<sup>95</sup>

## 10 Gold Cup

352 M Ills. 4, 11, 12; Pl. 20; Color Plate XIV C

Almost undamaged, about 6.8 cm high and 5 cm in diameter at the mouth, found in Tomb 36 (Trench XVIII C). Its walls are very slightly concave with the widest diameter at the rim and protruding ring base. The design on this cup, executed in relief with incised details, consists of two rows of three recumbent mountain goats in profile, the rows facing in opposite directions. The head of the animal is plain and smoothly polished except for lines indicating the eyes, nose, and mouth. The ear is leaf-shaped, divided by a line with many short, straight, parallel branches. The long horn with a graceful S-shaped curve is divided into more than ten sections, which may indicate the animal's age. The body of the goat is decorated with rows of parallel elongated dots. The shoulder, rump, and legs are plain and highly polished, except that parallel curving lines surround the shoulder points. The hind legs of the recumbent animal are turned to the front, and the forelegs to the back so that the hooves touch or even overlap. The space between these two rows of recumbent animals is plain, with no filling motif or band. The rim and base are encircled by a simple guilloche band bordered by straight lines.

III. 8



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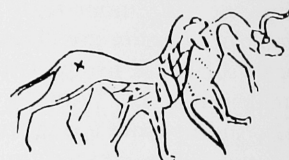
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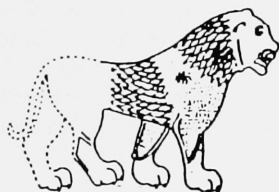
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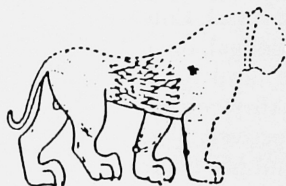
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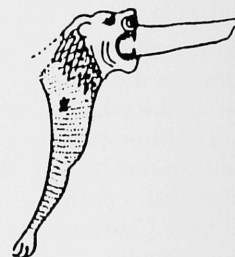
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Illustration 8. Other Animal Motifs on Marlik Metal Vessels

On the base of the cup is a geometric rosette of six long, pointed, oval petals, each petal divided by a central line. Between each two petals is a triangular area covered by fine dots. Around the central rosette is a band formed of six similar petals, each petal stretched between the points of two petals of the central rosette.

#### COMMENTS

Recumbent ibex, mountain goats, and sheep appear on other products of the ancient world. An ibex with overlapping hooves appears on an object classified by Ghirshman as *Amlash*, dated to the ninth to eighth centuries B.C.<sup>96</sup> Another recumbent ibex with overlapping hooves can be seen on a gold ornament found at *Ziwiye*, dated by Ghirshman to the seventh century B.C.<sup>97</sup> The same overlapping hooves occur on objects from *Izmit* in Anatolia, dated by Bossert to about 500 B.C.,<sup>98</sup> although here the head of the animal is turned to the rear, resting on its back. A round bitumen plaque found at *Haft Tepe*, with a row of recumbent sheep with overlapping hooves, belongs to the second half of the second millennium B.C.<sup>99</sup>

Recumbent animals, particularly with overlapping hooves, are considered to be characteristic of Scythian art. Examples can be seen on gold plates dated by Borovka to the sixth century B.C.,<sup>100</sup> and on a gold plaque found in a tomb at *Kuban*, attributed by Diez to the Scythians and dated to the seventh to sixth centuries B.C.<sup>101</sup> In the collection of the Oriental Institute of the University of Chicago is an embossed plaque showing an animal in recumbent position with overlapping hooves. It was acquired through an unidentified source with no information as to its origin, and it apparently contained pieces of two separate authentic plaques. After being cleaned and separated, they were given a suggested date of around the seventh to sixth centuries B.C.<sup>102</sup> Because the design of recumbent animals with overlapping hooves occurs at *Marlik* much earlier than it does in Scythian art, the background for this Scythian style of rendering animals may be said to have been found in the *Marlik* Cemetery.

The triple-coil band bordering the top and bottom of this cup has been used in different times and regions. A similar coil band appears on a group of seals in the *Ashmolean Museum*, classified by Hogarth as Hittite seals, Class IIO, group 1–5, dated to around the late second millennium B.C.<sup>103</sup> Similar coil bands also border the top and bottom of designs on cylinder seals classified by Frankfort as Mitannian, Assyrian (13th–10th centuries B.C.), First and Second Syrian, and Palestinean groups, dating from the middle to the late second millennium B.C.<sup>104</sup> Although a variety of techniques have been used, the design motif in all these examples is the same. A similar type of coil banding occurs on a seal classified by

*Moortgat* as Assyrian, dated to the thirteenth century B.C.,<sup>105</sup> and another example of this coil band appears on a gold bowl found at *Ras Shamra*.<sup>106</sup> Coil bands occur on many bronze vessels of the tenth century B.C. from western Iran.<sup>107</sup>

A rosette similar to that on the base of this gold bowl appears on an ivory fragment found in the *Nimrud* excavation at the Northwest Palace of *Ashurnasirpal* (883–859 B.C.), and also on the Southeast Temple of the same king.<sup>108</sup>

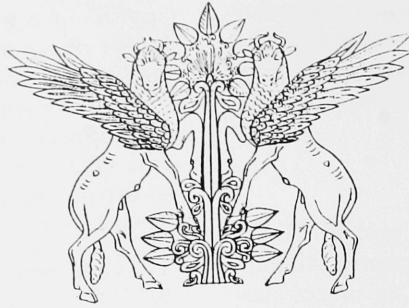
#### 11 Gold Bowl

353 M Ills. 4, 7, 10, 11, 12; Fig. 11; Pl. 21; Color Plate XIV D

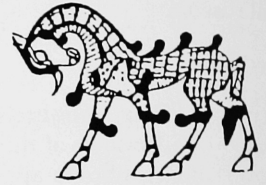
About 8.5 cm high with a diameter at the mouth of 13.5 cm, found in a somewhat crushed and deformed condition in Tomb 36 (Trench XVIII C). The vessel has a wide open mouth with a rim rolled for reinforcement, a rounded body, and a small base. The gold, which is fairly pure and rather soft, is well suited to the *repoussé* technique used here, in an antithetical scene of two rams walking away from an eagle with wings outstretched toward a sacred tree. The bodies of the rams, in relief, appear in profile, while their heads, in front view, are hammered out in the round from the body of the vessel. The horns, covered by many parallel wavy lines, curve to the front below their pointed oval ears. The eyebrows, nose, and mouth are simply outlined, and the oval eyes are bordered by short parallel straight lines. Narrow triangles with a downward and backward curling point, representing wool, cover the bodies of the rams, and on their stomachs and legs are parallel straight dotted lines representing hair. The eagle, supporting the rams with its outspread wings, is shown in front view, with its head also hammered outward in the round. The eagle has a sharply bent beak, and its round eyes are keen and fierce. Its wings are formed of four rows of feathers covered with herringbone decoration, three rows of short broad feathers, and one row of long pointed wing feathers. A thick horizontal band separates the tail of the eagle, composed of long pointed feathers covered with crosshatching, from its body. The eagle holds in its claws a fish whose scales are shown by crosshatching lines and tail by curved parallel lines. The tree of life, toward which the rams are walking, is set in a round pot covered with crosshatching, surmounted by two thick horizontal bands decorated by herringbone patterns. Large veined ovate leaves sprout symmetrically on both sides of the trunk, which, formed of two thick vertical bands decorated by simple hatching, ends in a flower bunch. The rim of the bowl is encircled by a triple-interlocking guilloche band, and the base by a single-coil band. On the bottom is another version of the geometric rosette found on most of the decorative vessels of *Marlik*. A twenty-petaled rosette, each petal having an inner semicircle outlining the tip, radiates around a



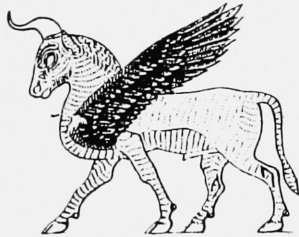
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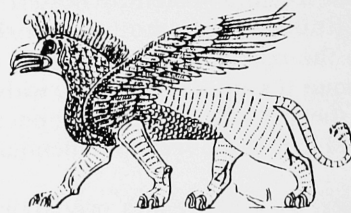
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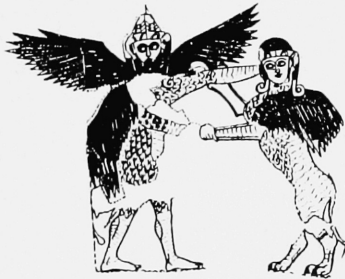
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*Illustration 9. Combined Imaginery Figure Motifs on Marlik Metal Vessels*

central circle, part of which is missing.

#### COMMENTS

The main design of this vessel, a bird with open wings holding or supporting animals, is a traditional scene in the art of the ancient world. However, in each period it is characterized by a particular technique and style, which is helpful in determining the dating of a motif such as this which was used over a long period. A seal of the post-Akkadian period, showing a lion-bird holding two mountain goats, is dated as early as the late third millennium B.C.<sup>109</sup> An open-winged bird with an animal head, possibly representing the divine bird Imdugud, can be seen on a limestone macehead from the third millennium B.C., and a bird of prey on two horned animals appears on a broken piece of steatite from Khafaje, probably made in Susa in the third millennium B.C.<sup>110</sup> This scene also appears on Akkadian<sup>111</sup> and Archaic cylinder seals classified as Mitannian, Hittite, and Assyrian<sup>112</sup> by Ward, who suggests that the eagle or lion-headed eagle is an emblem of a protecting power.

Porada suggests that a similar bird, possibly a falcon, appearing on a gold inlaid ornament from Susa dated before the second half of the second millennium B.C., may indicate an Elamite influence on Marlik art.<sup>113</sup> Similar rams occur on both the body and base of the Hasanlu gold bowl, discovered in Hasanlu level IV<sup>114</sup> and dated by Porada to between 1200 and 1000 B.C.,<sup>115</sup> and on the Assyrian relief of the Central Palace of Tiglathpileser III at Nimrud.<sup>116</sup> Karasek suggests that highly stylized rams' heads on a bracelet from Zawiye attest to the popularity of this animal as a motif in Iranian art of the first millennium B.C.<sup>117</sup> However, the rendering of the rams' heads from Marlik is closer to the Assyrian and Hasanlu examples.

A plant similar to the tree of life on this vessel can be seen on a seal classified by Weber as an Assyrian seal of the last quarter of the second millennium B.C.<sup>118</sup> A similar tree also appears on the robe of the Babylonian king on a boundary stone dated to the reign of Marduk-Nadin-Akhke (ca. 1098–1081 B.C.).<sup>119</sup>

The guilloche band encircling this vessel is identical to the borders of some of the other decorative vessels of Marlik, including Gold Beaker 8. It was one of the most popular decorative bandings of the second half of the second millennium B.C. (For a complete discussion of comparable examples from other sites, see pp. 28–29.)

#### 12 Gold Beaker

355 M Ills. 5, 9, 10, 11, 12; Fig. 3; Pl. 21; Color Plate XV

Vessel 16.5 cm high and flattened at the mouth, found in Tomb 36 (Trench XVIII C). It is a fairly tall

beaker with a flat base, and its rim is rolled for reinforcement. It is made of rather soft gold that has become somewhat deformed from earth pressure. The design on this vessel, in repoussé with precisely incised details, is divided into two registers. The top register contains an imaginary creature, possibly a griffin or phoenix, repeated three times, striding from right to left around the vessel. This imaginary creature has a bird's head, an upstanding crest, powerful wings, and the body of a lion; it may be a female, representing a goddess. Its powerful hooked beak is open, showing the tongue hanging out and well-pronounced teeth. Three concentric circles form the eye, surrounded by many short straight lines. Sprouting from its forehead down its nape is an elaborate crest, the front section curling forward and the remaining sections pointed upward, each section filled with herringbone patterns. The feathers of the head, neck, chest, and stomach are indicated by overlapping semiovals filled with many short lines, similar to fish scales. The hair on the rest of the body, legs, and tail is shown by rows of short straight lines. The elaborately patterned wings are outlined at the front by a band of crosshatching and covered by three rows of progressively longer wing feathers, each filled with herringbone patterns. The leg muscles and powerful claws are outlined. The curving lion's tail ends in a small brush. A double ridge separates this register from the lower one.

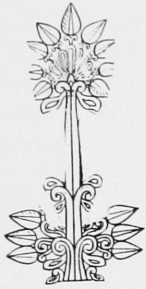
The lower register contains another imaginary figure, a winged bull, also striding vigorously from right to left around the vessel, repeated three times, with a filling design of a small plant pot between the figures. The eyes, nose, and mouth of the bull are outlined, and a large horn curves forward from its forehead. Rows of short parallel dotted lines indicating hair cover the head, the upstanding ear, the neck, and the body of the animal, while its mane is filled with many short irregular lines above a row of chevrons at the base. The powerful wings are decorated in the same way as those of the griffin in the upper register. The small plant pot between the winged bulls is an almost circular container covered with crosshatching, a small neck, and an open mouth. The plant it contains is possibly the *zarbin*, or fir, with a central dagger stem and symmetrical short branches filled with herringbone patterns. The lower edge or ground of this scene has a ridge and below it a row of semicircles filled with simple stars.

Around the rim of this beaker is a double guilloche band between the raised ridges. The base contains a geometric rosette encircled by a stylized plant loop formed of geometric leaves connected by semi-circular loops. The central sixteen-petaled flower, similar to a morning glory, is surrounded by a band formed of elongated half loops, with a very small circle in the center of each. Encircling this are fourteen oval pointed leaves, each with a central





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*Illustration 10. Plant and Flower Motifs on Marlik Metal Vessels*

dagger spine from which diagonal lines sprout forming herringbone patterns. The base of each of these fourteen leaves is covered by the inward spiral ends of the connecting loops, with the junction of each of the two loops filled with a hanging semicircle or oval filled with a very small circle.

#### COMMENTS

The bird griffin of the upper register can be interpreted as a phoenix or as an other mythical creature.<sup>120</sup> Azarpay, discussing the motif of the bird griffin as it appears on some of the Pazyryk objects, points out that it occurs as early as the Ur period of the third millennium B.C.<sup>121</sup> It was particularly well developed and extensively used in the second half of the second millennium B.C. The Marlik Cemetery has certainly produced extremely elaborate and precisely detailed versions of this imaginary figure, and it is possible that they influenced later portrayals.

A similar creature appears on a seal classified by Porada as Neo-Assyrian, dated between 1000 and 612 B.C.<sup>122</sup> A somewhat similar griffin or phoenix, with the same mane, wing, animal body, and bird head, can be seen on a relief found on the southern wall of Hilani at Tell Halaf. Vieyra suggests that this motif was borrowed from Assyria; he dates this particular example to the ninth to eighth centuries B.C.<sup>123</sup> It may indicate the remaining influence of Mitannian art in this area.

The griffin appears on several objects from Ziwiyé. A gold plaque with a generally comparable type of winged griffin and winged bull is dated by Ghirshman to the seventh century B.C.<sup>124</sup> A similar griffin with an upright tail and the addition of a garment covering the chest, differing slightly from the Marlik example in style and technique, appears on part of a pectoral, dated by Godard to the ninth century B.C.<sup>125</sup> Another griffin with the addition of a kilt or skirt occurs on a gold appliqué, dated by Kantor to the eighth to seventh centuries B.C.<sup>126</sup> The continuation of this motif of a griffin-phoenix can be seen on a silver gilt mirror from Kelermes, Kuban, assigned by Rostovtzeff to Scythian art of the sixth century B.C.,<sup>127</sup> and also on some of the Pazyryk objects.<sup>128</sup>

The winged bull that appears in the lower register is also a common motif in ancient Near Eastern art. A similar winged bull, also walking, appears on many Assyrian palace reliefs at Nimrud<sup>129</sup> and other sites covering a range of several centuries, although it should be noted that the bulls of Marlik are altogether more lively and active than the calm winged bulls of Assyrian art. A bull pulling a chariot of the weather god on the Hasanlu gold bowl is similar in technique and decoration to the body of the Marlik winged bull.<sup>130</sup>

The small plant pot with the *zarbin* tree, interspersed between the winged bulls, has been inter-

preted by Karasek as a provincial version of the stylized flowing vase with combined tree and water elements rising above the rim. Flowing vases with tree and water combinations are held by heroes seen on an Akkadian seal<sup>131</sup> and on wall paintings of the palace of Zimri-Lim at Mari,<sup>132</sup> where they are held by a goddess. However, these early examples are quite realistic when compared to a stylized version of the same motif on a copper plaque of Shalmaneser at Nimrud from the late ninth century.<sup>133</sup> The Marlik example is here assumed to be an imitation of such a stylized version, since the important feature of water descending on either side of the rim of the bowl has been omitted—presumably through a misunderstanding of this essentially Mesopotamian motif.<sup>134</sup> Many such plant pots, some with flowing water, occur on bronze vessels of the tenth century B.C. from western Iran.<sup>135</sup>

Decorative leaves similar to those on the base of this bowl occur on a vessel found in Kermanshah, supposedly discovered along with two daggers. Calmeyer dates this find to around the eleventh century B.C.<sup>136</sup>

### 13 Gold Bowl

515 M Ills. 3, 11, 12; Fig. 3; Pl. 21; Color Plate XVI

Approximately 9 cm high and 7.4 cm in diameter at the mouth, badly deformed by earth pressure, found in Tomb 32 (Trench XVII E). The bowl has a wide, open mouth with a rim reinforced by rolling, a rounded body, and a small base. The gold of which it is made is reddish, rather soft, and a little thicker than in most of the Marlik gold vessels. The main design consists of a standing bird, possibly an eagle or falcon, repeated four times around the vessel, with no filling motif. The eagle's body, shown in profile, is worked in fairly deep relief, and its head, in front view, is hammered out in the round. The bird has a round eye and downward curving beak. Its body and head are covered by feathers, shown by small attached parallel zigzag lines forming small open triangles. The feathers on the wings, legs, and tail are parallel herringbone bands; the wing contains five progressively longer rows. The claws, covered with wavy lines, are strongly formed. The rim is encircled by a rather thick double guilloche band, and the base by a band of double semicircles, possibly representing the ground on which the bird is standing. On the bottom is a geometric rosette of sixteen double-lined petals connected to a central circle.

#### COMMENTS

The double guilloche band at the rim can be compared not only to guilloche bands on other decorative vessels from Marlik (including Gold Beaker 8 and Gold Bowl 11), but also to bands on other objects from the ancient world (see pp. 28–29).

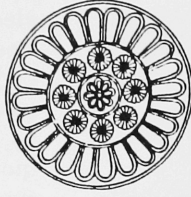
A rosette similar to that on the bottom of this cup can be seen on a silver mirror from Kelermes,



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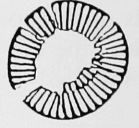
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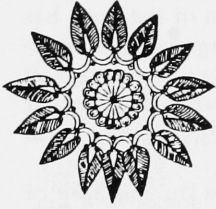
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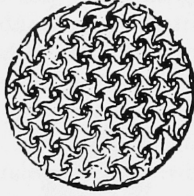
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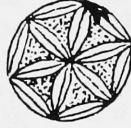
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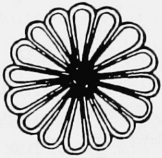
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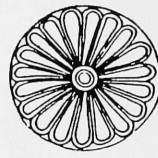
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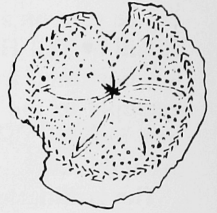
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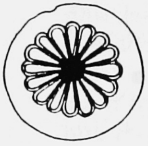
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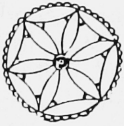
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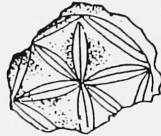
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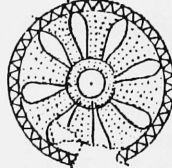
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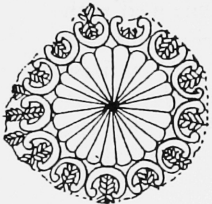
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Illustration 11. Base Motifs on Marlik Metal Vessels



Kuban, classified as Scythian, dated to the sixth century B.C.<sup>137</sup> Similar rosettes appear on the bases of many bronze vessels of the tenth century B.C. from western Iran.<sup>138</sup>

#### 14 Gold Beaker

610 M Fills. 3, 4, 8, 11, 12; Fig. 4; Pl. 22; Color Plates XVIII and XIX

About 20 cm high and 14 cm in diameter at the mouth, found in Tomb 2 (Trench VI B<sup>+</sup>). It is made of rather soft and very thin gold, and the rim has been reinforced by rolling. This tall straight-sided beaker has been slightly flattened by earth pressure. The body of the vessel is covered by four registers of designs, in repoussé with incised details, each design repeated around the vessel. Each of these rows of repeated designs contains part of a story, with the total forming an early example of a narrative composition. On the lowest register is a mother mountain goat suckling her young kid, as yet without horns. This design, repeated five times around the vessel, is the first stage in the story of the life of this young mountain goat. The hair on the body of both mother and child is indicated by many parallel chevron dotted lines, aside from the shoulder and fore- and hind legs, which are left blank. The corners of the shoulder triangle, where the hair often twists, contain con-centric parallel semicircular lines. On some of the repeats of this motif the muscles on the fore- and hind legs are outlined.

The next register contains the second stage of the animal's life, with the young mountain goat standing on his hind legs and eating the leaves of a tree. Here the mountain goat is slightly older than in the first row, for he has straight horns with two lines or intersections, indicating that he is two years old. He is vital and vigorous, shown in a position of action. His horns are straight and pointed, his ears erect, and his eyes oval. As in the first register, the hair on some parts of his body is shown by numerous parallel chevron dotted lines. He has a long tail with a bend, from which it drops straight to the ground. The tree from which he is eating is a palmette with a very thick trunk, divided into three main sections and narrowing as it goes upward. Two branches shoot off from the top of each section of the trunk above the point where the outer edge of the trunk rolls, forming a spiral. The top of each branch has similar spirals, possibly representing bunches of flowers. The bark of the trunk is indicated by parallel straight vertical lines in sections. The branches are formed of several sections decorated internally by straight parallel dotted lines. The top of the palmette has two flowers symmetric-ally on each side and three pointed branches in the middle. Both flowers and branches are decorated with parallel chevrons. Herringbone designs border the thickest part of the trunk near the ground.

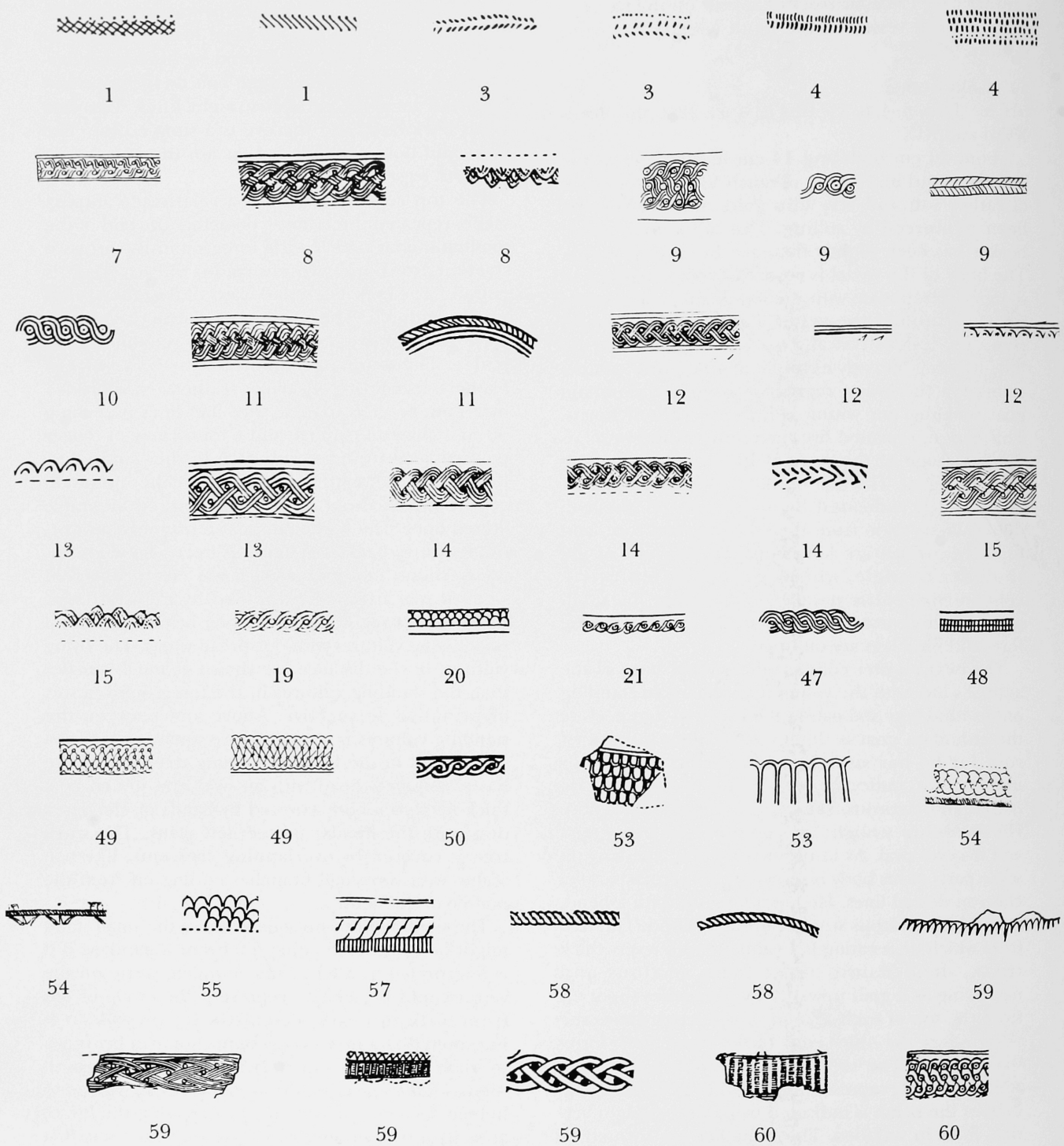
The third register shows a wild boar, repeated six

times, which now menaces the life of the mountain goat. The boar, easily identified by its sharp, upward-curving tusks, walks with its head lowered, ready to attack. Its body hair is indicated by horizontal herringbone bands, and the rough hair on the nape and forehead by short parallel straight lines. The ears point backward, and the eye is a simple oval. The tusks and nose are outlined, as are the muscles on the hind legs.

The top register contains a relatively complex scene, repeated three times, depicting the end of the mountain goat's life. In the foreground its carcass is stretched out and two enormous vultures eat its entrails. The eyes, beak, and claws of the vultures are simply outlined. The feathers of the neck and legs are formed of overlapping crescents resembling fish scales. The wings are divided into four rows of feathers: three rows of smaller feathers, each divided by a long pointed triangle with fine lines branching off in a chevron pattern, and a fourth row of longer pointed wing feathers, with each feather covered by herringbone designs. The carcass of the mountain goat is stretched out on its back, covered by simple dotted lines. The mountain goat is no longer young, for its long, backward-curving horns have eleven intersections, indicating that it was eleven years old when it was attacked and killed by the wild boar. Between this register and the one below are several small flying vultures with outspread wings. The flying vultures in the distance are shown as much smaller than the standing vultures in the foreground, a sort of primitive perspective. Above and between the standing vultures is a small figure squatting before a small stand in the form of a young tree. This figure has a shapeless head with an oval eye, joined by a thick neck to a body covered by bands of elongated dots, with the hands and feet left blank. The small tree is covered by overlapping crescents, like fish scales, with two small branches curling off from the middle of the stem.

The small figure who squats before the small stand might be considered either a fetus or a monkey. If it is interpreted as a fetus, the complete scene on the vessel could be seen to represent the circle of life from birth to death to rebirth. If, however, it is interpreted as a monkey, a connection can be drawn to some of the ancient stories of the Indo-Iranians, such as *Kalileh and Demneh*, in which advice is given to human societies allegorically by depicting the life of animals in the jungle. In this story, which was first introduced to Iran from the Indus Valley in Sassanian times, around the third century A.D., but which undoubtedly had a much longer history, a monkey plays the role of the wise individual giving words of advice to the other animals, just as here he is sitting and giving words of wisdom, "This is the end of life, do not get too closely attached to it."

The vessel is bordered at the rim by a double



*Illustration 12. Guilloche Motifs on Marlik Metal Vessels*

guilloche band of four parallel lines, and at the bottom by a similar double guilloche band of three parallel lines. The base contains an unusual pattern for the decorative vessels of Marlik, a reed-matting design bordered by a band of parallel connected chevrons.

#### COMMENTS

The motif of the first register, a young animal suckling from its mother, is rather unusual. A general similarity can be seen in a seal of the Old Babylonian period, which shows cows nursing their calves.<sup>139</sup> Ivory plaques from Nimrud<sup>140</sup> and Arslan Tash,<sup>141</sup> with a similar scene depicting mountain goats, are dated to the ninth century B.C. A silver beaker in the Adam Collection has two motifs almost identical to those on the Marlik vessel: a mother mountain goat suckling her kid on the upper register, and young mountain goats rampant on both sides of a stylized tree in the lower register.<sup>142</sup>

The design of the second register is a traditional scene in the art of the Near and Middle East, consisting of an antithetical group of two animals, appearing in profile, climbing symmetrically on both sides of a decorative, possibly sacred, tree of life. Although this antithetical group of two animals on both sides of a central decorative tree is found as a motif over a long period, the design of mountain goats in particular is more commonly found in the second and particularly in the early first millennium B.C. From this period a number of comparable examples can be pointed out.

This scene composition is present in Middle Assyrian seals of the middle of the second millennium B.C.<sup>143</sup> A plaque from Sinjerli, attributed to the second millennium B.C., with a similar composition but differing details of workmanship, contains a design of two mountain goats climbing both sides of a decorative tree.<sup>144</sup> Bronze vessels of the tenth century B.C. from western Iran contain additional examples of antithetical mountain goats.<sup>145</sup> Two mountain goats climbing both sides of a tree with rather stylized elaborate branches suggesting a slightly later development appear on a gazelle-head rhyton from northwest Iran, dated to the eighth to seventh centuries B.C.<sup>146</sup> A similar scene appears on an ivory plaque from the Fort of Shalmaneser III at Nimrud, dating to the ninth century B.C.<sup>147</sup> The design also appears on a fragment of an Egyptian blue vessel from Hasanlu, dated by both Crawford<sup>148</sup> and Porada<sup>149</sup> to the ninth century B.C. A relief from Sinjerli, also dated to the ninth century B.C., contains a design of two mountain goats climbing both sides of a tree.<sup>150</sup>

Other examples of antithetical groups of two mountain goats climbing both sides of a decorative tree were found at Nimrud: on the border of the royal garment worn by Ashurnasirpal in the Assyrian

reliefs<sup>151</sup> and on a fragment of pyxis from the Southeastern Palace of Ashurnasirpal, both dated to the ninth century B.C.<sup>152</sup> Other similar examples occur on a pectoral found at Ziwiye,<sup>153</sup> on a cylinder seal dated by Van Buren to the eighth to seventh centuries B.C.,<sup>154</sup> and on an iron ax with a wooden scabbard covered with gold from Kelermes, Kuban, assigned by Rostovtzeff to Scythian art of the sixth century B.C.<sup>155</sup>

The wild boar found in the third register of the Marlik beaker is not a common motif of ancient Near Eastern art, and Karasek suggests that it may be considered to be Iranian.<sup>156</sup> It appears in early Iranian<sup>157</sup> and Proto-Elamite<sup>158</sup> art, and a similar design of a wild boar can be seen on an engraved silver vessel found in a narrow grave at Maikop, in the Kuban area of southern Russia.<sup>159</sup> A boar with a forked tail curved down along its body appears on an orthostat relief from Alaca Hüyük that has been dated to the second millennium B.C.<sup>160</sup>

In the top register vultures are the main motif, and they are shown both flying and standing. A similar bird can be seen on an Assyrian relief in the Palace of Sennacherib (705–681 B.C.) at Nineveh, where it is shown on an Elamite body. Another vulture,<sup>161</sup> on the dead body of an Elamite officer slain by an Assyrian, appears in the Palace of Ashurbanipal.<sup>162</sup> A vulture with open wings appears in a scene showing Assyrian cavalry pursuing the Urartians in the Southwest Palace of Tiglathpileser III (745–727 B.C.) at Nimrud.<sup>163</sup> A relief on the outer wall of Hilani, at Tell Halaf, contains a large bird, identified by Vieyra as an ostrich but similar to the vultures on the Marlik vase.<sup>164</sup> Vieyra suggests that this element is a borrowing from Assyrian art, and he has dated the relief to the ninth to eighth centuries B.C. Vultures appearing on a Neo-Elamite relief from Susa, devouring the entrails of a corpse,<sup>165</sup> have been dated by Amiet around the eighth to seventh centuries B.C. The position of the vultures, the patterning of their bodies, and their folded wings are quite similar to the representation on the Marlik beaker.

The vulture motif appears in another area of ancient Iran. On a bronze quiver found in Luristan, dated to the eighth to seventh centuries B.C., are seated vultures, unlike in technique to those on the Marlik beaker.<sup>166</sup> Another vulture appears on a bronze belt said to have been found in Kiklavand, Luristan, and assigned by Nagel to the Luristan culture.<sup>167</sup>

The guilloche band bordering the rim and base of this Marlik vessel appears on many other decorative vessels from Marlik, and it has been discussed in connection with Gold Bowl 8.

#### 15 Gold Bowl

762 M Ills. 2, 9, 11, 12; Fig. 4; Color Plate XIX A-B

Badly crushed and broken, found in Tomb 52 (Trench XXIII G). Although it could have been

crushed by earth pressure, the way in which it is damaged, with some pieces missing, suggests the possibility that a deliberate effort was made to break it before it was placed in the tomb, as part of some sacrificial ceremony. Its original dimensions cannot be determined, although it seems to have belonged to the group of larger gold vessels. The walls of this bowl are of very thin gold with a design in repoussé with fine incised decoration that encircles the body. On the part still remaining the design is repeated twice. Two imaginary combined human and animal figures face each other, holding hands, their bodies in profile and their heads in front view, with a plant pot between them. One of these imaginary figures is male, the other female. Although the design is repeated, slight differences occur in the two representations. The male figure has a human body covered in feathers over the torso, two pairs of wings, and human hands and feet. He is heavily bearded and wears a highly decorative cap or headdress. The female figure, who also wears a decorative headdress, has the body and legs of a lion, a torso covered with feathers, and a single pair of wings. Her body is remarkably like the body of the phoenix on Gold Bowl 12, except that the phoenix has the head of a bird, not of a human. The male figure is holding the female's left hand with his right hand, while his left hand is on the back of her head. This whole scene possibly illustrates a legendary tale of the relations between a god and goddess.

The male figure has a full face with connected eyebrows, a sharp nose, and rather clear lines representing the eyes, nose, eyebrows, and mouth. His thick curly beard and mustache are filled with parallel curvy bands formed of numerous short straight lines. Thick sideburns extend down to a heavy curl at each side of his face. The entire body of this figure is covered by open-ended ovals outlined by dotted lines, representing wool, feathers, or fish scales, except for the forearm, shin, and a small area over the stomach, all covered by dotted lines. The elbow and back of the shin are outlined. The figure has two pairs of wings, the upper pair open and the lower pair folded back to the sides of the body. Each wing is divided into several rows of feathers, small feathers decorated by parallel chevrons and long wing feathers with pointed ends filled by parallel chevrons together forming a fine herringbone pattern.

The female figure has the body of a lion and the head of a human. She has an elaborate decorative headdress with a rather thick forehead band decorated by curving lines on each side of a straight middle line. Her hair parted in a straight line, is formed of parallel curving bands of numerous parallel short straight lines. A hanging lock on each side, covered with parallel vertical lines, ends in a thick curl. The face is flat, with the eyes, connected eyebrows, nose, and mouth clearly outlined. The upper part of her body, from the neck down, is covered by overlapping

open ovals similar to those on the male figure. The lower part of the body and forepaws are covered by parallel wavy dotted lines. The upper torso is birdlike, gradually changing into an animal body with a long curved tail and front paws outlined with double lines. A single pair of wings extends back from her shoulders, similar to the wings of the male figure, with several rows of short thick feathers and long pointed wing feathers, decorated with herringbone patterns.

The flower or plant pot between the figures, although rather small compared to other representations of sacred trees, seems to serve as a central element in the scene. The pot is globular, decorated by very fine herringbone bands. The root of the plant is a circular bud with fine crosshatching. The vertical stem has two horizontal branches and bunches of leaves with a branched central vein. An intricate double guilloche band encircles the vessel at the rim, while the ground below the design is a plant or flower field formed of parallel spotted cones with many short straight lines.

The rosette on the bottom of this vessel is very similar to the rosette on the base of Gold Bowls 8 and 12. It contains an inner rosette of sixteen petals surrounded by sixteen more double-lined petals, the whole surrounded by a circle of large leaves with dagger spines and branching veins springing from thick crescents with inward-turning ends.

#### COMMENTS

The male figure wears a conical cap with a rather thick band at the rim, decorated with semicircular lines possibly representing decorative knobs and buttons. Early examples of such decorative caps can be seen on plaques, dated by Van Buren to around 2500 to 2000 B.C., although their origins are not certain.<sup>168</sup> A similar headband with bronze decorative buttons appears on two statue heads found at Haft Tepe in Khuzistan, dating to about 1375 B.C.,<sup>169</sup> and a headdress with a comparable horned cap occurs on a stone head from Syria, dated by Moortgat to around the middle of the second millennium B.C.<sup>170</sup> A similar type of headdress appears on a helmet representing a divine figure holding a vase from which streams of living water issue, dated by Wilkinson to the late second or early first millennium B.C.<sup>171</sup> This type of headdress with parallel thick ropes or horns became more common during the first half of the first millennium B.C., and many later examples are found in Assyrian palace reliefs. Among these, a horned cap on the head of a winged goddess holding a necklace before a sacred tree occurs on an Assyrian relief from Nimrud, attributed to the Palace of Ashurnasirpal (884–859 B.C.).<sup>172</sup> Similar horned caps can be seen on stone reliefs from the Palace of Esarhaddon (681–669 B.C.) at Nimrud,<sup>173</sup> of Tiglathpileser III (827–745 B.C.) also at Nimrud,<sup>174</sup> of Sargon II

(722–705 B.C.) at Khorsabad (Dur Sharrukin),<sup>175</sup> and of Ashurbanipal (668–626 B.C.) at Kuyunjik (Nineveh).<sup>176</sup> A rather late example can be seen on a sculptured head, supposedly from Ecbatana, attributed by Culican to the Achaemenid period.<sup>177</sup> A winged human-headed bull with a horned cap also appears on the Xerxes Gate at Persepolis.<sup>178</sup>

An imaginary creature with a human head and an animal body, wearing a kilt or apron, appears on a gold appliqué from Ziwiye, dated to around the eighth to seventh centuries B.C.<sup>179</sup> Another similar imaginary figure with an animal body and human head occurs on the stand of a vessel dated to the beginning of the seventh century B.C.<sup>180</sup> Imaginary feline-bodied, human-headed creatures can be seen on Pazyryk objects.<sup>181</sup> Azarpay suggests that a close prototype of this monster is the Assyrian one because there is nothing similar in the art of Persia. With the

discovery of this motif at Marlik we may suggest it as another possible source for the Pazyryk type of monster, but the Ziwiye pectoral may also have had the Marlik monster as a prototype.<sup>182</sup> A later example of a winged animal with a long tail and human head appears on an engraved silver gilt mirror from Kelermes, Kuban, dated by Rostovtzeff to the sixth century B.C.,<sup>183</sup> where it probably is another indication of the Marlik influence on Scythian art. A winged sphinx also appears on a carved tube from the Southeast Palace of Ashurnasirpal (883–859 B.C.) at Nimrud.<sup>184</sup>

Plant pots, such as the one between the two imaginary figures, have been discussed under Gold Beaker 12. The rim of this vessel, as on many of the Marlik vessels, is encircled by a guilloche band. A complete discussion of this element may be found on pp. 28–29.

### *Silver Decorative Vessels (16–21)*

Only a few silver vessels were found at Marlik. Silver is subject to deterioration through time, but the Marlik silver vessels, or at least the few that remain, are made of a rather hard and strong alloy and are consequently fairly well preserved, retaining their original shape quite well.

The first group of silver vessels contains fairly plain vessels, some with a special shape. Two are pots with attached long spouts (16 and 17). Another simple silver vessel (18), is a small cup with a punched decoration.

A second group of silver vessels has a fluent linear decoration covering the body with geometric bands encircling the top and bottom of each vessel and a geometric rosette on the base. Examples are 19 and 20.

The third and most intricate category contains only a single example, a silver vessel with impressed designs in gold (21). This beautiful silver pot with an attached gold spout, very similar in shape to the simple long-spouted bronze, silver, and gold pots, contains elaborate designs in gold on the surface of the vessel. Coil bands surround the rim and bottom, and a geometric rosette decorates the base.

#### PLAIN SILVER VESSELS (16–18)

##### 16 Silver Spouted Pot

162 M Pl. 23; Color Plate XIX C

About 6.8 cm high and 5.4 cm in diameter at the mouth, with a spout approximately 8 cm long, found in Tomb 45 (Trench XXII H). It has an inward-turned rim, a sharply carinated body, and a flat ring

base. The long open spout, which swells at its base where it is decorated by parallel grooves, is riveted to the body of the vessel. Pots of similar shape in gold, bronze, and pottery were also found at Marlik.

##### 17 Silver Spouted Pot

163 M Pl. 23; Color Plate XIX C

About 7.4 cm high, 8.4 cm in diameter at the mouth, and with a spout about 6.5 cm long, found in Tomb 45 (Trench XXII H). The long open spout, swelling at the base, is riveted to the body of the pot.

##### 18 Silver Cup

14 M Pl. 23

About 4.5 cm high, 6.0 cm in diameter at the rim, and 3.0 cm in diameter at the base, found in Tomb 24 (Trench XV E). Its walls are thicker than in many of the other metal vessels, and the cup is well preserved. It has a thickened rim, a rounded body, and a small flat base. The body is decorated with somewhat irregular rows of punched circles of varying size. Around the rim is a band of small circles connected with straight lines to form a zigzag band edged by simple lines above and below.

#### SILVER VESSELS WITH FLUENT LINEAR DECORATION (19–20)

##### 19 Silver Beaker

202 M Ills. 4, 8, 12; Fig. 4; Pl. 23; Color Plates XIX C and XX A-B

About 14 cm high and 7 cm in diameter at the base, found in Tomb 45 (Trench XXII H). Tall, with

slightly concave sides, it has a thickened rim and flat base. S. M. Alexander suggests that the silver of this vessel probably contains some admixture of copper, which gives a yellowish cast to the vessel.<sup>185</sup> It is in a good state of preservation, only slightly flattened at the rim. The design is executed with great strength and vitality in a simple linear style. On one side a warrior is subjugating two leopards with his outstretched hands. The warrior's body appears in front view, with his head in profile, turned toward his left shoulder. The body of the warrior is powerfully delineated, and his face is strong, with a prominent hooked nose. He has a broad chest, narrow waist, and strong muscular legs, wide-stretched with feet pointing outward in opposing directions. His clothing is of particular interest. He wears a conical helmet, similar to bronze helmets found at Marlik, decorated by parallel wavy dotted lines. On the upper part of his body he wears a short-sleeved shirt of chain armor, filled with parallel herringbone bands. He has a wide belt around his narrow waist, possibly a bronze belt like those found in the excavation. His short skirt, stopping at the thighs, is covered with vertical lines indicating folds. The beasts subjugated by the warrior can be identified by the triple dotted spots that cover their bodies as leopards, which still are found in Gilan. The two leopards are symmetrically positioned on each side of the warrior, facing him with their forepaws on the back of his shoulder. The beasts are very powerful and muscular, stretched full length, snarling and angry. Their tails point upward in a graceful curve.

On the opposite side of the beaker is a bare tree with a mountain goat perched on top of it. The tree has a thick wavy trunk with many branches growing irregularly along it, each crowned with a cluster of four small circles representing flowers, fruits, or nuts. Simple lines outline the eyes, nose, and mouth of the goat. The mountain goat's horns, filled with short parallel lines, are large, curving forward and backward in a double crescent. At its throat and chest is a band of short parallel diagonal lines. Its fore- and hind legs bend slightly toward each other to provide balance atop the tree. Vertical bands of parallel short diagonal lines cover its body.

Considered together these two scenes suggest that the warrior is subjugating the leopards to protect the mountain goat, which has taken refuge atop the tree. The design is bordered above and below by a triple coil band. The base of the vessel is plain.

#### COMMENTS

The warrior's outfit can be compared in a general way to that of figures on two reliefs found in Babylon and Sinjerli, dated by Moortgat to the beginning of the first millennium B.C.<sup>186</sup> On a relief of a door found in Bogazköy a similar figure of a warrior with a short skirt and tight wide belt can be seen, belonging

to the thirteenth century B.C.<sup>187</sup> It has been suggested that this warrior, who wears a tight wide belt and short skirt, found at Babylon, Sinjerli, and Bogazköy, may represent Tesulo, a god of the Mitannians and Hittites.<sup>188</sup>

Two plaques, one from Anatolia and the other from Sinjerli, show a similar figure with a short, unfolded skirt, dated by Bossert to the early first millennium B.C.<sup>189</sup> A stone relief of the king's gate at Bogazköy contains a figure of a warrior with a slightly different helmet and feet turning in the same direction rather than opposing, dated by Vieyra to the latter part of the Hittite New Kingdom, around the late second millennium B.C.<sup>190</sup> Another similar figure, with feet turning in the same direction, occurs on a stone relief at Carchemish, dated by Vieyra to the reign of Katuwas, around 900 B.C.<sup>191</sup> Other figures with short skirt, tight wide belt, and feet pointed in the same direction occur at Babylon<sup>192</sup> and Tell Asmar<sup>193</sup> on a Hittite stele dated by Vieyra to the ninth century B.C.

Poroda and Dyson suggest a link between the warrior on the Marlik vessel and the "hero" or "Weathergod" shown on the Hasanlu gold bowl in battle with the mountain monster, particularly because of the precise decoration on his patterned garment and his stylized leg muscles. Especially to be noted is the resemblance of the punched herringbone pattern on the kilt of the Hasanlu hero to the design on the shirt of the Marlik figure.<sup>194</sup>

The triple-coil band bordering this vessel has been discussed under Gold Cup 10.

#### 20 Silver Cup

546 M Ills. 4, 11, 12; Fig. 5; Pl. 23; Color Plate XX C  
Cup, 8 cm high with a rim diameter of about 7.8 cm, found in Tomb 39 (Trench XVIII L). Essentially intact, its walls are slightly concave, with the largest diameter at the rim and base. The design is executed in a simple linear technique with very slight relief in some parts. A leaping stag is repeated three times around the body of the vessel. The head is blank except for a double circle indicating the eye. The ears are leaf shaped and pointed backward. The antlers are formed of two thick main branches that broaden at the ends, with many smaller branches sprouting at intervals. The body of the stag is covered by overlapping semiovals except for the areas of the shoulder and fore- and hind legs, which are blank. This simply outlined stag is very fluent and graceful. The bowl is bordered near the rim and base by a double row of connected semicircles, possibly representing a field covered by plants, mountainous rock and stone, or, in accordance with ancient Near Eastern convention, the mountain itself. The base of the vessel contains a geometric rosette of nineteen petals bordered by double lines around three concentric circles, altogether encircled by a single line.

## COMMENTS

A silver cup found in the Sefid Rud area, possibly in a clandestine excavation, with a stag design and similar border decoration has been dated to the late second or early first millennium B.C.<sup>195</sup> A galloping stag also appears on the edge of a gazelle head rhyton, found in northwest Iran and dated by Ghirshman to the eighth to seventh centuries B.C.<sup>196</sup>, and a beaker with a similar running stag whose place of origin is not certain has been dated by Goldman to the early first millennium B.C.<sup>197</sup>

## SILVER VESSEL WITH IMPRESSED GOLD DESIGNS (21)

### 21 Silver Pot with Gold Spout

277 M Fills. 2, 3, 4, 8, 9, 11, 12; Fig. 5; Pl. 24; Color Plate XX D

Height 7.5 cm, diameter 5 cm at the mouth, and attached gold spout about 8 cm long, found in Tomb 50 (Trench XXI L). The silver is badly corroded, but the pot is intact except for the slightly broken base. The vessel has a "teapot" shape, with a rim rolled for reinforcement, a carinated body, and a flat base. The open gold spout, which curves and swells at its grooved base, is riveted to the body. Designs in very thin sheet gold with incised details are impressed onto the shoulder and body of the vessel.

Around the shoulder a single scene is repeated four times, interrupted by the spout and opposite the spout by an elongated almond-shaped projecting knob. The design consists of a lion carrying his prey in his mouth. The lion's mane is indicated by overlapping triangles, and the hair on his stomach by rows of short straight parallel lines. The rest of the body is plain, with the muscles of the fore- and hind legs outlined and a swastika incised on his hind leg. The animal carried in the lion's mouth, possibly a mountain goat, has a forward-curving horn, with the hair of its body indicated by rows of short straight lines.

The lower register, on the body of the pot, is more narrative and includes several motifs. An imaginary figure has a bicephalic lion's head, the mouths of which are furiously open, outspread wings, a human upper torso and arms, a lower torso covered by either fish scales or feathers, and avian legs and feet. The lion's mane is covered by crosshatching and the feathers of the outspread wings by herringbone bands; the twisted torso has both a backbone, indicated by a curved double line intersected by straight lines, and breasts, indicated by small circles. Semicircles, either scales or feathers, cover the lower torso and upper legs, which end in prominent spurs and claws. A short bushy tail filled with short parallel zigzag lines curves upward.

The different parts of this mythical creature possibly represent the combined powers of the earth, with the lion heads for strength, the human torso for intelligence, the bird wings and feet for flight, the fish scales for swimming, and the horse tail for speed.

This creature, repeated twice on each side of the vessel, holds in its open hands, symmetrically on each side of its body, the hand of a smaller imaginary figure, possibly a sphinx, which combines a human female head, wings, and an animal, possibly a lion's, body with a long curving tail. The long hair of the female head is shown by a parallel curving lines, and the feathers of its wings by rows of herringbone patterns. A band of crosshatching surrounds the body at the chest. One of the sphinxes wears a projecting cap, possibly a crown.

Between the two pairs of mythical creatures is a man carrying an animal on his shoulders. He has a round cap on his head and wears a short-sleeved shirt held tight around his waist by a thick belt. A short overlapping skirt with decorative zigzag bands at the edges stops short of his knees, indicated by concentric semicircles. The animal he is carrying on his shoulders has a long curving tail and a cross on its hind leg. Below the spout is the final motif of this register, two long-necked standing birds facing each other.

A serpentine coil band encircles the rim. On the bottom is a geometric rosette formed of six oval petals outlined with a double line and bordered by a row of double leaves. The elongated curved triangular area between the petals is filled with small circles.

## COMMENTS

The spout of the pot is made of gold, but the pot itself is made of silver. Other examples of similar long-spouted pots made of two different materials have been found at Luristan and Sialk VI as well as Khurvin, where some pottery vessels with attached bronze spouts are dated by Ghirshman to the ninth to eighth centuries B.C.<sup>198</sup>

Silver vessels inlaid with designs in gold, in a similar technique, were found in the Hasanlu excavation<sup>199</sup> and also at Ziwiye.<sup>200</sup> The Hasanlu vase of silver with impressed gold designs may be considered possibly contemporary in manufacture.

The swastika or broken cross that appears on the hind leg of the lion in the upper register is found on many objects from various sites in the Near East and has a long history in various forms. It has been used in such different regions of Western Asia as Egypt, the Eastern Mediterranean shore, Mesopotamia, and Iran, occurring as early as the third millennium B.C.<sup>201</sup> As a shoulder or leg ornament it appears on the Kalardasht<sup>202</sup> and Hasanlu<sup>203</sup> gold bowls, both attributed to the very late second and early first millennium B.C. Swastikas can be seen on the fore- and hind legs of a bronze animal figurine, possibly the



lennium B.C. Swastikas can be seen on the fore- and hind legs of a bronze animal figurine, possibly the side of a horse bit, found in Luristan.<sup>204</sup>

The design of the swastika itself, in free use and not only as a shoulder or leg decoration, has a much older background in prehistoric times. It appears in some beautiful Samarran pottery designs as early as the fifth millennium B.C.<sup>205</sup> Since the designs on Samarran pottery tend to appear as if they are in motion, the swastika may have developed out of a simple fixed cross by the bending of the end of each radiant, guiding the eye around the cross. The swastika continued in use as late as the Sassanian period (2nd to 6th cent. A.D.), when it appeared on silver plates.

The main design on the lower register, an imaginary figure holding two other imaginary figures symmetrically on each side of his body, has a long background in the art of the ancient Near East, with characteristic elements varying from period to period. This scene of a master or mistress of animals, composed of a human or combined imaginary figure standing and subjugating two beasts or holding two sphinxes, usually illustrates mythical stories connected with legendary heroes. The motif is found as early as the protoliterate period, and it became very common in the Mitannian and Middle Assyrian glyptic.<sup>206</sup> Later the composition of the master of animals, particularly in a kneeling position, spread as far as Greece, an indication of the Oriental influence in Greek art.

An upright human-headed sphinx, wearing a spiral lock of hair and holding two reversed lions, appears in a seal from Saussatar, king of Mitanni around 1450 B.C.<sup>207</sup> The scene composition on this seal is similar to, although the details are different from, the design on the Marlik pot. A cylinder seal, assigned to the time of Eriba-Adad, king of Assyria around

1412–1405 B.C., has a scene of a winged double-headed lion symmetrically holding two griffins upside down.<sup>208</sup> A similar scene occurs on a seal identified by Moortgat as Assyrian, of the time of Tukulti Ninurta I (ca. 1260–1115 B.C.).<sup>209</sup> A gold cup found in western Iran and assigned by Porada to the thirteenth to tenth centuries B.C. has a somewhat similar scene of a monster symmetrically holding two animals.<sup>210</sup> This type of design also occurs in later times, during the first millennium B.C. A winged lion with a single head symmetrically holding two griffins appears on a tablet fragment found in Nippur, dated around 650 B.C.<sup>211</sup> An Archaemenid cylinder seal has a man holding two lions upside down while standing on the back of two opposing sphinxes.<sup>212</sup> Similar scenes occur in eighth-century B.C. North Syrian, Greek, and Phrygian art.<sup>213</sup>

A rampant winged lion symmetrically holding two beasts in heraldic posture can be seen on a gold beaker in the Cincinnati Art Museum, which, if authentic, was apparently found in a clandestine excavation in the region of Gilan or Mazanderan. It has been dated by Goldman to the early first millennium B.C.<sup>214</sup> A double-headed lion-bodied monster, with human arms and the wings and talons of an eagle, lifting mountain goats by their tails, appears on an electrum beaker found in northwestern Iran, dated to the ninth to eighth centuries B.C.<sup>215</sup> A silver gilt mirror from Kelermes, Kuban, assigned by Ros-tovtzeff to the Scythians and dated to the sixth century B.C., has a scene of a winged human holding two lions.<sup>216</sup>

The figure of a man carrying an animal on his shoulders is reminiscent of the warrior on Marlik Silver Beaker 19. A similar scene of a man carrying an animal on his shoulder appears on a Sinjerli relief dated by Bossert to the ninth century B.C.<sup>217</sup>

The coil band encircling the rim of this vessel and

### *Bronze Vessels (22–61)*

many other Marlik vessels has been discussed under Gold Cup 10.

The largest number of metal vessels found at Marlik are made of bronze, both plain and decorated. Although a few of these bronze vessels have a fairly heavy construction, many have thin walls and are, consequently, badly corroded, deformed, or crushed. The bronze vessels with elaborate repoussé decoration have especially thin and fragile walls, and most of them are broken, particularly in the middle of the body, which contains the main part of the design and is often thinner than the rest of the vessel. In some cases the walls are so completely corroded that nothing remains to hold the vessel

together, and only thicker fragments from the area around the rim and base remain.

These bronze vessels from Marlik can be arranged into several groups, the simplest being plain vessels in various shapes. These plain bronze vessels include large cooking pots (22–25) with pot handle (26); bowls (27–29); tumblers (30–31); plates (31–33); cups (34–36); jars (37–40); one situla (46); and spouted pots (41–45).

Some have simple and utilitarian shapes that were produced over a long span of time so that it is difficult to assign them typologically to a definite period. Others have more distinctive shapes, such as the spouted pot or "teapot," which is one of the most



A second group of bronze vessels, mostly cups and vases, have some simple linear decoration which occasionally has been slightly pushed out in relief. Simple geometric bands usually encircle the top and bottom of these vessels with the base containing a simple geometric rosette. Included in this group are 47–53.

The bronze vessels in the third group contain more elaborate designs that may cover the whole circumference of the body. Some of these designs have a narrative aspect and include motifs related to traditional myths and beliefs. In many the design is in very low relief, but on one vessel (55) the relief is pronounced with the heads of the animals adorning it pushed outward in the round from the body of the vessel, relating it closely to the elaborate gold vessels in the same technique. On most of these bronze vessels an intricate geometric band encircles the rim and bottom, and the base contains a finely detailed rosette. Included in this group are 54–61.

## PLAIN BRONZE VESSELS (22–46)

### LARGE COOKING POTS (22–26)

At Marlik food was often included among the contents of the graves. Most often it was contained in pottery vessels, but occasionally metal vessels, including large bronze cooking pots, were used. Some of these large cooking pots are crushed and deformed to a greater extent than seems likely to have been produced by simple earth pressure. It is premature to suggest that they were deliberately broken before being placed in the tombs, although this same condition of excessive damage can be seen in some other objects from the Marlik tombs.

#### 22 Bronze Cooking Pot

172 M not illustrated

About 30 cm in diameter at the mouth and 21.0 cm high, found in Tomb 18 (Trench XIV D). Considering its large size, the walls are rather thin. The pot has a globular body, rounded at the base and tapering slightly inward toward the rim, which is reinforced by thicker metal. Two opposing loop handles with cloverleaf bases are riveted near the rim.

#### 23 Bronze Cooking Pot

176 M not illustrated

About 26.5 cm in diameter at the mouth, found in Tomb 44 (Trench XXI M). It is similar to Cooking Pot 22, with a comparable type of loop handle. This pot is incomplete, however, with most of the lower part missing.

#### 24 Bronze Cooking Pot

1061 M Pl. 24

About 40 cm in diameter at the rim and 40 cm high, found in Tomb 47 (Trench XXII E). Even though it has thick walls, one side of the pot is badly damaged. It has a rounded base and straight sides, turned over at the rim to strengthen it and to hold in place a thick, wide reinforcing belt of bronze with opposing elongated loop handles; these handles were not separately made but are part of the band itself. The edge of the rim is turned over the reinforcing belt to produce a very strong support for handling.

#### COMMENTS

Several similar examples of large bronze cooking pots with belt-reinforcement bands, but with the handles attached by riveting, were found at Sialk Cemetery B (Sialk VI), assigned by Ghirshman to the beginning of the Iron Age.<sup>218</sup> A large cooking pot with a similar reinforcement band and handles appears on an Assyrian relief of Esarhaddon (681–669 B.C.) in the Southwest Palace.<sup>219</sup> Another can be seen on a stone relief of Sennacherib (705–681 B.C.) in the Southwest Palace, Court XIX, in Kuyunjik.<sup>220</sup>

#### 25 Bronze Cooking Pots

1062 M and 1063 M Pl. 24

Two large pots, almost identical in shape and in very bad condition, found in Tomb 52 (Trench XXIII G). They are very similar to 24, with reinforcement belts and loop handles, but they are too badly crushed for their exact dimensions to be determined. The approximate dimensions include a height of 40 cm and a rim diameter of 40 cm.

#### 26 Bronze Pot Handle

508 M Pl. 24

About 15 cm across, found in Tomb 23 (Trench XV D). It is made of rather thick bronze wire enlarged at the ends, which are turned backward to enclose thin loop wires that, in turn, hold the attached loop handle.

### BRONZE BOWLS (27–29)

#### 27 Bronze Bowl

412 M Pl. 25

Simple rounded bowl, about 18 cm in diameter at the mouth and 6.0 cm high, found in Tomb 36 (Trench XVIII C). Its walls are of rather thin bronze, reinforced at the rim.

#### COMMENTS

This is a common shape, made for several millennia, with a long history of use before the Marlik period. A similar type of plain bronze bowl with a small dentation for pouring at the rim is in the Ashmolean

Museum.<sup>221</sup> Because of its common shape and lack of decoration, neither Przeworski nor Moorey has given it a specific ascription. During the excavation of Tepe Giyan a plain bronze bowl with a round base but a slightly different, inward-turning rim was found at Level I.<sup>222</sup> Another round bronze bowl of this type, said to have been found in Luristan, bears the inscription "Ilul, the mighty king of city of Akkad."<sup>223</sup>

### 28 Bronze Bowl

658 M Pl. 25

About 11.5 cm in diameter at the mouth and 5.0 cm high, found in Tomb 30 (Trench XVI L). Although the walls are rather thick, this smallish vessel is in a poor state of preservation. It has a flat base with very slightly curving, outward-slanting sides.

#### COMMENTS

A similar bronze bowl with a flat base, found at Khinamin,<sup>224</sup> is assigned by Calmeyer to Group 72 of his Bronze Classification.<sup>225</sup> Another bowl of this type with a flat base, outward-slanting sides, and outward-turned rim, is in the Serre Collection in Berlin.<sup>226</sup> A third example, also with slightly outward-turning rim, was found in Giyan Level I, Tomb No. 34.<sup>227</sup> The date given to Level I of Giyan varies slightly according to different scholars, but it falls during the second half of the second millennium B.C.

### 29 Bronze Bowl

631 M Fig. 5

Medium-size, about 12.0 cm in diameter at the mouth and 4.0 cm high, found in Tomb 4 (Trench VIII A<sup>+</sup>). It is incomplete and has rounded sides and a ring base.

### BRONZE TUMBLERS (30–31)

Two bronze tumblers with wide, very slightly rounded bases and concave sides, smaller in the middle than at the top and bottom, were found at Marlik. One fits in an accompanying plate.

### 30 Bronze Tumbler

175 M Pl. 25

About 7.3 cm in diameter at the mouth and 7.0 cm high, found in Tomb 50 (Trench XXI L). The diameter of the slightly rounded base is larger than the diameter at the mouth. The sides of the tumbler are concave, with an outward-turned rim, overlapped inward for reinforcement.

#### COMMENTS

A bronze vessel of similar shape, with an extra decoration of double molding bands around the middle and near the base, is in the Adam Collection, dated by Moorey to the late second or early first millennium B.C.<sup>228</sup>

### 31 Bronze Tumbler and Plate

728 M, 661 M Pl. 25

Both found in Tomb 24 (Trench XV E). The tumbler is about 7.8 cm in diameter at the mouth and 9.3 cm high. It has a very slightly rounded base and very concave sides that flare outward to a wide rim. The mouth is open with an outward-turned rim reinforced by overlapped turned metal. This tumbler fits well into an accompanying plate, about 19.0 cm in diameter, with a wide rim and central depression.

#### COMMENTS

A similar cup in the Ashmolean Museum is dated by Moorey to the early first millennium B.C.<sup>229</sup> Other examples of this type of vessel were found at Tepe Giyan, Level I, dated by Contenau and Ghirshman to about 1400–1100 B.C.<sup>230</sup>

### BRONZE PLATES (32–33)

### 32 Bronze Plate

186 M Pl. 26

Small enough to be the lid of another vessel, 7.0 cm in diameter and 0.8 cm in height at the edge, found in Tomb 42 (Trench XX F). It is, in fact, one of the items found in the first test trench dug at the beginning of our excavation. The plate has a flat base and a straight low vertical edge or side. The metal is in a poor state of preservation and is badly corroded.

### 33 Bronze Plate

723 M Fig. 5

Rather large round plate, about 42 cm in diameter and 5.2 cm in height at the edge, found in Tomb 4 (Trench VIII A<sup>+</sup>). It is made of rather thin sheet metal and it is partly broken. The plate has a very flat base and a straight vertical edge.

#### COMMENTS

A bronze plate with a flat base and a vertical edge in the Adam Collection carries an inscription that has been dated by Lambert and Moorey to the period between the late second and early first millennium B.C.<sup>231</sup>

### BRONZE CUPS (34–36)

Three small bronze cups were found at Marlik. These are well-proportioned vessels with small bases from which the rounded bodies swell out, to taper or turn in to a narrower neck. Separate handles are riveted on.

### 34 Bronze Cup

151 M Pl. 26

About 8.0 cm in diameter at the mouth and 5.0 cm

high, found in Tomb 27 (Trench XVII D). It is fairly well preserved and has a rounded body that tapers to a small flat base. The globular body curves inward and then turns straight upward to form a distinct angle at the short neck, which flares a little outward. The rim is thickened slightly for reinforcement. A separate rather large handle is riveted to the neck and lower body.

#### COMMENTS

A similar bronze cup with outward-turned rim and riveted handle was found at Sialk Cemetery B, dated by Ghirshman to the early first millennium B.C.<sup>232</sup>

#### 35 Bronze Cup

229 M Fig. 5

About 9.2 cm in diameter at the mouth and 6.5 cm high, found in Tomb 25 (Trench XVI F). Like 34, it is fairly well preserved and has a rounded body that tapers to a small flat base. A short neck spreads slightly outward, and a large metal handle is riveted to the rim and lower body.

#### 36 Bronze Cup

1161 M Pl. 26

About 6.0 cm in diameter at the mouth, 2.5 cm in diameter at the base, and 8.5 cm high, found in Tomb 27 (Trench XVII D). Its walls are thin and the vessel is cracked, particularly around the base, part of which is missing. The rounded body tapers to a slightly outward-turning ring base. The vessel has a high shoulder from which it tapers inward to a large neck that turns sharply to an outward-flaring rim, now rather bent. A handle is riveted at the upper end to the neck below the rim, while the lower end is free. An impressed band encircles the body at the shoulder, emphasizing the very graceful outline of the cup.

#### COMMENTS

A bronze cup in the Adam Collection that is somewhat similar in shape but with animal figurines as handles is assigned by Moorey, on the basis of these decorative handles, to the Achaemenian period.<sup>233</sup> This is probably a later and more elaborate example of the same type of cup.

### BRONZE JARS (37–40)

#### 37 Bronze Jar

619 M Pl. 26

About 5.5 cm in diameter at the rim and 15.7 cm high, found in Tomb 6 (Trench X A<sup>+</sup>). It is made of thin bronze, which is much corroded and broken. The jar has a carinated pear-shaped body, which tapers to a flat base. At the shoulder it curves in to a narrow vertical long neck that gradually enlarges toward the mouth where it flares outward at the rim,

which is turned and reinforced by overlapped metal.

#### 38 Bronze Jar

1399 M Fig. 5

About 4.5 cm in diameter at the rim, 4.0 cm in diameter at the base, and 10.5 cm high, found in Tomb 5 (Trench VIII D). It has a very rounded globular body, which tapers in somewhat to a flat base. At the shoulder it curves in to a relatively broad high neck with an outward-turned, thickened rim, dented at one point to facilitate pouring. A molding band encircles the neck.

#### 39 Bronze Jar

44 M Fig. 5

Now incomplete, probably about 3.0 cm in diameter at the rim and about 15.5 cm high. It was found in Tomb 26 (Trench XVII B) and has a tapering teardrop body, possibly rounded at the bottom, which is missing, although it could also have been flat. A long tapering neck turns slightly outward to form the rim. Two molding bands encircle the neck. Because it is deformed on one side, it is not now symmetrical in outline at the shoulder. The shape of this jar is very similar to some pottery jars of Marlik.<sup>234</sup>

#### 40 Bronze Jar

1400 M Fig. 5

About 5.5 cm in diameter at the mouth, 3.7 cm in diameter at the base, and 7.5 cm high, found in Tomb 5 (Trench VIII D). The walls, which are rather thin, are broken and partly missing. The jar has a flat base and rounded globular body, which curves in a little to a small short neck, and then immediately spreads outward to a flared rim.

Similar vessels with outward-turned rims and flat bases in the Adam Collection are assigned by Moorey to the early first millennium B.C.<sup>235</sup>

### BRONZE SPOUTED POTS (41–46)

At Marlik spouted pots were found in pottery<sup>236</sup>, in silver (16–17), and in a combination of silver and gold (21), as well as in bronze. The bronze spouted pots are sometimes rather plain and angular, in other instances rounded, with varying degrees of decoration at the base of the long open spout. This spout usually swells at the base in a very decided curve that distinctly suggests the curving contours of a bird head, neck, and crop, particularly that of a crane, which is found along the White River (Sefid Rud) near Marlik.

Spouted pots of this type are one of the most characteristic vessels of the late second and early first millennium B.C. in northern and western Iran. Bronze pots with long spouts were found in Sialk Cemetery B,<sup>237</sup> Luristan,<sup>238</sup> Tepe Giyan,<sup>239</sup> Tepe

Guran,<sup>240</sup> Khurvin, and Hamadan. Examples of these bronze spouted pots can be seen in such museums and collections as the Hamburg Museum,<sup>241</sup> the Musée d'Art et d'Histoire Genève,<sup>242</sup> the Bröckel-schen Collection,<sup>243</sup> the Museum für Vor- und Früh-geschichte, in Berlin,<sup>244</sup> the Werner Collection,<sup>245</sup> the David Weill Collection,<sup>246</sup> the Ashmolean Museum,<sup>247</sup> the Audouin Collection,<sup>248</sup> the Städtl. Museum für Volkerkunde in Munich,<sup>249</sup> the Adam Collection,<sup>250</sup> the British Museum,<sup>251</sup> and in a private collection in Stuttgart<sup>252</sup>

#### 41 Bronze Pot with Spout

1401 M Fig. 6

About 7.2 cm in diameter at the mouth, 6.6 cm in diameter at the base, and 16.0 cm high, found in Tomb 27 (Trench XVII D). The walls are very thin, and the pot is badly corroded and incomplete. The vessel has a slightly outward-turning ring base and a rather angular carinated body with a high shoulder. A long open spout swelling at the base is riveted to the shoulder of the vessel.

#### 42 Bronze Pot with Spout

1402 Fig. 6

About 8.6 cm in diameter at the mouth, 9.0 cm in diameter at the base, and 15.0 cm high, found in Tomb 52 (Trench XXIII G). It has thin walls and is partly broken. The vessel has a flat base and a carinated body with a moderately high shoulder that turns inward in a distinct angle near the inward-slanting rim. A long open spout with only slight swelling at the base, decorated with parallel molding bands, is riveted to the body above the shoulder.

#### 43 Bronze Pot with Spout

154 M Fig. 6; Pl. 27

About 10.0 cm in diameter at the mouth and 13.0 cm in height, found in Tomb 27 (Trench XVII D). It is made of rather thin metal and is badly crushed and broken. The vessel has a ring base that slants slightly outward and a gently tapering slightly carinated body with a moderately high shoulder. There is a sharp angle at the short neck, which tapers slightly inward. The rim is turned over to reinforce the edge. This pot has a long, open, tapering, straight spout, which swells slightly at the base, where it is riveted to the shoulder of the pot.

#### 44 Bronze Pot with Spout

1403 M Fig. 6

About 10.6 cm in diameter at the mouth, 8.0 cm in diameter at the base, and 10.4 cm high, found in Tomb 45 (Trench XXII H). It has thin walls and is much corroded, with parts missing. The vessel has a slightly concave base and a rounded globular body with a short vertical neck. The long open spout curves slightly downward at the end. This spout swells very decidedly at the base, which is riveted to the body at its widest point.

#### 45 Bronze Pot with Spout

822 M Fig. 6; Pl. 27

About 13.5 cm high and 9.0 cm in diameter at the mouth, with a spout 19.0 cm long, found in Tomb 52 (Trench XXIII G). The body of this broken pot is round, the neck short and straight, and the base flat. Riveted to the body is a very long open spout, which swells and is decorated with knobs and parallel circular grooves at the place of attachment.

#### COMMENTS

Similar bronze pots with long spouts were found in Sialk Cemetery B,<sup>253</sup> and a similar vessel with a high stand was found in Khurvin.<sup>254</sup> Closely similar bronze vessels have also been found in Luristan.<sup>255</sup>

#### 46 Bronze Situla

992 M Pl. 28

About 16 cm high and 6.5 cm in diameter at the mouth, found in Tomb 47 (Trench XXII E). The bronze of the vessel is thickly corroded. It has a wide mouth, a beautifully proportioned concave neck, a small shoulder, and a long oval body that tapers inward at the bottom to end in a small knob. The situla must have had a support because it cannot stand alone.

The shape of this vessel is very similar to Mosaic Vase 62, which also ends in a knob at the base.<sup>256</sup> Bronze vessels in this shape from western Iran, belonging to the tenth century B.C., are discussed by Calmeyer<sup>257</sup> and Muscarella.<sup>258</sup> The Adam Collection of Persian antiquities also contains bronze vessels with a similar knob on the base.<sup>259</sup>

### BRONZE VESSELS WITH LINEAR DESIGNS (47–53)

#### 47 Bronze Vase Fragment

712 M Ill. 12; Pl. 28

Only one large piece of this bronze vase, originally about 13.0 cm high with its original diameter undetermined, now remains. It was found in Tomb 2 (Trench VI B<sup>+</sup>) and has a rather concave body with a small outward-turned rim and a projecting hollow ring base. Although the vessel is not complete, the entire repeating design can be determined, consisting of four rows of wild boars in slight relief, each row alternating in direction. The boar bends his head toward the ground, probably searching for food. It is well fed, with a plump face and strong, husky body. The head is long and conical, with the muzzle outlined by three concentric circles and the tusk a simple upward line. The ear is an upward-pointing oval with a line down the middle, and the eye a concentric almond shape. The head is separated from the neck by two parallel short diagonal lines. The body is covered by parallel herringbone

bands running lengthwise, the legs are undecorated, and the tail is short and thick, pointing upward with a bent tip. Simple coil or cablelike bands separate the rows of the design, and a triple coil band with a central point or small circle in each coil encircles the rim. The base is missing.

#### COMMENTS

The motif of a wild boar is discussed under Marlik Gold Beaker 14. In addition to its occurrence as a motif on decorative vessels, many bronze figurines of wild boars were found at Marlik. It is a local animal, still native to the forested highlands of Gilan.<sup>260</sup> Similar coil bands occur on various Marlik vessels as well as on objects excavated elsewhere in the Middle East, and the motif is discussed under Gold Cup 10.

#### 48 Bronze Cup

1185 M Ills. 4, 11, 12; Fig. 6

Fragments of a bronze cup, originally about 12 cm in diameter at the mouth, found in Tomb 39 (Trench XVIII L). Although part of the vessel is missing, the design on the body can be determined, consisting, apparently, of a row of standing antelopes, two of which appear on the remaining fragment, done in a very simple linear style. The bodies of the animals are simply outlined. One is quite plain; on the other the hair of the chest is shown by short straight and curved lines, and a double line, probably a rope, encircles the neck. The antlers of both animals are large and branching, with each branch subdivided. Part of a body, possibly of a bird or small animal, covered with short parallel curving lines, appears behind one of the antelopes. This design is bordered at the top and bottom by a band of straight rectangular crosshatching. On the base of the cup is a simple geometric rosette of sixteen petals outlined with a double line around three inner concentric circles.

#### 49 Bronze Vase

1213 M Ills. 4, 11, 12; Fig. 6

Several pieces of a bronze vessel, approximately 11.0 cm around the base, were found in Tomb 39 (Trench XVIII L). They were originally part of a tall straight-sided vase with a thickened rim and a projecting ring base. Although it is broken and parts of the upper portion of the vessel are completely missing, much of the design can be determined. The body of the vessel is divided into two registers. The lower register, which is more complete, contains a row of four recumbent antelopes, simply outlined. Their eyes are concentric double-pointed ovals, and their ears are pointed ovals with an inner line. Their antlers are large and spreading, with each broad main branch divided into several smaller sub-branches. The fore- and hind legs of the recumbent animal touch, with the hooves above each other. The top register contains another row of animals facing

in the opposite direction. All that remains are parts of their heads, heads either of rams or of mountain goats, with large horns filled with parallel lines forming crescents pointing in opposite directions. This row of animals apparently is also in a recumbent position because part of their legs appear above the horns of the lower register, although their intervening bodies are missing. The vessel is bordered near the rim and base by decorative guilloche bands, and the base contains a geometric rosette of six oval petals around a triple concentric circle. Between each two petals another pointed oval stretches to form a chain around the rosette, and a band of semicircles surrounds the entire design.

#### COMMENTS AND COMPARISONS

The motif of animals in a recumbent position with overlapping hooves is discussed under Marlik Gold Cup 10. A six-petaled rosette, similar to the one on this Marlik vase, can be seen on the base of an electrum goblet in the Louvre, assigned by Amiet, based on the hatching and other details, to the Marlik type of work.<sup>261</sup>

#### 50 Bronze Vessel Fragment

1213a M Ills. 4, 12; Fig. 7; Pl. 29

Single fragment, including part of the rim, of a bronze vessel, approximately 12 cm across, found in Tomb 39 (Trench XVIII L). On this fragment three incomplete ibex or deer appear, rendered in a simple linear style. The walking animals are simply outlined, their bodies plain, and their eyes simple ovals. Thick branching horns point in opposing directions. A single coil band surrounds the rim.

#### 51 Bronze Vessel

1392 M Ill. 11; Fig. 7

This broken bronze base, almost 7 cm across, was found in Tomb 5 (Trench VIII D). It contains a linear design of a geometric rosette with a six-pointed star, each point formed of an elongated oval divided by a central line. Stretching between the outer points of the star and encircling it are six more elongated ovals. A similar rosette occurs on the base of Marlik Gold Cup 10.

#### 52 Bronze Vessel

1393 M Ill. 11; Fig. 7

Broken base, found in Tomb 5 (Trench VIII D). At its center is a simple geometric rosette about 7 cm in diameter, with eight separated petals connected by a double inner circle. The area between the petals and between the two inner circles is filled with dots. Around the rosette is a zigzag band within a double line.

#### 53 Bronze Vessel Fragments

1397 M Ills. 11, 12; Fig. 7

A number of broken pieces of a rather large

bronze vessel with a linear design, found in Tomb 5 (Trench VIII D). Although the complete design cannot be reconstructed, parts of it include a decorative band of elongated arches around the base, a small, twelve-petaled rosette, thick parallel bands, a hand, and a design of parallel wavy lines.

## BRONZE VESSELS WITH ELABORATE DESIGNS (54–61)

### 54 Bronze Vase

98 M Ills. 2, 3, 6, 11, 12; Fig. 7

Fragments of what is apparently a large beaker, found in Tomb 42 (Trench XX F). Enough of the pieces remain to give some idea of the original design, which was precisely incised in two registers. The top register apparently contains a hunting scene. An archer and a charioteer can be seen. The archer, in front, stretches a bow with his left arm and aims with his right. He wears a round cap with a forehead band tied with a hanging part behind and has a short straight beard with circular sideburns curling around his ear. His chest is covered by a garment filled with parallel double straight lines. The charioteer behind him is pulling on the reins. His beard and hair are straight and rather short, and he wears a simple round cap. A wide dotted band crosses his chest diagonally, and part of a quiver full of arrows appears at his back. Two projecting circular double lines bordering each shoulder outline his very muscular body. The lower part of the bodies of the archer and charioteer are missing as are the chariot and the animals pulling it. All that remains is part of the reins and the top of a decorative knob on the yoke of the harness. The scene in front of the chariot is a little more complete. Several large vultures surround a fallen animal, possibly a mountain goat of which the hoof and lower part of one leg can be seen. The vultures are carefully depicted. Their eyes are circles surrounded by concentric pointed ovals, and their beaks are bent, one containing a small triangle. The feathers of their neck, chest, and shoulder are indicated by numerous semiovals with straight hatching, and the larger feathers of the wings have parallel herringbone bands. Their large claws are covered with short parallel lines. Two arrows appear either behind the vultures or actually hitting the body of one of the birds. Standing beside the vultures is a man holding up the hide or carcass of an animal. He wears a small round cap, like the cap of the charioteer, a short-sleeved jacket, and a short folded skirt. The jacket is decorated with parallel lines, and the skirt is covered with dots and bordered by a zigzag band. A long object, possibly a sword, appears in front of his forward leg, apparently hanging from his waist. The

hide or carcass he holds up has no head or feet; he may have cut them off and left them for the vultures to eat. In his other hand he may be carrying a bow, part of which appears behind him. Little remains of the rest of this register, only bits showing the hooves and a little of the fore- and hind legs of horses, possibly pulling another chariot, a repeat of the first design. Ground level is shown by a fine band of parallel hatching that encircles the vessel and separates this register from the one below.

Less of the lower register remains, and only a little of the design can be determined. One piece contains part of a chariot with an archer, apparently similar to the archer and chariot of the upper register, except that less of the archer, nothing of the charioteer, and much more of the horses remain. The archer, wearing slightly more elaborate headgear, a beautiful cap or crown formed of several looping bands, is pulling tight on his bow. His beard and mustache are simple. Only one-third of a wheel of the chariot remains. The horses pulling it have a decorative band down their backs, and their bodies are covered by rows of parallel dotted lines. The joints of their forelegs are indicated by double lines, and their manes by bands of short straight diagonal lines. An elaborate yoke, through which the reins pass, is tied, possibly by leather straps, around the horse's chest, which is covered by a breastplate filled with parallel dotted lines. The archer may be aiming at a herd of antelope, whose branching antlers appear at the top of a broken fragment. The body of one of these antelopes seems to lie in front of the horses, with two arrows piercing it. Its carcass is covered by bands of short straight lines and is very similar to the animal carcass in the upper register. Other small pieces contain fragments of designs that no doubt form parts of this and similar scenes. The rim of the vessel has a band of connected double coils, with small circles emphasizing the point of each twist and below this a band of short diagonal lines. Under the horses' hooves is a bit of the band of parallel hatching that encircles the vessel at the bottom.

Two broken pieces of the base remain, containing part of a geometric rosette apparently almost identical to the rosette on the base of Bronze Vessel 51, a six-pointed star, each petal or ray a pointed oval, surrounded by a circle of six more petals or rays extending between the points of the star. The triangular area between the petals is filled by bands of short straight lines, with each point filled with a rounded petal design. The rosette is bordered by three concentric circles, the outer two of which form a band with a dotted line in the center.

### COMMENTS

Many bronze vessels of the tenth century B.C. from western Iran contain archers, usually kneeling, rather than aiming from a chariot as in the Marlik vessel.<sup>262</sup>

**55 Bronze Pot**

178 M Ills. 8, 10, 11,12; Fig. 8; Pl. 29; Color Plate XXI A

Much broken, found in Tomb 32 (Trench XVII E). More than half of it was missing, and a master hand was needed to reassemble the remaining pieces.<sup>263</sup> Now that the work is done, it is possible to see the original shape and design of this outstanding piece of bronze work. As reconstructed, the pot is approximately 11 cm high and 12 cm in diameter at the mouth, with a spout 8 cm long. The vessel, which is round with a simple outward-turned rim and a flat base, has the general shape of a "teapot." The body of the pot contains a row of lions in profile, with finely incised details, their heads projecting outward, walking toward the spout, two on each side. The walking lions on each side of the pot converge on a larger central lion, shown in front view, which carries in its widely extended jaws the spout of the vessel, a square hollow tube. The head of this central lion projects outward about 4 cm from the body of the vessel, much more than the heads of the subsidiary lions. Opposite the spout is a small decorative plant, the only part of the design completely reconstructed from a study of the other Marlik vessels, from which the two pairs of lions are walking away. The bronze of this vessel is very thin throughout, especially in the area of the lion heads, which were formed as part of the body of the vessel.

The mouth of the central lion is forced wide open to hold the spout, revealing clearly the long incisors as well as other teeth. The skin folds and muscles are beautifully delineated to give an impression of the power and strength of the beast. The whiskers are indicated by parallel small lines on both sides of the nose above the upper lip, and a ring of muscle surrounds the head, separating it from the neck. The eyes are clearly detailed, with the pupil projected outward, and the eyebrows are well pronounced. The ears are small, a soft thick ring pointing backward. The long hair of the mane is precisely rendered by overlapped ovals, each covered by several wavy lines. The mane covers the area from the ears to the lower part of the neck, where it submerges into an elongated dotted area representing the hair of the chest and forelegs. The edge of the mane is well differentiated by a row of concentric semicircular lines extending from the ears around the neck. A large well-pronounced rosette, possibly representing a twist of hair, is on each shoulder; it is formed of many curved lines radiating out from a central point, like a turning sun or star.

The four subsidiary lions walking around the vessel have approximately the same details. They are shown in profile, with their heads pushed out in the round from the body of the vessel. Their mouths are closed, but they are very alert and attentive. The twisting many-pointed rosette appears on the shoulder of

each lion. Body hair is indicated by numerous elongated dots, and the mane, back, and stomach are covered by overlapped semiovals, made of several wavy lines. The muscles and tendons of the fore- and hind legs are indicated by parallel lines, and the claws are carefully detailed. The long tail, parallel to the hind leg, turns up at the tip.

The plant located opposite the spout was almost destroyed, but part of the trunk, a simple stem, remains. Under the feet of the lions, around the base, are rows of parallel connected semicircles, representing the ground. The base of the vessel is decorated by a geometric rosette of twenty-three petals, a stylized form of the wild morning glory. The central rosette is surrounded by thirteen thick open loops with ends twisted inward, possibly representing flowerpots, each holding a branch of a tree or plant.

**COMMENTS**

A similar design of walking lions with heads projecting outward can be seen on the Kalardasht gold bowl, although there the heads are separately made and riveted to the body of the vessel, and on a bronze vessel from Susa, now in the Louvre, exhibiting the same technique of projecting animal heads.<sup>264</sup> The twisting star ornament on the shoulder has been discussed under Marlik Silver Pot 21.

**56 Bronze Chalice**

1325 M Ill. 11; Fig. 8

About 6 cm high, 14.5 cm in diameter at the mouth, and 7 cm in diameter at the base, found in Tomb 5 (Trench VIII D). Although broken and incomplete, the beautiful proportions of the vessel are still apparent. The rim is reinforced with a supporting ring, and rather thick projecting ring bands encircle both the rounded body where it joins the stem and the base of the stem. The body of the chalice is plain, but on the base is a finely detailed geometric rosette about 5 cm in diameter. At the center four rather thick crescents with curving ends face outward. Pointing outward from the middle of each crescent is an oval plant resembling a cedar, decorated with parallel herringbone patterns. At the juncture of each two crescents is a group of three similarly decorated leaves with rounded ends.

**57 Bronze Vessel**

1391 M Ills. 2, 4, 10, 11, 12 Fig. 8

Two large pieces, originally about 8.5 cm in diameter at the mouth, found in Tomb 5 (Trench VIII D). They contain part of the rim and base of the vessel. Although the design is not complete, much of it can be determined. A hunting scene in linear style encircles the vessel. The existing fragment contains two incomplete leaping mountain goats. Their horns form large, opposing, open semicircles, covered with open parallel chevrons. The head and fore- and hind legs are outlined, and the eyes, nose, and mouth are

indicated by simple lines. Parallel vertical rows of short lines represent the body hair. Behind the two leaping mountain goats, and facing in the opposite direction, is an archer, only part of whose head and hand, grasping the upper part of his bow, remains. The archer wears a round helmet or cap rimmed by a double line. An arrow has cut through the body of the most complete of the mountain goats, entering his chest with the point coming out of its stomach. In front of the two goats, separating them apparently from another group of mountain goats as indicated by part of a horn, is a strange object, possibly a pineapple-shaped tree. The rim of the vessel is bordered by three concentric bands: the uppermost is a double line, the middle one a beautiful coil or cable band, which is very finely done with tiny circles in each twist, and the lowest a row of straight parallel vertical lines set closely together.

The bottom of the vessel contains a double concentric geometric rosette. An inner rosette with four-teen tiny petals surrounds three concentric circles around a central point. Around this inner rosette is an outer rosette of twenty-two petals. All the petals of both the inner and outer rosette are outlined with a double line.

### 58 Bronze Vessel

1394 M Ills. 3, 6, 11, 12; Fig. 8

Fragments of a rather large bronze vessel, diameter about 11.5 cm at the base, found in Tomb 42 (Trench XX F). Its walls are very thin and fragile, and the upper part of the vessel is completely missing, but the lower part, around a hollow ring base, is almost complete. The design around this lower part consists of a row of walking pack animals, either horses or mules, beautifully rendered in a simple linear style. The bodies of the animals, of which often only the lower portions remain, are plain except for the outlining of the muscles and joints. Only part of the head of one animal remains, and this also is simply outlined. In contrast to the simple outlining of the animals is the elaboration of their trappings: a zigzag-bordered saddle blanket; numerous straps for fastening the load, which is covered in larger zigzags; a curving breastplate over the chest; and a pomegranate bell hanging under the neck. One section of the body, better preserved than the rest, contains a tall pole with another hanging pomegranate suspended over the rear of one of the pack animals. A coil band similar to other coil bands on Marlik vessels borders the bottom of the design.

About half of the base remains. It apparently contained, inside a cable circle, four birds, possibly vultures, of which parts of three remain. The feathers of the body are indicated by bands of short straight lines, and the wing and tail feathers are covered with herringbone bands. A fragmentary design in the center may be an imaginary four-headed snake, held by the vultures.

### 59 Bronze Vessel Fragments

1395 M Ills. 2, 3, 10, 11, 12; Fig. 9

Many broken pieces of a rather small vase or cup, about 8.0 cm in diameter at the mouth, found in Tomb 44 (Trench XXI N). Although too fragmented to be assembled in one vessel, they show parts of a very elaborate design. A small portion of the rim contains a riveted handle, and below the woven reed band encircling the rim is a bit of the curving, crosshatched branches of a tree ending in hanging globular fruit. One fragment shows, below these hanging branches, a man with long hair pushed behind his head and long sideburns resembling woven rope. From the angle of his body, he may be driving a chariot. Other pieces contain a foot below a long decoratively edged skirt and an arm with part of a torso. A large fragment contains a flying bird with outstretched wings, elaborately decorated, and another head of the same bird appears on a smaller fragment.

A remaining piece of the base contains part of a six-petaled geometric rosette about 7.0 cm across. The area between each two petals is filled either by parallel bands formed of many short curving lines or by scattered small circles.

### 60 Bronze Vessel Fragments

1396 M Ills. 10, 12; Fig. 9

A few broken pieces, found in Tomb 1 (Trench III D<sup>+</sup>), insufficient to give any idea of the shape and complete design of this vessel. One piece contains a rather thick band with parallel rows of short straight parallel lines. A second piece contains a similar decoration at the top, and below another design representing part of a flower or plant. Parallel bands of straight lines decorate the curving stem, which separates into two curving ends enclosing a dotted bud. A third piece, including part of the rim, is especially illustrative of the high quality of workmanship on this vessel. Encircling the rim is a very intricate band of triple guilloche, the twists filled by circles with a central point. Below this guilloche band is part of a highly decorative tree whose branches, filled with bands of short straight diagonal lines, curve away from a center filled by four flower petals filled with dots and edged by a double line.

### 61 Bronze Vessel

1398 M Ill. 11; Fig. 9

Base of vessel, containing a rosette about 7.0 cm in diameter at the base, found in Tomb 44 (Trench XXI N). The base contains a six-petaled rosette inside a circle formed of six pointed oval petals, each petal stretching between the outer points of two petals. The area between the petals is divided by a curving double line, and the background is covered with dots. This rosette is very similar to the rosette on the base of Bronze Vessel 59, found in the same tomb. Possibly a pair of bronze vessels of similar shape and design were placed together in the tomb.



## *Comments and Conclusions*

Many of the Marlik metal vessels, whether gold, silver, or bronze, contain designs of varying degrees of elaboration, about which some further discussion on a number of points may be useful.

### DISTRIBUTION OF METAL VESSELS IN MARLIK TOMBS

Metal vessels were found in fewer than half of the Marlik tombs, in twenty-two out of a total of fifty-three tombs, and the number in a single tomb ranged from one to six. Vessels of a single metal tended to be clustered together, with Tomb 36 containing four gold vessels, Tomb 5 containing five bronze vessels, and Tomb 45 containing one gold, one bronze, and three silver vessels, half of the silver vessels found at Marlik. In only two of the tombs, Tomb 24 and 45, were vessels of all three metals buried together. Moreover, only sixteen tombs produced one or more decorative metal vessels.

### PROVENANCE OF MARLIK DECORATIVE VESSELS

The first question involves the provenance of the vessels. Were they locally produced or were some at least imported? Some scholars have suggested that the more elaborate vessels, particularly the gold ones, were possibly imported while the cruder ones may have been locally made.<sup>265</sup> Support for this proposition is found in a comparison of these vessels with objects previously found that have been attributed to other sites in the ancient world (Map 5).

Several circumstances, however, support the presumption that all the decorative metal vessels of Marlik were locally made. First is the large number of such metal vessels found at Marlik,<sup>266</sup> for no similar quantity have been uncovered at any other site of this period. All these Marlik vessels exhibit a remarkable uniformity of spirit, a liveliness, grace, and vitality that permeate all the designs, whether simple or elaborate, and that seem to mark them as the products of a single culture. There is a coherence of subject matter and artistry among various products of Marlik, and some of the pottery figurines and vessels from Marlik are quite as sophisticated in their own way as are these decorative metal vessels. The elaborate high-relief technique of Gold Beaker 8, one of the most beautiful of the gold vessels, also appears in a bronze vessel, 55. In fact, the bronze vessels, al-

though much fragmented and very incomplete, contain designs closely related to and equally as fine as those on the elaborate gold vessels.

In recent years, both before and since the excavation of Marlik, more and more information has been revealed concerning the existence of a highly developed metal industry in the highlands of Gilan and Mazandaran during the late second and early first millennium B.C., a metal industry that, it seems probable, was centered around Marlik.

Other scholars, after a study of the material, have also reached the conclusion that the decorative vessels are local products. Wilkinson, in an article in which he discusses two decorative metal cups from the region around Marlik, now in the Metropolitan Museum, says:

The indication, therefore, is that there was more than one school of design in the Marlik area. This would seem more likely than the supposition that the Marlik vessels should simply be divided into two groups, one local and the other imported. One of the Marlik schools—that of the stag cup—used a style that would appear to have been indigenous to the people occupying the area; the other, of which the gazelle cup is perhaps the most refined example, incorporated traditions of both Mesopotamia and other parts of Iran.<sup>267</sup>

This quotation from Wilkinson leads to the next point of special interest, a consideration of the designs on these decorative metal vessels from Marlik, some of which draw our attention because they contain traditional motifs with strong historical links to the ancient world, and others, conversely, because they are unusual and specific to Marlik and its culture.

### TRADITIONAL MOTIFS IN MARLIK DECORATIVE VESSELS

#### *GEOMETRIC ROSETTE*

One of the most commonly repeated motifs is the geometric rosette, found on the bases of almost all the decorative metal vessels of Marlik.<sup>268</sup> The geometric rosettes vary in detail and degree of intricacy in accordance with the elaboration of the design on the body of the vessel, from a simple dotted circle roughly divided into sections on Gold Beaker 3; through a crudely punched rosette with two rows of petals on Gold Bowl 4; and a slightly more detailed

rosette filled with dots and encircled by a zigzag band on a broken base, 52; to more finely made rosettes of varying detail on Gold Cup 10, Gold Bowl 11, Gold Bowl 13, Silver Pot 21, Bronze Cup 48, and Bronze Vessels 49 and 57; and culminating in the exquisitely detailed rosettes on Bronze Chalice 56 and Gold Beakers 8, 12, and 15.

The repetition of this motif has led us to consider whether it might have had a more than decorative function. Marlik, after all, is a cemetery, and all the objects found there were funerary objects, placed in the tombs during the burial ceremony and consequently illustrating something of the religious beliefs of their possessors.

We know that the early Indo-Iranians gave primary importance to the solar disk or sun as one of their deities or as a symbol of their ancient gods, continuing in this practice as late as the first half of the first millennium B.C. The geometric rosette found on the Marlik vessels in its more elaborate examples consists of a band of geometricized plant leaves surrounding a central solar disk or sun whose energizing rays spread outward, symbolizing the dependence of all living things on the central life-giving sun. It would seem that the people who buried their illustrious dead at Marlik, if not actually sun worshippers, at the very least gave the sun a place of great importance in their pantheon.

#### *STYLIZED PALMETTE OR TREE OF LIFE*

Another traditional design found on the Marlik vessels is the stylized palmette, or tree of life, whose leaves surround the most elaborate geometric rosettes. Trees appear on many of the Marlik vessels, varying from the simple, fairly realistic trees on Gold Bowl 4 and Silver Beaker 19; to small stylized plant pots, sometimes used as a filling motif, on Bronze Pot 55, Gold Beaker 12, and the upper register of Gold Beaker 14; and reaching their most elaborate form in the large stylized palmettes on Gold Beaker 8, the second register of Gold Beaker 14, and the fragments of Bronze Vessel 60 (Ill. 11).

In its most elaborate form the tree of life is found in an antithetical grouping with animals flanking or approaching it. Porada, in discussing the art of ancient Iran, says that "The most persistent motif is that of two-horned animals flanking a tree. The variant renderings of this and other motifs from the prehistoric period to Sassanian times provide a survey of the changing styles and of their basic traits."<sup>269</sup>

This antithetical grouping of horned animals on either side of a tree of life occurs on two of the most striking of the metal vessels of Marlik, Gold Beakers 8 and 14. The first shows the story of life, where in the second register a young goat stands on its hind legs as it eats from a highly stylized palmette, while the

second portrays beautifully detailed winged bulls, their heads projecting outward in full relief, also standing on their hind legs flanking a very decorative palmette.

### EXCEPTIONAL CHARACTERISTICS OF MARLIK DECORATIVE VESSELS

#### *ANIMAL MOTIFS*

Movement is found much more often on the Marlik vessels, however, than a stylized static design. All the animals (Ills. 3–8) in one register may move in the same direction around the vessel, as in Gold Beaker 9 with two rows of prancing unicorns; Gold Beaker 12 M with two registers of striding animals, griffins above and winged bulls below; Silver Cup 20 with a row of leaping stags; Bronze Beaker 49 with four rows of wild boars sniffing the ground; and Bronze Vessel 58 with a row of walking pack animals. On other vessels figures move away from a point on one side of the vessel to converge at an opposite point, as in Gold Bowl 11 M with rams walking away from an eagle with outspread wings toward a sacred tree; Silver Pot 21 with lions on the shoulder, each holding an animal carcass in its mouth, walking away from a small knob and converging on a long spout; and Bronze Pot 55 with lions moving away from a small plant pot toward a central lion holding a spout in his mouth.

Whether simply outlined or decorated with stylized patterns on various parts of their bodies, these animals always exhibit a natural and fluid movement and are usually clearly related to a ground line represented by one of the decorative bands that encircle the vessel and separates the registers. Only a few of the vessels, including Gold Beaker 14 with the story of life, Gold Cup 10 with recumbent mountain goats, and Bronze Vase 47 with rows of wild boars (the same motif is also found on the third register of 14), contain no such band separating the registers and forming a ground line, so that the motifs, to a certain extent, seem to float in the air. Even on these vessels, however, the motifs are placed in a clear, though not explicitly drawn, line in relation to one another.

#### *MYTHICAL AND IMAGINARY FIGURES*

In addition to realistic portraits of animals, most of them still native to the region around Marlik (including horned cattle, deer, mountain goats, sheep, wild boar, leopards, lions, eagles, and vultures) another type of creature, very characteristic

of the Marlik artists, appears on the decorative metal vessels—an imaginary figure that combines features of more than one animal or of animals and man.

Some of these combinations are very simple, a fairly naturally depicted animal with a single feature, such as wings, horns, or hump, of another species, as for instance, the winged bulls of Gold Beakers 8 and 12, the humped mountain goat of Gold Bowl 4, and the horselike unicorn of Gold Beaker 9. Other combinations are more elaborate, with a wholly new creature formed from the elements of different animals, as is the griffin of Gold Beaker 12, half eagle and half lion. The most complex mythical figures appear on Silver Pot 21 and Gold Vessel 15. The former contains two creatures, the larger with a double lion head, a human upper torso and hands, a feathered lower torso, and clawed feet, holding the hands of a smaller figure with a human female head and hands, wings, and the lower body and tail of a lion. Gold Vessel 15 also contains two imaginary figures, the larger with a male human head, hands, and feet, two pairs of wings, and a torso covered with feathers, whereas the smaller, similar to the smaller figure on the silver pot, has a human female head, a single pair of wings, a torso covered with feathers, and the body and legs of a lion.

This combination of features from more than one animal occurs also in the bronze and pottery figurines of Marlik, where such imaginary creatures were found accompanying realistically depicted animals, just as both natural and imaginary figures occur on the decorative metal vessels.

These imaginary creatures apparently reflect the mythology of their creators, and some have a long history of development in the ancient world, where the traditions on which they are based continued in the myths and literature of later times. For example, the griffin on the top register of Gold Beaker 12 can be interpreted as the phoenix or simorgh of later Iranian tradition. In the *Shahnameh* of Ferdowsi, based on older texts from the Pahlavi language of Sassanian and Parthian times, which, no doubt, in turn were based on an even older Indo-Iranian tradition, the heroic bird, Simorgh, gives shelter to Zal, the father of Rostam, adopting him as a baby and serving him until he was grown.

#### *PORTRAYALS OF THE MARLIK PEOPLE*

Some of the decorative metal vessels of Marlik contain representations of human figures and consequently may provide some impression of the appearance and dress of the Marlik people, or at least of the men, since all the figures are male.

Silver Beaker 19 contains a heroic figure subjugating two leopards. He has a strong muscular physique and a handsome face with a clear eye, prominent

hooked nose, well-defined mouth, and shaven chin. He wears a peaked conical helmet, a patterned short-sleeved shirt, possibly of chain mail, a wide belt at his narrow waist, and a very short, probably pleated, kilt. He has bands at his wrists, and his feet are bare. Similar conical helmets, wide belts, and wristbands, all of bronze, were found in the tombs of Marlik.

Silver Pot 21, with impressed gold designs, has on the body another male figure, this one carrying an animal carcass on his shoulder. The figure is beardless and wears a round cap and a short-sleeved shirt banded at the sleeve edges. His wrapped kilt, edged with zigzag bands, ends just above the knees, and his feet are bare.

More figures appear on Bronze Vessel 54, which is unfortunately much fragmented and incomplete. In the upper register a bearded charioteer wears a round cap with a fringe of hair below. His powerful shoulders are doubly outlined and across his chest is the decorated band of a quiver, which can be seen at his back. In front of the charioteer is an archer, also bearded. His hair is short and straight with circular sideburns curling around his ears, and he wears a forehead band tied around his head and hanging behind. His shirt is covered with double vertical lines. The rest of these figures are missing. In the same register another man holds up an animal hide or carcass. Around his head is another forehead band, but the lower part of his face is missing so that we do not know whether or not he is bearded. He wears a short-sleeved shirt, filled with straight lines, and a short folded kilt edged with a zigzag band. His feet are bare. The final figure on this interesting vessel appears in the lower register where the head of another archer, apparently also in a chariot, is all that remains. He has a straight beard and rather more elaborate headgear than the upper figures, a cap or crown formed of several looping bands.

Bronze Vessel 59, of which only small pieces remain, contains our final examples of the human figure. One fragment contains part of a man with long hair pushed behind his head, a long braided beard, and looping sideburns. Another fragment has part of a torso covered across the chest with a wide band filled with wavy decorated lines and an arm with a wristband or bracelet. Two other fragments contain the bottom edges of decoratively banded long gowns with a bare foot below.

On these figures the most common dress is a short-sleeved patterned shirt with a short wrapped kilt, folded or decoratively edged, cinched in at the waist and worn with a round or conical cap with little or no hair showing. These simply dressed figures are usually clean-shaven. Those figures judged to be of higher social standing usually have straight beards covering the lower half of the face and longer and more elaborately arranged hair worn with decorative headbands. Little indication of their clothing re-

Table 2. Comparative Chronology and Time Range of Some of Marlik Decorative Vessels with Comparable Material Produced in Other Archaeological Sites and Cultures

2500	2400	2300	2200	2100	2000	1900	1800	1700	1600	1500	1400	1300	1200	1100	1000	900	800	700	600	DATE B.C.	
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																				64	
																				66	
GUTI																NEO-ELAM				Persians	ELAM
1 <sup>ST</sup> A W A N		EBARTI			ANSHAN				SUSA				MEDE								
CUTI UR III				ISIN-LARSA				II ISIN				MEDIAN ART				Persians	MESOPO- TAMIA				
PROTO-IMPERIAL				AKKAD				KASSITE				MITANNI						NEO-ASS.			
LAGASH				1ST DYN. BABYLON				MID-ASSYRIAN								Persians	ANATOLIA				
EARLY BRONZE AGE				HITTITES				OLD EMPIRE													
T.II		TROY III-IV		KINGDOM												Persians	EAST MEDITER. SYRIA- PALESTINE				
EARLY BRONZE AGE				FOREIGN RULE				TO													
				MIDDLE BRONZE AGE				LATE BRONZE AGE				IRON AGE									

mains except for traces of a decoratively patterned shirt or jacket and bits of a longer, ceremonial-looking decoratively edged gown, possibly worn by a figure with the most elaborate hair, sideburns, and braided beard. On all the figures the feet are bare.

## INFLUENCE OF MARLIK CULTURE AND ART IN THE ANCIENT WORLD

We have seen that with the excavation of the cemetery at Marlik evidence has been uncovered of a vigorous and technically outstanding school of art, previously little known, which obviously both influenced and was influenced by the art of other cultures. We are consequently faced with the problem of harmonizing this new evidence with previous conceptions concerning the art of the ancient world.

This will be a difficult and complicated task. A single example of a culture in which close relationships are evident is that of the Assyrians. The powerful Assyrian empire attracted outstanding artisans from all over the ancient world, including Marlik, whose contributions were, naturally, absorbed into their imperial art. The Assyrian kings also made repeated military expeditions to this part of Iran, from which, undoubtedly, they carried back some of these beautiful objects as well as some of the craftsmen themselves. Thus it is clear that distinguishing the influence of Assyrian art on Marlik from Marlik art on the Assyrians will not be easy.

One of the possible contributions of Marlik to Assyrian art is discussed by Professor Canby in an article on the sculpture of Ashurnasirpal in which she suggests that some of the designs decorating the garment of the king are not basically Assyrian. These include the standard seven-petaled palmette to which long, cone-tipped tendrils are added and nibbles on cones growing directly on palmettes. She suggests,

It would seem possible then, to attribute the hybrid plant forms which appear on the embroideries to the mentality of the local craftsmen who produced the pieces found at Hasanlu and Marlik . . . The style of drawing and repertoire of motifs on some of the embroideries suggest that they were not carved on the reliefs by Assyrians but foreigners under Assyrian influence. A few unusual details suggest that the foreigners came from the northern areas where local artists were under the influence not only of ninth century Assyrian art but Middle Assyrian traditions. Although the links to objects from Hasanlu, Marlik and later Urartu are specific, the exact pinpointing of influence has to wait until the characteristics of the various art centers

(or alternatively the possibility of a broad common pool of motifs) can be defined for the ninth century in this northern area. . . If these speculations prove correct the garment decoration on Ashurnasirpal's sculpture will have to be deleted from the corpus of Assyrian art and such elaborate textiles from the stock list of Assyrian trade items. Since the embroideries have been so listed for over a century some theories would have to be revised. Still the picture of foreign craftsmen working in Ashurnasirpal's palace under the supervision of Assyrian sculptors gives a vivid idea of how such craftsmen learned their Assyrian lore.<sup>270</sup>

## CHRONOLOGY AND DISTRIBUTION OF THE MARLIK CULTURE

As these decorative metal vessels were described, they were compared with objects from various sites of the ancient world. The results of this detailed comparison are shown in Map 6, insofar as the distribution of cultural influence is concerned.

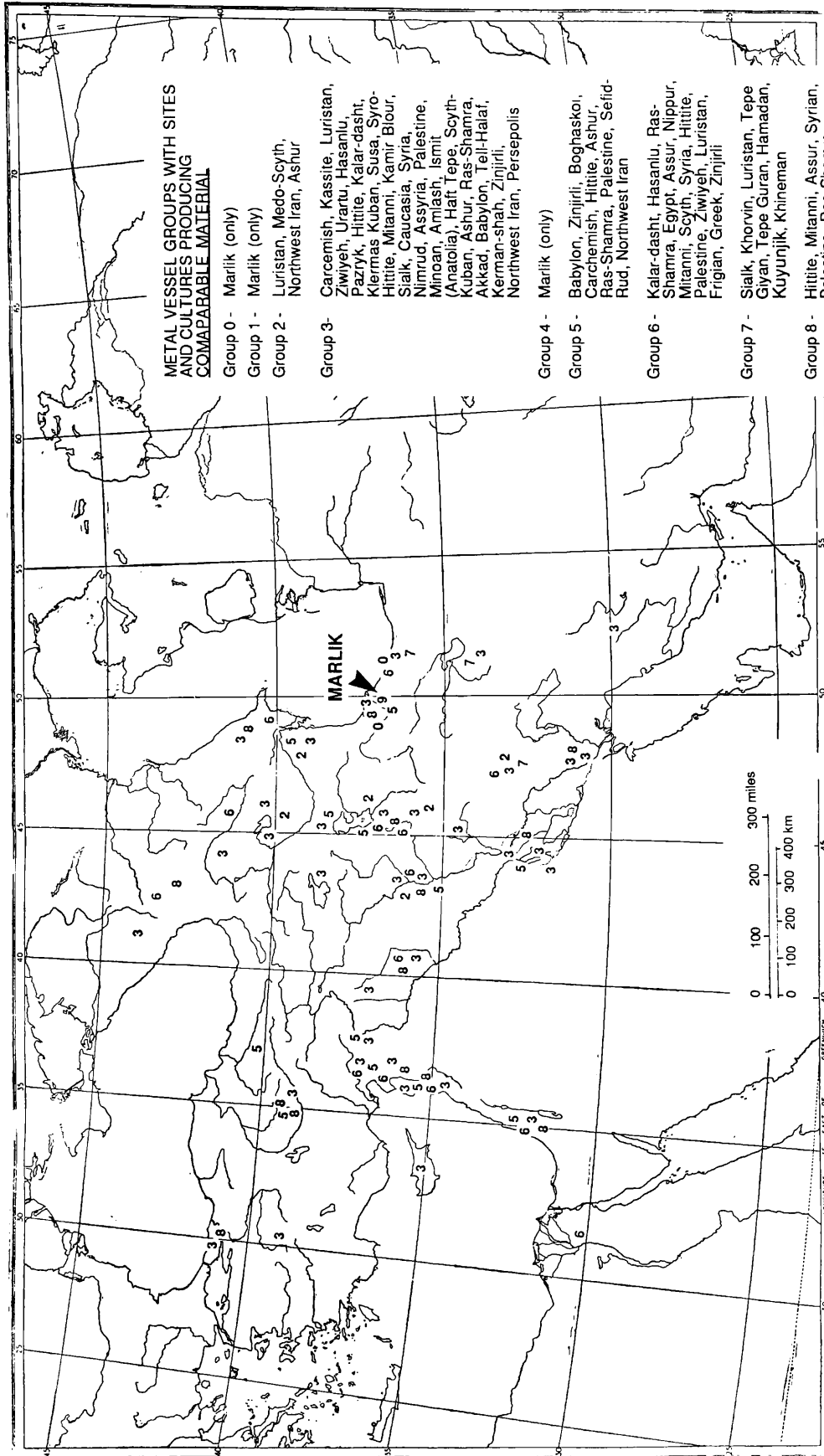
Table 2 shows the time range and comparative chronology of the decorative metal vessels of Marlik. Here the largest group of comparable objects falls between the thirteenth and tenth centuries B.C. This dating derived from typology accords well with the carbon 14 analysis of remains from Tomb XV D, which yielded a date of 1457 B.C.  $\pm 55$ ,<sup>271</sup> as well as with the results of studies of other objects from Marlik, most particularly the cylinder and stamp seals.<sup>272</sup>

On Map 6 we can see that some of the subject matter of the compositions as well as certain design elements and styles are found over a vast area with an existence in ancient art much earlier than the Marlik period, illustrating the use by Marlik artists of traditional motifs of the ancient world, which they incorporated in their own products. At the same time there are many elements of design, scene composition, style, and technology that are quite unusual and unique to Marlik art. The distribution of material reflecting these unique characteristics of Marlik art may well be considered to give some indication of the extent both of the political ascendancy of the Marlik people during the period from the thirteenth to the tenth centuries B.C. and, more widely, of the extent of the influence of Marlik art in its own time and later, after the political coherence and unity of the culture had been lost.

Our study indicates that the Marlik people settled in the highlands of the Elburz Mountains during the second half of the second millennium B.C., flourish-

ing for several centuries between the fourteenth and tenth centuries B.C. They apparently established a strong and powerful kingdom extending from the northern slopes of the Elburz Mountains, covering the southern part of the Caspian Basin, and including Russian Talish, Iranian Talish, eastern Azerbaijan, Gilan, and Mazanderan. Here they estab-

lished a great center of metal industry, particularly bronze, whose projects, by trade or by other means, reached as far as the Eastern Mediterranean and the Indus Valley. Their influence can be traced over a wide area of the ancient world and into succeeding cultures, most particularly those of the Medes and the Achaemenians.



Map 6. Distribution of Sites and Cultures Producing Comparable Material for Decorative Metal Vessels

## Chapter IV Notes

1. Although some scholars propose gold as the earliest metal worked by man, most archaeologists consider copper to have come first.
2. Hole et al. 1969.
3. The Qazvin Plain Expedition, of which the excavation of Zaghe was a part, was carried out by the Institute of Archaeology of the University of Tehran.
4. Caldwell 1967.
5. Negahban 1977c.
6. See Silver Pots 16 and 17.
7. See Bronze Pot 45.
8. See Silver Pot 21, which has a gold spout.
9. Godard, Y. and A., 1954: Pl. 27, Cat. 312.
10. Culican 1965: Pl. 7.
11. Culican 1965: Fig. 39, p. 138.
12. Moorey 1974a: Figs. 129–139, p. 147.
13. Barnett 1957: Pl. XXIX S46, S39, pp. 7–8; Pl. XXX, S37b.
14. Moortgat 1932: Pl. XLIV 2, p. 112. This seal is in the Berlin Staatlichen Museum.
15. Erlenmeyer, M.-L., and H., 1965: p. 6 and Pl. III, pp. 13–16.
16. Van Buren 1954a: Tab. III, Fig. 17, pp. 28–9.
17. Weber 1920: Pl. 96, Fig. 480. This seal is in the Berlin Staatlichen Museum.
18. Godard, Y. and A., 1954: Pl. 19, Cat. 311.
19. Porada 1962: Fig. 47, p. 70. This ring is in the City Museum of St. Louis.
20. Porada 1962: p. 75. This bowl is in the British Museum.
21. Moortgat 1932: Pl. LXIV, p. 111.
22. Budge 1914: Pl. 12.
23. Reade 1963: Pl. IX, pp. 38–47.
24. Ghirshman 1964c: Fig. 91, p. 70.
25. Ghirshman 1964c: Fig. 137, p. 104.
26. Kantor 1964: Pl. VIII B, pp. 234–237.
27. Frankfort 1939: Pl. XXXII C. This seal is in the Berlin Staatlichen Museum.
28. Porada 1948a: Pl. LXXXVII 609E. This seal is in the collection of the Pierpont Morgan Library.
29. Weber 1920: Pl. 97, p. 484.
30. Frankfort 1939: Text Fig. 65, p. 213.
31. Calmeyer 1969: Fig. 65, p. 66; Chronological Chart. This type of bowl is categorized by Calmeyer as belonging to group 32.
32. Dyson 1962: Fig. 5.
33. Calmeyer 1973: H 1, 2, 4, p. 63; H 8, p. 67; H 12, p. 69; Fig. 101, p. 108; Fig. 124, p. 166; Fig. 128, p. 169; Fig. 129, p. 170; Fig. 132, p. 181; Fig. 144, p. 221.
34. Piotrovsky 1954: Fig. 11.
35. Kantor 1957b: Fig. 1. This gold appliqué is in the Cincinnati Art Museum.
36. Unger 1927: p. 110; Fig. 44, p. 78.
37. Frankfort 1939: Pl. XXXV J.
38. Weber 1920: Pl. 57, Fig. 270. This seal is in the Museum of Graz.
39. Azarpay 1959.
40. Ward 1910: Figs. 854–855, pp. 280–281.
41. Frankfort 1939: Pl. XLI, h, f; Pl. XLII m, n; Chronological Index, p. 329.
42. Hogarth 1920: Pl. VI 166, pp. 35, 95; Pl. VII 166a, pp. 38, 95. The first seal is in the Ashmolean Museum and the second in the Chester Collection.
43. Ghirshman 1964c: Figs. 30–31, pp. 28–29.
44. Porada 1962: p. 85.
45. Dyson 1960b: p. 129.
46. It seems that, while the Hurrian population of northern Mesopotamia was responsible for the art of many objects, particularly cylinder seals, found in Nuzi and Kirkuk, possibly some of the Hurrians stayed in their homeland, developing their art in the much more peaceful areas of southern Caucasia, northeastern Mesopotamia, northern Iran, and eastern Turkey, where later the Manneans, Medes, Urartians, and Assyrians, all influenced by this Hurrian art, formed kingdoms. Another possibility is that the Hurrians, after the defeat of the Mitannian empire, retreated to the east, possibly rejoining their original stock; this may account for the great influence of Hurrian art in this area.
47. Calmeyer 1973: Fig. 93, p. 99; Fig. 130, p. 175; Fig. 131, p. 176; Fig. 138, p. 205; Fig. 139, p. 206.
48. Ghirshman 1964c: Fig. 127, p. 96; Fig. 129, p. 97.
49. Porada 1962: Fig. 62, p. 93.
50. Ref. 50 and 21.
51. Rostovtzeff 1922: Pl. VI. This mirror is in the Hermitage Museum.
52. Ward 1910: Fig. 670, p. 222.
53. Ghirshman 1964c: Fig. 91, p. 70.
54. See Gold Beaker with Unicorns 9.
55. Crawford et al. 1966: Fig. 46, p. 28. This gold cup is in the Metropolitan Museum.
56. Wilkinson 1965: Fig. 1, p. 101; Fig. 3, p. 104.
57. Wilkinson 1965: p. 105.
58. Akurgal 1959: Figs. 14–15, p. 104; Pl. XIII.
59. Porada 1965: p. 96.
60. Rosettes with varying numbers of petals and ranging from extremely simple to highly elaborate were found on the bases of many of the Marlik metal vessels.
61. Vanden Berghe 1959: p. 96.
62. Dove 1936.
63. Ghirshman 1939: Pl. LXXXIII A, F.
64. Schaeffer 1948b: Fig. 275, No. 1, 6, p. 502.
65. Dyson 1960a: Fig. 1, p. 250.
66. Porada 1967.
67. Amiet 1965: Fig. 2, Pl. XVI, XVII.
68. Porada 1965: p. 88.
69. Schaeffer 1934: Pls. XV, XVI, pp. 124–131.
70. Dalton 1905: Pls. VIII, IX.
71. Frankfort 1939: Pl. XXXI a, c, d, e; Pl. XLII b, o; Pl. XLIII a, b; Pl. XXXII a, g; Pl. XLI e, f, i, j, o; Pl. XLII f, h, i, j, k, m, o; Pl. XLIV c, i, m, n; Pl. XLIV a, t.
72. Moortgat 1942: Figs. 77–78, pp. 84–86.
73. Bossert 1942: Pl. 144, No. 612, p. 61.
74. Hogarth 1920: Pl. VI 166, 167, 175, 179, 182, 183; pp. 35–37, 95.
75. Andrae 1934: Pl. 512, No. 8, p. 681; Pl. 527, pp. 686–687; Pl. 600, No. 3, p. 709.
76. Goldman 1964: Fig. 3.
77. Porada 1962: Fig. 39, p. 56; Figs. 65–66, pp. 118–119; p. 114.
78. Akademia Nauk SSSR 1960: Fig. 2, p. 55.
79. Barnett 1957: Figs. 11–12, pp. 46–47; Pl. 12, A 15; Pl. XV, L5.
80. Ghirshman 1964c: Figs. 36, 93, pp. 33, 71; Fig. 137, p. 104; Figs. 377, 379, pp. 312–313; Fig. 404, p. 328.
81. Barnett 1957: Pls. CXIII–CXVIII.
82. Rostovtzeff 1922: Pl. VIII, No. 1.
83. Vanden Berghe 1959: Pl. 2 a, b, pp. 5–6.
84. Godard, A., 1950: Fig. 79, pp. 91, 133.
85. Schaeffer 1948b: Fig. 266, No. 12.
86. Schaeffer 1948b: Fig. 292, No. 5, p. 513.
87. Woolley 1921: Vol. 2, Pl. 28, Nos. 1–3.
88. Dalton 1905: Pl. IX.
89. Barnett 1957: Pl. XXX, S37c, S45a, S44a-b, S43, S41; Pl. XXXI, S34a-b; Pl. XXXIII, S50.
90. Mylonas 1966: Pl. 139 below.
91. Marinatos 1960: Pls. 80, 161, 170.
92. Karasek n.d.: p. 45.



93. Kantor 1947a: Pl. III A, B, F, J.
94. Bossert 1937: Pls. 18, 25, p. 16; Pls. 204, 335, p. 31; Pls. 249, 433, p. 40.
95. Amiet 1965: Fig. 1, p. 243.
96. Ghirshman 1964c: Fig. 44, p. 36.
97. Ghirshman 1964c: Fig. 154, p. 115.
98. Bossert 1942: Pl. 320, No. 1217, p. 94.
99. Negahban 1977a: Fig. 41.
100. Borovka 1928: Pl. 3 B, C, p. 91.
101. Diez 1944: Fig. 10, p. 24.
102. Kantor 1964: Pl. VII B, p. 238.
103. Hogarth 1920: Pl. VI, 166, 167, 175, 179, 182, 183; pp. 35–37, 95.
104. Frankfort 1939: Pl. XXXI a, c, d, e; Pl. XLII b, o; Pl. XLIII a, b; Pl. XXXII a, g; Pl. XLI e, f, i, j, o; Pl. XLII f, h, i, j, k, m, o; Pl. XLIV c, i, m, n; Pl. XLIV q, t.
105. Moortgat 1942: Fig. 77, 78, pp. 84–86.
106. Schaeffer 1934: Pl. XV.
107. Calmeyer 1973. Coil bands occur on most vessels in Groups A, B, C, E, F, G, H, I, K, L, M, N, O and Figs. 92 and 137.
108. Barnett 1957: Pls. XV K2, XXIX S36q, S35; Pl. XXXI S38 a-c; Pl. CX S403 a-c.
109. Porada 1947a: Fig. 39, p. 38.
110. Wilkinson 1963: Figs. 8–9, pp. 279–280.
111. Porada 1948a: Pl. XLI, 267 E.
112. Ward 1910: pp. 31–35.
113. Barnett 1965: pp. 53–4.
114. Dyson 1959: pp. 4–17.
115. Porada 1959: pp. 19–22.
116. Barnett and Falkner 1962: Pls. V, VI.
117. Dyson 1960b: pp. 118–129.
118. Weber 1920: Pl. 480, p. 96.
119. Porada 1964b: p. 200.
120. Azarpay 1959.
121. Azarpay 1959: Figs. 19–24, pp. 324–325.
122. Porada 1947a: Figs. 77, 84, pp. 60–65.
123. Vieyra 1955: Pl. 94; pp. 49, 82–83.
124. Ghirshman 1964c: Fig. 379, p. 313.
125. Godard, A., 1950: Fig. 20, pp. 33–34.
126. Kantor 1957b: Fig. 3.
127. Azarpay 1959: Figs. 19–24, pp. 324–325.
128. Rostovtzeff 1932: Pl. VI.
129. Van Buren 1930: Pl. XLIX, Fig. 235, p. 186.
130. Barnett 1965: pp. 98–99.
131. Frankfort 1963: Pl. 45, Fig. D.
132. Parrot 1958: Pl. A.
133. Mallowan 1966: Vol. 2, No. 324, p. 398, p. 396 (descr.).
134. Karasek n.d.; personal communication.
135. Calmeyer 1973: A 13, p. 25; G 3–4, p. 59; H 4, p. 63; H 10, p. 69; I 2, p. 71; Chart, p. 196.
136. Calmeyer 1969: Fig. 65, p. 66; Chronological Chart.
137. Rostovtzeff 1922: Pl. VI.
138. Calmeyer 1973. Rosettes appear on the base of most vessels in Groups A, B, C, F, G, H, I, K, L, M, N, O and Figs. 92, 97, 98.
139. Frankfort 1939: Pl. XXVI, I.
140. Mallowan 1966: Vol. 2, Fig. 425, p. 521.
141. Thureau-Dangin 1931: Pl. XXXVII.
142. Moorey 1974a: Fig. 183, p. 186.
143. Frankfort 1939: Pl. XLIII d.
144. Contenau 1926: Fig. 12, pp. 29–30.
145. Calmeyer 1973: G 4, p. 59; H 1, p. 63; H 2, p. 67; H 8, p. 69; H 12, p. 108; Fig. 101, p. 181; Fig. 132.
146. Ghirshman 1964c: Fig. 404, p. 328.
147. Mallowan 1966: Vol. 2, Fig. 471, p. 545.
148. Crawford 1961: Fig. 5, p. 90.
149. Porada 1962: p. 114.
150. Bossert 1942: Pl. 239, No. 938, p. 76.
151. Budge 1914: Pl. L2.
152. Barnett 1957: Pl. XXXIII, pp. 7–8.
153. Godard, A., 1950: Fig. 13, p. 23.
154. Van Buren 1954b: Pl. XXIII, Fig. 14; p. 110. This seal is in the Layard Collection.
155. Rostovtzeff 1922: Pl. VIII, No. 1.
156. Karasek n.d.: p. 59.
157. Porada 1965: Pl. I, pp. 20–21.
158. Amiet 1966: Fig. 72, p. 114.
159. Gurney 1961: Pl. 17.
160. Frankfort 1956: p. 115 and Fig. 35.
161. Barnett 1960: Pl. 124, 128, p. 31.
162. Barnett and Falkner 1962: Pl. LXVII, pp. 26, 117.
163. Barnett and Falkner 1962: Pl. LXVII, p. 26, No. 3.
164. Vieyra 1955: Pl. 94, pp. 49, 82–83.
165. Amiet 1966: Fig. 410 D, p. 536.
166. Kleiss 1962: Fig. 21b, p. 166.
167. Nagel 1963: Pls. XXIX–XXXI; Drawing 57 at end of book.
168. Van Buren 1930: Pl. XXVII, Fig. 132, p. 94; Pl. XXXV, Fig. 169, p. 127.
169. Negahban 1977a: Figs. 8, 9, and cover pictures.
170. Moortgat 1932: Pl. IX, p. 107.
171. Wilkinson 1965: Fig. 9, p. 9.
172. Barnett 1960: pp. 27, 3; Pls. 3, 5, p. 9.
173. Barnett and Falkner 1962: Pls. CIX, CXI, CXIII, pp. 23–24.
174. Barnett and Falkner 1962: Pl. CVII, p. 18.
175. Andrae 1934: Pl. 548, p. 692.
176. Andrae 1934: Pl. 566, p. 697.
177. Culican 1965: Pl. 74; pp. 131, 251.
178. Ghirshman 1964c: Fig. 212, p. 165.
179. Kantor 1957b: Fig. 3.
180. Akurgal 1959: Pl. B. This vessel is in the collection of the Villa Giulia in Rome.
181. Azarpay 1959: Fig. 41, p. 337.
182. Ghirshman 1964c: Fig. 379, p. 313.
183. Rostovtzeff 1932: Pl. VI, pp. 48–49.
184. Barnett 1957: Pls. XLVI–XLVII S70, pp. 7–8.
185. Karasek n.d.: p. 52, Footnote 153.
186. Moortgat 1932: Pls. XLIX, XLVIII, p. 110.
187. Moortgat 1932: Pl. LXXXVIII, p. 112.
188. Contenau 1926: Pls. IV–VI, Figs. 4–6, p. 21.
189. Bossert 1942: Pl. 199, Nos. 816, 818, p. 71.
190. Vieyra 1955: Pl. 15.
191. Vieyra 1955: p. 63; Pl. 41, pp. 58–59.
192. Vieyra 1955: Pl. 85.
193. Vieyra 1955: Pl. 86, pp. 80–81.
194. Karasek n.d.: pp. 53–54. Porada 1965: pp. 98–100.
195. Wilkinson 1965: Figs. 7–8, pp. 106–107.
196. Ghirshman 1964c: Fig. 404, p. 328.
197. Goldman 1964: Fig. 3, pp. 327–328.
198. Ghirshman 1964c: Fig. 16, p. 18.
199. Dyson 1960b: p. 127.
200. Ghirshman 1964c: Fig. 142, p. 109.
201. Kantor 1947b: Pls. X–XI, pp. 250–274.
202. Vanden Berghe 1959: Pl. 22, p. 5.
203. Porada 1962: Fig. 62, p. 93.
204. Potratz 1952: Tab. IV, No. 11, p. 20; "D'ardenne de Tizac," *Art et Decoration*, 1931, S.15; Potratz, *Praehistorische Zeitschrift* 1941/42, S.210, Fig. 63.
205. Frankfort 1956: Fig. 1.
206. Kantor 1962: p. 104; Fig. 14, pp. 110–111.
207. Barnett 1957: Fig. 28, p. 83.
208. Contenau 1926: Fig. 68, p. 62.
209. Moortgat 1942: Fig. 63, pp. 78–79.
210. Porada 1962: p. 91. This gold cup is in the Louvre.
211. Van Buren 1930: Pl. LXVIII, Fig. 320, p. 277.
212. Dalton 1905: Fig. 28, p. 43.
213. Barnett 1957: Fig. 29b, p. 83.
214. Goldman 1964: Fig. 3, pp. 327–328.
215. Culican 1965: Pl. 8. This beaker is in the Louvre.
216. Rostovtzeff 1922: Pl. VI, pp. 48–49.
217. Bossert 1942: Pl. 235, No. 910, p. 76.

218. Ghirshman 1939: Pl. XXIV, No. 9; Pl. LVII, S.828; Pl. LIX, S.653; Pl. LXV, S.857d; Pl. LXVIII, S.717; Pl. LXXXIII, S.940; Pl. LXXVII, S.970, p.125.
219. Barnett and Falkner 1962: Pl. CXXII, p. 25.
220. Smith 1938: Pl. XLVII.
221. Moorey 1971: Fig. 21, No. 495; Pl. 79, No. 495, p. 262.
222. Contenau 1935: Pl. 18, Tomb 52, No. 4, p. 26.
223. Calmeyer 1969: Fig. 27, pp. 28–29.
224. Calmeyer 1969: Fig. 155 (lower right).
225. Calmeyer 1969: pp. 182–184.
226. Potratz 1968: Pl. XLII, Fig. 260.
227. Contenau 1935: Pl. 8, Tomb 3, No. 3, pp. 18, 76.
228. Moorey 1974a: No. 126, pp. 144–145.
229. Moorey 1971: Fig. 22, No. 507; Pl. 80, No. 507, pp. 266–267.
230. Contenau 1935: Pl. V, No. 3, pp. 18, 47, 80.
231. Moorey 1974a: No. 141, pp. 160–161.
232. Ghirshman 1939: Pl. LXIX, S.954.
233. Moorey 1974a: No. 139, pp. 144, 158.
234. Negahban 1977: Fig. 24, pp. 18, 41.
235. Moorey 1974a: No. 128a, pp. 146–147.
236. Negahban 1977: Fig. 25, pp. 18–19, 42.
237. Ghirshman 1939: Pl. XXIII, Nos. 2, 5; Pl. L, S.546a; Pl. LIII, S.572.
238. Schaeffer 1948b: Fig. 265, Nos. 20, 21, §203, pp. 477–484.
239. Herzfeld 1941: Fig. 217, Pl. XXV, p. 110.
240. Calmeyer 1969: pp. 101–102, 104.
241. Potratz 1955: Fig. 30, pp. 219, 222.
242. Potratz 1955: Pl. 5.
243. Calmeyer 1964: Pl. 47, No. 98, pp. 40–41.
244. Nagel 1963: Pl. LIV, Nos. 119a, b, p. 46.
245. Nagel 1963: Pl. LIV, No. 118, p. 46.
246. David-Weill Collection 1972: 277, 279, 280.
247. Moorey 1971: Fig. 27, No. 522, Pl. 82; Fig. 28, Nos. 523–524, p. 278.
248. Loudmer and Poulain 1976: Fig. 58.
249. Potratz 1968: Fig. 273, pp. 68, 94.
250. Moorey 1974a: Figs. 137–138, pp. 156–157.
251. Moorey 1974b: Pl. XIX (left), p. 38.
252. Potratz 1968: Fig. 272, pp. 68, 94.
253. Ghirshman 1939: Pl. XIX, Nos. 2, 5.
254. Vanden Berghe 1959: Fig. 157c.
255. Schaeffer 1948b: Fig. 265, Nos. 20, 21.
256. Negahban 1977: Fig. 106, Pl. XVII.
257. Calmeyer 1973: 0 9, p. 85; Fig. 113, p. 136; Fig. 115, p. 137; A 3, 4, p. 19; A 5, p. 21; A 13, p. 25; A 15, 17, p. 27; A 18, 19, 20, p. 29; A 21, 22, p. 31; A 23, 24, 26, p. 33; Fig. 93, 96, 97, 98, pp. 102–106; Groups A, B, C, D, E, F, G, H, I, K, L, M, N, O all contain examples.
258. Muscarella 1978: Pls. 45–52.
259. Moorey 1974a: Fig. 134–135, pp. 153–154.
260. Wild boars are common in this region and often cause danger during the mating season. When heavy snows fall, they may besiege villages, preventing traffic between communities. Then the villagers travel only in groups, beating on pots and pans to frighten the wild boars away.
261. Amiet 1968: Fig. 1, pp. 250–251.
262. Calmeyer 1973: F 1–18, pp. 47–57; N 2, p. 81; Fig. 97, p. 104; Fig. 100, p. 107.
263. This master hand was found in Mr. Ali Akbar Sameti, the metal repairer of Musée Iran Bastan, who devoted more than a month to the difficult task of restoring the broken vessel. The fine drawing of the details of the vessel is by Miss Lili Taghipour, of the museum staff, who has drawn most of the designs on the Marlik vessels.
264. Samadi 1959a: Figs. 11, 12.
265. Barnett 1965: pp. 90–103. This emphasis on the gold vessels stems from the fact that few silver vessels were found at Marlik, whereas the bronze vessels, much fragmented and broken, have only recently been published.
266. In addition to the vessels found at Marlik itself, other decorative metal vessels of the Marlik culture have been found in clandestine excavations in the Sefid Rud area, such as the Metropolitan Museum vessels discussed in the following paragraphs.
267. Wilkinson 1965: p. 107.
268. Only three of the vessels contain a design on the base that is not a rosette. Gold Beaker 9 has a design of curving interlacing triangles; Gold Beaker 14 has a woven-reed design; and Bronze Vase 58 has a circular design of vultures. In addition, several vessels have plain bases, and several of the bases are missing.
269. Porada 1965: p. 13.
270. Canby 1971.
271. Modderman, P.J.R., Instituut Voor Prehistorie Der Rijksuniversiteit Te Leiden (Groningen C-14 Laboratory) Letter Ref. 20, Jan. 15, 1968.
272. Negahban 1977b.

Table 3. Specifications of Marlik Metal Vessels

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Diam. cm.	H. cm.	Material
1	Pot (simple linear design)	31 M	14931	26	XVII B	7.7	9.0	gold
2	Cup (plain)	150 M	25068	27	XVII D	6.0	5.0	gold
3	Beaker (dotted decoration)	761 M	14813	47	XXII E	13.5	13.5	gold
4	Bowl (goat)	13 M	14700	24	XV E	5.5	9.0	gold
5	Cup fragments (bulls)	321 M	25022	32	XVII E			gold
6	Cup (fluted)	354 M	14704	36	XVIII C	8.0	3.5	gold
7	Cup (fluted)	1132 M	25399	37	XVIII E	9.0	4.0	gold
8	Beaker (winged bulls)	29 M	14708	26	XVII B	14.0	17.5	gold
9	Beaker (unicorns)	201 M	14698	45	XXII H	10.5	17.5	gold
10	Cup (mountain goats)	352 M	14810	36	XVIII C	5.0	6.8	gold
11	Bowl (eagle/rams)	353 M	14701	36	XVIII C	13.5	8.5	gold
12	Beaker (winged bulls/griffs)	355 M	14811	36	XVIII C		16.5	gold
13	Bowl (standing eagles)	515 M	14702	32	XVII E	7.4	9.0	gold
14	Beaker (life motif)	610 M	14699	2	VI B+	14.0	20.0	gold
15	Bowl (gods/goddesses)	762 M	14812	52	XXIII G			gold
16	Pot w/spout	162 M	25336	45	XXII H	5.4	6.8	silver
17	Pot w/spout	163 M	25337	45	XXII H	8.4	7.4	silver
18	Cup (punched decoration)	14 M	14902	24	XV E	6.0	4.5	silver
19	Beaker (warrior)	202 M	14834	45	XXII H	7.0	14.0	silver
20	Cup (leaping stag)	546 M	14854	39	XVIII L	7.8	8.0	silver
21	Pot w/spout	277 M		50	XXI L	5.0	7.5	silver, gold
22	Cooking pot	172 M	25146	18	XIV D	30.0	21.0	bronze
23	Cooking pot	176 M	38 STO	44	XXI M	26.5		bronze
24	Cooking pot	1061 M	25423	47	XXII E	40.0	40.0	bronze
25	Cooking pot	1062 M	77 STO	52	XXIII G	40.0	40.0	bronze
25	Cooking pot	1063 M	77 STO	52	XXIII G	40.0	40.0	bronze
26	Pot handle	508 M	25017	23	XV D			bronze
27	Bowl	412 M	14607	36	XVIII	18.0	6.0	bronze
28	Bowl	658 M	25355	30	XVI L	11.5	5.0	bronze
29	Bowl	631 M	71 STO	4	VIII A+	12.0	4.0	bronze
30	Tumbler	175 M	25020	50	XXI L	7.3	7.0	bronze
31	Tumbler	728 M	25224	24	XV E	7.8	9.3	bronze
31	Plate	661 M	25319	24	XV E	19.0		bronze
32	Plate	186 M	25014	42	XX F	7.0	0.8	bronze
33	Plate	723 M	38 STO	4	VIII A+	42.0	5.2	bronze
34	Cup	151 M	14589	27	XVII D	8.0	5.0	bronze
35	Cup	229 M	15 STO	25	XVI F	9.2	6.5	bronze
36	Cup	1161 M	25410	27	XVII D	6.0	8.5	bronze
37	Jar	619 M	14619	6	X A+	5.5	15.7	bronze
38	Jar	1399 M	31 STO	5	VIII D	4.5	10.5	bronze
39	Jar	44	38 STO	26	XVII B	3.0	15.5	bronze
40	Jar	1400 M	31 STO	5	VIII D	5.5	7.5	bronze
41	Pot w/spout	1401 M	38 STO	27	XVII D	7.2	16.0	bronze
42	Pot w/spout	1402 M	31 STO	52	XXIII G	9.0	15.0	bronze
43	Pot w/spout	154 M	38 STO	27	XVII D	10.0	13.0	bronze
44	Pot w/spout	1403 M	31 STO	45	XXII H	10.6	10.4	bronze
45	Pot w/spout	822 M	25421	52	XXIII G	9.0	13.5	bronze
46	Situla	992 M	14614	47	XXII E	6.5	16.0	bronze
47	Vase (boar)	712 M	14608	2	VI B+		13.0	bronze
48	Cup (standing antelopes)	1185 M	25441	39	XVIII L	12.0		bronze
49	Vase (recumbent antelopes)	1213 M	25468	39	XVIII L	11.0		bronze
50	Vessel fragment (ibex heads)	1213a M	25468	39	XVIII L	12.0		bronze
51	Base fragment	1392 M	31 STO	5	VIII D	7.0		bronze
52	Base fragment	1393 M	31 STO	5	VIII D			bronze
53	Vessel fragments	1397 M	31 STO	5	VIII D			bronze

*Table 3. Specifications of Marlik Metal Vessels.*

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Diam. cm.	H. cm.	Material
54	Vase (hunting scene)	98 M	53 STO	42	XX F			bronze
55	Pot (lions)	178 M	25380	32	XVII E	12.0	11.0	bronze
56	Chalice (plant motif)	1325 M	31 STO	5	VIII D	14.5	6.0	bronze
57	Vessel (hunting scene)	1391 M	31 STO	5	VIII D	8.5		bronze
58	Vessel (pack animals)	1394 M	31 STO	42	XX F	11.5		bronze
59	Vessel fragments	1395 M	31 STO	44	XXI N	8.0		bronze
60	Vessel (incomplete)	1396 M	31 STO	1	III D+			bronze
61	Base fragment	1398 M	31 STO	44	XXI N			bronze
	Vessel	49 M	31 STO	26	XVII B			bronze
	Lids	509 M	21 STO	23	XV D			bronze
	Vessel	347 M	14600	44	XXI N			bronze
	Vessel	1389 M	31 STO	5	VIII D			bronze

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# Mosaic Glass and Frit Vessels

## *Introduction*

Glazed pottery, frit, and glass have a long history of development in the ancient world. The first glazes may have been produced as early as the fifth millennium B.C.,<sup>1</sup> but it was some time before the problem of making the alkaline glazes adhere to an ordinary clay body was solved, and the earliest examples of glazed pottery vessels belong to the sixteenth century B.C.<sup>2</sup> Glass also was developed over a long period of time, with the earliest products being thick glazes. Peltenberg suggests that the earliest glass objects produced in a discipline of glass making date to the mid-second millennium B.C.,<sup>3</sup> a date supported by findings of early Egyptian glass.<sup>4</sup> The manufacture of polychrome into vitreous material was also developed around the sixteenth century

B.C.<sup>5</sup> The techniques used to make ancient glass are described in detail by Schuler.<sup>6</sup>

Marlik produced a relatively large number of mosaic glass, frit, and vitreous frit-glass vessels, eight examples altogether. Although this might not at first seem to be a large number, it begins to appear more remarkable when compared to the one or two examples produced in other excavated sites of the second half of the second millennium B.C. Found at Marlik were three examples of mosaic glass vessels, four of frit vessels, and one of a vitreous frit vessel, in some parts well vitrified like glass, which apparently represents an attempt to make a complete glass vessel rather than the mosaic glass for which the technique was already well developed.

## *Mosaic Glass Vessels (62-64)*

Three mosaic glass vessels were found at Marlik, all of them in Tomb 45, pointing to the likelihood that all three were made by the same glass maker, in whose workshop the technique of making mosaic glass was well advanced. Comparable materials from Hasanlu in northwestern Iran, from Tell al Rimah and Aqar Quf in Mesopotamia, and from Egypt demonstrate that very highly specialized and experienced glass makers were conducting workshops in different parts of the Near and Middle East at this time. Since the process was very delicate and consequently very expensive, it probably would have been taking place only at the seat or capital of a major power that had the treasury necessary to maintain this type of special court workshop.

### **62 Mosaic Vase**

1114 M Fig. 10; Pl. 30; Color Plate XXI B

Badly broken and restored,<sup>7</sup> about 17.0 cm high and 7.0 cm in diameter at the rim, with walls about 0.4 cm thick. The vessel, which was found in Tomb 45 (Trench XXII H), is made of an elaborate glass mosaic. Very fine small cylinders of blue and white stone, each about 0.275 cm in diameter, were laid next to one another in a mortar that vitrified to red or green upon firing, to form delicate geometric lozenges. This beautiful mosaic was used to produce a tall vase with a knob at the rounded bottom and very slightly outward-curving sides with a plain rim that has been ground smooth. The knob at the base fits into a hole in the center of a separate stand, only

part of which was found, with a round base and projecting center with a cavity in the middle.

The mosaic technique used in making this vase was very carefully carried out. The individual rods were precisely made, and the heating in the kiln well controlled so that the light-blue and white rods were not noticeably affected, and the red mortar used to bind the rods together flowed into the interstices of the pattern, becoming a little deformed and in some parts changing in color to green. Alternatively, the present greenish color of the mortar in some parts might have been produced during the long period underground. This mosaic vase has been studied by Von Saldern<sup>8</sup> with several very small broken pieces left from the restoration analyzed at the Corning Museum of Glass Laboratory under the supervision of Robert H. Brill.<sup>9</sup>

### 63 Mosaic Beaker

1115 M Fig. 10; Pl. 30

About 9.3 cm high and 5.8 cm in diameter at the mouth, found in Tomb 45 (Trench XXII H); cylindrical shape with flat base. It is divided horizontally by rather wide bands of blue-white-blue glass into three main registers consisting of horizontal bands of multicolored glass in irregular red-white, blue-white, and yellow-blue chevron and vertical zigzag patterns. Each of these glass bands is constructed of two threads of contrasting color twisted together while soft and then flattened to form a ring, with the rings possibly placed one on top of the other around a solid cylindrical core and then surrounded by an outer mold containing the base to which the lowest ring was to adhere.<sup>10</sup>

### 64 Mosaic Chalice

1116 M Fig. 10; Pl. 30

Partly broken and restored, about 11.5 cm high and 6.0 cm in diameter at the rim, found in Tomb 45 (Trench XXII H). Its tall bowl, rounded at the bottom and with a rim turned slightly inward, has a long cylindrical stem with a flat-bottomed solid pedestal base. Its design consists of white, gray, and yellow encircling horizontal bands of parallel connected semicircular and zigzag patterns set in a light-bluish matrix.

### COMMENTS

Several ancient clay tablets discuss the making of glass, the earliest mention occurring on a few broken clay tablets found in the library of the Palace of Ashurbanipal at Nineveh, and on three more isolated tablets of the same genre, one acquired from a dealer and now in the British Museum, another excavated in Babylon and now in the Staatliche Museum in Berlin, and a third found at Bogazköy and also in the British Museum.<sup>11</sup>

Several examples of mosaic glass similar to 62 were found at Tell al Rimah, including a broken piece of a mosaic vessel that is technologically closely similar to this Marlik beaker but with a different design pattern, of parallel zigzag bands, found in Level I B and dated by Oates to 1400–1350 B.C.<sup>12</sup> Other fragments of mosaic glass from Tell al Rimah are discussed by Von Saldern<sup>13</sup> with a detailed scientific analysis of the pieces undertaken by Brill of the Corning Museum of Glass.<sup>14</sup> Pieces of three badly crushed mosaic glass beakers found in Level IV of Hasanlu, dated to the ninth century B.C., which when restored apparently represented narrative scenes,<sup>15</sup> have also been analyzed in detail by Brill.<sup>16</sup>

Zigzag patterns similar to those of 63 can be seen on a glass jar found in the Middle Assyrian level of Tell al Rimah.<sup>17</sup> Saldern suggests, "The shape of the beaker resembles a type represented in the Nuzi ware. The bands are technically related to the twisted bands or ropes frequently laid around the rims of Egyptian and to a lesser degree Mesopotamian core-formed vessels. They are also reminiscent of the black and white twisted rods from Tchoga Zanbil. Analogues seem to exist furthermore between them—when seen as a strip of two altering colors—and decorative painted bands on late Assyrian ceramics from Assur."<sup>18</sup>

Several vessels with similarities to 64 have also been found. A somewhat similar technique was used in Egyptian core vessels from the Eighteenth Dynasty.<sup>19</sup> Other examples from Egypt belonging to the second half of the second millennium B.C. can also be compared to the Marlik vessel.<sup>20</sup> A glass jar of unknown provenance in the Iraq Museum is dated to the eighth to seventh centuries B.C.,<sup>21</sup> and a somewhat similar glass jar, with a sand core, of similar technique, from a later time was found in the Fortetsa tomb near Knossos in Crete, assigned to the Geometric Period with a suggested date of 750 B.C.<sup>22</sup>

## *Frit Vessels (65–69)*

Although frit had been used for some time in the making of seals and beads, the second half of the

second millennium B.C. saw a great development in the application of frit to the making of larger objects.

The frit jars of Marlik, and one or two examples in particular, reveal a rather well-developed technology, which was used to produce vessels of great beauty of shape and proportion. These frit jars were found in three tombs, with Tomb 50 (Trench XXII I) and Tomb 41 (Trench XIX K) each containing two frit jars, and Tomb 24 (Tomb XV E) containing one.

#### 65 Frit Jar

30 M Pl. 31

About 26.0 cm high and 2.5 cm in diameter at the rim, found in Tomb 24 (Trench XV E). The jar is made of light greenish blue frit, its surface in some parts aged with granulated effect. The oval body has its largest diameter in the middle, gradually decreasing toward the top and bottom, with a rather small flat base and a small shoulder, encircled by a band of connected parallel chevrons, that turns in a sharp projected angle to a long cylindrical neck. This jar is beautifully proportioned, with a graceful, elegant shape.

#### 66 Frit Jar

94 M Pl. 31

About 15.0 cm high and 4.0 cm in diameter at the rim, found in Test Trench 2, which is located in the area of Tomb 50 (Trench XXII L). It is made of whitish frit, which on some parts of the surface is pulverized and decayed with a granulated effect. The globular body has an almost round pointed base and a shoulder curving in an extension of the body to a rather concave neck, which in turn curves to an outward flat rim. The firing in some parts has produced an effect of vitrification on the surface. This well-proportioned jar has a beautifully balanced shape.

A glass jar similar in shape to 66 was found at Tell al Rimah, in the Mid-Assyrian level.<sup>23</sup>

#### 67 Frit Jar

103 M Pl. 31

About 6.2 cm high and 2.8 cm in diameter at the rim, found in Test Trench 2, which falls in the area of Tomb 50 (Trench XXII L). It is made of whitish frit, which in some parts has become well vitrified, almost similar to glass, and in fact, this jar may well represent a very early and primitive example of crude glass. Particles of frit and soil sediment produce a granulated effect on the surface. The jar has a carinated body with a flat base, concave neck, and outward-curving thickish rim.

#### 68 Frit Jar

1086 M Pl. 31

About 10.5 cm high and 3.8 cm in diameter at the rim, found in Tomb 41 (Trench XIX K). It is made of whitish frit, which shows a granulated effect on some corroded parts of the surface. The body is globular with a round base and straight neck that slants outward toward a flat rim with a rather narrow mouth.

#### 69 Frit Jar

1087 M Pl. 31

Broken with some parts missing, about 18.5 cm high and 2.4 cm in diameter at the mouth, found in Tomb 41 (Trench XIX K). It is made from a whitish frit so soft and powdery that it looks like gypsum. The jar has a fairly long body with a flat outward-turned base, and a long neck slanting inward near the rim, which is flat with a rather small mouth. A loop handle connects to the neck and shoulder.

## Chapter V Notes

1. Peltenberg 1971: p. 6.
2. Peltenberg 1971: pp. 7–8.
3. Peltenberg 1971: p. 8.
4. Nolte and Haevernick 1967: pp. 491–493.
5. Peltenberg 1971: p. 9.
6. Schuler 1959a, 1959b, 1962.
7. Mr. Piramoon of the Iran Bastan Museum was most helpful in restoring this vase, of which enough remained to reveal the profile from rim to base. The light areas in the picture are not original.
8. Saldern 1966.
9. Brill 1966.
10. Saldern 1966: p. 17.
11. Oppenheim 1970: p. 4.
12. Oates 1966: Pl. XXXV C, p. 127, footnote 9.
13. Saldern 1966: Fig. 13, pp. 18–19.
14. Brill 1966: pp. 26–27.
15. Saldern 1966: pp. 10–15, 23.
16. Brill 1966: pp. 3–20.
17. Oates 1970: Pl. III b, pp. 2–3.
18. Saldern 1966: pp. 17–18.
19. Schuler 1962: pp. 32–37. Vavra 1954: Figs. 4, 8, 9, 11, 12 Beilage I (top right) III, pp. 13–23.
20. Nolte and Haevernick 1967: p. 491, Pls. 59–62, 64.
21. Lenzen 1965: Pl. 52, Cat. No. 134, p. 89.
22. Weinberg 1962: Fig. 4, pp. 2–3.
23. Oates 1970: Pl. III e, pp. 2–3.



*Table 4. Specifications of Mosaic Glass and Frit Vessels*

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Diam. cm.	H. cm.	Material
62	Vase	1114 M	14696	45	XXII	7.0	17.0	glass
63	Beaker	1115 M	14719	45	XXII	5.8	9.3	glass
64	Chalice	1116 M	14720	45	XXII	6.0	11.5	glass
65	Jar	30 M	25210	24	XV	2.5	26.0	frit
66	Jar	94 M	25211	50	XXII L	4.0	15.0	frit
67	Jar	103 M	25361	50	XXI L	2.8	6.2	frit
68	Jar	1086 M	25116	41	XIX K	3.8	15.0	frit
69	Jar	1087 M	30 STO	41	XIX K	2.4	18.5	frit



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# Figurines

Among the many objects of artistic worth found in the Royal Cemetery of Marlik is a rich collection of human and animal figurines. All the human and most of the animal figurines are complete and formed in the round. A few of the animal figurines were made as part of another object, such as the handle of a vessel, the finial of a bracelet, or the head of a pin. In the last case, the animal may not be a complete figure but only a part of one, usually the head.

These figurines are made in both pottery and metals, including gold, silver, and bronze. All the figurines are highly stylized, but some of the animal figurines appear more naturalistic, representing actual species, whereas others seem to portray myth-

ical creatures. A consistent artistic style is apparent for the whole collection of figurines, although they exhibit varying qualities of workmanship. Groups of figurines coming from a single tomb show a common style and details of workmanship, indicating that they were most likely the product of a single workshop or even a single artist.

On the whole the animal figurines, both in pottery and in metal, are beautifully proportioned, finely worked, and highly stylized, whereas the human figurines are cruder and more awkward. The human figurines, less well proportioned and balanced than the animal figurines, are nude, with great emphasis placed on the male and female organs, and may represent gods and goddesses of fertility.

## *Pottery Human Figurines (70-77)*

Five male and three female pottery figurines were found at Marlik, all red in color. They were broken when uncovered, and the lighter lines and patches in the illustrations represent the repairs. Except for the small solid figurines of an archer and a charioteer, the pottery human figurines are hollow and fairly large, between 35 and 46 cm tall, and most were found in a single tomb, Tomb 36.

Characteristically these figurines have triangular flattened faces with pierced ears, oval eyes that look almost closed, and strained open mouths. They have attenuated arms and somewhat slender upper bodies, which widen to massive buttocks and legs ending in very large flat feet, often with six toes on each foot. Sexual characteristics of both the male and female figurines are detailed and prominently displayed. The proportions of their bodies and the size and flatness of their feet make it possible for these figures to stand easily without support.

The surface of most of the figurines shows some evidence of polishing and burnishing. Although nude, they are adorned with a variety of trappings. Four of the five male figures carry a large dagger at the waist, which, on three of the figures, is attached to a wide belt. The female figures are more variously decorated with hair, jewelry, some indication of a garment covering the lower body, and decoration around the ankles and over the tops of the feet.

Helene Kantor, in discussing female fertility figures that have been found practically throughout the ancient world—in Syria, Mesopotamia, Anatolia, the eastern Mediterranean shores, and Iran—as early as the third millennium and as late as the early first millennium B.C., says: “Usually their hair, necklace, naval and pubic triangle are shown by incision or punctuation decoration. They often refer to human devotees under the protection of the goddess of fertility or to the goddess herself.”<sup>1</sup>

### 70 Pottery Female Figurine

1120 M Fig. 11; Pl. 32

Dark red hollow pottery figurine, broken when found but later repaired, about 35.0 cm high, found in Tomb 36 (Trench XVIII C). It has a rounded small head, a long triangular face with a pointed chin, roughly triangular projecting ears that are pierced, an almost nonexistent forehead, long oval eyes with a curve at each end, a large straight narrow nose, and an open mouth with a few traces of teeth. The attenuated arms have elbows reaching straight out from a triangular shoulder area and hands with well-pronounced fingers that touch above the small conical breasts with shallow holes in the center indicating nipples. The waist is fairly thick, and the buttocks are large and backward projecting. The female organ is carefully detailed and prominent. Short cylindrical legs end in large flat feet, with five cuts indicating six toes on each foot.

The surface of this figurine is polished and burnished, and bands of elongated dots decorate various parts of the body. Hair is indicated by a circular band of elongated dots around the back of the skull, from which radiate numerous straight bands of elongated dots, reaching to the forehead in front and the nape of the neck in back. Two parallel bands of elongated dots encircle the neck, and one band encircles each wrist, probably representing a necklace and bracelets. Another band of elongated dots surrounds the body below the waist, with two extensions in front reaching to each side of the top of the pubic triangle, apparently representing some sort of female dress. Six parallel bands of elongated impressed dots cover the top of each foot, from toe to ankle, and two parallel bands surround the front of the ankle with one band continuing completely around it.

### 71 Pottery Female Figurine

1117 M Fig. 11; Pl. 32

Hollow red pottery figurine, broken when found but later reassembled, about 37.5 cm high, found in Tomb 36 (Trench XVIII C). The head of this crude figurine is small, with a rounded skull, an elongated triangular face with almost no forehead ending in a pointed chin, semicircular pierced ears, narrow oval eyes, an extraordinarily large nose with large nostrils, and an open oval mouth with no teeth. The attenuated arms are raised, with the hands, having well-pronounced fingers, clasping each side of the face. Small conical breasts have shallow holes in the center indicating nipples. A fairly slender waist slopes outward into massive buttocks. The female organ is carefully detailed and prominent. Short cylindrical legs end in large flat feet, with five cuts indicating six toes on each foot.

On the better-preserved fragments of this figurine the burnishing of the surface can be seen, and several parts of the body are decorated. At the back of the skull the hair is indicated by several bands of

elongated dots, which radiate outward from a circular band of elongated dots. A band of larger elongated dots encircling the neck, from which two parallel loops of smaller dots extend to the chest, probably represents a necklace with pendants. Several unconnected elongated dots, large and small, lie parallel to the necklace and hanging bands. Another band of elongated dots surrounds the body below the waist, from which two more bands of dots reach to each side of the female organ, probably indicating a garment. Three more parallel bands of elongated dots decorate the top of the feet near the ankles, which are surrounded by two bands of dots.

### 72 Pottery Female Figurine

379 M Fig. 11; Pl. 32; Color Plate XXII A

Hollow figurine of red pottery, broken when found but later reassembled, about 37.5 cm high, found in Tomb 36 (Trench XVIII C). The head is rounded, with a flattened triangular face, somewhat triangular projecting pierced ears, pointed oval eyes, an outward-pointing large straight nose, and a strained open mouth with teeth indicated in the upper and lower jaws. The attenuated arms are upraised, and the hands, barely indicated with simple cuts for the fingers, clasp the cheeks on each side of the gaping mouth. The small projecting conical breasts have shallow holes in the center indicating nipples. Attached between the breasts is an open-spouted vessel, which connects through a hole to the hollow body of the figurine. Although most of this attached vessel was missing, enough remained to reproduce the original. The figure narrows somewhat at the waist and then widens into massive hips rounded at the back. The female organ is carefully detailed and prominent. Massive conical legs end in large flat feet, with five cuts indicating six toes on each foot.

The surface of this figurine is burnished, with particular care shown in the area of the waist. The hair is indicated by rows of short parallel elongated dots, which spread out from a circle of elongated dots at the back of the skull. Two rows of elongated dots around the neck probably represent a necklace, and many small short lines also surround the tops of the breasts. There is no indication of a garment covering the lower part of the body, but the tops of the feet are adorned with three rows of parallel elongated dots.

### 73 Pottery Male Figurine

378 M Pl. 32; Color Plate XXII B

Hollow red pottery figurine, broken when found but later reassembled, about 37.5 cm high, found in Tomb 36 (Trench XVIII C). It has an elongated small head, which is very rounded at the back, a triangular face with a projecting sharp chin, projecting semioval pierced ears, a sharp nose with narrow oval nostrils, long narrow oval eyes that appear almost closed, and an open oval mouth with

crudely cut teeth in both the upper and lower jaws. The simplified and attenuated arms hold a spouted vessel in front of and attached to the chest, with the left hand at the base and the right hand at the rim of the vessel. Simple cuts on the hands indicate fingers. This small spouted vessel is connected to the hollow body of the figurine through the chest. The broad buttocks project at the rear, separated by a sharp cleft. A prominent erect male organ points forward and slightly upward. The massive hollow legs, slightly parted, end in wide flat feet with five rough cuts indicating six toes on each foot. The surface of this figurine is rather smooth with traces of burnishing on some parts, but it is otherwise unadorned and there is no sword at the waist as on the other male figurines.

#### 74 Pottery Male Figurine

518 M Fig. 11; Pl. 33

Hollow red pottery figurine, about 46 cm high, found in Tomb 36 (Trench XVIII C). It has a head rounded at the back with a flat face sloping from a receding forehead to a pointed chin, widely projecting crescent ears that are pierced at the bottom, slit eyes that appear to be closed, a short straight nose beginning at the top of the almost nonexistent forehead, and an open mouth with teeth indicated in the lower jaw. Crudely formed arms hold a spouted vessel in front of the chest, connected through the large hollow left arm to the hollow body of the figurine, with the slenderer solid right arm supporting the vessel near the rim. The torso widens to massive buttocks, projecting noticeably at the rear and separated by a sharp cleft. The carefully detailed erect male organ projects forward. Short cylindrical legs end in large flat feet on which four rough cuts indicate five toes. There is little surface polish. At the waist is a large undecorated dagger with part of the crescent handle broken off.

#### 75 Pottery Male Figurine

1113 M Pl. 33

Hollow red pottery figurine, broken when found but later reassembled, about 38.5 cm high, found in Tomb 36 (Trench XVIII C). It has a head that is slightly rounded at the back, a face that is triangular but not flattened, one rounded ear pierced in the center (the other ear is missing), eyes set very high, a large projecting nose, and an open oval mouth with no teeth. In profile there is an impressive force to this head, which is thrown back with the chin projecting. Attenuated forearms come forward from the triangular shoulder and upper arm to meet in front of the chest, where two small knobs indicating nipples are set very low on the torso. The massive buttocks are somewhat rounded at the rear and separated by a cleft. A large erect male organ points slightly downward. Heavy cylindrical legs, slightly parted, end in large flat feet, with five rough cuts

forming six toes on each foot.

The surface of some parts of this figurine, particularly the arms and hands, is highly polished and burnished. At the waist two rows of impressed circles indicate a very wide belt, such as the bronze belts found during the excavation, and attached to the front of the belt is a large dagger whose crescent handle contains two long grooves and whose blade is covered by three parallel rows of circles and dots apparently representing a decorated sheath.

#### 76 Pottery Male Figurine of Archer

821 M Fig. 12; Pl. 33

Small, solid, red pottery figurine, about 23 cm high, found in Tomb 52 (Trench XXIII G); the only one of the human pottery figurines not found in Tomb 36. It is solid rather than hollow and more crudely made than the other figurines, with an extremely long torso and attenuated extremities, and a rough, unpolished surface. It was broken when found, but the pieces were reassembled with very little repair except for the bow and arrow shaft, which are new. The head of this figurine seems almost birdlike, with a rounded back extending in a long curved line to the end of the nose, flat leaf-shaped ears located far back, pointed oval slits for eyes, a beaklike nose with nostrils at the sides, and an open mouth that is a simple gouge in the clay. This avian head is set on a very long neck. The long torso has crude arms raised in front of the chest and ends in short legs. The buttocks are rounded and slightly projecting at the back with a small cleft. The limp male organ points downward. The short thick legs end in rather small feet, with rough cuts indicating six toes on the left foot and four on the right.

When this little statue was first found, we could not understand the reason for the position of the arms or the purpose of a small pottery arrowhead found about 60 cm away. Once the figurine was reassembled, we saw clearly that it was intended to be an archer pulling on his bow, which was apparently made of some perishable material that had completely disintegrated, leaving only the well-preserved pottery arrowhead. A new bow and arrow shaft were made and placed in position to complete the figurine.

At his waist the archer wears a wide belt, which is indicated by parallel rows of impressed circles. Attached to the front of this belt is a very large dagger. Two grooves at the end of the crescent handle are interspersed with impressed circles, and the blade is covered with rows of impressed circles apparently representing a decorated sheath. The figure also has several cuts or holes, two in the back and one on the outside of each leg. These may be wounds, with the figure representing the owner of the tomb who died in battle.

**77 Pottery Figurine of Male Charioteer with Horses**  
519 M Fig. 12; Pl. 34; Color Plate XXII C

Pottery model, badly broken when found but later restored with the missing parts filled by lighter clay, about 27.0 cm long and 19.0 cm high, found in Tomb 36 (Trench XVIII C). It consists of two horses with a charioteer between, all mounted on four wheels, made of a dark, brick red color with a burnished surface. The small figure of the charioteer is solid and very crudely made, with a small round head with a beaklike nose pushed forward and almost no chin, elongated holes for eyes, and flat triangular pierced ears. The arms and hands, which are partly broken, extend forward as though holding the reins of the chariot or pulling on a bow. Small projecting knobs form the breasts. The lower body is short, with heavy projecting buttocks and solid cylindrical legs. The male organ is prominent and erect.

A thick projecting ring around the waist suggests a wide belt. Attached at the front is a very large dagger with a crescent handle decorated by a projecting oval band surrounded by impressed dots, and parallel bands of impressed dots, representing a decorated sheath, cover the blade. In its crudeness and awkward proportions, shape of the head, position of the arms, and the large dagger at the waist, this figure is very similar to 76.

The highly simplified and stylized horses have small heads with conical muzzles in which the mouth is a very small open hole in the center, circular holes for eyes, and thick, chunky, upward-projecting ears located right on top of the head. They have strong cylindrical necks, enlarging gradually toward the chest, and simple rounded bodies with projecting tails. In place of legs there are pierced loops in which the axle could be mounted, and on the inner side, between the two horses, a single loop at front and back joins the animals. The axles were made of a perishable material, probably wood, which has since disintegrated, and new wooden axles have been provided. The wheels are circular disks with four spokes, with the front wheels larger than the back ones.

COMMENTS

A few somewhat similar human pottery figurines have been found at related sites in Iran. A standing female figurine, similar to 70, with hands placed below the breasts rather than above and with bands of dots at the waist, supposedly acquired from Amlash, has been dated by Ghirshman to the ninth to eighth centuries B.C.<sup>2</sup>

A pottery figurine similar to 73 in that the figure holds a cup was apparently found in a clandestine excavation. The figurine is of rather crude workmanship and has been dated to the early first millennium B.C.<sup>3</sup> Another figurine with general similarities, possibly found in Luristan, has also been dated to the early first millennium B.C.<sup>4</sup> A human figure holding a vessel appears on a multiple vase, or kernos, found at Hasanlu, dated by Ghirshman to the ninth to eighth centuries B.C.<sup>5</sup> Two other vessels, one in the shape of a human holding a vase<sup>6</sup> and the other crudely made in the form of a figurine, both from Luristan, have been dated by Ghirshman to the eighth to seventh centuries B.C.<sup>7</sup>

A pottery figurine similar to 74, found at Dailaman, is dated by A. Godard to the early first millennium B.C.,<sup>8</sup> and a similar pottery figurine of a man holding a vessel with both hands, in the collection of Galerie Israel in Tel Aviv, is dated by Dubiner to 1000–500 B.C.<sup>9</sup> A somewhat similar warrior with a dagger at his waist appears on a painted vase from Sialk, dated by Ghirshman to the tenth to ninth centuries B.C.<sup>10</sup>

A roughly made pottery figurine with an eagle head, a relatively large dagger at the waist, and an unusual position of the hands, somewhat similar to 76, was found at Khurvin and has been dated by Ghirshman to the ninth to eighth centuries B.C.<sup>11</sup> and by Vanden Berghe to the eleventh century B.C.,<sup>12</sup> contemporary with Sialk Cemetery B and A and Giyan I B. The earlier date would better accord with the contents of the Marlik tombs. Another similar pottery figurine of an archer in crude workmanship with a large dagger at his waist, from Khurvin, is dated by Vanden Berghe to the late second or early first millennium B.C.<sup>13</sup>

Several models of a chariot and charioteer have been found in other excavations, none very similar in style to the Marlik model. A terra-cotta chariot drawn by cows, from Mohenjo-daro, belongs to the third millennium B.C.<sup>14</sup> A pottery chariot with a standing figure on bars, without horses, was found in Level H of Haina, dated by Bossert to 2000–1750 B.C.<sup>15</sup> Another light chariot with two riders but no horses (although a broken piece of a horse's head appears in the picture) was found at Ras Shamra and has been dated by Bossert to the thirteenth century B.C.<sup>16</sup> Finally, a chariot rider with wheels and axles, found at Trialeti, Kourgane XXIX, in Caucasia, is assigned by Schaeffer to the end of the Bronze and the beginning of the Iron Age, ca. 1200–1000 B.C.<sup>17</sup>

## *Bronze Human Figurines (78–81)*

Four bronze human figurines were found at Marlik. A pair of medium-size bronze female figurines was found in Tomb 36, the tomb that contained the majority of the pottery human figurines, and two small bronze figurines of riders, both in a seated position and one with an accompanying mule, were found in Tomb 13. These bronze human figurines are crude and highly stylized, even more so than the pottery figurines, and they show the same exaggeration of the sexual parts.

### **78 Bronze Female Figurine**

381 M Pl. 34; Color Plate XXII D

Solid bronze, about 20.5 cm high and weighing about 950 gm, found in Tomb 36 (Trench XVIII C). It has a conical cap or skull top with an oval face, large projecting ears, each pierced by two holes, large holes for eyes, a short nose, and a small straight horizontal line for the mouth. The small head sits on a very long, thick, cylindrical neck. The upper torso is flattened, with broad shoulders and projecting knobs for breasts set high. The arms are shortened, bent at the elbows, and the hands, each with five fingers, are placed below the breasts. A sharp line crosses the wrists, dividing the hands from the forearms. The waist is rather thick, with a hole indicating the navel, and the lower body widens to very thick hips. The groin is carefully outlined, and a horizontal line demarcates the pubic triangle. Conical legs end in very small feet. At the back of the figure a sharp vertical cut reaches from the base of the neck to the end of the spine, deepening where it separates the massive protruding buttocks.

### **79 Bronze Female Figurine**

380 M Pl. 34<sup>18</sup>

Solid bronze, about 21.5 cm tall and weighing about 1035 gm, found in Tomb 36 (Trench XVIII C), quite similar to **78**. It has a small head with a conical top, a small flat face with a straight nose, projecting elongated ears, each pierced with two holes and with part of a bronze earring still remaining in one, small dots for eyes, and a mouth that is a small oval depression with a tiny hole in the center. This small head sits on a thick, long, cylindrical neck. The upper body is flat, with very broad shoulders tapering to a narrow waist and projecting conical knobs for breasts set rather high. The slender arms are bent at the elbows, and the hands, each with three fingers, are clenched in front of the stomach. The lower body is heavier and more rounded, with a narrow waist widening into massive buttocks with a clearly outlined groin. The buttocks project markedly at the rear, with a line reaching from the neck to the end of the spine as in **78**. Straight conical legs end in very small feet with some slight indication of toes.

### **80 Bronze Figurine of Mule and Rider**

931 M Fig. 12; Pl. 35

Small solid bronze, about 8.5 cm high and 6.5 cm long, found in Tomb 13 (Trench XII G). The rider is simplified and crude, with a very large head surmounted by a tall rounded cap and a fragmentary torso with no arms and short legs. A prominent nose projects from an otherwise indistinguishable face, with details of eyes and mouth unclear, and two large flat projecting pierced ears. The neck and upper body are cylindrical with no differentiation of parts. The torso widens slightly at the buttocks, ending in short small legs. The figure is seated, fitting sideways on the saddle of its accompanying mule.

### **81 Bronze Male Figurine**

932 M Pl. 35

Solid bronze, about 6.5 cm tall, found in Tomb 13 (Trench XII G). The crudely made seated figurine has a round cap that extends to the nape of the neck, with a large nose and projecting ears the only distinguishable features of the face. The shoulders are rounded, and the right arm points forward while the left arm extends slightly downward. The middle of the torso is cylindrical and very much elongated, ending in very short and rudimentary bent legs. The buttocks and legs are flattened underneath, forming a solid base. Projecting upward from this solid base is a very large erect male organ.

### COMMENTS

Several figurines somewhat similar to **78** and **79** have been found, attributed to Amlash. A figurine from the Amlash area has been dated to 1000–800 B.C.<sup>19</sup> A terra-cotta statuette of a woman, somewhat similar in general composition and also found in the Amlash area, has been dated by Ghirshman to the ninth and eighth centuries B.C.<sup>20</sup> Although different in detail, a steatopygous statuette, similar in general form and also described as being from Amlash, is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>21</sup>

Several figurines with riders somewhat similar to **80** have also been found. A bronze horse and rider found in Tsageri and belonging to the so-called Colchian culture of the southeastern coast of the Black Sea has been dated to the thirteenth to twelfth centuries B.C.<sup>22</sup> A somewhat similar horseback rider, astride with no saddle, found in a clandestine excavation near Amlash, has been dated by Ghirshman to the ninth to eighth centuries B.C.,<sup>23</sup> and a similar figurine, found in the Dailaman region along with another example said to be from Amlash, has been dated by Terrace to the beginning of the first millennium B.C. (1000–800 B.C.).<sup>24</sup>

## *Gold Human Figurine (82)*

A single gold human figurine was found at Marlik, a small hollow torso of a king wearing a separately made crown and earrings.

### **82 Gold Bust**

356 M Fig. 12; Pl. 35; Color Plate XXII E-F

Hollow gold bust, about 11.7 cm high, found in Tomb 36 (Trench XVIII C). It is made from rather pure gold, which was soft enough to be shaped by hammering and was somewhat deformed by earth pressure, with some small parts missing. The repoussé figure, shown in respectful or prayerful attitude, is looking almost directly forward with his hands crossed over his chest. The hair is indicated by thick projecting parallel bands decorated with many small parallel crescent lines above the forehead and on the sides. On the head is a small round cap with an elongated projecting triangular area pointing toward the nape. Encircling the head is a separate, rather simple, crown of twisted gold wire. The face is triangular, with well-pronounced features. The eyes are elongated pointed ovals surrounded by a projecting line for eyelids and projecting bands connected at the top of the large pointed nose for eyebrows. Wrinkle lines across the forehead and below the eyes seem to indicate age. A broad upper lip surmounts a rather large closed mouth formed by an impressed line between the projecting relief of the upper and lower lips. The long narrow pointed chin is dented and deformed by earth pressure. Two holes pierce each of the large projecting ears, with a simple loop earring remaining in one ear. At the top of the nape are small parallel crescent lines with small impressed dots below. Two attached parallel rings form a simple necklace around the middle of the neck, possibly covering a joint between the neck and

shoulder, and at the base of the neck are dotted lines representing a double-chain necklace, connected by four parallel vertical dotted lines, from which dangles a globular pendant with a long hanging tail. Reverse herringbone patterns of small crescents covering the torso represent chain armor. Skeletal arms are crossed in front of the body, with the palms flat against the chest and the fingers splayed outward. The upper arms are unadorned, but the forearms are covered by impressed elongated dots from elbow to wrist. On each side of the chest is a large pointed decorative button with a conical boss in the center, looking very like the embossed gold buttons found in the excavation.<sup>25</sup> The bust narrows toward the bottom, which is encircled by a fluent double-coil band, similar to the twisted coil of the crown, bordered by double lines above and below.

### COMMENTS

A coil band similar to that of the crown and lower edge of the torso appears on many decorative vessels from Marlik as well as on objects from other excavations.<sup>26</sup> A somewhat similar coil band appears on a gold bowl from Ras Shamra.<sup>27</sup> Similar coil bands can be seen on a group of cylinder seals from the Ashmolean, classified by Hogarth as Hittite seals of Class III, groups I-V, dated to the late second millennium B.C.,<sup>28</sup> and on seals classified by Frankfort as Mitannian,<sup>29</sup> Assyrian,<sup>30</sup> First<sup>31</sup> and Second<sup>32</sup> Syrian, and Palestinian<sup>33</sup> groups, dated from the middle to late second millennium B.C. A similar coil band also appears on seals classified by Moortgat as thirteenth-century Assyrian.<sup>34</sup> Although the motif is similar on all these seals, the technique and quality of workmanship vary.

## *Conclusions*

Although the Royal Cemetery of Marlik contained fifty-three tombs, human figurines were found in only three: Tomb 36, Tomb 52, and Tomb 13. Of these three tombs, a single one, Tomb 36, contained six of the eight pottery human figurines, two of the four bronze human figurines, and the hollow gold bust of a king, constituting by far the majority of the human figurines from Marlik. This tomb, although small, was one of the richest tombs at Marlik both in terms of the precious objects it contained and in terms of the unusual nature of many of the objects, of which these human figurines are one example.

In all, eight pottery, four bronze, and one gold

human figurine were found in the tombs of Marlik, a very limited number in comparison to the quantity and variety of animal figurines found there. The same small proportion of human to animal figurines apparently existed at other sites during the late second and early first millennium B.C., and consequently material comparable to these human figurines is not abundant. The few human figurines that have been found seem to have come from a region roughly including Caucasia and the Elburz and Zagros mountains and their immediate vicinity. This is the area in which a highly developed bronze industry flourished during the latter part of the



Table 5. Specifications of Human Figurines

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Diam. cm.	H. cm.	Material
70	Figurine (female)	1120 M	25149	36	XVIII C		35.0	pottery
71	Figurine (female)	1117 M	25140	36	XVIII C		37.5	pottery
72	Figurine (female)	379 M	14677	36	XVIII C		37.5	pottery
73	Figurine (male)	378 M	14666	36	XVIII C		37.5	pottery
74	Figurine (male)	518 M	25138	36	XVIII C		46.0	pottery
75	Figurine (male)	1113 M	14676	36	XVIII C		38.5	pottery
76	Figurine (archer)	821 M	14671	52	XXIII G		23.0	pottery
77	Figurine (charioteer)	519 M	14670	36	XVIII C	27.0	19.0	pottery
78	Figurine (female)	381 M	25070	36	XVIII C		20.5	bronze
79	Figurine (female)	380 M	25069	36	XVIII C		21.5	bronze
80	Figurine (mule w/rider)	931 M	25076	13	XII G	6.5	8.5	bronze
81	Figurine (male)	932 M	25078	13	XII G		6.5	bronze
82	Figurine (human bust)	356 M	14692	36	XVIII C		11.7	gold

Table 6. Specifications of Animal Pottery Figurines

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Diam. cm.	H. cm.	Material
83	Figurine (bull)	156 M	25359	27	XVII D	25.0	16.0	pottery
84	Figurine (bull)	182 M	25364	27	XVII D	29.0	21.0	pottery
85	Figurine (bull)	491 M	14667	18	XIV D	28.0	25.0	pottery
86	Figurine (bull)	493 M	14679	18	XIV D	28.0	23.0	pottery
87	Figurine (bull)	494 M	14669	18	XIV D	26.0	19.0	pottery
88	Figurine (bull)	495 M	25187	18	XIV D	27.0	22.0	pottery
89	Figurine (bull)	496 M	14672	18	XIV D	26.0	19.0	pottery
90	Figurine (bull)	501 M	25188	19	XIV E	27.0	19.0	pottery
91	Figurine (bull)	517 M	14610	19	XIV E	27.0	20.5	pottery
92	Figurine (bull)	617 M	25379	5	VIII D	26.3	21.5	pottery
93	Figurine (bull)	818 M	25418	52	XXIII G	33.5	27.5	pottery
94	Figurine (bull)	1252 M	31 STO	24	XV E	29.0	24.5	pottery
95	Figurine (bull)	1278 M	31 STO	13	XII G	28.0	21.0	pottery
96	Figurine (bull)	502 M	25135	19	XIV E	28.0	21.0	pottery
97	Figurine (bull)	262 M	14674	32	XVII E	28.0	23.5	pottery
98	Figurine (bull)	263 M	25189	32	XVII E	29.0	20.0	pottery
99	Figurine (bull)	516 M	14609	19	XIV E	26.5	21.0	pottery
100	Figurine (stag)	820 M	25144	52	XXIII G	26.0	33.0	pottery
101	Figurine (stag)	505 M	25133	36	XVIII C	29.0	27.0	pottery
102	Figurine (stag)	819 M	25226	47	XXII E	30.0	35.0	pottery
103	Figurine (stag)	377 M	14678	36	XVIII C	27.5	30.0	pottery
104	Figurine (mule)	1111 M	14664	24	XV E	36.5	25.0	pottery
105	Figurine (mule)	1124 M	25222	36	XVIII C	33.0	26.0	pottery
106	Figurine (ram)	506 M	25134	36	XVIII C	35.0	26.0	pottery
107	Figurine (ram)	1118 M	25141	36	XVIII C	30.0	27.0	pottery
108	Figurine (ram)	1123 M	25209	36	XVIII C	33.0	29.0	pottery
109	Figurine (ram)	1125 M	25233	36	XVIII C	37.5	34.0	pottery
110	Figurine (ram)	759 M	25393	1	III D+	7.5	5.5	pottery
111	Figurine (bear)	155 M	14673	24	XV E		27.0	pottery
112	Figurine (bear)	1112 M	14665	24	XV E		30.0	pottery
113	Figurine (leopard)	1119 M	25143	36	XVIII C	34.0	27.5	pottery
114	Figurine (dog)	815 M	25157	52	XXIII G	18.5	9.0	pottery

second and beginning of the first millennium B.C. There must have been close relations and communications throughout this region, and there may even

have been a common group spreading gradually over the whole mountainous area.

### *Pottery Animal Figurines (83–155)*

Vessels formed in the shape of animals go far back in history. In Iran, as early as the prehistoric period, zoomorphic vessels of alabaster were produced in Elam.<sup>35</sup> Early pottery vessels painted with birds and animals have been found in pre- and protohistoric excavations throughout the country. Gradually development took place toward molding part of the animal or bird, especially the head, on the vessel,<sup>36</sup> and eventually the beauty of the animal form began to dominate the vessel until, as we see at Marlik, the vessel itself came to be made in the form of an animal; that is, it became a hollow animal figurine.

Sometimes the relationship to more ordinary vessels was retained, in that a jar neck projected from the back of the animal whose hollow body constituted the container. Examples of this type appear in Anatolia by the beginning of the second millennium B.C., where, at Kültepe, a lion with a fiercely open mouth, hollow body, and long jar neck on its back is dated by Akurgal to the eighteenth century B.C.<sup>37</sup> Another example from Kültepe, with painting on its body, is in the Louvre.<sup>38</sup> A slightly later pottery figurine of an animal with a jar neck on its back, from Razgour in Russian Talish, is dated by Schaeffer to 1500–1400 B.C.<sup>39</sup>

A number of animal figurines of this type, with a jar opening on the back—many obtained from dealers—have been attributed to the region around Marlik, most often to “Amlash,”<sup>40</sup> but no animal figurines with these jar openings on their back were found at Marlik itself. There the progression toward vessels in the form of animals was carried a step further, in that the muzzle was formed as an open spout from which liquid contained in the hollow body could be poured.

In the tombs of Marlik thirty-three of these pottery animal figurines were found, representing a variety of animals including the humped bull, stag, ram, mule and horse, bear, leopard, and dog. Of these the largest number by far, seventeen in all, are of humped bulls, the cattle native to the region. There are many fewer figurines of other animals: five of rams, four of stags, two of mules and bears, and a single figurine each of a leopard, a dog, and a chariot with a charioteer that incorporates two horses. Not only do the bulls constitute by far the largest group of figurines, but also their most noticeable feature, a large hump that is always exaggerated, has been added to figurines of other animals, such as stags and

rams, which do not possess this characteristic in real life.

These pottery figurines from Marlik are highly stylized, but also alert and vigorous. Both young and graceful as well as mature and powerful animals are depicted. Some, including many of the humped bull figurines, seem to be highly sophisticated versions of a developed style, whereas others, such as the leopard, bear, and dog, seem more individual and even experimental in their modeling.

Of the thirty-three pottery animal figurines found at Marlik, thirty-one are hollow, and of these hollow figurines, twenty-six have a muzzle in the shape of an open tapering spout from which liquid held in the hollow body could have been poured. The single figurine of a leopard has a spout inserted in the neck below the head, and four other figurines have a muzzle in the form of a truncated cone, with a mouth cut across the front that communicates to the hollow interior of the figurine. The remaining two pottery animal figurines, a playful dog and a small crudely made ram, are solid.

Most of the animal figurines are made of red pottery, varying in color from a light brick red to dark reddish brown, with seven figurines gray or grayish brown in color. The surface is usually highly polished and burnished, and a few figurines are pattern-burnished or decorated with incised patterns.

The main characteristics of these animal figures have been simplified and stylized. On the horned animals, which form the majority, the head is always very simply modeled, with the horns, placed above the open spout or truncated cone of the muzzle, sometimes the only feature indicating the type of animal depicted. Eyes, when present, are simple circles. Most of the figurines have small projecting ears, which are usually pierced and sometimes still carry simple gold loop earrings. The body is always simple and streamlined, with a band tail and tapering conical legs without the joints or hooves that are often evident on the horned animals. A few of the figurines also have a male organ under the body, and one figurine, a bear, has female sexual characteristics. The more unusual animals, including the leopard, bear, and dog, exhibit much more individuality in the modeling, such as the snarling mouth and curling tail of the leopard, the pronounced human characteristics of the two bears, and the lively appearance of the dog, which has a long tongue,

upraised ears, and pointing tail.

These pottery animal figurines are moderately large in size. The thirty-one hollow animal figurines vary in length from 35.0 to 37.5 cm and in height from 16.0 to 35.0 cm. Of the two solid figurines, one, the dog, is only slightly smaller than the smallest of the hollow figurines, measuring 18.5 cm long, and shows a little of the same facility in modeling, but the other, a ram, is much smaller, only 7.5 cm long and 5.5 cm high, and much more crudely formed.

## HUMPED BULLS (83–128)

Seventeen of the animal figurines from Marlik represent humped bulls (Color Plate XXIII A-B, which seem to have held a special meaning for the people of Marlik, perhaps as a symbol of power and fruitfulness. All of these bull figurines are hollow and have a muzzle in the form of an open spout. Ten of the figurines are of red pottery, and seven are gray or grayish brown in color. All are well burnished, and some are pattern-burnished. Two have some black spots on the red surface, and two have incised decoration in addition to the burnishing.

The figurines vary in length from 25.0 to 29.0 cm, and in height from 19.0 to 25.0 cm, with one exception, **93**, which is markedly larger: 33.5 cm long and 27.5 cm high. Both slender young and heavy mature animals are depicted, and on almost all of them the hump, a symbol of power and strength, is emphasized, sometimes to the point that the head is submerged in the massive pointed hump behind it. There is very little detailing of the head, the most prominent feature being the large upward- or slightly forward-pointing crescent horns. Most of the figurines have pierced ears, in some of which gold earrings still remain.

The bull figurines typically have a massive chest with a ridge down the front that probably represents a dewlap. The body is simplified and streamlined, with tapering conical legs, a band tail, and, in one instance, a male organ under the body. These figurines of humped bulls, highly stylized as they are, are very effective in portraying the power and strength of the animal.

### 83 Pottery Humped Bull Figurine

156 M Pl. 36

Hollow pottery figurine, partly broken when found and later restored, about 25.0 cm long and 16.0 cm high, found in Tomb 27 (Trench XVII D). It is made of well-burnished red pottery, with the burnishing of the hump particularly noticeable. The muzzle is an open spout with joined crescent horns placed immediately above and no indication of eyes or ears. Curving upward to a point behind the horns is a very high hump, which descends in a straight line at the

back. A central projecting band down the chest from the neck to the forelegs represents a dewlap. The narrow body swells to a rounded rump with a projecting band tail and short conical legs with no indication of joints or hooves. This figurine suggests a strong but fairly young animal.

### 84 Pottery Humped Bull Figurine

182 M Fig. 13

Partly broken when found but later reassembled, about 29.0 cm long and 21.0 cm high, found in Tomb 27 (Trench XVII D). Closely similar in shape and details to **83**, it has a red and brown surface, which is polished and burnished. The muzzle is an open spout with upstanding crescent horns above, but no eyes or ears. Behind the horns a backward-pointing hump descends in a straight line to the back. Down the front of the throat and chest is a ridge, partly missing, representing a dewlap. The body narrows slightly at the middle and swells to a rounded hump with a long band tail and short conical legs.

### 85 Pottery Humped Bull Figurine

491 M Fig. 13; Pl. 36; Color Plate XXIII C

Hollow pottery figurine, almost intact except for a crack in one leg and one horn, about 28.0 cm long and 25.0 cm high, found in Tomb 18 (Trench XIV D). It is brick red and burnished, with traces of the burnishing process particularly noticeable on the legs. On some parts of the body this burnished coat has deteriorated. The face has an open-spouted muzzle with heavy tapering crescent horns above, no eyes, and ears that are small pierced knobs holding plain gold hoop earrings. Behind the horns the head swells to an extremely large conical pointed hump, so that the entire body, from the front view, is massive and pointed. Down the front of the almost vertical chest is a narrow ridge representing a dewlap. The thick body is tubular, ending in a very rounded rump with tapering conical legs, longer in front than in back.

### 86 Pottery Humped Bull Figurine

493 M Pl. 36

Hollow pottery figurine of a bull, complete with no cracks or missing parts, about 28.0 cm long and 23.0 cm high, found in Tomb 18 (Trench XIV D). It has a reddish color with some black spots<sup>41</sup> and an even, burnished surface. Although the pointed hump is massive, the small head with a muzzle in the form of an open spout is independently modeled, rather than being submerged in the hump as in many of the other figurines. Crescent horns are placed above the open-spouted muzzle, the eyes are impressed circles on each side of the muzzle, and below the horns are semiconical pierced ears containing flattened gold loop earrings. A massive hump curves to a backward point, from which it descends to the back in a straight line, and the curving chest is intersected by a

high projecting band. The short thick body curves under at the rump with a short band tail and short conical legs, with the forelegs longer than the hind ones. This figurine portrays a mature and powerful beast, with a strong forceful posture.

### 87 Pottery Humped Bull Figurine

494 M Pl. 36

Hollow figurine, almost completely intact except for the tips of the horns and a crack in one of the hind legs, about 26.0 cm long and 19.0 cm high, found in Tomb 18 (Trench XIV D). It is a beautiful reddish brown color and its surface is covered by a pattern-burnished coat formed of carefully arranged parallel zigzag lines. The muzzle is an open spout with crescent horns above small semioval projecting ears, pierced with gold loop earrings. The head is submerged in a massive hump, flattened at the top and pointing slightly backward, from which it descends in a straight line at the back. The chest curves under with a projecting line encircling the throat from ear to ear and descending in a straight line down the chest. The body is tubular, rounded at the rump with a fairly long projecting band tail and rather short, solidly placed legs adding to the overall impression of power and strength.

### 88 Pottery Humped Bull Figurine

495 M Pl. 36; Color Plate XXIII D

Hollow figurine, intact except for a small piece broken and missing from the end of the spout, about 27.0 cm long and 22.0 cm high, found in Tomb 18 (Trench XIV D). It is a light brick red in color with a very good burnished sheen and traces of the burnishing process visible on the surface. Black spots on the body probably represent the natural spots of the animal's coat. The head of this bull was modeled separately and is not completely submerged in the massive hump. Crescent horns are placed above the open spout forming the muzzle; the eyes, placed rather lower than normal on each side of the spout, are indicated by projecting knobs with a depression in the center; and projecting semicircular ears located below the beginning of the spout are pierced with flattened gold loop earrings, which remain in place. Behind the head a large hump curves to a backward point, from which it descends in a straight line to the back. A large projecting vertical band representing a dewlap stretches from the throat down the chest. The stocky, tubular, short body curves to a rounded rump with a short projecting band tail and short tapering legs. This is one of the finest of the animal figurines, highly stylized but strong and powerful, and an outstanding example of Marlik craftsmanship.

### 89 Pottery Humped Bull Figurine

496 M Pl. 37; Color Plate XXIII E

Hollow figurine, intact except for a few minor cracks and small chips off the points of the horns,

about 26.0 cm long and 19.0 cm high, found in Tomb 18 (Trench XIV D). It is gray with patches of black and has a surface that is extraordinarily well burnished with a fine even sheen that is particularly noticeable on the horns and around the body. The head is modeled quite separately from the hump in an elongated triangular shape with an open spout forming the muzzle, above which are upstanding crescent horns. The eyes are indicated by impressed circles on each side of the spout, and projecting semioval pierced ears are located below the horns. Behind the head a massive hump curves backward to a rounded point, from which it descends in a straight line to the back. No projecting band marks the center of the chest, which slopes backward to the body. The torso is small, tapering to a slender middle, from which it rounds over the rump with a small projecting band tail. Under the body in front of the hind legs is another projecting band, representing a male organ. The legs are more carefully formed and more natural in appearance than is usual in the bull figurines, with a slight suggestion of hooves flattened underneath.

### 90 Pottery Humped Bull Figurine

501 M Pl. 37

Hollow figurine, broken when found but later restored with the missing pieces filled with lighter clay, about 27.0 cm long and 19.0 cm high, found in Tomb 19 (Trench XIV E). It is dark gray in color and well burnished. The muzzle is an open spout with large crescent horns above, the eyes are impressed circles on each side of the spout, and projecting semioval pierced ears are located below the horns. An extremely large, tall hump curves upward from the back of the head to a somewhat pointed top, from which it descends in a straight line to the back. There is no projecting band on the chest, which is rather full and curves inward to a relatively small body with a tapering middle and rounded rump having a projecting band tail and short cylindrical legs; the forelegs are longer than the hind ones.

### 91 Pottery Humped Bull Figurine

517 M Pl. 37

Hollow figurine, broken when found and later reassembled except for a few missing pieces including the tips of the horns, about 27.0 cm long and 20.5 cm high, found in Tomb 19 (Trench XIV E). It is a dark reddish brown color with a burnished surface that is now weathered and coarse. Above the long open-spouted muzzle are joined crescent horns with a projecting ridge in the center, and semicircular pierced ears are located behind and below the horns. Behind the head a large hump curves upward to a point, from which it descends in a straight line to the back. A pronounced band curves from the neck down under the chest. The body is slender with a narrow middle that swells upward to a

rounded rump with a short projecting band tail and conical slender legs, flattened underneath. This seems to be a young animal, without the force and majesty of the more mature bulls.

#### 92 Pottery Humped Bull Figurine

617 M Fig. 13; Pl. 37

Hollow figurine, broken when found but later reassembled with several pieces still missing, about 26.3 cm long and 21.5 cm high, found in Tomb 5 (Trench VIII D). It is grayish brown with a burnished surface that is now rough and coarse on some parts from weathering. Although it is similar in style to the other bull figurines, there is no exaggeration of the hump. The muzzle is a long open spout with upward-pointing horns above, one of them broken off, connected to each side of the head, and semioval pierced ears below the horns. A very small, unnatural-looking hump is located at the back of the neck above the shoulders. The neck is elongated and thick, with a projecting ridge down the center front. The body tapers in at the middle and then swells upward to a very rounded rump with a short projecting band tail and short conical legs, flattened underneath. The modeling of this figurine around the head and hump is somewhat different from that of the other Marlik bulls.

#### 93 Pottery Humped Bull Figurine

818 M not illustrated

Hollow figurine, intact except for a few cracks and some small pieces broken and missing, about 33.5 cm long and 27.5 cm high, found in Tomb 52 (Trench XXIII G). It is a rather light brownish color with traces of fine burnishing on the surface, particularly around the neck area. Several bands of impressed circles decorate different parts of the body, with two parallel bands of circles surrounding the neck, three encircling the shoulder, and two surrounding the flattened rump of the very cylindrical body. The head of this figurine, which is completely submerged in the hump, has a narrow open spout for a muzzle with horns attached above it forming a complete semicircle. Impressed circles located below the horns represent the eyes, and behind them are semioval pierced ears. Behind the horns a large hump rises to a conical point. The throat and chest curve markedly in front, intersected by a long vertical projecting band that begins just below the muzzle and extends to the forelegs, decreasing in size as it descends. The rather awkward body has a heavy cylindrical shape, flattened at the back, with short cylindrical legs placed at a somewhat unnatural angle. This figure, which is the largest of the humped bulls, seems rather awkward and unbalanced.

#### 94 Pottery Humped Bull Figurine

1252 M Fig. 13; Pl. 38

Hollow figurine, badly broken when found but later reassembled with a number of pieces still

missing, about 29.0 cm long and 24.5 cm high, found in Tomb 24 (Trench XV E). It is a light brick red color with traces of burnishing under a coat of sediment that now covers the surface. The head and hump form a well-balanced combination. The muzzle is an open spout with large crescent horns, with elongated tapering points above, and around the base of the left horn lies a ring, which probably represents a rope or other fastening. On the forehead below the horns are impressed circles representing eyes, and at the sides are pierced semicircular flat ears, which point forward to indicate alertness. The hump is broken and partly missing, but it seems to have been large. Two parallel bands of elongated dots beginning at the ears surround the throat, where they join and continue down both sides of a central ridge. Several parallel bands of impressed elongated dots also decorate the forehead. The well-proportioned body swells upward to a rounded rump with a projecting band tail and tapering conical legs. Although the figurine is broken and some parts are missing, it has the appearance of a strong stylized but well-proportioned animal in a natural posture.

#### 95 Pottery Humped Bull Figurine

1278 M Fig. 13; Pl. 38

Hollow figurine, broken in many pieces when found but later restored with the missing parts filled in by lighter-colored clay, about 28.0 cm long and 21.0 cm high, found in Tomb 13 (Trench XII G). It is a dark gray color with a burnished sheen over the surface. The head is somewhat independently modeled. The muzzle is a narrow open spout with, above, crescent horns that are joined by a projecting ridge in the center and, below the horns, projecting semioval pierced ears. A massive hump curves backward to a conical point. A long ridge runs down the center of the chest, which curves inward to the forelegs. The body tapers slightly in at the middle and then swells up at the rump with a projecting band tail and short conical tapering legs.

#### 96 Pottery Humped Bull Figurine

502 M Fig. 13; Pl. 38

Hollow figurine, badly broken when found but later repaired, about 28.0 cm long and 21.0 cm high, found in Tomb 19 (Trench XIV E). It has a dark gray color with a burnished surface. The muzzle is an open spout with heavy crescent upward-pointing horns above and, below the horns, flat projecting rectangular pierced ears. Behind the head is a large conical hump, which descends in a straight line to the back. A ridge extends down the middle of the chest, from the throat to the forelegs. The narrow body swells up to a rounded rump with a projecting band tail and tapering conical legs, which are longer in front than in back. They show a slight shaping of hooves and are grooved in the center front. Another

projecting band under the body represents a male organ. This rather young animal with a massive hump has a strong and forceful stance.

### 97 Pottery Humped Bull Figurine

262 M Pl. 38

Hollow figurine, about 28.0 cm long and 23.5 cm high, found in Tomb 32 (Trench XVII E). It is dark gray in color with a shiny burnished surface on which traces of the burnishing process can be seen. The animal has a very small head with a long muzzle in the shape of a spout and, above the spout, crescent horns joined across the forehead with a ridge and small, flat, projecting pierced ears at the sides. The head is thrown far forward, with the throat and chest sloping backward in a long curve to the body, and down the center is a projecting ridge representing a dewlap. At the shoulder is a very small hump, which may indicate that this is a young animal. The short body narrows at the middle with a rounded rump, a long projecting band tail, and elongated conical legs with a flat base.

### 98 Pottery Humped Bull Figurine

263 M Pl. 38

Hollow figurine of a bull, about 29.0 cm long and 20.0 cm high, found in Tomb 32 (Trench XVII E). It is dark gray with a shiny burnished surface on which traces of the burnishing process are clearly visible. It has a small but independently modeled head with a long open spout for a muzzle, above which are crescent horns pointing upward with small, flat, projecting pierced ears at the sides. Behind the horns a very tall conical hump curves upward and descends in a straight line to the back. A projecting band representing a dewlap extends down to the chest from the middle of the neck to the forelegs. The body tapers to a narrow middle and then swells upward to a pronounced rump with a projecting band tail and conical legs, flattened underneath.

### 99 Pottery Humped Bull Figurine

516 M Fig. 13; Pl. 38

Hollow figurine, intact except for a missing piece at the top of the left horn, about 26.5 cm long and 21.0 cm high, found in Tomb 19 (Trench XIV E). It has a surface that was originally burnished but is now badly weathered and deteriorated. The head, which is submerged in the tall hump, has an open spout muzzle with crescent horns above, meeting over the forehead with a projecting ridge in the center, and lightly marked eyes on each side of the muzzle. A very tall hump rises above the head and curves back to a slight point, from which it descends in a slightly concave curve to the back. A narrow projecting band extends from the neck to the forelegs. The normally proportioned body is slightly constricted in the middle and curves to a rounded rump with a thick projecting band tail and conical, moderately long legs, the forelegs angled slightly forward. With the

exception of the tall hump the proportions seem to represent a young animal without the power and force of the more mature beast.

### COMMENTS

A humped bull rather similar to 83 in the Museum of Fine Arts of Boston, said to be from Amlash or northwestern Iran, is dated by Culican to the tenth to ninth centuries B.C.<sup>42</sup> Another similar example, in the Louvre, is assigned by Parrot to northern Iran, around the tenth century B.C.<sup>43</sup>

A pottery figurine of a large humped bull in the collection of the Galerie Israel in Tel Aviv is said to derive from Marlik.<sup>44</sup> Similar in style to the Marlik examples (particularly 84), it has a muzzle in the shape of a spout, a stylized hump, reversed horns, a body that is narrow in the middle and rounded over the rump, short conical legs, and suspension loops on the nape and rump with parallel bands of dotted lines all over the body. This figurine is dated by Dubiner to 1000–500 B.C.<sup>45</sup>

A pottery humped bull somewhat similar to 85 with a muzzle in the form of a spout and short conical legs, said to be from Pile Kouh in the highlands of the Elburz Mountains, is presently in the collection of Galerie Israel in Tel Aviv. Like the previous example, it is dated by Dubiner to 1000–500 B.C.<sup>46</sup> A highly stylized pottery figurine of a bull or bison with a very large hump and mane, small body, and rump with very short small legs is in the Foroughi Collection in Tehran. This masterpiece of art, said to be from Amlash, is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>47</sup>

Another example, similar to 90, with a large stylized hump, a muzzle in the form of a spout, and short conical legs, said to be from Dailaman on the northern slopes of the Elburz Mountains, is dated by Godard to the early first millennium B.C.<sup>48</sup> A similar example in the Louvre is attributed by Parrot to northern Iran, dated to around the tenth century B.C.<sup>49</sup>

A final example, similar to 91 and characterized by a very large and stylized hump, a muzzle in the form of a spout, crescent horns, a band down the chest, short conical legs, a male organ under the rump, and impressed parallel lines of small triangles and short lines on the neck and around the rump, is in the Foroughi Collection in Tehran. It is said to be from Amlash and is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>50</sup> and by Porada to the twelfth to sixth centuries B.C.<sup>51</sup>

## STAGS AND MOUNTAIN GOATS (100–103)

Four pottery figurines of stags were found at Marlik, all of them hollow and made of red pottery

with a well-polished and burnished surface. They have upstanding, almost straight, antlers, and three have the short straight points that are similar to the antlers of the roe deer of the Caspian forest.

In other details, however, they differ. One of the stags has a hump and a thick body, like the humped bulls of Marlik, whereas the other three are more slender and deerlike with no hump. Three have a muzzle in the form of an open spout, but the muzzle of the fourth stag figurine is a truncated cone, a feature found on several other animal figurines from Marlik. Three of the stags have the normal straight-forward stance of the Marlik animal figurines, but one has an asymmetrical position with the head turned to one side, an attitude found in two other Marlik figurines.

These stag figurines, with their straight antlers and elongated necks, measure between 26.0 and 30.0 cm long and 27.0 and 35.0 cm tall, with height as their largest dimension.

#### 100 Pottery Stag Figurine

820 M Pl. 39

Hollow figurine, broken when found but since restored with the paler patches resulting from filling the missing parts with lighter clay, about 26.0 cm long and 33.0 cm high, found in Tomb 52 (Trench XXIII G). It is red in color with a burnished surface. There is almost no shaping of the head and no indication of eyes or ears. The muzzle is a narrow open spout, above which are long slender straight horns, joined at the base, with many small projecting points. The rather long slender neck, very straight at the back, curves under markedly at the chest. The body is long and cylindrical, swelling to a pronounced rump with a small projecting knob tail and very short truncated conical legs.

#### 101 Pottery Stag Figurine

505 M Pl. 39

About 29.0 cm long and 27.0 cm high, found in Tomb 36 (Trench XVIII C). It is a dark red color with a burnished surface. The rather long muzzle is in the shape of an open spout, with, above it, long, straight, upward-projecting horns without points. Below and in front of the horns are small impressed circular eyes, and behind them are small, flat, pierced upstanding ears. The cylindrical neck curves to a relatively small cylindrical body with a rounded rump, projecting long tail, and short conical legs.

#### 102 Pottery Stag Figurine

819 M Pl. 39; Color Plate XXIV A

Hollow figurine, broken when found and later reassembled, about 30.0 cm long and 35.0 cm high, found in Tomb 47 (Trench XXII E). It is brick red in color with a well-burnished surface. The muzzle is an open rather small spout, above which are long, slightly backward-curving horns with many short straight points. Impressed circles represent eyes. Be-

hind the horns the head projects upward into a pronounced hump. The neck, thick and straight at the back, curves in front to a cylindrical thick body with a rounded heavy rump, a short projecting band tail, and tapering conical legs. Except for the antlers, this figurine seems more to resemble the strong and forceful bull figurines than the slender and graceful deer.

#### 103 Pottery Stag Figurine

377 M Pl. 39; Color Plate XXIV B

Hollow figurine, about 27.5 cm long and 30.0 cm high, found in Tomb 36 (Trench XVIII C). It has an overall brick red color with traces of smooth polishing and burnishing on the chipped and damaged surface. The figurine is asymmetrical, with the head turned to the right side. The muzzle is a truncated cone with a sharply cut mouth extending across the front to the sides. Projecting from the forehead are slightly curving antlers with numerous small straight points, with impressed circles indicating eyes below and in front of these horns. Behind the eyes are flat semioval ears, the right ear pointing backward and the left ear bent and turned forward. The shapely neck, straight and long, swells a little at the breast with no trace of a hump at the back. The well-proportioned torso narrows a little at the middle and extends to a smooth rounded rump with a short projecting band tail. Under the body, another short projecting band represents a male organ. Well-placed elongated legs are conical. This is a graceful, beautifully proportioned figurine with the unusual asymmetrical stance conveying an impression of alert watchfulness.

#### COMMENTS

There are a number of pottery figurines of stags and mountain goats in various collections throughout the world, most of uncertain provenance but said to have come from the highlands of the Elburz Mountains and assigned variously to Amlash, Rudbar, Kalardasht, and Dailaman. These have been dated sometime between the last half of the second to the first half of the first millennium B.C. Two pottery figurines of stags, one with a conical head, straight horns, hollow ovoid body, and long conical forelegs,<sup>52</sup> and the other with a muzzle in the form of a spout, many-branched straight horns, a short thick neck, hollow heavy body, short thick conical legs, and a long-necked jar opening on its back,<sup>53</sup> both said to be from Amlash, are dated by Porada to the twelfth to sixth centuries B.C. A rather crudely made figurine of a young antelope with a hollow body and an opening hole on the back of the shoulder, not very similar to the Marlik figurines but also said to be from Amlash, is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>54</sup> All three of these figurines are in the Foroughi Collection in Tehran.

A pottery figurine from Kalardasht of a mountain

goat with a conical muzzle, projecting knobs for eyes, crescent horns pushed backward, a long straight neck, and an oval body with short conical legs, an opening hole on the back with a short straight rim, and incised linear decoration representing the branches of a tree extending from neck to tail, is dated by Bussagli to the ninth to eighth centuries B.C. in a picture caption, but to the eleventh century B.C. in the text,<sup>55</sup> and to 1200–1000 B.C. by Porada.<sup>56</sup> A pottery figurine of a recumbent stag with crescent horns pushed backward, and a straight cylindrical body with an opening hole in the back with a short vertical rim, also from Kalardasht, is dated by Ghirshman to the eighth to seventh centuries B.C.<sup>57</sup> A crudely made pottery figurine of a mountain goat with straight horns and an oval body, not very similar to the Marlik figurines, is said to be from Dailaman. It is dated by Godard to the early first millennium B.C.<sup>58</sup> A crudely made pottery figurine of an antelope with a hollow body and straight antlers, painted with crosshatching and parallel lines, with the tail forming a spout at the rear, found in Cyprus, is dated by Bossert to the Older Iron Age, at the end of the second millennium B.C.<sup>59</sup>

Several pottery figurines of stags are in the collection of the Galerie Israel in Tel Aviv. A crudely made pottery figurine of a stag with a hollow body, thick neck, open mouth, straight antlers, and a vertical jar neck on its back, said to have been found at Rudbar near the site of Marlik Tepe, is dated by Dubiner to 1000–500 B.C.,<sup>60</sup> as is another figurine of a stag whose provenance is not known. This figurine is not similar to the Marlik figurines in style, having a muzzle in the form of a spout, short antlers, a thick neck, and a hollow oval body.<sup>61</sup> Dubiner dates a third pottery figurine of a mountain goat with long crescent horns, a hollow ovoid body, two hind legs and one front leg on the ground, and two more short legs in the air, to the Achaemenian Period, ca. 400 B.C.<sup>62</sup>

A pottery figurine of a recumbent mountain goat with a small head, large flat ears, and a cylindrical thick body with a tall jar neck with an outward open rim on the back, said to be from Amlash, is dated by Porada to the twelfth to sixth centuries B.C.<sup>63</sup> Another pottery figurine of a mountain goat, with a hollow body in three connected globular sections, a small conical muzzle, simple crescent horns, projecting knob eyes, a short tail, narrow bent conical legs, and an opening hole on the rump with a curved rim and incised decoration around the neck, also said to be from Amlash, is dated by Porada to the twelfth to sixth centuries B.C.<sup>64</sup> These are both in the Foroughi Collection in Tehran.

## MULE FIGURINES (104–105)

Two of the pottery animal figurines from Marlik represent pack animals, probably mules. Made of red

pottery with a highly polished and burnished surface, they are very similar in general form and attitude except for a difference in the heads. On one the muzzle is an open spout, and on the other it is a truncated cone. Mules, of course, are excellent pack animals in mountainous areas such as the highlands of Gilan where Marlik is located and are much used there to the present day. A third, most unusual figurine is a charioteer with two horses, all mounted on wheels, also of burnished red pottery (see discussion under 77).

### 104 Pottery Mule Figurine

1111 M Pl. 39; Color Plate XXIV C

Hollow figurine, broken when found but later reassembled, about 36.5 cm long and 25.0 cm high, found in Tomb 24 (Trench XV E). It has a rather dark brick red color, and its surface is extraordinarily well polished and burnished and shows visible marks of the burnishing process. The entire figure, highly simplified and stylized, stands as though bracing itself with both fore- and hind legs angled slightly forward. The muzzle is a long open spout with impressed circles for eyes behind the spout, and at the sides of the head are flat semioval ears pointing upward and backward. The skull projects backward in a slight point, a small vestige of the pronounced hump found on many of the Marlik animal figurines. A strong cylindrical neck curves in slightly to the chest. The body is fairly slender, rounding over the rump with a short projecting band tail and tapering elongated conical legs.

This mule figurine carries a large load divided into three parts, with one large oval pack on each side of the body and a smaller oval pack on the back. Projecting bands across the chest and around the rump under the tail represent the leather straps that anchor the load securely. The placement of three packs in this position is known in Iran as "Shah-neshin," or "the king's seat," since a rider can sit comfortably on the animal, supported at the sides and back by the packs.

### 105 Pottery Mule Figurine

1124 M Pl. 39

Hollow figurine, about 33 cm long and 26.0 cm high, found in Tomb 36 (Trench XVIII C). It is a dark reddish brown with traces of burnishing. Broken into many pieces and very badly crushed around the middle when found, it has been reassembled, and the missing parts, mostly in the load area, have been reconstructed. It has the same braced stance as the other mule figurine, 104. The head is small, with a muzzle in the form of a truncated cone and a round open mouth extended to the sides by a sharp cut, similar to the head of Stag Figurine 103. The eyes are circular holes and the semioval ears are flat, pointing upward and backward. The thick neck is cylindrical, with very slight curving at the front, and the torso is long with a projecting knob tail. The



forelegs are tapering cones, and there is a definite backward stance in the rump and hind legs, which are much thicker.

This mule carries a large rounded oval load at each side, but none at the back, with projecting bands representing the leather straps running across the chest and around the rump under the tail.

#### COMMENTS

A hollow pottery figurine of a loaded pack animal, its conical legs angled forward, said to have been found in the region of Dailaman or the highlands of the Elburz Mountains, is dated by Godard to the early first millennium B.C.<sup>65</sup> Less closely similar is a pottery figurine of a horse with detailed decoration on the mane, impressed circles in the area of the neck, crown knobs on the head, back, and chest, and a hole in the rump, said to be from Amlash. The figurine is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>66</sup>

Two hollow pottery figurines of horses are in the collection of Galerie Israel in Tel Aviv. One, with a long neck, a muzzle in the shape of a spout, and a large hump on the back rather than the neck, said to be from Marlik, is dated by Dubiner to 1000–500 B.C.<sup>67</sup> He dates the other, a horse with a long bent neck, globular body, and a jar neck on top of the rump, to 1200–1000 B.C.<sup>68</sup> This example is not similar in style to the Marlik figurines and is said to be from Ardebil in Azerbaijan. A pottery figurine from Cyprus of a horse or donkey with a vessel mounted on its back, also not very similar to the Marlik figurines, is dated by Bossert to the Old Iron Age, ca. 1100–750 B.C.<sup>69</sup>

A more geometrically shaped pottery figurine of a horse or mule with a short neck, straight body, short legs, and a large suspension loop on the back, painted in geometric checkered panels over the body with banded parallel lines on the neck and muzzle, housed in the Tehran Archaeological Museum, has been attributed to Luristan.<sup>70</sup> A pottery figurine from Susa of a horse with a narrow neck, small head, straight body with broken legs, a painted blanket containing pictures of animals and birds, and a front chest cover with birds and rams is dated by Ghirshman to the seventh century B.C.<sup>71</sup> and by Bussagli to the second millennium B.C.<sup>72</sup> Finally, a pottery figurine of a horse with a small head, heavy body, and almost no legs, with a rather tall jar neck projecting from the back and a painted blanket of animals and birds, found at Maku in Azerbaijan, is dated by Ghirshman to the eighth century B.C.<sup>73</sup> This last figurine is in a rather different style from the Marlik figurines and should be later in date.

## RAM FIGURINES (106–110)

Five pottery figurines of rams were found at Marlik, four of them similar to the other Marlik animal figurines in being hollow and manufactured of red pottery with a polished and burnished surface. These figurines are the largest in size of all the animal figurines, measuring between 30.0 and 37.5 cm long and 26.0 and 34.0 cm high, and were all found in the same tomb, Tomb 36 (Trench XVIII C). Two of these hollow ram figurines have an open spout for a muzzle, and two have a truncated cone. Two have horns that curl back behind their ears, and two have rather different horns, curling or pointing outward. All of them portray powerful animals, one with the massive hump and heavy body of the mature humped bull.

The fifth ram figurine is quite different, not only from the other ram figurines, but from all the pottery animal figurines of Marlik, as it is very small, solid, and quite crudely made. The characteristic horns curling around the ears are present, however.

### 106 Pottery Ram Figurine

506 M Fig. 14; Pl. 40; Color Plate XXIV D

Hollow figurine, broken when found but later reassembled with the missing parts shown by lighter clay, about 35.0 cm long and 26.0 cm high, found in Tomb 36 (Trench XVIII C). It is brick red in color with a polished and burnished surface. The head is an elongated triangle and the muzzle a long open spout. Small round eyes are located on each side of the head just under flat, triangular, outward-projecting pierced ears. Graceful, well-formed horns make a loop on each side of the head, circling around the eyes and ears. The thick, powerful neck curves to the chest with two parallel bands of elongated impressed dots around the throat extending from the base of the horns on one side to the base on the other. The long body narrows slightly at the middle and sweeps to a rounded rump, with a short projecting knob tail placed rather low and, under the body, another projecting band representing a male organ. The short tapering legs are well placed. This is a graceful, well-proportioned animal with a firm, strong stance.

### 107 Pottery Ram Figurine

1118 M Pl. 40

Hollow figurine, broken when found but later reassembled with the missing parts filled with light clay, about 30.0 cm long and 27.0 cm high, found in Tomb 36 (Trench XVIII C). It is reddish brown in color with a surface burnished to a smooth sheen. The head is a truncated cone with the mouth formed

by a sharp cut continued to the sides of the muzzle. Graceful horns curve around the ears from the middle of the forehead. The eyes are impressed circles below the base of the horns, and the ears are projecting pierced flat semiovals located in the center of the curving horns. A strong, thick neck curves slightly forward and under at the chest. The long body sweeps to a rounded rump with a projecting band tail, and another projecting band under the body represents a male organ. The tapering conical fore- and hind legs are naturally positioned. This figure represents a young, strong, graceful animal.

#### 108 Pottery Ram Figurine

1123 M Pl. 40

Hollow figurine, broken when found but later reassembled, about 33.0 cm long and 29.0 cm high, found in Tomb 36 (XVIII C). It is rather brownish in color with burnishing over the entire surface. An elaborate pattern of impressed dots covers the body with alternating straight and zigzag bands. The head, almost submerged in a large pointed hump, has a muzzle that is an open spout with no indication of eyes or ears. Above the spout heavy twisted horns curve outward and forward, and, behind the horns, a very long pointed hump descends in a straight line to the back. The neck and chest curve under, with a projecting band extending from the base of the throat to the forelegs. The long body narrows just behind the forelegs and then swells and thickens to a very heavy curved rump. The legs are tapering cones, and the hind legs are extremely short. This powerful, mature beast is very similar to the humped bull figurines in the details of its body.

#### 109 Pottery Ram Figurine

1125 M Pl. 40

Hollow figurine, broken when found but later reassembled, about 37.5 cm long and 34.0 cm high, found in Trench 36 (Trench XVIII C). It is dark reddish brown in color with a burnished surface. The muzzle is a truncated cone with a round notched mouth. On top of the head sweeping horns curve forward, and, below them, are small, flat, projecting pierced ears. At the back of the head is a small projecting knob hump. The thick, strong neck curves slightly to the forelegs. The long body is narrow and rounded at the rump with a projecting band tail, and, under the body, is another projecting band representing a male organ. The tapering conical legs have rather pointed ends. This is a young and slender but strong animal that might also be identified as a young bull except for the long upright neck, which is more characteristic of the mountain sheep.

#### 110 Pottery Ram Figurine

759 M Pl. 40

Solid, rather crude figurine, intact except for the ends of the legs and ears, about 7.5 cm long and 5.5

cm high, found in Tomb 1 (Trench III D<sup>+</sup>). It is reddish brown in color. On this small figurine, as in two other Marlik animal figurines, the head turns to the right side. There is an almost pointed round muzzle with small incised points representing eyes, circular horns attached to each side of the head, and small projecting ears, which are broken off. The body is crudely shaped with a thick, short neck and heavy torso with a projecting knob tail at the rear and rudimentary legs, broken at the ends. This small figurine differs markedly from the rest of the pottery animal figurines from Marlik.

#### COMMENTS

An animal-shaped vessel with a hollow body, small head, and jar neck with asymmetrical handles on the back, from Khurvin, is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>74</sup> Another pottery figurine of a ram, of unknown origin, is housed in the Galerie Israel in Tel Aviv. This figurine is not very similar to the Marlik figurines in style, having a narrow head, a muzzle with a hole in the mouth, a long narrow neck, a straight hollow body, narrow spiral horns, and crude, unbalanced conical legs. It is dated by Dubiner to 1000–500 B.C.<sup>75</sup>

### BEAR FIGURINES (111–112)

Two of the most charming animal figurines from Marlik represent bears. These two bears, one male and the other female, are portrayed as seated with jolly open faces and some decidedly human characteristics. Both were found in the same tomb.

#### 111 Pottery Bear Figurine

155 M Fig. 14; Pl. 41; Color Plate XXIV E

Hollow figurine, broken when found and later reassembled with the joining and filling shown by lighter patches of clay, about 27.0 cm high, found in Tomb 24 (Trench XV E). It has a dark brick red color, burnished over the whole surface. The seated figure has a large round head with a triangular open spout for a mouth and a nose that is a small triangle with open nostrils. Oval holes represent eyes, and the ears are small, projecting, flat semicircles, pierced in the center. Two projecting bands joined at the top angle out to each side of the bridge of the nose, and around the back of the head are three more sets of projecting short bands joined at the top and radiating outward that probably represent fur. The figure has almost no neck, with the head sitting almost directly on a sturdy barrel-shaped body. Instead of forelegs, there are short human arms and hands, each with four fingers, held in front of breasts indicated by small projecting knobs. The barrel torso is flattened under at the rear to make a base for the seated figure. In front, small straight legs project

forward, ending in flat feet with no indication of toes. Between the base of the legs is a raised patch, apparently representing a pubic triangle, with a small incised rectangle above whose meaning is not evident. Many of the details of the head and body of this figure are similar to those found on the human pottery figurines of Marlik.<sup>76</sup>

### 112 Pottery Bear Figurine

1112 M Fig. 14; Pl. 41

Hollow figurine, badly crushed and broken when found and later reassembled with the missing parts filled with lighter clay, about 30.0 cm high, found in Tomb 24 (Trench XV E). It has a light brick red color with burnishing over the surface. This seated male bear has a bulkier body than the female and appears somewhat less bearlike. Its head is round with a wide-open mouth with an upraised upper lip and a chin extending into a long beard. Above the mouth is a small protuberant nose with small round nostrils, and the eyes are large oval holes on each side of which are projecting small, flat, semicircular ears, partly pierced. Around the back of the head are projecting bands that probably represent fur. The body has a bulging barrel shape that is broader toward the bottom. The figure has a short neck with, just below the neck at the front, a projecting open spout that connects to the hollow interior. Below the spout flattened human arms ending in four fingers, indicated by three shallow cuts, reach forward in a curve in front of the body. The broadened rump is flattened underneath to make a firm base for the figure. Two small legs ending in small flat feet extend forward and outward. Above the base of the legs is a very large male organ projecting forward, with, below it, small knobs representing testicles. As with the female bear figurine, this male bear has many human characteristics.

#### COMMENTS

A crudely made hollow pottery figurine of a seated male bear holding a vessel in its hands, with an erect male organ, is housed in the Galerie Israel in Tel Aviv. It is said to be from Amlash and is dated by Dubiner to 1500–1200 B.C.<sup>77</sup>

## LEOPARD FIGURINE (113)

### 113 Pottery Leopard Figurine

1119 M Fig. 14; Pl. 41

Hollow figurine, about 34.0 cm long and 27.5 cm high, found in Tomb 36 (Trench XVIII C). It is the only example of a pottery leopard figurine found at Marlik. It is rather unusual among the pottery figurines in both color and appearance. It has a dark

gray-brown color with burnishing over the entire surface, which is completely covered with impressed circles representing the leopard's spots. The figurine is asymmetrical in position, with the head turned to the right side, as is Stag Figurine 103, which was found in the same tomb. The round head has an open snarling mouth with a drooping lower lip and a small round hole in the center of the mouth connecting to the interior of the figure. Above the mouth is a small nose with tiny nostrils, while the eyes are raised circles centered with shallow holes, and the large, flat, semioval ears are raised and alert. Below the head the neck pinches in slightly and then swells outward in an extremely long, thick cylindrical form that is straight at the back and curves into the breast in front. At the top of the throat is an open spout that connects to the hollow interior. The proportions of this figurine seem to suggest that it was originally intended to have a spout for a muzzle and that the leopard head was superimposed on top of the original design. The body of the leopard is slender in front, swelling upward to a rounded hump with a raised curling tail and a male organ below the tail in the cleft of the buttocks. The legs are short and curve forward at the paws, particularly noticeable in the forelegs. This is an unusual figure, which exhibits the snarling aggressiveness of the leopard very clearly.

## DOG FIGURINE (114)

### 114 Pottery Dog Figurine

815 M Fig. 14; Pl. 41

Solid figurine, almost intact except for a few cracks, about 18.5 cm long and 9.0 cm high, found in Tomb 52 (Trench XXIII G). It is a rather light brick red color with no trace of burnishing on the surface, which is not smoothed or polished. The head and muzzle have an overall triangular shape. The mouth is open with a long tongue hanging out and sharp teeth indicated in the upper and lower jaws. Long cuts on the muzzle indicate nostrils; the eyes are elongated oval gouges with eyebrows marked by projecting bands; and projecting semioval ears angle forward, giving a quality of alertness to the figure. The long neck is slender, and the body swells to a large stomach and then tapers to the rump, from which a thick tapering tail curves upward. Simple thick forelegs bend forward, cut off at the end with no suggestion of paws, whereas the much smaller tapering hind legs are straight. The overall impression, very effectively conveyed, is of a lively crouching puppy. This solid figurine is rather crudely made, although the modeling shows some facility.

## *Metal Animal Figurines (115–155)*

Metals, which were discovered as early as the sixth millennium B.C.,<sup>78</sup> were in widespread use by the second millennium B.C. By the second half of the second millennium B.C. a bronze industry was well developed, with one of its major centers located in the highlands of the Elburz and Zagros mountains of northern Iran. The contents of the Royal Cemetery of Marlik, of which the many bronze animal figurines are an important part, illustrate the advanced state of bronze production there during the latter part of the second millennium B.C. (Color Plate XXV A).

Sixty-eight metal animal figurines, mostly bronze with a few of gold, were found either at Marlik itself or in the nearby site of Gheshlagh. These include humped bulls or oxen, stags, mountain goats, rams, horses, leopards, wild boars, and dogs. In addition to the individual figurines, a number of objects found in the Marlik tombs are decorated with complete animal figures or with modeled animal heads. Some of these animal figurines, although simplified, are quite natural in form and attitude, but others are more stylized, often with an extreme exaggeration of a characteristic feature such as the hump or horns. The figurines remain in a good state of preservation except for the corroded and often granulated surface, in contrast to such items as the thin-walled decorative vessels, many of which have deteriorated into fragments.

These metal animal figurines are usually rather small. All are freestanding except for the four largest figurines, one of which is mounted on wheels and three on rods. Many of the small animal figurines found at Marlik itself have a hole piercing the body or neck, probably for suspension, whereas all the Gheshlagh figurines, which are noticeably cruder in workmanship than those from Marlik proper, have suspension loops on the back of the animal. In addition, many small animal figures were found at Marlik in the form of beads and other types of jewelry. They are discussed in Chapter 7.

### BULL FIGURINES AND MODELS OF OXEN WITH A YOKE AND PLOW (115–133)

#### *BRONZE BULL FIGURINES (115–128)*

The largest number of bronze animal figurines, like those of pottery, are of humped bulls or oxen. Twenty-nine bull figurines were found either at Marlik itself or in the vicinity of Gheshlagh. Ten of these figurines form part of small models that con-

tain a pair of humped bulls with a yoke and usually a plow. In addition to these separate figurines, humped bulls appear as decorative additions to a long bronze pin (452) and a stamp seal (490).

The age and type of animal depicted vary. Most common is a heavy, mature bull or ox with a blunt muzzle and pronounced hanging dewlap forming a distinct triangular head profile, long tapering horns that may be twisted at the points, an exaggerated hump, and a stocky, powerful body. In contrast to these mature beasts are some figurines that seem to portray much younger animals, having a slender muzzle, short horns, slight or nonexistent dewlap, small hump, and slim body.

These bronze bull figurines vary in length from about 2.5 to 11.5 cm. The largest figurine, 118, is unique in being mounted on wheels.

#### **115 Bronze Humped Bull Figurine** 386 M Pl. 42

About 4.0 cm long and 4.0 cm high, found in Tomb 36 (Trench XVIII C). It has a small head with a pointed conical muzzle and long upright crescent horns sprouting from the forehead. The thick, heavy neck has a prominent dewlap extending from the muzzle to the forelegs in a diagonal line in profile and, at the nape, a tall, backward-projecting hump with a rounded top. The short body narrows in the middle and rises to a small flat rump with a projecting band tail. The legs are short and conical, with the forelegs slightly longer than the hind legs. A round hole pierces the bottom of the dewlap at the chest. This is a beautifully stylized figurine, exhibiting the strength and power of the mature bull.

#### **116 Bronze Humped Bull Figurine** 387 M Pl. 42

About 4.5 cm long and 3.0 cm high, found in Tomb 36 (Trench XVIII C). It is made of cast bronze, heavily rusted on the surface with granulated soil sediment adhering on some parts. The head of the bull is small, with a conical pointed muzzle and a thick forehead supporting heavy tapering crescent horns angled forward. A very large, heavy dewlap in which the neck is completely submerged extends from the muzzle, down the throat, and between the forelegs to the stomach. Sprouting from the back of the neck and shoulders is a thick conical hump, somewhat rounded at the top. The thick body has a flat rump, projecting band tail, and elongated tapering conical legs, which slant very slightly backward. The impression of strength and preparedness produced by the slightly lowered head and braced legs of this figurine illustrates the expressive genius of the Marlik craftsmen.

**117 Bronze Humped Bull Figurine**

388 M Pl. 42

About 3.2 cm long and 3.8 cm high, found in Tomb 36 (Trench XVIII C). It exhibits the distinctive triangular head profile of a mature bull carried to an extreme of stylization. From the point of the conical muzzle a large dewlap extends in a diagonal line to the forelegs. Long upstanding twisted horns, very thick and strong at the base, sprout from the sides of the head. Rising from the back at the shoulder is a large hump, rectangular at the base and curving backward at the top. The small body is cylindrical, with a flattened projecting rump, a short band tail, and tapering conical forelegs that slant slightly forward while the shorter, heavier hind legs reach slightly backward. This is a highly stylized figure of a strong, mature bull with an alert braced stance.

**118 Bronze Humped Bull Figurine Mounted on Wheels**

15 M Pl. 42; Color Plate XXV B

About 11.5 cm long and 11.0 cm high, found in Tomb 24 (Trench XV E). It has a blunt muzzle with a hanging dewlap extending in a diagonal line to the forelegs, producing the distinctive triangular head profile of all the mature bull figures. Projecting upward from the forehead are tapering crescent horns slightly curved at the tips, and below the horns, on each side of the head, are flat projecting ears. On the back at the shoulder is a rather large conical hump bent backward near the tip. The small cylindrical body ends in a rounded rump, with short legs pierced near the ends by axles riveted to solid disk wheels. The largest of the bull figurines, this is a beautifully stylized portrait of a powerful, mature bull, probably mounted on wheels for use as a toy.

**119 Bronze Humped Bull Figurine**

240 M Pl. 42

About 11.5 cm long and 9.5 cm high, found in Tomb 47 (Trench XXI E). It has a conical raised head with a round muzzle, eyes that are projecting knobs, and, above them, upstanding crescent horns sprouting from the forehead. The neck and throat are broad, with a large hanging dewlap extending from the muzzle to the forelegs. On the back at the shoulders, distinctly outlined by a sharp edge, is an elongated conical hump with the top pushed slightly backward. The cylindrical body rises to a flattened, slightly curved rump with a small hanging tail. The legs are conical with the forelegs longer than the hind legs, and a hole pierces the body at the top of the shoulder. The front part of the body of this highly stylized mature beast is so emphasized that the figurine is almost unbalanced.

**120 Bronze Humped Bull Figurine**

241 M Pl. 42

About 8.5 cm long and 6.8 cm high, found in Tomb 47 (Trench XXI E). It has a triangular head

with a conical muzzle. Springing slightly forward from the forehead are short crescent horns with small projecting knob eyes below. A slight dewlap extends from the muzzle to the forelegs, and at the shoulder is a large conical hump. The body narrows in the middle, rising to a small flat rump with a very short tail. Conical forelegs are rather long and backward slanting, while the almost straight hind legs are much shorter. This figurine is very similar to, although smaller than, 119 and was found in the same tomb. It may well have been produced by the same artist.

**121 Bronze Humped Bull Figurine**

1075 M Pl. 42

About 4.3 cm long and 3.0 cm high, found in Tomb 13 (Trench XII G). It has a lowered head set on an almost horizontal neck. Springing from the forehead are short, thick vertical horns, with, below them, slightly projecting eyes. The round neck has a slight dewlap reaching to the chest. At the shoulders is a tall conical backward-projecting hump with a rounded top. The body narrows in the middle and then enlarges to a flattened rump. The legs are thick and conical, with the forelegs rather longer than the hind legs. On the back near the hump is a vertical hole. Both this figurine and the following one, 122, which came from the same tomb and is very similar in size, form, and attitude, are rather crudely made.

**122 Bronze Humped Bull Figurine**

1076 M Pl. 42

About 4.2 cm long and 3.0 cm high, found in Tomb 13 (Trench XII G). It has a triangular head with a slightly rounded muzzle. Short, thick horns sprout upward from each side of the forehead above rounded, slightly projecting eyes. The lowered head is attached to the shoulders by a very short horizontal neck, with a small dewlap extending from the throat to the forelegs. At the shoulders is a tall hump with a backward-bending conical top. The long narrow body is pushed upward to a flattened rump. The legs are conical and very short.

**123 Bronze Humped Bull Figurines**

85 M Pl. 43

Three very small figurines, about 2.5 cm, 2.7 cm and 3.0 cm long, respectively, found in Tomb 40 (Trench XVIII N). They are closely similar in size, form, and attitude, and only one will be described. The head is small and triangular with a conical muzzle. Small tapering horns sprout upward or slightly forward from the forehead. The neck is short and thick, with a small dewlap extending down the throat to the forelegs. At the shoulder is a small slightly backward-pointing hump. A narrowed body swells to a small projecting rump, flattened at the back with no sign of a tail. The legs are conical and tapering, with the hind legs rather pointed at the ends. These figurines, which are normally propor-

tioned and well balanced, seem, with their small horns, hump, and dewlap, to represent young animals.

#### 124 Bronze Figurines of Humped Bulls

806 M, 807 M, 808 M, and 809 M Pl. 43

Four figurines, apparently of bulls, each approximately 8.5 cm long and 5.0 cm high, found in Tomb 52 (Trench XXIII G). They are very similar in form and detail, and only one will be described. The long narrow head has a square muzzle with an open mouth. Projecting crescent horns sprouting from the forehead push forward on two of the figurines and backward on the other two. Below the horns the eyes are round holes surrounded by a slightly projecting ring. The raised neck has a slight dewlap at the throat, producing a curved line from head to chest. The slim elongated body, with a small hump at the shoulder, ends in a small rounded rump with a long bent tail reaching halfway to the ground. Long cylindrical legs, braced forward, end in well-detailed hocks and slit hooves. These four figurines are quite different from the bull figurines already described. With their small humps and slim elongated bodies they do not seem very bovine, but rather, in proportions and attitude, rather doglike. Nevertheless, the specific details of horns, hocks, and hooves have led to their inclusion with the bull figures.

#### 125 Bronze Humped Bull Figurine

942 M Pl. 43

About 7.0 cm long and 5.0 cm high, found in Trench 1 of Gheshlagh. It has a tapering conical muzzle and straight, thick, tapering horns sprouting from the top of the head, which is set on a short horizontal neck with no dewlap. A tall conical hump rises from the shoulder. The body is narrow and cylindrical, ending in a very high rump that is flattened at the back. Short straight legs are thick and conical. Some impressed lines at the shoulder may indicate muscles. A hole pierces the body at the base of the hump, and a suspension loop extends from the hump to the back. This is a rather crudely formed and badly proportioned figurine.

#### 126 Bronze Humped Bull Figurine

941 M Pl. 43

About 6.5 cm long and 5.0 cm high, found in the Gheshlagh area. It has a lowered triangular head with a round muzzle and open mouth. Slightly bent short horns point forward. At the shoulder is an extremely tall upright hump, rounded at the top. The long cylindrical body rises to a rather small, pointed, flattened rump with a projecting band tail. The legs are long and conical. On the back behind the hump is a small suspension loop.

#### 127 Bronze Humped Bull Figurine

1128 M Pl. 43<sup>79</sup>

About 6.7 cm long and 5.3 cm high, found in

Trench 1 of Gheshlagh. It has a triangular head with a conical pointed muzzle and crescent horns pointing forward. The neck is short, with a dewlap at the throat reaching from the muzzle to the chest, and a large conical hump at the back extending from the nape to the shoulder. The straight cylindrical body points upward at the flattened rump, with a rather low projecting band tail. The straight round bar extends from the hump to the back, forming a suspension loop.

#### 128 Bronze Humped Bull Figurine

1130 M Pl. 43

About 9.2 cm long and 6.3 cm high, found in the Gheshlagh area. It has a very small head with a round muzzle and almost straight horns pushed slightly forward at the top of the head. The long neck has little indication of a dewlap in front, while on the back at the shoulder is a rather tall, conical, backward-pointing hump with a rounded top. The long body thickens as it extends toward a flattened rump with a short projecting band tail. The cylindrical legs have slight projections at the ends indicating hooves, with the forelegs angled forward and the hind legs straight, producing a braced stance. A suspension loop bent in the middle connects to the hump and back. As in the other Gheshlagh figurines, the workmanship is crude and the figure badly proportioned.

#### *BRONZE MODELS OF OXEN WITH YOKE, SHAFT AND/OR PLOW (129–133)*

#### 129 Bronze Model of Oxen with Yoke and Plow

59 M Pl. 43; Color Plate XXV C

About 25.0 cm long overall and weight about 345 gm, found in Tomb 27 (Trench XVII D). It has two similar oxen, and only one will be described. The face and head are formed of triangular flat sections that include the forehead, nose, and muzzle, with no details of features. Sprouting from the forehead are crescent-shaped forward-pointing horns. A pronounced dewlap extends from the muzzle to the forelegs along the almost horizontal thick neck, and on the back at the shoulders is a large conical hump holding the yoke in place. The cylindrical body ends in a projecting rump, and the straight cylindrical legs have small projecting points at the ends representing hooves.

The yoke is a bronze bar curved to fit over the necks of the oxen with a downward-pointing projection in the center holding the twisted wire fastening the yoke to the shaft of the plow, which is a very long bronze bar with a knob near the end where it is attached to the yoke. The plow end is bent and curved in an S shape to form the handle and hold the blade, a flat bronze bar with pointed ends connected to the shaft by a bronze loop.

Littauer suggests that harnessing was used as early as the middle of the second millennium B.C.<sup>80</sup> Yokes were well developed by the time Marlik was in use (the latter part of the second millennium B.C.), with yokes and harnesses especially being used for horses and chariots or carts.

### 130 Bronze Model of Oxen with Yoke and Shaft

767 M Pl. 44

Weight about 830 gm, found in Tomb 47 (Trench XXII E). It has two quite similar oxen, each about 10.5 cm long and 10.0 cm high, and only one will be described. The head is triangular in front view, although the planes are not quite as flat as those of the oxen of 129, with tapering crescent horns spouting from the forehead. The thick horizontal neck has a hanging dewlap reaching from the top of the throat to the chest, and near the shoulder at the back is a tall tapering hump, pointing slightly backward, which holds the yoke in place. The narrow cylindrical body rises upward to a projecting flattened rump. The legs are cylindrical and straight with forward projections at the ends indicating hooves. The yoke and shaft are quite similar to 129 except that the wire loop connecting the yoke to the shaft is longer, with two twists. Another loop at the end of the shaft would connect it to the plow, which is missing.

### 131 Bronze Model of Oxen with Yoke and Plow

817 M Pl. 44

Two very similar oxen, each about 10.5 cm long and 8.5 cm high, found in Tomb 52 (Trench XXIII G) (Fig. 17A). Only one will be described. The head is wide and flat, but not quite as triangular as in the two previous models. Upstanding crescent horns, pushed forward, sprout from the forehead above circular eyes. A short horizontal neck is submerged in a large dewlap that extends from the muzzle to the forelegs. On the back at the shoulder is a tall conical hump that holds the yoke in place. The body is angular with a flattened rump, and the legs are truncated cones with no indication of hooves. The yoke is a flat bar curved to fit the necks of the oxen, with extensions in the center between which the bronze wire fastening the shaft is hooked. This shaft, differing from the shafts of the previous models, is a long thin double wire looped and bent apart at the ends. Two crossed bronze bars form the plow, one longer with a sharp point at the end and the other shorter and flat with a small projecting handle end.

### 132 Bronze Model of Oxen with Yoke

227 M Pl. 44

Two quite similar oxen, each about 7.0 cm long and 5.0 cm high, found in Tomb 25 (Trench XVI F). Only one will be described. The small head has a conical muzzle and upstanding horns. On the back at the shoulder is a small, elongated, backward-curving hump. The slender body rises to a rounded rump with a short drooping tail, and the conical legs are

rounded at the ends. A very narrow flat bar, about 0.8 cm wide and 8.0 cm long, forms the yoke.

### 133 Bronze Model of Oxen with Yoke

487 M not illustrated

Two similar animals, the slightly larger one about 7.3 cm long, found in Tomb 18 (Trench XIV D). Only one will be described. The small thin head, resembling the head of a goat more than that of a bull, has upstanding crescent-shaped horns. The cylindrical neck is nearly horizontal. A small backward-pointing hump on the back at the shoulder holds the yoke in place. The long narrow body ends in a small rump and short tail, with long cylindrical legs rounded at the ends. A straight long flat bar of bronze with globular ends forms the yoke, with no shaft or plow. Except for 132, which it somewhat resembles, this model is different in the type of animal depicted and much cruder in workmanship than those previously described.

### COMMENTS

A bronze bull similar to 120, possibly from Dailaman, is dated by Terrace to 1100–800 B.C.,<sup>81</sup> and another from Amlash is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>82</sup> A bronze figurine of a bull with a small hump and flattened rump, somewhat similar to 123 although of poorer workmanship, is dated by Calmeyer along with other small finds from the Elburz region to around the early first millennium B.C., although no exact date is suggested.<sup>83</sup> A final example, characterized by a small hump like 124, is dated by Moorey to the late second millennium B.C.<sup>84</sup>

A model plow similar to 129 is dated by Moorey to Iron Age I (ca. 1200–1000 B.C.),<sup>85</sup> while a bronze bull said to be from Amlash, similar to the bulls in 130, is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>86</sup>

## STAG FIGURINES (134–142)

### *BRONZE STAG FIGURINES (COLOR PLATE XXV D)*

Ten bronze figurines of stags together with five sets of bronze antlers were found at Marlik proper, and a single stag figurine was found at Gheshlagh. Most have a slender body and long legs, with particular emphasis given to the long many-pointed antlers. The figures exhibit a variety of poses from a vigorous animal with its head raised and alert to a creature on the defensive with its lowered head braced for attack. Some of the stags have very simple undifferentiated legs, whereas on others considerable attention has been given to a careful but often awkward delineation of the joints, hocks, and hooves. Four of the fig-

urines are pierced by holes, probably for suspension, and the single figurine from Gheshlagh has a suspension loop on the back.

#### **134 Bronze Stag Figurine**

390 M Pl. 45; Color Plate XXV D

About 4.2 cm long and 5.1 cm high, found in Tomb 36 (Trench XVIII C). It has a blunt triangular head with a conical muzzle. Sprouting upward from the top of the head are antlers with many forward-curving points spaced at intervals, and below the antlers are small projecting knob ears. The thick, round, upright neck extends to a stocky body, which rises to a conical flattened rump with a slight projecting tail. The legs are conical, the forelegs more slender, and the hind legs thicker with rounded ends. This is a well-proportioned alert animal ready for action.

#### **135 Bronze Stag Figurine**

539 M Pl. 45; Color Plate XXV D

About 6.5 cm long and 4.0 cm high, found in Tomb 50 (Trench XXI L). It has a small, conical, downward-pointing muzzle. Many-branched antlers sprout upward and forward from the top of the head, all more or less having their base in a thick stem. These antlers, which are not symmetrical or balanced, have some attachments that were either produced by a defect in the casting process or added later. On each side of the head are projecting ears. The almost upright neck is round and thick, extending to a cylindrical long body that narrows at the middle and ends in a rounded rump with a short projecting band tail. The legs are conical, with the long forelegs extended slightly forward, while the almost straight hind legs are shorter and heavier. This is a well-proportioned animal, braced and ready for action.

#### **136 Bronze Stag Figurine**

540 M Pl. 45

About 5.3 cm long and 5.0 cm high, found in Tomb 50 (Trench XXI L). It has a very small head with a flat thin muzzle and round mouth. Massive upstanding antlers with curving points, those near the base so large that they resemble a second pair of curving horns, surmount the head. Below the antlers, on each side of the head, are knob ears. The cylindrical neck extends to a long narrow body with a short, heavy bent-knob tail at the rump. The legs are unusually shaped, with a curved knee joint and a pronounced forward bend at the ends, apparently indicating hooves. Under the body is a prominent male organ. A hole pierces the back just behind the shoulder. This is a strong, alert figure with rather unusual detailing of several features.

#### **137 Bronze Stag Figurine**

541 M Pl. 45

About 4.8 cm long and 5.0 cm high, found in Tomb 50 (Trench XXI L). It has a head with a

round, thin muzzle and few detailed features. A group of antlers, curving forward and upward, unconnected to a main stem, sprouts from each side of the forehead. Below the antlers are projecting knob ears set low. The long neck broadens toward the chest and body, which is long and narrow with a short projecting tail at the rump. Straight legs have a hock and pointed ends without hooves. A large hole pierces the body near the shoulder. This long, low animal has a strong stance, ready for action.

#### **138 Bronze Stag Figurine**

243 M Pl. 45

About 11.0 cm long and 11.0 cm high, found in Tomb 47 (Trench XXI E). It has a lowered head similar to the head of a moose, with a long rectangular muzzle and open mouth. Rising from the top of the head are large, heavy, upstanding crescent antlers with many forward-jutting points. The lowest ones, which are particularly long, curve down over the forehead. Below the antlers on each side of the head are flat projecting ears. A long cylindrical nearly horizontal neck extends to a slight body, which narrows in the middle and ends in an angular rump with a short bent tail. The long straight legs are outlined at the shoulder and haunch and have impressed bands at the ends indicating hooves. A hole pierces the lower neck. The stag represented in this figurine seems scarcely able to raise its head under the weight of its heavy antlers.

#### **139 Bronze Stag Figurine**

242 M Pl. 45

About 8.5 cm long and 9.0 cm high, found in Tomb 47 (Trench XXI E). It is heavily rusted, with soil sediment adhering to the surface. The stag has an elongated muzzle, drooping slightly at the end. Extremely long heavy antlers with numerous projecting points curve backward from the top of the head. In front of the antlers are round projecting eyes, and behind them flat ears extend outward from the sides of the head. The upright neck and body are long, narrow, and cylindrical. The body is slightly heavier at the shoulder and chest and ends in a short projecting tail at the rump. The legs are long and cylindrical with a slight outward curve and conical ends. Near the rump a hole pierces the body. This is a well-proportioned, alert figure, well balanced despite the exceptionally long heavy antlers.

#### **140 Bronze Stag Figurines**

794 M, 799 M, 800 M, and 814 M Pl. 46

Four figurines, averaging about 8.0 cm long and 6.5 cm high, found in Tomb 52 (Trench XXIII G). They are very similar in form, shape, details, and attitude, and only one will be described. The long narrow head with its round muzzle and open mouth is held upright and horizontal. Long, many-pointed antlers curve outward and backward from the head in a horizontal line, with round holes in front of the



antlers indicating eyes. The long upright neck, curving at the throat, joins a narrow elongated body with a band tail at the round rump. Cylindrical legs, angled outward and forward, have distinct details of hocks and split hooves. These four figurines all have a distinctive braced stance, with the head carried upright and the antlers almost horizontal.

#### 141 Bronze Stag Figurine

940 M Pl. 46

About 7.5 cm long and 7.0 cm high, found in Test Trench 1 of Gheshlagh. It has a slightly stocky body with a thick round head and a short muzzle with a wide-open mouth. Curving upward and backward from the top of the head are heavy antlers with many thick, tapering points. Below the antlers on each side of the head are flat projecting ears, angled forward. The cylindrical neck joins a round body, tapering in the middle and flattened at the rump with a short projecting tail. The legs are thick with rounded ends. On the back at the shoulders is a suspension loop. The general workmanship and composition of this figurine from Gheshlagh are rather crude.

#### 142 Bronze Antlers

367 M, 368 M, 369 M, 370 M, and 371 M Pl. 46

Five sets, each about 6.0 cm long, found in Tomb 36 (Trench XVIII C). All have two main crescent-shaped branches with many subsidiary points. At the base of each pair of antlers is a flat wide muzzle plate pierced by two holes like eyes. These well-formed sets of antlers were probably riveted around the circumference of a vessel made of some perishable material that has since completely disappeared.

#### COMMENTS

A number of stag figurines comparable to 134 have been found, for the most part attributed to areas near Marlik. An example from the Caucasus is dated to 1400–1000 B.C. by Herzfeld;<sup>87</sup> others from Kuban are dated by Hancar to around the early first millennium B.C.;<sup>88</sup> and another example from the Caucasus is attributed by Schaeffer to the beginning of the Iron Age, around 1200–1100 B.C.<sup>89</sup> From Agha Evlar in Persian Talish is a rather similar antelope assigned by Schaeffer to Talish Recent 2, dating from 1450–1350 B.C.,<sup>90</sup> and similar examples from Russian Talish include figurines from Djönü, assigned by Schaeffer to Talish Recent 3, around 1350–1200 B.C.<sup>91</sup>; others from Hiveri attributed to Talish Recent 3 or Talish Iron I, ca. 1350–1000 B.C.;<sup>92</sup> and still others from Tulu, dated to Talish Recent 3 or Iron I, ca. 1350–1000 B.C.<sup>93</sup> Moorey dates a similar bronze figurine of a stag to Iron Age I-II, ca. 1200–1000 B.C.<sup>94</sup>

A bronze stag figurine somewhat similar to 135 is attributed to the Elburz group by Calmeyer, who suggests a tentative date in the early first millennium B.C.,<sup>95</sup> and another somewhat similar figurine from Hiveri in Iranian Talish is assigned by Schaeffer to

Talish Recent 3 or Talish Iron I, with a suggested date of 1350–1000 B.C.<sup>96</sup>

A figurine similar to 138 with some differences in the antlers appears on a vessel from Trialeti in the Caucasus, dated by Schaeffer to the sixteenth to fifteenth centuries B.C.,<sup>97</sup> and a similar figurine in the Adam Collection in London is dated by Moorey, based on the Marlik examples, to Iron Age I, ca. 1200–1000 B.C.<sup>98</sup> Another, similar figurine, said to be from Amlash, is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>99</sup>

A bronze stag similar to 140 was found at Hasani Mahale Tomb 4 in the Dailaman region.<sup>100</sup> Three other, similar figurines are categorized by Calmeyer as Elburz small plastic finds, with a tentative date around the early first millennium B.C.<sup>101</sup> A figurine with a slimmer body and a suspension loop on the back is assigned by Moorey, based on the Marlik figurine, to Iron Age I, ca. 1250–1000 B.C.<sup>102</sup> A standing animal from Gilan in a similar position, with its horns pointed upward, is dated by Nagel to ca. 1000 B.C.<sup>103</sup>

A stag figurine similar to 141 with a suspension loop on the back from Kuban is dated by Schaeffer to the second half of the second millennium B.C.<sup>104</sup> Several comparable examples come from Iran: one possibly from Luristan or northern Iran, according to Herzfeld;<sup>105</sup> another from Dailaman, dated by Terrace to 1000–800 B.C.;<sup>106</sup> and a third discovered at Tamadjan in the highlands of Gilan in a fortuitous excavation.<sup>107</sup> Less similar figurines found in the Kozbek treasure of the Caucasus are dated by Tallgren to 1000–600 B.C.<sup>108</sup>

## MOUNTAIN GOAT FIGURINES

(143–146)

### BRONZE MOUNTAIN GOAT FIGURINES

Another animal characteristic of Marlik is the mountain goat, found throughout the highlands and mountainous areas of Iran. From early times it attracted the attention of artists and craftsmen, and scholars have suggested that it was the symbol of a mountain deity. It can be seen in a variety of mediums, including cave paintings, rock carvings, and pottery designs. At Marlik mountain goats appear in the designs on decorative metal vessels and jewelry and are also modeled as individual figurines in pottery and metal.

Six bronze figurines of mountain goats were found in the tombs at Marlik. Three small figurines, each quite different from the others but all natural in form, were found in Tomb 36, while three much larger figurines, highly stylized in form and features

with only the horns suggesting that they are intended to represent the mountain goat, were found in Tomb 26.

Mountain goats also serve as decorative additions to several bronze objects. A small humped mountain goat perches on the handle of a bronze bell (947). On other objects only the head with its characteristic sweeping horns is found. Mountain goat heads adorn the handle of a macehead (641), the finials of a bronze bracelet (347), and the end of a long bronze pin (451). In addition, several gold examples were found (324 and 372).

#### 143 Bronze Mountain Goat Figurine

389 M Pl. 46

About 3.7 cm long and 4.0 cm high, found in Tomb 36 (Trench XVIII C). It is short and stocky with a small triangular head and a very blunt, almost nonexistent muzzle. Flat crescent backward-turning horns spring from the forehead, and below the horns are projecting knob ears. The neck and chest are thick, strong, and heavily muscled, as is the body, which ends in a projecting round knob at the rump, representing a raised tail. The short conical forelegs reach forward, but the narrower, longer hind legs are straight. This is a highly stylized and strong figure.

#### 144 Bronze Mountain Goat Figurine

391 M Pl. 46

About 5.0 cm long and 5.2 cm high, found in Tomb 36 (Trench XVIII C). It has a raised head with a round tapering muzzle. Round eyes and small knob ears project outward. Attached low on the forehead are thick spiral-twisted horns, angled toward the side and back. The small head almost disappears in the thick round neck, which extends to a heavy chest and round body with a projecting band across the rump and a large projecting knob tail. The forelegs are straight, thick, and conical with some shaping of the hock; the shorter tapering hind legs slant backward. This is a powerful mature beast with a strong solid stance.

#### 145 Bronze Mountain Goat Figurine

392 M Pl. 47

About 4.4 cm long and 3.5 cm high, found in Tomb 36 (Trench XVIII C). It has a highly stylized head with a pointed conical muzzle. Projecting sideways and backward from the forehead are very wide flat horns. The neck and body are rounded with a flattened rump and short conical legs. A hole pierces the back. This beautifully stylized figurine seems to represent a young kid.

#### 146 Bronze Mountain Goat (?) Figurines

32 M Pl. 47; Color Plate XXV E

Three figurines, averaging about 12.0 cm long and 22.5 cm high, found in Tomb 26 (Trench XVII B). They are the largest bronze animal figurines found at Marlik and are almost identical; only one will be described in detail. The figurine, which is very thin

and elongated, is not very suggestive of a mountain goat except for the horizontal backward-sweeping crescent horns. The long muzzle has a downward droop rather like the muzzle of a camel. The mouth is a crescent line, the nostrils incised ovals, and the eyes incised circles. Springing outward and sideways from the forehead are crescent horns, which are flat on two of the figurines and very pointed on the third. Below the horns at the top of the neck are flat oval projecting ears. The very long cylindrical, almost vertical, neck extends to a narrow body. Straight legs, also very long and narrow, are outlined at the shoulder and haunch. The forelegs have a projecting hock above flattened, rather human-looking feet, and the hind legs have a middle joint in addition to the hocks and flattened feet. There appears to be a boot on the hind leg of one of the figurines. All three of these figurines are mounted on rods, one on front and two in back, which serve as stands. These figurines are highly stylized and bear little resemblance to a real mountain goat or indeed to any other animal.

#### COMMENTS

A bronze mountain goat figurine similar to 143 with a single horn is dated by Porada to 1200–1000 B.C.<sup>109</sup> and by Ghirshman to the ninth to eighth centuries B.C.,<sup>110</sup> while another somewhat similar example from Kuban in the Caucasian region is dated by Hancar to the early first millennium B.C.<sup>111</sup>

A mountain goat figurine similar to 145 from Khurvin is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>112</sup> A final example, somewhat similar to 146 with crescent horns and an elongated body, possibly originating in Luristan,<sup>113</sup> has been dated to the eighth to seventh centuries B.C. by Ghirshman.<sup>114</sup>

## HORSE FIGURINES (147–148)

### BRONZE HORSE FIGURINES

Several bronze figurines of horses were found at Marlik or in the vicinity of Gheshlagh. Most of these figurines were found in a single tomb, Tomb 52, and exhibit the same long narrow body and features and braced stance characteristic of all the animal figurines from that tomb. In addition, horses decorate several other objects, including a bronze horse cheekpiece (940), discussed in Chapter 11, and a gold bracelet (345), discussed in Chapter 7.

#### 147 Bronze Horse Figurine

1129 M Pl. 47

About 6.2 cm long and 5.0 cm high, found in the Gheshlagh area. It has a long head with a wide muzzle and open mouth with rather thick lips. The

eyebrows are a projecting line and the ears point forward. The neck is thin and somewhat flattened, curving at the throat, with a mane indicated by small dentations at the nape. The long narrow body is straight and horizontal, with the rump pushed backward into an irregular projection. The straight narrow long legs, with no natural shaping, end in flat forward projections rather like small human feet. On the back is a saddle formed of two vertically mounted flat semioval disks. The form, proportions, and workmanship of this figurine, as of the other figurines from Gheshlagh, are rather crude.

#### 148 Bronze Figurines of Horses

810 M, 798 M, 786 M, and 787 M Pl. 47

Four figurines, each about 7.5 cm long and 6.0 cm high, found in Tomb 52 (Trench XXIII G). They are very similar, and only one will be described. The raised long narrow head has a round muzzle and a round open mouth. The eyes are round holes with, above them, rather small flat upright ears. A very long neck has a gracefully curving throat emphasized by the upraised head. The body is slim and narrow with a rounded rump and a long downward-streaming tail. Long narrow legs ending in tapering points representing hooves are braced forward. Overall the animal appears braced and alert, possibly even shocked or frightened. These four figurines all have the distinctive elongated form and alert stance of the other animal figurines from Tomb 52 and do not seem notably equine in general form and attitude, although the details of the hooves and flowing tail account for their inclusion with the horse figurines. Indeed their proportions and attitude seem somewhat suggestive of a dog baying at the moon or under attack from a wild beast.

### OTHER METAL ANIMAL FIGURINES (149–154)

A few ram, leopard, dog, and wild boar figurines were found at Marlik. In addition, some of the jewelry, in particular the gold jewelry, contains modeled animal heads (see discussion in Chapter 7).

#### 149 Bronze Ram Figurine

393 M Pl. 47

About 3.5 cm long and 2.5 cm high, found in Tomb 36 (Trench XVIII C). It<sup>15</sup> has a round head that is reinforced by a projecting band across the forehead and a pointed muzzle. Springing from the forehead are forward-curving horns with twisted ends. The thick round neck joins a stocky body with a flattened rump and band tail. The short straight conical legs are strongly positioned, with the hind legs angled slightly backward. A hole pierces the back at the shoulder. This small stylized figurine is very

strong and forceful.

#### 150 Bronze Figurines of Leopards

795 M, 796 M, 797 M, and 811 M Pl. 48

Four figurines of crouching leopards, each about 10.5 cm long and 3.5 cm high, found in Tomb 52 (Trench XXIII G). Like the other bronze animal figurines found in this tomb, they have long narrow bodies and limbs. The four figurines are almost identical, and only one will be described in detail. The head is round, with a wide flat muzzle and open mouth. The eyes are circular holes, and the raised ears are small and flat. The cylindrical neck is almost horizontal, in line with the body. Three parallel projecting bands across the shoulder represent the heavy shoulder and back muscles characteristic of the big cats. The long horizontal body ends in a rounded rump, from which a long straight horizontal tail projects, reflecting the tension of the animal in its crouching position. Very long forelegs are bent at the joints so that they rest on the ground with the claws of the flat forepaws indicated by incised parallel lines. Knobs at the front of the upper forelegs represent knotted muscles. The shorter hind legs, also angled to the front, are flattened near the ends, and, like the forelegs, have incised claws. This is a strong, powerful beast, fully alert and ready to spring. These unique figurines of leopards are representative of the advanced craftsmanship and artistry of the Marlik artists.

#### 151 Bronze Dog Figurines

788 M, 789 M, 790 M, and 791 M Pl. 48

Four figurines, each about 7.0 cm long and 3.0 cm high, found in Tomb 52 (Trench XXIII G). They have the same long narrow bodies characterizing the other bronze animal figurines found in this tomb. The four figurines are closely similar, and only one will be described in detail. The head is long, with a round muzzle and an open mouth from which, on two of the figurines, a thick tongue hangs out. The eyes are round holes, and above them are small flat upward-projecting ears. The somewhat lowered neck is round with two thick projecting parallel bands, apparently representing a collar, encircling it. The body is long and narrow with a tail curling up over the rump in a semicircle. The thick cylindrical legs end in rudimentary paws and are braced rather far apart. This lively figure is alert and ready for play.

#### 152 Bronze Boar Figurines

792 M, 793 M, 812 M, and 813 M Pl. 48

Four figurines, each about 7.0 cm long and 3.0 cm high, found in Tomb 52 (Trench XXIII G). All exhibit the long narrow bodies characterizing the other bronze animal figurines from this tomb. They are very similar, and only one will be described in detail. The head is conical with a long round muzzle, and a large tusk projects upward from the end of the snout. The eyes are circular holes and, above them,

small flat ears project forward from the top of the lowered head. The almost horizontal round neck joins a long narrow body with a short projecting knob tail at the rounded rump. Long cylindrical legs, braced forward, end in hocks and hooves. This is also a strongly positioned animal, ready for action.

A somewhat similar bronze figurine of a wild boar, said to be from Amlash, is dated by Ghirshman to the ninth to eighth centuries B.C.<sup>116</sup>

### 153 Gold Tiger Heads

20 M Pl. 48; Color Plate XXVI A

Pair of hollow heads, about 4.0 cm long and 2.0 cm in diameter at the neck, found in Tomb 26 (Trench XVII B). The heads are very similar, and only one will be described. The head is round with a rather flat squared-off muzzle. The oval low-relief eyes are surmounted by parallel bands representing eyebrows, and incised pin marks indicate hair and eyelashes. The upper lip is wide and thick, and the nostrils are indicated by round impressed points. The whiskers on both sides of the nose are shown by parallel bands surrounded by punched incised points. The leaf-shaped ears have oval depressions. A rather wide wavy band of parallel short crescent lines separates the head from the neck, which is covered by parallel bands of crescent-shaped lines forming the mane. The neck edge is bordered by two parallel coil bands. The head was originally fastened to a stick, probably made of wood, through holes at the neck edge. This pair of elaborately detailed tiger heads represents a high level of art and technology.

### 154 Gold Tiger Head

2 M Pl. 48

Hollow head, about 3.0 cm long and 1.5 cm in

diameter at the neck, found in Tomb 24 (Trench XV E). It is hammered out in repoussé. The head is round with a rather round muzzle, circular depressions for eyes, and a nose marked by a projecting band. Separately made pointed fangs are mounted in the mouth. Across the forehead and brows are projecting thick bands. The ears are triangular depressions pointing backward. Short crescent-shaped lines in different directions represent the stripes of the tiger and the hair of the mane. The round neck has holes around the neck edge for mounting the head on top of a handle or other object.

## BIRD FIGURINE (155)

Only one free-standing bronze figurine of a bird was recovered during excavations (see discussion below). In addition, birds decorate a number of other objects, most often the handles of bells (948, 949, 952) and stamp seals (486, 488, 489) or items of jewelry (198 and 449). In some cases the head of the bird is in the round, with the rest of the body, if present, modeled in high relief.

### 155 Bronze Bird Figurine

1186 M Pl. 48

About 7.0 cm long, found in Gheshlagh. It is made of cast bronze, now covered by rust, and has a stylized elongated body with a loop on the back. The features are not detailed, but an impressed line runs along the edge of the wing and the claws are made of long bent wires.

## *Animal Figurines Made of Miscellaneous Materials* (156)

In addition to the example discussed below, animal figures made of miscellaneous materials are incorporated in the following items: a frit necklace with ram beads (290), a ram's head whetstone (896), and two red carnelian necklaces with bird-shaped pendants (246, 247).

### 156 Ram Figurine

376 M Pl. 48

About 5.0 cm long and 2.7 cm high, found in Tomb 36 (Trench XVIII C). It is made of a black material like charcoal or possibly natural bitumen mixed with other substances, and is now badly cracked. The ram has a rather large head with a round muzzle in which the mouth is a circular slit. The horns are a projecting thick band encircling eyes indicated by large holes. The neck is round and the

body cylindrical, with a projecting thick band tail. The legs are short and thick with a flat base. A bronze ring hangs from a hole piercing the area between the rump and the band tail, and several more bronze loops are set into the body of the animal, which apparently was attached to some larger object. A large hole piercing the side of the body may have been a suspension hole.

The origin of the ram motif remains in question. Karl Jettmar discusses a stone slab decorated with a ram's head in the Rietberg Museum that may be a portable altar. Various scholars have suggested different dates from the early second millennium B.C. to the middle of the first millennium B.C. for the origin of the ram cult in the Ural and Altai mountains with subsequent Iranian migration. Nevertheless, Jettmar concludes that "the ram's head slabs

originated in western Iran even if they were known up to now only from a secondary centre."<sup>117</sup> In any

case, the suggested origin of the ram decoration in early Indo-Iranian art should be noted.

### *Comments*

Sixty-one of the metal animal figurines described here were found in eleven Marlik tombs, and seven more were found in the nearby area of Gheslugh. Three of the Marlik tombs, Nos. 18, 25, and 27, each produced only a single figurine. Six other tombs produced several figurines, including Tomb 13 with two examples, Tomb 24 with two examples, Tomb 26 with five examples, Tomb 40 with three examples, Tomb 47 with five examples, and Tomb 50 with three examples. The great bulk of the metal figurines, however, were found in just two tombs—Tomb 36 with thirteen figurines and Tomb 52 with twenty-five figurines.

The figurines from each tomb are generally similar to each other in style and workmanship but differ from those found in other tombs. This suggests that different craftsmen produced the figurines for each tomb, pointing to the probable time differences between each burial. The differences in style and workmanship among the figurines from various tombs are noticeable enough to lend credence to the proposition that Marlik was used as a cemetery over a period of several hundred years.

The number and quality of the bronze figurines found at Marlik present additional evidence of the flourishing state of the bronze industry in the Elburz highlands during the late second and early first millennium B.C. The largest number of figurines comparable to the Marlik animal figurines has been found in Gilan and Mazanderan, in the highlands of the Elburz Mountains. These are not only parallel in time but can be considered products of the same culture. A somewhat smaller group of comparable

figurines has been found in Iranian and Russian Talish, parts of Azerbaijan, and Caucasia and may also represent an extension of the same cultural identity. The close similarity of figurines found at Marlik and in these surrounding regions suggests that a fairly cohesive culture covered the whole area of the southern and western part of the Caspian Basin in the late second and early first millennium B.C. This bronze industry continued for much longer in some of the peripheral areas after the people of Marlik had moved on or disappeared.

The third group of examples comparable to the Marlik figurines comes from the Zagros Mountains and is usually referred to as "Luristan Bronzes." Three major categories of Luristan Bronzes are described by Vanden Berghe,<sup>118</sup> who performed systematic excavations in the Luristan area. It is the second group of his classification, dated to the second half of the second millennium B.C., that is comparable to the Marlik bronze figurines. Although the Marlik and Luristan bronze figurines seem closely related, there are regional differences. The Luristan Bronzes are much more stylized and imaginary than those from Marlik and other parts of the Caspian Basin, which are more natural and representational. Because there is a long history of bronze-working in Luristan that is absent at Marlik, the possibility is raised that Marlik received much of its bronze technology from Luristan. At Marlik, with the presence of both metal ore and abundant fuel in the forested mountainous region, this bronze industry took hold and flourished, spreading from Marlik to a larger area in the Caspian Basin.

Table 7. Specifications of Metal Animal Figurines

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
115	Figurine (bull)	386 M	25101	36	XVIII	bronze
116	Figurine (bull)	387 M	25102	36	XVIII	bronze
117	Figurine (bull)	388 M	25103	36	XVIII	bronze
118	Figurine (bull on wheels)	15 M	14682	24	XV	bronze
119	Figurine (bull)	240 M	25073	47	XXI	bronze
120	Figurine (bull)	241 M	25075	47	XXI	bronze
121	Figurine (bull)	1075 M	25111	13	XII	bronze
122	Figurine (bull)	1076 M	25111	13	XII	bronze
123	Figurine (3/bulls)	85 M	25110	40	XVIII	bronze
124	Figurine (bull)	807 M	25085	52	XXIII	bronze
124	Figurine (bull)	809 M	25087	52	XXIII	bronze
124	Figurine (bull)	808 M	25086	52	XXIII	bronze
124	Figurine (bull)	806 M	25082	52	XXIII	bronze
125	Figurine (bull)	942 M	25079	1		bronze
126	Figurine (bull)	941 M				bronze
127	Figurine (bull)	1128 M	25388	1		bronze
128	Figurine (bull)	1130 M	25390			bronze
129	Figurine (oxen w/ plow)	59 M	25071	27	XVII	bronze
130	Figurine (oxen w/ yoke)	767 M	25120	47	XXII	bronze
131	Figurine (oxen w/ plow)	817 M	25121	52	XXIII	bronze
132	Figurine (oxen w/ yoke)	227 M	25391	25	XVI	bronze
133	Figurine (oxen w/ yoke)	487 M	25112	18	XIV	bronze
134	Figurine (stag)	390 M	25105	36	XVIII	bronze
135	Figurine (stag)	539 M	25099	50	XXI	bronze
136	Figurine (stag)	540 M	25100	50	XXI	bronze
137	Figurine (stag)	541 M	25098	50	XXI	bronze
138	Figurine (stag)	243 M	25072	47	XXI	bronze
139	Figurine (stag)	242 M	25074	47	XXI	bronze
140	Figurine (stag)	800 M	25081	52	XXIII	bronze
140	Figurine (stag)	799 M	25084	52	XXIII	bronze
140	Figurine (stag)	814 M	14683	52	XXIII	bronze
140	Figurine (stag)	794 M	25095	52	XXIII	bronze
141	Figurine (stag)	940 M	25050	1		bronze
142	Figurine (stag antlers)	371 M	25002	36	XVIII	bronze
142	Figurine (stag antlers)	369 M		36	XVIII	bronze
142	Figurine (stag antlers)	370 M		36	XVIII	bronze
142	Figurine (stag antlers)	368 M		36	XVIII	bronze
142	Figurine (stag antlers)	367 M	25002	36	XVIII	bronze
143	Figurine (mountain goat)	389 M	25104	36	XVIII	bronze
144	Figurine (mountain goat)	391 M	25106	36	XVIII	bronze
145	Figurine (mountain goat)	392 M	25107	36	XVIII	bronze
146	Figurine (3/mountain goat)	32 M	14680	26	XVII	bronze
147	Figurine (horse)	1129 M	25389			bronze
148	Figurine (horse)	798 M		52	XXIII	bronze
148	Figurine (horse)	787 M	25096	52	XXIII	bronze
148	Figurine (horse)	786 M	14687	52	XXIII	bronze
148	Figurine (horse)	810 M	14684	52	XXIII	bronze
149	Figurine (ram)	393 M	25158	36	XVIII	bronze
150	Figurine (leopard)	811 M	14685	52	XXIII	bronze
150	Figurine (leopard)	795 M	25083	52	XXIII	bronze
150	Figurine (leopard)	796 M	14686	52	XXIII	bronze
150	Figurine (leopard)	797 M	25016	52	XXIII	bronze
151	Figurine (dog)	789 M	25090	52	XXIII	bronze
151	Figurine (dog)	788 M	14688	52	XXIII	bronze
151	Figurine (dog)	790 M	25091	52	XXIII	bronze

*Table 7 continued*

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
151	Figurine (dog)	791 M	25092	52	XXIII	bronze
152	Figurine (wild boar)	813 M	25089	52	XXIII	bronze
152	Figurine (wild boar)	792 M	25093	52	XXIII	bronze
152	Figurine (wild boar)	793 M	25094	52	XXIII	bronze
152	Figurine (wild boar)	812 M	25088	52	XXIII	bronze
153	Figurine (2/tiger head)	20 M	14693	26	XVII	gold
154	Figurine (tiger head)	2 M	14691	24	XV	gold
155	Figurine (bird)	1186 M	25442			bronze

## Chapter VI Notes

1. Kantor 1962: Figs. 13 A, B, pp. 99–101.
2. Ghirshman 1964c: Fig. 48, p. 39. This is now in a private collection in Tehran.
3. Terrace 1965: Fig. 4, p. 8. This is now in the collection of Norbert Schimmel.
4. Kleiss 1962: Fig. 10 (the figurine is dated to the ninth to eighth centuries b.c. in the picture description and to the tenth to ninth centuries b.c. in the catalog text). Godard, A., 1938: Fig. 182, p. 261. This is now in the collection of E. Borowski.
5. Ghirshman 1964c: Fig. 24, p. 24.
6. Ghirshman 1964c: Figs. 25–26, pp. 277, 335.
7. Ghirshman 1964c: Figs. 82, 108, pp. 320, 391.
8. Godard, A., 1962: Fig. 121, p. 85.
9. Dubiner 1966: Fig. 2. The vessel is incorrectly said to be from Marlik. Its provenance is in question.
10. Ghirshman 1964c: Fig. 334, p. 276. This is now in a private collection in Lucerne.
11. Ghirshman 1964c: Fig. 19, p. 20.
12. Vanden Berghe 1959: Pl. 156 a; pp. 124, 281.
13. Vanden Berghe 1964: Pl. XXIII, No. 224, pp. 39–45, 64.
14. Auboyer 1966: Fig. 3, p. 58.
15. Bossert 1951: Fig. 627, pp. 43, 192.
16. Bossert 1951: Fig. 634, pp. 43, 194.
17. Schaeffer 1948b: Fig. 291, No. 3, p. 513.
18. This figurine has been analyzed by Vatandoost-Haghighi (1977: No. 30, pp. 109–112), who found “Cu:95.44; Sn:2.86; As:0.94; Sb:0.38; No:0.01; Co:n.d.; Fe:0.11; Bi:0.019; Zn:n.d.; Ag:0.029; Au:n.d.” He goes on to say, “This is a fine example of complex casting. The proportion of tin is lower than in a true tin bronze, although lead is virtually absent. The figurine seems to have been cast from a composite lost wax master. There is a gap between the neck and the body, breast part and the body, and hands and the arms, corresponding to the points of attachment of pre-formed wax sections to the wax body.”
19. Vroeg Aardewerk 1966–1967: Pl. 10, pp. 14, 17.
20. Ghirshman 1962: p. 52.
21. Ghirshman 1964c: Fig. 32, p. 30.
22. Lordkinpanidze 1968: Fig. 4, p. 15ff.
23. Ghirshman 1964c: Fig. 39, p. 35.
24. Terrace 1962: Figs. 1–2, pp. 212–224.
25. Negahban 1977: Figs. 82–83.
26. Schaeffer 1934: Pl. XV.
27. Negahban 1977: Fig. 104, pp. 108–109ff.
28. Hogarth 1920: Pl. VI, 166–167, 175, 179, 182–183, pp. 35–37, 95.
29. Frankfort 1939: Pl. XXXI a, c, d, e; Pl. XLII b, o; Pl. XLII a, b.
30. Frankfort 1939: Pl. XXXII a, g, 13th–10th cent. b.c.
31. Frankfort 1939: Pl. XLI e, f, i, j, o.
32. Frankfort 1939: Pl. XLII f, h, i, j, k, m, o; Pl. XLIV c, i, m, n.
33. Frankfort 1939: Pl. XLIV q, t.
34. Moortgat 1942: pp. 84–86, Figs. 77–78.
35. Amiet 1966: Figs. 65–71, 76–83, 88, 94.
36. Vanden Berghe 1964: Pl. VIII; Pl. X, No. 53; Pl. XXII, No. 182; Pl. XXVIII; Pl. XXIX, Nos. 213–214; Pl. XXX; Pl. XXXIII, No. 223; from Qazvin Plain and other parts of Iran.
37. Akurgal 1962: Pl. XII, p. 54.
38. Akurgal 1962: Fig. 34.
39. Schaeffer 1948b: Fig. 226, No. 5, §177, p. 422.
40. Amlash is the small market town in Gilan Province to which objects found in clandestine excavations in the highlands of the Elburz Mountains, most belonging to the late second millennium culture of which Marlik is the Royal Cemetery, were brought to be sold to antiquists and dealers from Tehran. These objects were sold abroad under the general name “Amlash,” although they did not originate in the town itself.
41. At first glance we thought the spots might have been caused by the lack of sufficient oxygen and sufficient circulation in the kiln. However, considering the excellent even color of almost every pottery figurine found and the well-developed technology of pottery making at Marlik, it seems more likely that the spots were intended to reproduce the natural spots on the animal’s coat.
42. Culican 1965: Pl. 9, p. 242.
43. Parrot 1963: Pl. XV 1, 2, Fig. 4, pp. 236–241.
44. This identification is in question although the style is similar to the Marlik figurines, and it may have been found in the vicinity.
45. Dubiner 1966: Fig. 26.
46. Dubiner 1966: Fig. 16.
47. Ghirshman 1961–62: Pl. XI, Cat. No. 118, p. 23. Ghirshman 1964c: Fig. 34, p. 420. Kleiss 1962: color plate opp. p. 12.
48. Godard, A., 1962: Fig. 124, p. 85.
49. Parrot 1963: Fig. 5, pp. 239–241.
50. Kleiss 1962: Fig. 13, Cat. No. 61, p. 48.
51. Porada 1964–65: Cat. No. 92, pp. 62, 131.
52. Porada 1964–65: Cat. No. 91, pp. 62, 128.
53. Porada 1964–65: Cat. No. 89, pp. 62, 130.
54. Ghirshman 1961–62: Pl. XIII, Cat. No. 116, p. 23. Ghirshman 1964c: Fig. 47, p. 421.
55. Bussagli 1956: Pl. XXII, 191, pp. 113–115. The latter seems to be the intended date since he has suggested the eleventh century b.c. for all Kalardasht objects. This is now in the Tehran Archaeological Museum.
56. Porada 1964–65: Color Pl. p. 21, Fig. 51, p. 58, pp. 1, 16, 55.
57. Ghirshman 1964c: Figs. 127–128, p. 424. All of Ghirshman’s dates for the Kalardasht objects seem too early. This is now in the Tehran Archaeological Museum.
58. Godard, A., 1962: Fig. 125, p. 85.
59. Bossert 1951: Fig. 126, pp. 9, 44.
60. Dubiner 1966: Fig. 28.
61. Dubiner 1966: Fig. 22.
62. Dubiner 1966: Fig. 33.
63. Porada 1964–65: Cat. No. 88, pp. 62, 129.
64. Porada 1964–65: Cat. No. 84, pp. 61–62, 129.
65. Godard, A., 1962: Fig. 123, p. 85.
66. Ghirshman 1961–62: Pl. XII, Cat. No. 112, p. 22. Ghirshman 1964c: Fig. 35, p. 420. Kleiss 1962: Fig. 12, Cat. No. 57, p. 47. This is now in the Foroughi Collection in Tehran.
67. Dubiner 1966: Fig. 18. The actual origin of this figure is in question.
68. Dubiner 1966: Fig. 23.
69. Bossert 1951: Fig. 127, pp. 9, 44.
70. Godard, A., 1938: Fig. 181, pp. 261–262.
71. Ghirshman 1964c: Fig. 347, p. 439.
72. Bussagli 1956: Pl. IX, No. 32, p. 51.
73. Ghirshman 1964c: Fig. 345, p. 432.
74. Vanden Berghe 1964: Pl. XXXII, pp. 39–45, 64.
75. Dubiner 1966: Fig. 27.
76. Negahban 1979.
77. Dubiner 1966: Fig. 1. The authenticity of this figurine is in question.
78. Wertime 1964.
79. This bull figurine has been studied by Vatandoost-Haghighi (1977: No. 31, pp. 112–113), who made the following analysis: “Cu: 91.32; Sn: 8.04; Pb: 0.33; As: 0.14; Sb: n.d.; Ni: 0.022; Co: n.d.; Fe: 0.043; Bi: n.d.; Zn: n.d.; Ag: 0.082; Au: n.d.” He says: “Technologically this is a



- fairly hard alloy and it is clear that the origin of the ore for this figurine had not been the same as No. 30 Human Figurine 380 M where antimony and bismuth are present and the amount of arsenic is high. The figurine has been lost wax cast, and the loop being formed from a separate piece of wax as can be seen at its junction with the animal's back."
80. Littauer 1968: Pls. IV-V, pp. 27–31.
  81. Terrace 1962: Fig. 1, p. 215. This is now in the Boston Museum of Fine Arts.
  82. Ghirshman 1964c: Fig. 40, p. 35. This is now in a private collection in Tehran.
  83. Calmeyer 1964: Pl. 7, No. 15, p. 13. This is now in the Bröckelschen Collection.
  84. Moorey 1971: Pl. 40, No. 217 (larger one), pp. 170–171. This is now in the Ashmolean Museum.
  85. Moorey 1974a: Fig. 171, pp. 20, 174–175. This is now in the Adam Collection in London.
  86. Ghirshman 1961–62: Pl. XV, Cat. No. 137, p. 25. Ghirshman 1964c: Fig. 40, p. 420. This is now in the Foroughi Collection in Tehran and was shown in the "7000 Years of Persian Art" exhibition in Paris, October 1961-January 1962.
  87. Herzfeld 1941: Fig. 293, pp. 174–175. This is now in the Tiflis Museum.
  88. Hancar 1935: Fig. 41, pp. 99, 105. This is now in the Natural History Museum of Vienna.
  89. Schaeffer 1948b: Fig. 296, No. 10, §215, p. 504.
  90. Schaeffer 1948b: Fig. 217, No. 11, §165, pp. 407–408.
  91. Schaeffer 1948b: Fig. 233, No. 18, §182, 186, pp. 428, 431–432.
  92. Schaeffer 1948b: Fig. 236, No. 11, §179, pp. 423–424.
  93. Schaeffer 1948b: Fig. 236, No. 13, §188, pp. 438–439.
  94. Moorey 1974a: Fig. 159, pp. 20, 168–169. This is now in the Adam Collection in London.
  95. Calmeyer 1964: Pl. 7, No. 17, p. 13.
  96. Schaeffer 1948b: Fig. 236, No. 10, §179, pp. 423–424.
  97. Schaeffer 1948b: Fig. 286–288, pp. 510, 512.
  98. Moorey 1974a: Fig. 156, pp. 20, 168–169.
  99. Ghirshman 1964c: Fig. 41, p. 420. This is now in the William Rockhill Nelson Gallery of Art, Atkin Museum of Fine Arts, Kansas City.
  100. Sono and Fukai 1968: Pl. XXXVII, No. 1 a-c; Pl. LXIV, No. 26 a-c.
  101. Calmeyer 1964: Pl. 8, Nos. 18, 20–21, pp. 13–14. This is now in the Bröckelschen Collection.
  102. Moorey 1974a: Fig. 154, pp. 167–169. This is now in the Adam Collection in London.
  103. Nagel 1963: Pl. VI, No. 13 a-b, p. 14. This is now in the Museum für Vor- und Frühgeschichte in Berlin.
  104. Schaeffer 1948b: Fig. 300, No. 24, pp. 522, 524, 526. Tableau Sinoptique VIII.
  105. Herzfeld 1941: Pl. XXXI (top group, middle left), p. 174.
  106. Terrace 1962: Fig. 1, pp. 212–215.
  107. Samadi 1959a: Fig. 38.
  108. Tallgren 1930: Figs. 30–32, pp. 131, 181.
  109. Porada 1964–65: Fig. 99, pp. 16–18, 63. This is now in the Foroughi Collection in Tehran.
  110. Ghirshman 1961–62: Pl. XV, Cat. No. 125, p. 24.
  111. Hancar 1935: Fig. 41, pp. 99, 105.
  112. Vanden Berghe 1964: Pl. XLVII, No. 348.
  113. Godard, Y. and A., 1954: Pl. 6, Cat. No. 261.
  114. Ghirshman 1964c: Fig. 71, p. 422.
  115. This is the only bronze ram figurine found at Marlik, but another ram figurine, possibly of natural bitumen mixed with clay, was also found.
  116. Ghirshman 1964c: Fig. 42, p. 420. Ghirshman 1961–62: Pl. XV, Cat. No. 123. This is now in the Foroughi Collection in Tehran.
  117. Jettmar 1965: p. 292.
  118. Vanden Berghe 1971.



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# Jewelry and Ornaments of Marlik

## *Introduction*

It seems that human beings have always appreciated beautiful and colorful objects and used them for adornment. At first, such available materials as bone and stone were used until gradually the technology was developed that enabled man to use semiprecious stones such as red carnelian and agate, metals such as gold, silver, and eventually bronze, and such man-made materials as pottery, frit, and glass. With the introduction of metal technology and the knowledge of and access to semiprecious stones through trade and economic exchange, a tradition of fine jewelry making became established.

By the second millennium B.C. there were many centers in the ancient Near and Middle East that produced masterpieces of art and technology in the form of personal jewelry, and Marlik must now take its place as such a center. In the tombs of the Marlik Royal Cemetery the deceased were laid out with their varied belongings, which included items of personal adornment. An extremely rich collection of jewelry,

which included necklaces and pendants, buttons, bracelets, and earrings, with rings, forehead bands, hair binders, and pins in lesser numbers, was found. Much of this jewelry came from tombs that had apparently belonged to women, although some items of adornment were also found in tombs that have tentatively been classified as belonging to warriors because of the large numbers of weapons and hunting items found in them.

Much of this jewelry is made of gold, sometimes combined with other materials. In the necklaces gold is often combined with beads of red carnelian and occasionally of agate and other materials. Some necklaces are made entirely of beads of red carnelian, agate, frit, glass, and so forth. A very few pieces of silver jewelry were found at Marlik, and a few of bronze. A few items were also made of such materials as frit, bone, shell, lime, gypsum, and an unidentified black substance.

## *Necklaces and Pendants (157–309)*

Necklaces form the largest and most varied group of jewelry found at Marlik. Many of these necklaces are made of gold, elaborately worked into beautiful and unusual beads and pendants. Other necklaces combine gold with beads of other materials including red carnelian, agate, frit, and a black sub-

stance. Some necklaces are made entirely of these beads, and a few necklaces are made of beads of gypsum, transparent stone, glass, shell, and so on. Many of these necklaces have pendants or large centerpiece beads, often also made of gold, and many separate pendants were found as well.

## NECKLACES AND PENDANTS MADE PREDOMINANTLY OF GOLD (157–203)

These beautiful gold necklaces combine unusual quadruple spiral, pomegranate, and animal head beads with more common shapes such as lentoid, globular, date shaped, lozenge, and double pyramid. The most common pendant is an embossed disk with a design of the sun or a central boss surrounded by smaller bosses. Other gold pendants are more unusual and elaborately worked, and they include designs such as a single pomegranate or cluster of pomegranates or grapes, finely granulated pieces in various shapes, and free-form rosettes. One unique example consists of a double eagle head; another is inlaid with lapis lazuli.

### GOLD NECKLACES (157–169)

#### 157 Gold Chain Necklace

802 M Pl. 49

Broken into four pieces, found in Tomb 52 (Trench XXIII G). It is formed of folded loops that are very regular in size.

#### 158 Gold Necklace with Mountain Goat Head Beads

12 M Pl. 49

Contains ten gold beads in the shape of mountain goat heads, each about 1.6 cm long, interspersed with many small gold barrel-shaped beads, found in Tomb 24 (Trench XV E). The mountain goat head beads are made from very thin sheet gold filled with a black pigment similar to natural bitumen and, although very small, are carefully detailed, with a flat muzzle, a single line forming the mouth, and parts of the head indicated by soft projecting lines. A suspension loop is attached at the neck edge of each bead.

Similar gold beads with animal heads in simple workmanship were found at Khurvin, dated by Vanden Berghe to the late second and early first millennium B.C.<sup>1</sup> Another example, dated by Moorey to the same time period,<sup>2</sup> is rather similar in shape and workmanship. Features were originally etched on the now damaged surface of the bead, which has a small suspension loop at the neck. Other animal heads made in repoussé from sheet gold with a suspension loop at the neck, not very similar in shape or workmanship to the Marlik beads, are dated by Maxwell-Hyslop to the Late Cypriote II period<sup>3</sup>; while she assigns examples from Enkomi to the Late Cypriote Ia period.<sup>4</sup>

#### 159 Gold Necklace with Variegated Small Beads

224 M Fig. 15; Pl. 49

Contains several types of small gold beads, found

in Tomb 45 (Trench XXI H). One type consists of four-sided lozenge-shaped beads with ends reinforced by rolling; a second of elongated and barrel-shaped beads; and a third of spherical beads, some with parallel rib decoration encircling the bead. All three types of beads are graduated in size.

#### 160 Gold Necklace of Disk, Fluted, and Tubular Beads

567 M Pl. 50

Contains several types of gold beads, found in Tomb 50 (Trench XXI K). One group consists of flat disk beads that are formed of two circles of plain sheet gold, soldered together, with a central tubular hollow through which a suspension cord could be threaded. Five beads, three narrow and two broad, are decorated with parallel vertical rib fluting, and have a collar at each end formed by rolling the edge inside. Other beads consist of spiral gold bands twisted into long cylinders.

A gold necklace with similar oval-shaped flat disk beads was found at Tepe Hissar, Level III B.<sup>5</sup> A gold necklace with flat disk beads from Khurvin is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>6</sup>

Fluted beads were made over a period of at least one and one-half millennia. Fluted gold beads appear in a necklace in the British Museum, which is dated to the Sargonic period by Maxwell-Hyslop.<sup>7</sup> Similar beads with ribbed decoration were also found at Larsa,<sup>8</sup> and other fluted beads are associated with the Third Dynasty of Ur.<sup>9</sup> Fluted beads from Tell el-'Ajjul are dated to the seventeenth to sixteenth centuries B.C.<sup>10</sup> Gold fluted beads attributed to the Elamites are dated by Amiet to the early second millennium B.C.,<sup>11</sup> while examples found at Ghalekuti I are attributed by Fukai to the end of the Bronze and beginning of the Iron Age.<sup>12</sup> Globular gold beads with parallel rib decoration found in the province of Gilan in northern Iran are dated by Porada to 1000 B.C.<sup>13</sup>

This type of bead continued to be produced for some time after the Marlik period. Fluted gold beads occur in a necklace from Ziyiye, dated by Maxwell-Hyslop to the eighth to seventh centuries B.C.<sup>14</sup> Vertically ribbed biconical beads appear in a necklace attributed by Pierides to the Cypro-Achaic I period, with a suggested date of 700–600 B.C.<sup>15</sup> He dates vertically ribbed beads from Royal Tomb No. 1 at Salamis to the second quarter of the eighth century B.C.<sup>16</sup> and a necklace with ribbed beads to Cypro-Classic I, with a suggested date of 475–400 B.C.<sup>17</sup> These examples illustrate the long use of this type of bead in Cyprus.

#### 161 Gold Necklace of Lentoid and Globular Beads

1205 M Pl. 50

Contains gold lentoid and globular beads, found in Tomb 52 (Trench XXIII G). The lentoid beads

have a rather sharp pronounced line at the middle of the bead where the two halves are joined. Both the lentoid and globular beads are hollow with holes at each end.

### 162 Gold Necklace of Beads with a Butterfly Bead Centerpiece

446 M Pl. 50

Found in Tomb 36 (Trench XVIII C). It contains elongated barrel-shaped beads made from thin gold sheet combined with a butterfly bead centerpiece formed of a central tube with two spiral bands fastened at each end and soldered together to form a quadruple spiral. This type of bead is given further consideration under 163.

## GOLD NECKLACES WITH ACCOMPANYING PENDANTS (163–169)

Gold pendants at Marlik were found both with and without the accompanying beads of a necklace. Those discussed below fall in the first category.

### 163 Gold Necklace with Butterfly Beads and Pomegranate Cluster Pendant

291 M Pl. 50, Color Plate XXVI B

Contains gold butterfly, globular, and oval beads with a pomegranate cluster pendant, found in Tomb 32 (Trench XVII E). The butterfly or quadruple spiral beads consist of a long central tube with two tight spirals at each side formed of twisted square gold wire finely soldered together, possibly by a chemical process. Other beads are spherical and hollow, with a suspension hole at each end, and still others are elongated and oval, decorated by ribbing of parallel projecting bands, and also pierced lengthwise by a suspension hole. The pendant is a cluster of pomegranates formed of four globular beads, with a small suspension loop on one, soldered together with their long conical necks or crowns hanging downward.

Similar quadruple spiral beads found at Troy III<sup>18</sup> and at Alaca Hüyük<sup>19</sup> are dated by Schaeffer to 2300–2100 B.C., whereas somewhat similar butterfly beads found at Assur, Grave 20, are assigned by Maxwell-Hyslop to the Gut-Gudea period, about 2250–1894 B.C.<sup>20</sup> Similar butterfly beads of interlocked gold wire in a less elaborate necklace were found in the Assyrian tombs of Mari, dated by Parrot to the fourteenth to thirteenth centuries B.C.,<sup>21</sup> and similar beads were also found at Tell Brak.<sup>22</sup> An almost identical necklace with gold butterfly beads of twisted square wire formed in spirals, found at Hasanlu prior to the work there of the University of Pennsylvania,<sup>23</sup> is suggested by Ghirshman to date to the ninth to eighth centuries B.C.<sup>24</sup> A still later example of this type of quadruple spiral bead appears in

the Treasure of Ziyiye, dated to the eighth to seventh centuries B.C.<sup>25</sup>

Double spiral beads in a similar technique were found at Hissar IIIC<sup>26</sup> and at Maral Dêrésî in Caucasia, dated by Schaeffer to 1200 B.C.<sup>27</sup> Double spiral beads found at Tepe Nush-i Jan are dated by Maxwell-Hyslop to the ninth to seventh centuries B.C.<sup>28</sup>

These quadruple spiral or butterfly beads are found at sites spread over a large area of the ancient world, covering a long span of time from the third to early first millennium B.C. Maxwell-Hyslop suggests that the gold- and silversmiths of the Highland Zone had easy access to their fellow craftsmen in Mesopotamia, whether by overland trade or by sea.<sup>29</sup> She goes on to say that in the Mari series, as first noticed by Mallowan, unlike the Brak and Anatolian examples, "The four coils or spirals, instead of being drawn out of the central tube, appear to be twisted or bound around the end of it."<sup>30</sup> This is the technique used for the quadruple spiral beads of Marlik and Hasanlu and for many unstratified specimens attributed to "Amlash." A fourteenth- to thirteenth-century date is suggested by Maxwell-Hyslop for this type of quadruple spiral bead, which probably continued in use to the early first millennium B.C.

The pendant of this necklace is a cluster of pomegranates. The pomegranate was a popular motif in the jewelry of Marlik, whose artists and craftsmen were strongly influenced by their natural environment. To the present day the lower edge of the forest along the northern slopes of the Elburz Mountains is covered for several hundred kilometers by wild pomegranate bushes.

Gold pomegranate beads appear in a necklace in the Cyprus Museum, attributed by Pierides to the late Cypriote II period, around 1400–1230 B.C.<sup>31</sup> A pomegranate pendant of frit, found in Chapel III of Tchoga Zanbil, is dated by Ghirshman to around 1250 B.C.<sup>32</sup> A cluster of pomegranate beads of similar shape, made from fired clay, was found at Sialk Cemetery B.<sup>33</sup> A somewhat similar pomegranate pendant can be seen on a necklace worn by a bird-headed winged deity on a stone relief of the Ashurnasirpal II Palace,<sup>34</sup> and another, similar pendant appears on a necklace in the Assyrian relief in the Staatlichen Skulpturen Sammlung in Dresden.<sup>35</sup>

### 164 Gold Chain Necklace with Pomegranate Pendant

358 M Pl. 51

Chain, about 51 cm long, with a gold pomegranate pendant about 4.5 cm in diameter, found in Tomb 36 (Trench XVIII C). This finely made quadruple gold chain ends in two narrow gold tubes with rolled rims formed of sheet gold. Each tube is attached to a gold loop, and the two loops are joined to each side of the rolled rim of the vertical neck of a large pomegranate pendant. The pendant is a hollow sphere decorated with impressed designs of triangular,

elongated oval, parallel, and crossed lines divided horizontally into two sections.

**165 Gold Necklace with Pomegranate Beads and Disk Pendant**

261 M Pl. 51

Necklace with fourteen pomegranate beads and a disk pendant about 2 cm in diameter, found in Tomb 47 (Trench XXI E). The pomegranate beads have a hollow globular top with a small suspension loop attached and a long cylindrical neck. The pendant is a circular disk of gold with a projecting boss in the center circled by a dotted line and surrounded by two rows of smaller bosses, each also circled by an impressed dotted line. At the top of the pendant is a wide rolled suspension loop decorated by two impressed parallel lines.

A similar gold pendant, found at Khurvin, is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>36</sup>

**166 Gold Necklace with Two Embossed Disk Pendants**

474 M Pl. 51

Necklace with two disk pendants, each about 1.5 cm in diameter, found in Tomb 45 (Trench XXII H). The necklace has fourteen four-sided bipyramidal beads, with ends reinforced by rolling inward, and three long cylindrical beads encircled by parallel impressed lines. Suspended from the necklace by broad rolled loops are two disk pendants, each with a central embossed knob circled by a dotted line surrounded by a row of smaller embossed knobs with an outer dotted line at the rim of the disk.

A similar gold pendant from Khurvin is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>37</sup>

**167 Gold Necklace with an Embossed Disk Pendant**

462 M Pl. 51

Necklace with three types of gold beads and an embossed gold disk pendant approximately 1.8 cm in diameter, found in Tomb 45 (Trench XXII H). Several of the beads are large and have a barrel or thick ring shape. Others have a four-sided bipyramidal shape reinforced at the rim by rolling inward. Two of the beads are long, thin cylindrical tubes of gold decorated with parallel impressed lines circling or spiraling around the tube. The disk pendant has a large embossed knob in the center circled by a dotted line, with a row of smaller embossed knobs surrounding the pendant at the rim. Each of these smaller knobs is also encircled at the base by a dotted line, and a simple projecting band edges the pendant.

**168 Gold Necklace with a Free-Form Rosette Pendant**

264 M Pl. 51

Necklace of gold beads with a large gold disk pendant about 5.8 cm in diameter, found in Tomb

33 (Trench XVIII F). Half of the beads are hollow and spherical with a hole at the ends, while the others are flattened elongated ovals with a rolled rim at each end. The central disk pendant is a flat plaque of gold encircled at the rim by a narrow projecting double band with herringbone hatching. On the face of the plaque is a free-form rosette formed by a vertically soldered gold band. At the center is a rather large circle with three elongated triangular stems around it, each crowned with flowers formed of round and oval petals. Between the three main shapes are several rounded crescents with smaller triangular cores crowned by more petals. The top crowns of the main stems and the crowns of the crescents together form nine main flowers and six smaller inner ones. At the top of the plaque is a spherical bead through which a suspension cord could have been threaded, and two holes are also punched on each side of the pendant by which it could have been sewn onto a background.

This particular motif, with vertical bands of gold soldered on a plain disk plaque to form an unusual free-form rosette, seems to be a unique and innovative design of Marlik. Two examples in addition to that currently under discussion (182 and 209) were found in the same tomb, all presumably products of the same artist. This necklace, along with a pendant of the same design also from Marlik, is dated by Maxwell-Hyslop to the thirteenth to twelfth centuries B.C., contemporary with the Mid-Assyrian period.<sup>38</sup>

**169 Gold Chain Necklace with Granulated Double-Pyramid Pendant on a Loop**

3 M Pl. 52

Chain, about 56 cm long, with a pendant loop about 3.5 cm in diameter and a granulated double-pyramid pendant, found in Tomb 24 (Trench XV E). The chain, formed of double folded loops, passes through a large loop of gold wire whose ends are hooked together. Fastened to the bottom of this loop is a small double-pyramid pendant formed of small gold balls that decrease in size from top to bottom.

A similar type of granulated pyramid appears on a gold ring from Nymphaeum in the Crimea, dated by Rostovtzeff to the fifth century B.C.<sup>39</sup>

*GOLD PENDANTS (170–203)*

The pendants discussed below occur without the accompanying beads of a necklace. They have been divided into three groups for ease of discussion: (1) cluster pendants (representing pomegranates and grapes); (2) disk pendants in a variety of designs; and (3) a miscellaneous group including such shapes as animal heads and crescents.

## GOLD CLUSTER PENDANTS (170–180)

**170 Gold Pomegranate Cluster Pendant**

268 M Pl. 52

Pendant consisting of a cluster of eight pomegranates with a suspension loop, found in Tomb 33 (Trench XVIII F). Each pomegranate has a hollow spherical body, made of two hemispheres carefully soldered together, and a spreading conical neck vertically soldered to the bottom of the sphere. The junction of the neck and body is covered by a thin twisted square gold bar. The pomegranates are arranged in four rows, one on top, three in each of two middle rows, and one on the bottom. Attached to the topmost pomegranate is a suspension loop in the form of a thick spool covered with parallel rib decoration, with the ends reinforced by rolling. Threaded through this spool is a larger suspension loop of thick plain gold wire in an overlapping circle.

**171 Gold Pomegranate Cluster Pendant**

833 M Pl. 52

About 3.0 cm wide, found in Tomb 47 (Trench XXII E). The pendant, made from very thin sheet gold, is deformed and incomplete. The pomegranates around the outside of the cluster are highly stylized with relatively large necks or crowns, but the inner ones are hollow gold balls.

**172 Gold Pomegranate Cluster Pendant**1210<sup>a</sup> M Pl. 52

Badly damaged and deformed, made from very thin gold, about 3.2 cm long, found in Tomb 47 (Trench XXII E). The workmanship is quite similar to 171, which was found in the same tomb. Each pomegranate has a very long neck or crown.

**173 Gold Pomegranate Cluster Pendant**

366 M Pl. 52

Pendant with a large loop and chain, about 11.0 cm in length, found in Tomb 36 (Trench XVIII C). The pomegranates, which are stylized with large spreading conical necks, are well arranged in a cluster that is connected on top to a large plain gold loop. The loop is thicker in the center, where the cluster is attached, and narrower toward the ends, which hook over each other. It is fastened through a gold chain made of nine circular loops of gold wire whose ends overlap.

A somewhat similar arrangement of a pendant with linked loops, in a mulberry rather than pomegranate cluster shape, was found at Mari. It is dated by Maxwell-Hyslop to the Mid-Assyrian period (thirteenth century B.C.).<sup>41</sup>

**174 Gold Pomegranate Cluster Pendant**

1a M not illustrated

About 3.0 cm long, found in Tomb 24 (Trench XV E). It is composed of globular spheres, with a single long-necked pomegranate at the bottom.

**175 Gold Pomegranate Pendant**

359 M Pl. 53

About 5.5 cm high, found in Tomb 36 (Trench XVIII C). It is made from rather solid sheet gold and consists of a plain globular sphere, formed of two joined hemispheres, with round soldering that is partly deteriorated. It ends in a neck with a suspension hole on each side.

**176 Gold Pomegranate Pendant**

1199a M Fig. 15; Pl. 53

Made from sheet gold, deformed and broken, found in Tomb 36 (Trench XVIII C). It has a long narrow neck with a dentated rim cut in sharp triangles at the edge. A suspension hole is drilled on each side of the neck near the top.

**177 Gold Grape Cluster Pendant**

66 M not illustrated

About 2.5 cm long, found in Tomb 26 (Trench XVII B). This is the best preserved of several such pendants found at Marlik. It is made of hollow globules of very thin sheet gold finely soldered together to form the cluster.

**178 Gold Grape Cluster Pendant**

17 M not illustrated

About 2.0 cm long, found in Tomb 24 (Trench XV E). It is incomplete and is similar to 177 in being composed of hollow globules of very thin sheet gold formed into a cluster.

**179 Gold Grape Cluster Pendant**

126 M Pl. 53

About 3.6 cm long, found in Tomb 27 (Trench XVII D). Incomplete, broken, and partly deformed.

**180 Gold Grape Cluster Pendants**

1210b M Pl. 53

Pair of pendants, one of which measures about 2.5 cm long, found in Tomb 47 (Trench XXII E). Each pendant is incomplete and badly deformed and has a circular gold suspension loop on top.

A grape cluster earring, with smaller grapes at the bottom gradually enlarging toward the top, found at Hasanlu Period V-IV, is dated by Maxwell-Hyslop to 1200–800 B.C.,<sup>42</sup> by Ghirshman to the ninth to eighth centuries B.C.,<sup>43</sup> and by Vanden Berghe to Sialk Cemetery A-B or Giyan I period.<sup>44</sup> A similar type of grape cluster earring in silver with a bronze suspension loop was found at Sialk Cemetery B.<sup>45</sup>

## GOLD DISK PENDANTS (181–197)

*PLAIN GOLD DISK PENDANTS (181)***181 Plain Gold Disk Pendants**

1198 M Pl. 53

Two pendants, each about 2.0 cm in diameter,

found in Tomb 6 (Trench X A<sup>+</sup>). They are made from thick plaques of solid gold without decoration. A thick curled wire tang forms a suspension loop at the top of each pendant.

*GOLD DISK PENDANT WITH A SOLDERED DESIGN (182)*

**182 Gold Free-Form Rosette Pendant**

265 M Pl. 53, Color Plate XXVI C

About 5.7 cm in diameter, found in Tomb 33 (Trench XVIII F). It contains a free-form flower design almost identical to that of 168.

*GOLD DISK PENDANTS WITH GRANULATION (183–184)*

One exquisite decoration used by the Marlik goldsmiths was granulation, a technique whereby designs are formed by soldering numerous tiny gold balls onto a base. In addition to the pendants described here, a number of beautiful earrings were made in this technique.

**183 Gold Granulated Disk Pendant**

62 M Pl. 53

About 4.8 cm in diameter, found in Tomb 26 (Trench XVII B). The thick gold plaque has two large concentric circles in the center formed of vertically soldered gold bands. Between these two concentric circles is a file band of small gold balls soldered in a circle. A few extra balls occur as well, possibly indicating that there was originally another file, which fell out or was not completed. Four thick bands of three parallel files of small gold balls extend from the edge of the central concentric circles to the decorative border band, dividing the plaque into four equal sections. In the outer corners of each section are two round circles formed of vertically soldered gold bands. Between each pair of circles is a wavy band of three parallel files of gold balls, extending from the central circles to a decorative border that is also formed of three parallel files of small gold balls. At the top of the plaque is a suspension loop, which is made of a plain thick gold band. This finely worked pendant is unique in form and composition.

**184 Gold Granulated Rosette Pendant**

63 M Pl. 54

About 4.6 cm in diameter, found in Tomb 26 (Trench XVII B). It is decorated with a geometric rosette in granulation. An eight-pointed star surrounds a rather large central ring made of a plain, vertically soldered gold band. Decorating the inner

side of the ring is a file band of small gold balls from which three triangles, each consisting of ten gold balls, reach toward the center of the point, marked by three gold balls. Some of the gold balls of the triangles are missing, as is one from the center point. Pointing outward from the outer side of the ring are eight granulated triangles, each with twenty-one small gold balls, forming the eight points of the star. Around the edge of the disk is a file band of small gold balls with larger and smaller triangles pointing inward spaced along it. The nine larger triangles each have twenty-eight small gold balls, seven on each side, and between each pair of larger triangles is a smaller triangle, also nine in number, containing fifteen small gold balls. The plain area between the outer band and the central star is filled by eighteen small triangles, each formed of six small gold balls, which are spaced between each larger and smaller outer triangle. Some of these gold balls are also damaged or missing. At the top of the plaque is a large, wide suspension loop reinforced by rolling at each end, and a large hole pierces the pendant near the bottom.

A similar gold pendant with a triangular pattern in granulation and two suspension loops at the top, found at Tell el-'Ajjul in Palestine and discussed by Maxwell-Hyslop, is assigned by Tufnel to Middle Bronze Age II, with a suggested date of about the seventeenth to sixteenth centuries B.C.<sup>46</sup> Granulation in a triangular pattern can also be seen on a ring from Susa, dated by Andrae to the end of the second millennium B.C.<sup>47</sup> Triangular granulation appears on the gold cover of a turquoise scarab from Lachish in Palestine, dated by Bossert to the thirteenth century B.C.,<sup>48</sup> and on a gold pomegranate-shaped pendant probably deriving from Enkomi and assigned by Pierides to Late Cypriote II period, with a suggested date of 1400–1230 B.C.<sup>49</sup> Similar granulation appears on another pendant in the Cyprus Museum, found during the Markides excavation at Arses in the Lamaca District, and assigned by Pierides to Cypro-Archaic I, with a suggested date of 700–600 B.C.<sup>50</sup> A triangular pattern in granulation also appears on three gold earrings in the Louvre, classified as New Elamite and dated by Amiet to around the seventh century B.C.<sup>51</sup> Additional examples of triangular granulation can be seen on an earring found at Sialk Cemetery A<sup>52</sup> and on the cover of an iron dagger decorated in gold, found at Shumeyko's farm near Rommy. Rostovtzeff assigns this latter example to Scythian art of the sixth century B.C.<sup>53</sup>

*GOLD EMBOSSED DISK PENDANTS (185–197)*

A number of gold embossed disk pendants with a suspension loop at the top were found without the accompanying beads of a necklace. Although most of



these pendants share a common shape and style of workmanship, there is some variety in design details.

#### PENDANTS WITH A SUN DISK OF MANY POINTED RAYS (185–190)

##### 185 Gold Embossed Disk Pendant

448 M Pl. 54

Of sheet gold, about 5.0 cm in diameter, found in Tomb 23 (Trench XV D). The pendant has a large hemispherical sun disk in the center surrounded by a single file of small projecting knobs with seven rather thick raised rays radiating outward. Each ray is outlined by a sharp projecting straight line down the center, with two chiseled smaller lines at each side. Between each two main rays are smaller projecting knobs circled by a row of small projecting points. The outer edge of the pendant is bordered by a projecting band decorated by a single file of small knobs. A rather thick tang of metal on top is rolled into a suspension loop.

##### 186 Gold Embossed Disk Pendant

1064 M Pl. 54

About 6.5 cm in diameter, found in Tomb 12 (Trench XII E). It is very similar in general design to 185, with a rather smaller central embossed sun disk surrounded by seven long pointed rays, each outlined somewhat more carefully, but in the same way, as 185. Between each two rays are two small knobs circled by a single file of small projecting dots. Circling the edge of the pendant are four parallel chiseled lines, and at the top is a suspension loop with an embossed line near each end.

##### 187 Gold Embossed Disk Pendant

554 M Pl. 54

About 4.0 cm in diameter, found in Tomb 15 (Trench XIII C). It has a large embossed sun disk in the center with seven short rays radiating outward. The central sun disk has a conical embossed knob in the middle surrounded by a wide embossed band. Between the central sun disk and the wide band and around the outer edge of the band are single files of small dots. The seven short, thick rays each have a central raised line and double chiseled lines on each side. Between each two rays is an embossed projecting knob surrounded by a single file of smaller dots. The pendant is bordered by two parallel chiseled lines, while a rather thick tang of metal on top is rolled into a suspension loop, now partly deformed, with straight chiseled lines at each end and crossed lines in the center.

##### 188 Gold Embossed Disk Pendants

529 M not illustrated

Three pendants, each about 1.8 cm in diameter, found in Tomb 50 (Trench XXI L). They have a design of a central sun disk surrounded by a single

band of dotted lines with six sharp, pointed rays radiating outward. Each of these projecting rays is divided down the middle by a sharp ridged line and bordered by two parallel chiseled lines at each side. Between each two rays there is an embossed circle surrounded by a dotted incised line. Each pendant is bordered by three parallel incised lines and has a thick suspension loop on top reinforced at the ends.

##### 189 Gold Embossed Disk Pendant

548 M Pl. 54

About 3.8 cm in diameter, found in Tomb 23 (Trench XV D). It has a central embossed sun disk with six rays, closely similar to the design of 188.

##### 190 Gold Embossed Disk Pendant

308 M Pl. 54

About 6.0 cm in diameter, found in Tomb 50 (Trench XXII L). It is almost circular in shape and is made from thin sheet gold. The pendant has a slightly different design than those previously discussed—a central embossed knob with four outspreading rounded ovals that looks like a large four-petaled flower or possibly like four bees or beetles. Around the central knob is a band of small crescent-shaped chiseled dots, while the four raised ovals that are somewhat unequally spaced around the center are bordered by a line of small crescent dots with four parallel lines on average radiating outward from the sides of each oval, contributing to the insectlike appearance. The pendant is bordered by two parallel files of chiseled irregular dots, while a curled tang forms a suspension loop at the top, with five incised parallel, almost vertical, lines below reaching to the border band. This unusual design may be a rather crude version of the sun disk or star.

#### COMMENTS

The design of an embossed sun disk with rays or a star seems to have been used frequently in the ancient world, and many examples parallel to those from Marlik have been found. A pendant with a central boss of six rays, smaller bosses surrounded by punched dots between each two rays, and a curled tang for suspension, found at Alalakh Level IV, is dated by Maxwell-Hyslop to 1500–1300 B.C.<sup>54</sup> Circular pendants with a central boss and eight rays, with a smaller knob between each two rays and a curled tang, found at Tell el-'Ajjul, are dated by Maxwell-Hyslop to 1550–1300 B.C.<sup>55</sup> Gold pendants with high-relief embossed and pointed rays, found at Ras Shamra (Ugarit), are dated by Schaeffer to the fourteenth to thirteenth centuries B.C.,<sup>56</sup> while Bossert dates similar examples from Ras Shamra to the fourteenth century B.C.<sup>57</sup> Similar pendants found in Talish have been dated to the fifteenth to fourteenth centuries B.C. and to the late second millennium B.C.<sup>58</sup> A gold pendant with minor differences of design, with a large central disk and small rays, found

in a funerary deposit in the Inshushinak Temple at Susa, is dated by Amiet to the end of the second millennium B.C.<sup>59</sup> and by Herzfeld to about the thirteenth century B.C.<sup>60</sup> A similar pendant in silver, found in the East Temple of Kiririsha at Tchoga Zanbil, is dated by Ghirshman to 1250 B.C.<sup>61</sup> Similar pendants can also be seen on necklaces on a stone relief of Ashurbanipal (884–859 B.C.)<sup>62</sup> and of Tiglathpileser III (746–729 B.C.)<sup>63</sup> at Nimrud, while a later example appears in the Oxus Treasure, dated by Dalton to the Achaemenian period.<sup>64</sup>

#### PENDANTS WITH A CENTRAL BOSS SURROUNDED BY ONE OR MORE FILES OF SMALLER BOSSES (191–197)

A number of gold disk pendants, such as the pendants of 166, 167, 207, and 208, have a large central boss surrounded by smaller knobs in one or more files. Those discussed below were found without the accompanying beads of a necklace.

##### 191 Gold Embossed Disk Pendant

564 M Pl. 55

About 5.5 cm in diameter, found in Tomb 50 (Trench XXI K). It has a central embossed knob circled by a file of impressed dots and surrounded by two parallel concentric rows of smaller knobs and four parallel concentric lines of impressed dots. A curled tang forms a suspension loop at the top of the pendant.

##### 192 Gold Embossed Disk Pendants

125 M not illustrated

Pair of gold pendants, similar in design to 191, found in Tomb 27 (Trench XVII D). Each pendant is about 2.0 cm in diameter and is made from a circular sheet of gold with a large central embossed knob surrounded by three files of smaller knobs covering the surface of the pendant to the rim. A curled tang forms a suspension loop at the top.

##### 193 Gold Embossed Disk Pendants

9 M Fig. 15; Pl. 55

Five closely similar pendants, each about 2.4 cm. in diameter, found in Tomb 24 (Trench XV E). Each is a circular sheet of gold with a rather large central embossed knob surrounded by three files of smaller knobs which cover the surface of the pendant to the rim. A curled tang at the top of each pendant forms a suspension loop.

##### 194 Gold Embossed Disk Pendants

435 M, 436 M, 437 M, 443 M Fig. 15; Pl. 55

Four somewhat similar pendants, found in Tomb 36 (Trench XVIII C). They are all circular plaques of sheet gold with a large embossed knob in the center, circled by a row of round dotted lines. A smaller file of one or two rows of smaller knobs, each circled by a

single file of small projecting dots, fills the remaining surface of the pendant. Each pendant is bordered by a single file of projecting small knobs, with a curled tang forming a suspension loop on top and a hole piercing the disk near the bottom.

A pendant similar to 437 M, with rows of small projecting knobs around a large embossed knob, found at Khurvin, is dated by Vanden Berghe to 1300–900 B.C.<sup>65</sup>

##### 195 Gold Embossed Disk Pendant

314 M not illustrated

About 1.1 cm in diameter, found in Tomb 47 (Trench XXI E). It has a large embossed central knob encircled by a single file of very small knobs, surrounded by a row of embossed knobs, each knob in turn surrounded at the base by small knobs. At the top is a curled tang.

##### 196 Gold Embossed Disk Pendants

644 M Pl. 55

Pair of pendants, each about 3.0 cm in diameter, found in Tomb 2 (Trench VI B<sup>+</sup>). The pendants have plain embossed knobs in the center with four projecting bands radiating outward, dividing them into four sections. A smaller embossed knob appears in each section, with a single file of smaller knobs forming the border. Suspension loops at the top of each pendant are broken.

##### 197 Gold and Lapis Lazuli Pendant

553 M Pl. 55

About 5.0 cm in diameter, found in Tomb 15 (Trench XIII C). It is made from a circular plaque of gold inlaid with a large almost circular piece of lapis lazuli. The lapis lazuli is surrounded by a thick projecting circular band of gold, with each side of the projecting band surrounded by a delicate file of fine impressed dotted lines. Between this projecting band and the edge are embossed knobs encircled by impressed dotted lines and projecting short straight lines. Bordering the pendant is another thick projecting band, and a wide curled tang at the top forms a suspension loop. Although little lapis lazuli was found at Marlik, another example of its use can be seen in Gold Decorative Buckle 447.

Oppenheim discusses the origin of lapis lazuli. He notes that, according to Sumerian, Akkadian, and Babylonian texts, it must have come from some mountainous area, and that there were two types, one genuine and the other artificial.<sup>66</sup>

#### MISCELLANEOUS GOLD PENDANTS (198–203)

##### 198 Gold Eagle Head Pendant

16 M Pl. 55

Pendant with double eagle heads on a loop about 5.5 cm in diameter, found in Tomb 24 (Trench XV

E). The double eagle heads, joined by an elongated neck, are made in repoussé from sheet gold and are hollow and filled with natural bitumen. The well-shaped heads have oval eyes, oval projecting bands for eyelids, and a sharp downward bent beak. The characteristically keen eye of the eagle is well represented. The double eagle heads are suspended by a gold band from a large loop made from a twisted four-sided gold bar. The surface of the pendant is plain and finely polished. This double-eagle-head pendant is unusual, and the workmanship is very fine.

### 199 Gold Crescent Pendants

310 M Pl. 56

Five pendants, each about 4.7 cm in length, found in Tomb 32 (Trench XVII E). All five are closely similar in shape and technique. Each pendant is a crescent-shaped plaque of gold with a smaller crescent formed by a narrow, vertically soldered gold band as a decorative motif in the center of the pendant. Bordering each pendant is a double-twisted gold wire forming a double coil band, while a plain gold band suspension loop is attached to the center of the convex side of the crescent.

Similar gold moon-shaped pendants with suspension loops on the back were found at Mari and are dated by Maxwell-Hyslop to around 2017–1750 B.C.<sup>67</sup>

### 200 Gold Pear-Shaped Pendants

10 M Pl. 56

Eight pendants, each about 2.8 cm long, found in Tomb 24 (Trench XV E). All are made from sheet gold with a hollow convex body resembling half a pear. The wider part of the body is covered with small projecting knobs, while the narrower upper part is plain with a smooth surface. Suspension holes are located on each corner at the top of the neck.

### 201 Gold Pear-Shaped Pendants

28 M and 68 M Fig. 15

Several pear-shaped pendants, made from sheet gold, found in Tomb 26 (Trench XVII B). 28 M (Fig. 57) consists of three examples, each about 2.8 cm long, and 68 M (Fig. 58) also consists of three examples, each about 2.5 cm long. All are closely similar in shape and workmanship, with the pendants of 28 M having small repoussé dot decoration.

### 202 Gold Granulated Cage Pendant

19 M Pl. 56, Color Plate XXVI D

On a gold loop, about 3.8 cm in diameter, found in Tomb 26 (Trench XVII B). At the base of the cage is a flat circular ring to which twelve pyramids are soldered with their points hanging downward. Each of these pyramids is built up of finely soldered gold balls, four to each side. This circular ring with its attached pyramids is connected to the upper part of the cage by twelve long double bands or columns of twisted gold bars, which are bent slightly outward at

the middle, in a carinated form. Each of these columns fits at the top into a small inverted cup on the bottom of the dome-shaped cap of the cage. Inside the cage a thick, round gold bar forms a central main column from the top through the bottom ring, ending in a pyramid of gold balls larger than the pyramids around the bottom edge of the cage. The rim of the dome is edged on top by a file of larger gold balls, while the central dome, which has a plain polished surface, has four equally spaced circular windows, each surrounded by a solid circular band in turn encircled by a file of gold spheres. The cage is topped by a large round gold ball formed of two halves connected by a pronounced narrow brim folded over to form a fine projecting band decorated by diagonal parallel impressed lines, like a single coil band. The connecting joint between the cage and this upper ball is encircled by double-twisted gold bars decorated with parallel diagonal lines forming a double-coil band. At the top of this ball is a loop formed by a quadruple band of twisted gold bars, with, threaded through it, a large circle of thick gold wire with overlapping ends. The workmanship of this pendant is extraordinarily fine.

Similar granulation can be seen on a ring from Nymphaeum in the Crimea, dated by Rostovtzeff to the fifth century B.C.<sup>68</sup>

### 203 Gold Double-Ball Pendant

1480 M Pl. 56

About 2.5 cm long, found in Tomb 36 (Trench XVIII C). It is made from sheet gold in the form of two spherical gold balls connected by a small cylindrical tube. The lower, larger ball has a slight carination of the body where the two halves are joined, while the upper, smaller ball has a large suspension loop on each side.

## *GOLD PENDANTS ACCOMPANYING NECKLACES MADE OF OTHER MATERIALS (204–211)*

### 204 Necklace of Gold and Red Carnelian Beads with a Gold Pomegranate Pendant

478 M Pl. 56

Found in Tomb 19 (Trench XIV F). Two of the gold beads are shaped like four-sided double pyramids, one of which is reinforced at each end by rolling inward to form a projecting ring, while the other is much simpler in shape. The remaining gold beads have an elongated barrel shape. Some of the red carnelian beads are also barrel shaped, while others are globular. The gold pendant, in the shape of a single pomegranate, is hollow, with a globular body made of two joined hemispheres and a conical tube neck slightly larger at the outer edge. An elaborate

gold suspension band loop is soldered to the top of the pomegranate pendant.

Pomegranate beads and cluster pendants have already been discussed under 163. Examples in silver were found in Tomb 123 of Sialk Cemetery B,<sup>69</sup> and similar examples in bone with a more stylized and larger neck were also found in Sialk Cemetery B.<sup>70</sup>

### **205 Necklace of Gold Pomegranate and Red Carnelian Beads with a Gold Pomegranate Cluster Pendant**

299 M Pl. 56, Color Plate XXVII A

Found in Tomb 32 (Trench XVII E). The gold pomegranate beads, made from very thin sheet gold, consist of a globular base formed of two half spheres soldered together, with a tapering conical tube of gold forming the neck or crown of the pomegranate and a small suspension loop at the top of the sphere. The remaining beads are made of red carnelian, with the longer ones in a double-conoid shape and the shorter ones cylindrical or date shaped. These finely cut and polished beads have suspension holes running lengthwise through the middle, and most have gold caps at each end. The gold pomegranate cluster pendant contains five globular spheres, one on top with an attached suspension loop, four in the middle, and at the bottom a single long-necked bead soldered upside down to the center of the four middle pomegranates.

The long double-conoid carnelian beads recall Sumerian gold-capped beads attributed to the Third Dynasty of Ur and suggested to be even older by Maxwell-Hyslop.<sup>71</sup> A biconoid bead with gold caps said to be from Ziwiyeh is dated by Maxwell-Hyslop to the eighth to seventh centuries B.C.<sup>72</sup> Additional examples of pomegranate cluster pendants are discussed under 163.

### **206 Necklace of Frit Beads with Gold Pomegranate Cluster Pendant**

195 M Pl. 57, Color Plate XXVII B

Found in Tomb 16 (Trench XIII F). Most of the frit or primitive porcelain beads have an elongated barrel or ovoid shape and are decorated with parallel twisted spiral lines along the length of the bead and wide gold caps at the ends. The surface of these frit beads is damaged or broken in some parts and occasionally has deteriorated to a soft powderlike substance. Two frit beads have a four-sided bipyramidal shape, resembling two pyramids connected at the base, with a rather pronounced projecting ring at each end. One has a quadruple spiral or butterfly shape with two sections on each side of a central tube, each decorated by an incised double concentric circle. Suspension holes run lengthwise through all these frit beads. The gold pendant is a cluster of pomegranates hanging upside down, their long, slightly conical necks at the bottom of the cluster and a single globular pomegranate at the top, with an

attached suspension loop whose neck hangs down into the center of the middle row of four pomegranates. Between the hanging necks of the four middle pomegranates is a single pomegranate at the bottom of the cluster.

### **207 Necklace of Red Carnelian Beads with Four Embossed Gold Disk Pendants**

457 M Pl. 57

Found in Tomb 45 (Trench XXII H). Some of the red carnelian beads have an elongated ovoid shape with a well-polished surface, while others are globular. The largest of the four gold pendants, 2.2 cm in diameter, has a rather large central boss surrounded by a dotted line with two rows of smaller embossed knobs around the rim, an outer row of fifteen slightly larger knobs encircled by elongated dotted lines, and an inner row of nine slightly smaller knobs. The rim is flat and simple, with a gold suspension loop formed at the top by rolling the metal. The three smaller gold pendants have the same decoration in simpler form. A main embossed knob in the center, encircled by a dotted line, is surrounded by a single row of smaller embossed knobs, each also circled by a dotted line. At the edge of each pendant is a projecting band; a suspension loop was formed at the top by rolling the metal.

### **208 Necklace of Red Carnelian Beads with an Embossed Gold Disk Pendant**

116 M Pl. 57

Necklace with pendant, 2.0 cm in diameter, found in Tomb 27 (Trench XVII D). The graduated red carnelian beads are flat, ring, and barrel shaped; they are not well cut and show much unevenness and dentation on the surface. The gold pendant is a circular disk with a large embossed knob in the center surrounded by many smaller embossed knobs irregularly covering the surface to the rim. At the top of the pendant the metal is rolled into a suspension loop.

### **209 Necklace of Gold and Red Carnelian Beads with a Gold Free-Form Rosette Pendant**

266 M Pl. 57

Necklace with pendant, 6.0 cm in diameter, found in Tomb 33 (Trench XVIII F). The gold beads are rather long and tube shaped, with narrowed ends reinforced by rolling; the red carnelian beads, in graduated sizes, are date shaped. The gold pendant contains a free-form geometric flower design almost identical to that of 168.

### **210 Necklace of Gold Pomegranate and Red Carnelian Beads with a Spherical Gold Pendant**

298 M Pl. 58

Found in Tomb 32 (Trench XVII E). Some of the gold beads are shaped like pomegranates, with a hollow globular body formed from two hemispheres soldered together and a conical neck that spreads slightly toward the outer rim. At the end of the

globular base of each pomegranate bead is a fairly elaborate suspension loop. Other gold beads are globular and hollow, formed of hemispheres soldered together. Some of the red carnelian beads have an elongated ovoid shape, with gold caps at each end, whereas others have a double-conoid shape in various sizes, some with a rather sharp angular line encircling the center of the bead and some more date shaped with no central line. The gold pendant is a hollow sphere with suspension holes at the top.

**211 Necklace of Gold, Agate, and Red Carnelian Beads with a Gold Pendant**  
479 M Pl. 58

Found in Tomb 19 (Trench XIV F). The gold beads are formed of spiral wire in a cylindrical tube shape. The thick gold wire is rather simply bent into a spiral. The beads vary in diameter and thickness, and one of the beads has a gold cap at one end. One type of agate bead, in various shades of black, brown, and white, has an elongated barrel shape, with one bead white with bands of black at each end. Other black and white agate beads are almost rectangular and have a thick center and rather thin edges at the biconvex sides. Both types of agate beads have lengthwise suspension holes. The red carnelian beads consist of disks of varying thickness, the thin ones being similar to a lentoid shape with a thinner edge. The gold pendant is gourd shaped with a wide bottom and smaller top. The bottom has a round, thick ring base distinguished by an incised band. The neck is encircled by two projecting parallel thick bands just above the shoulder, with a much larger and thicker ring above and a very thin ring on top, to which a solid suspension loop with a large hole is attached. Fine parallel vertical impressed lines decorate the surface of the pendant.

Similar spiral wire tubular beads were found at Vadjalik in Persian Talish<sup>73</sup> with material classified by Schaeffer to Talyche Moyen I, dated to 2100–1900 B.C.<sup>74</sup> Maxwell-Hyslop compares this type of spiral wire or coil bead to beads found at Ur in Early Dynastic and Sargonid graves and suggests some sort of contact between metalsmiths in Sumer and northwest Persia during the Sargonid period.<sup>75</sup> Spiral wire tube beads were also found at Agha Evlar; these are assigned by Schaeffer to Talyche Recent 2, with a suggested date of 1450–1350 B.C.<sup>76</sup> Spiral silver wire beads were found in Tomb 21 of Sialk Cemetery B.<sup>77</sup>

**NECKLACES MADE OF GOLD IN  
COMBINATION WITH OTHER  
MATERIALS (212–218)**

**212 Necklace of Gold Butterfly and Red Carnelian Beads**  
192 M Pl. 58

Found in Tomb 16 (Trench XIII F). The four gold butterfly or quadruple spiral beads consist of a central tube with four attached bands of gold forming tight spirals, two on each side. This central tube is reinforced at each end by metal rolled inward to form a projecting ring band. The red carnelian beads, graduated in size, have an elongated ovoid shape.

**213 Necklace of Gold and Red Carnelian Beads**  
486 M Pl. 58

Found in Tomb 19 (Trench XIV F). Some of the gold beads have an elongated oval or date shape and are hollow with rather large openings at each end; others are globular and also hollow with large openings. Some of these gold beads are broken and damaged.

There are also a few red carnelian beads, either disk shaped with rounded edges or globular in shape.

**214 Necklace of Gold and Agate Beads with a Red Carnelian Centerpiece**  
1177 M Pl. 59

Found in the tomb of Ali Karam Bagh.<sup>78</sup> The gold beads, made in a lentoid shape and varying in size, are hollow and biconvex, with a hole through the center of each bead. The agate beads, also graduated in size, are mostly globular and dark gray or brown in color with rather thick streaks of white. The red carnelian centerpiece is a long cylindrical tube that narrows slightly at each end, with a hole through one end by which it can be suspended vertically.

Similar beads are found in a necklace in The University Museum of the University of Pennsylvania and are attributed by Maxwell-Hyslop to the Third Dynasty of Ur.<sup>79</sup>

**215 Necklace of Gold, Red Carnelian, and Agate Beads**  
1404 M Pl. 59

Found in the tomb of Ali Karam Bagh. The gold beads are cylindrical except for one which is ovoid and reinforced at the rim by rolling inward. Some of the red carnelian and agate beads have an elongated olive shape, graduated in size, with a lengthwise suspension hole. Others, mostly of lighter and darker shades of red carnelian, are barrel shaped, and a few of the red carnelian beads have a lentoid shape. A closely similar necklace of gold, red carnelian, and agate beads was found at Dailaman, Ghalekuti I.<sup>80</sup>

**216 Necklace of Gold and Red Carnelian Beads with an Agate Pendant**  
1436 M Pl. 59

Found in Tomb 16 (Trench XIII F). Some of the small gold beads have a lentoid shape, while others, also small, are globular and fluted. One plain globular bead is bordered at each end by a rolled band. The finely worked red carnelian beads are barrel shaped. The pendant is a flat, roughly triangular

piece of streaky agate with a concave upper side and rounded points, with a suspension hole running from one side point to the other. The workmanship of this pendant is also very fine.

### 217 Necklace of Gold and Black Decorated Beads

1202 M Pl. 59

Found in Tomb 2 (Trench VI B<sup>+</sup>). Several of the gold beads, some of them damaged, are date shaped, hollow with large openings at the ends. Two of the gold beads have an elongated cubic shape, slightly narrower toward each end, which is rounded and reinforced by rolling inward. One bead, of thicker gold, is barrel shaped with impressed parallel vertical dentation running lengthwise, narrower toward each end, where circular necks are reinforced by a thickness of metal at one end and rolling inward at the other. Beads of very thin gold, with a long tubular shape that gradually narrows toward each end, and filled with natural bitumen, have a decoration of impressed vertical and horizontal lines forming a checkered pattern of square segments in a corncob design. Some parts of these beads are broken and slightly deformed. A fifth type of bead is made from a solid black, rather hard substance, which may be a mixture of natural bitumen and another material. These beads are oval with flat ends covered by gold caps and are decorated by rings of an inlaid white substance.

Somewhat similar elongated barrel-shaped beads with corncob decoration were found in Grave 446 of Tell el-'Ajjul, dated by Maxwell-Hyslop to the middle of the second millennium B.C.<sup>81</sup>

### 218 Necklace of Gold and Fired Clay Beads with a Gold Centerpiece

226 M Pl. 60

Found in Tomb 25 (Trench XVI F). One group of beads, some of them damaged, are made from very thin sheet gold and have a date or elongated barrel shape. Other gold beads are cylindrical tubes, decorated with parallel impressed lines. A third group of beads, partly broken, are made from well-levigated fired clay in a double-conoid shape. The gold centerpiece is a large ovoid bead with spiral, almost horizontal impressed lines encircling the surface. This bead is hollow with suspension holes at each end.

Somewhat similar shape and decoration can be seen in the centerpiece of a necklace found at Ur.<sup>82</sup>

## NECKLACES OF RED CARNELIAN (219–253)

### 219 Necklace of Red Carnelian Beads

312 M not illustrated

Contains beads in a dark shade of red carnelian,

found in Tomb 47 (Trench XXI E). Some of the beads are ovoid with a six-sided shape, each side slightly concave. These beads, which are graduated in size, are extraordinarily well finished and polished. Others, of a much simpler type, have a date or elongated ovoid shape and are also well polished. Both types have a lengthwise suspension hole.

### 220 Necklace of Red Carnelian Beads

537 M Pl. 60

Contains oval, six-sided beads of red carnelian, found in Tomb 50 (Trench XXI L). The sides of the beads are concave, as are the ovoid beads of 219.

### 221 Necklace of Red Carnelian Beads and Centerpiece

219 M Pl. 60

Found in Tomb 45 (Trench XXI H). Some of the beads, which have a highly polished surface, are elongated and cylindrical, gradually narrowing toward each end, with a lengthwise suspension hole. Other beads are date shaped, while several are double-conoid. The centerpiece, of streaky red carnelian, is long and tubular, narrowing toward each end, with a lengthwise suspension hole.

### 222 Necklace of Red Carnelian Beads

193 M Pl. 60

Contains beads of light brownish carnelian, found in Tomb 16 (Trench XIII F). Some of the beads, graduated in size, have an elongated double-conoid shape and a lengthwise suspension hole; many of these are broken and incomplete. Other beads are rather small and globular.

Similar types of beads can be seen in a necklace from Sialk Cemetery B, dated by Ghirshman to the first quarter of the first millennium B.C.<sup>83</sup>

### 223 Necklace of Red Carnelian Beads

1405 M Pl. 61

Contains beads in both light and dark shades of red carnelian, found in the tomb of Ali Karam Bagh. Some of these are olive shaped and graduated in size, while others are very small and cylindrical. One bead is a thick circular disk, not well formed.

### 224 Necklace of Red Carnelian Beads

682 M Pl. 61

Contains flat, thick, disk-shaped beads in different sizes and different shades of red carnelian from dark reddish brown to lighter brown, found in Tomb 3 (Trench VI A). The beads are carinated, with a sharp line around the middle and a rather large suspension hole through the center of the disk.

### 225 Necklace of Red Carnelian Beads

542 M Pl. 61

Contains graduated beads in different shades of light red carnelian, found in Tomb 50 (Trench XXI L). Most of the beads are olive shaped, but one darker bead has a six-sided date shape.

**226 Necklace of Red Carnelian Beads**

225 M Pl. 61

The only necklace found in Tomb 25 (Trench XVI F); contains red carnelian beads in shades from dark reddish brown to almost light cream, in such a variety of shapes and sizes that it seems to have been assembled from collected beads rather than from beads made specifically for a single necklace. Some of the beads are biconoid, with sharp angular lines at the middle on some and curves on others, whereas others are cylindrical and tube shaped, slightly smaller at each end; all have a lengthwise suspension hole. One bead is oval with six slightly concave sides. Another group consists of globular beads, some with a well-polished surface and others with a rougher cut, and one has incised circular bands engraved on the surface. Two beads have a flat circular disk shape with angular edges cut with great precision.

**227 Necklace of Red Carnelian Beads**

220 M Pl. 62

Contains beads of a light brown carnelian, found in Tomb 45 (Trench XXI H). Most of the beads are globular, some of streaky carnelian, and are of very good workmanship with a suspension hole cut through the center of the bead. Other beads are barrel or disk shaped, of poorer workmanship with some irregularities in the cutting.

**228 Necklace of Red Carnelian Beads**

571 M Pl. 62

Contains beads in a variety of light shades of poor quality red carnelian, found in Tomb 50 (Trench XXI L). One group consists of carefully made beads, somewhat damaged on the surface, which are olive shaped with a lengthwise suspension hole. The majority of the beads, however, have a flat circular disk shape with irregularities in the cutting and surface treatment.

**229 Necklace of Red Carnelian Beads and Centerpiece**

223 M Pl. 62

Contains beads of brownish carnelian, found in Tomb 45 (Trench XXI H). Most of the beads, which are olive shaped with a lengthwise suspension hole, are well cut with a polished surface. A large oval flat disk bead with smoothly curved sides and a lengthwise suspension hole forms a centerpiece to the necklace.

**230 Necklace of Red Carnelian Beads and Centerpiece**

383 M Pl. 62

Contains beads and a centerpiece in various shades of brownish carnelian with streaky lines on some pieces, found in Tomb 36 (Trench XVIII C). Some of the beads are olive shaped and are well cut with a polished surface and a lengthwise suspension hole. Others are barrel shaped, graduated in size. Two

beads are double-conoid with a rather angular line around the middle of the bead. The remaining beads have a flat disk shape, not all of them well cut. The centerpiece is a rectangular flat bead tapered at the edges with a lengthwise suspension hole.

**231 Necklace of Red Carnelian Beads and Centerpieces**

199 M Pl. 63

Contains small, rather poor quality red carnelian beads and three centerpieces, found in Tomb 16 (Trench XIII F). The beads are circular flat disks of rather crude workmanship with much undulation and irregularity and are not well polished. The three centerpieces, one partly broken, are olive shaped and better made, with well-polished surfaces.

A similar type of simple plain necklace, found at Khurvin, is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>84</sup>

**232 Necklace of Red Carnelian Beads**

572 M Pl. 63

Contains small beads of rather poor quality red carnelian in shades of brown to light cream, found in Tomb 50 (Trench XXI L). Most have a flat circular disk shape with much irregularity, undulation, and dentation on the edges.

**233 Necklace of Red Carnelian Beads**

545 M Pl. 63

Contains beads of poor quality red carnelian in various shades from dark to light brown, found in Tomb 50 (Trench XXI L). The larger beads are better made in an almost circular shape, while others have an irregular shape with much undulation and dentation at the edges.

**234 Necklace of Red Carnelian Beads**

1406 M Pl. 63

Found in Tomb 44 (Trench XXI N). Some beads are olive shaped with some damage on the surface, one is biconoid, and the majority are globular, graduated in size, of poor workmanship.

**235 Necklace of Red Carnelian Beads**

1407 M not illustrated

Contains beads in a dark shade of red carnelian, found in Tomb 44 (Trench XX M). The beads are of different sizes, shaped like flat, irregular disks, and are rather crudely made with little attention to surface polishing.

**236 Necklace of Red Carnelian Beads**

1410 M not illustrated

Contains beads in both light and dark shades of red carnelian, found in Tomb 52 (Trench XXIII G). Some of the beads are olive shaped, well cut and polished, with a lengthwise suspension hole; others are globular, in darker shades; and a few have a biconoid shape.

**237 Necklace of Red Carnelian Beads and Centerpiece**

1412 M Pl. 64

Contains beads and a centerpiece in dark shades of red carnelian, found in Tomb 2 (Trench VI B<sup>+</sup>). The majority of the beads have a thick disk shape and are graduated in size. They exhibit workmanship of varying quality, with some beads having crude cuts at the edges. The centerpiece is a large globular bead with a finer cut and a polished surface.

**238 Necklace of Red Carnelian Beads and Centerpiece**

1418 M not illustrated

Contains beads and a centerpiece in dark shades of red carnelian, found in Tomb 5 (Trench VIII D). The beads, graduated in size, have a circular disk shape with many irregularities in cutting. The centerpiece is a much larger date-shaped bead with a lengthwise suspension hole.

**239 Necklace of Red Carnelian Beads and Centerpieces**

1421 M Pl. 64

Contains beads and three centerpieces in light shades of red carnelian, found in Tomb 15 (Trench XIII C). Some of the beads are globular with a polished surface; two are olive shaped; and the majority have a thick circular disk shape with some irregularities and dentation. The three centerpieces, of much darker shades of carnelian, are cylindrical, with a well-polished surface and a lengthwise suspension hole.

**240 Necklace of Red Carnelian Beads**

1422 M Pl. 64

Contains beads in dark shades of red carnelian, found in Tomb 14 (Trench XIII B). Some of the beads are olive shaped and graduated in size; a few of them are globular; others are biconoid with some narrowing to an almost lentoid shape; and still others have an irregular thick disk shape, many with dentation at the edges.

**241 Necklace of Red Carnelian Beads**

1429 M Pl. 64

Contains beads in both light and dark shades of red carnelian, found in Tomb 47 (Trench XXII E). Most are olive shaped, with a few examples showing angular carination. A suspension hole runs lengthwise through the center of the beads.

**242 Necklace of Red Carnelian Beads and Centerpiece**

1434 M Pl. 64

Contains beads and a centerpiece of dark red carnelian, found in Tomb 50 (Trench XXI K). Some of the beads are olive shaped, graduated in size, with a well-polished surface; others are globular, well cut and polished; one is cylindrical with a lengthwise suspension hole; and the remainder have a thick circular disk shape. The centerpiece is a larger globular bead.

**243 Necklace of Red Carnelian Beads**

221 M Pl. 64

Contains beads of light red carnelian, found in Tomb 45 (Trench XXI H). The larger beads have a thick lentoid shape and are well cut and polished, with a suspension hole through the center. The remainder of the beads are globular and graduated in size.

**244 Necklace of Red Carnelian Beads and Pendant**

1178 M Pl. 64

Contains red carnelian beads and a pendant of excellent workmanship, found in the tomb of Ali Karam Bagh. The beads are an elongated olive shape, graduated in size, and the small conical pendant has slightly convex sides with a suspension hole through the top.

**245 Necklace of Red Carnelian Beads and Pendant**

191 M Pl. 64

Contains beads of a light brown shade of carnelian with some whitish beads, found in Tomb 50 (Trench XXI L). Several of the beads, graduated in size, are olive shaped with a lengthwise suspension hole; others are globular and very well polished; and one bead has a double-conoid shape. The pendant is made from light-colored stone in a conical triangular shape with convex sides and has a suspension hole through the point of the triangle.

**246 Necklace of Red Carnelian Beads with a Bird-Shaped Pendant**

459 M Pl. 65

Found in Tomb 45 (Trench XXII H). Not all the beads are carefully cut and polished, and some have rough surfaces. The larger beads are olive shaped with a lengthwise suspension hole, while others are barrel shaped with a rather well-polished surface. A third group is globular, a fourth has a thick circular disk shape, and a fifth is irregular in shape with little polishing. The pendant represents a bird, possibly a duck, with its head turned backward resting on its back, and a suspension hole running through the body from breast to tail. This pendant is well balanced and finished with a finely polished surface.

A duck with its head turned and resting on its back was a common motif of the ancient world, used over a long period of time. It is found as early as the Sumerian period from Egypt to the Indus Valley, and appears not only in jewelry but also was made in larger sizes for other purposes (such as weight stones).<sup>85</sup> Objects of this shape found at Nuzi are dated by Starr to around the late second millennium B.C.<sup>86</sup> Duck-shaped beads in different stones including natural bitumen, agate, carnelian, malachite, and hematite are attributed by Amiet to the Mid-Elamite period, with a suggested date of the second half of the second millennium B.C.



**247 Necklace of Red Carnelian Beads and Pendant**  
472 M Pl. 65

Contains beads and a pendant of light shades of red carnelian, found in Tomb 19 (Trench XIV F). Some of the beads are olive shaped with a well-polished surface and a lengthwise suspension hole. A few beads, made from darker shades of carnelian, are spherical with a well-polished surface. Most of the beads, however, are rather rough, irregularly shaped thick disks, neither well finished nor well polished. The pendant is small, and like that of 246, is shaped like a duck with its head resting on its back. The details of the wings, head, and tail are finely worked. A suspension hole runs across the body of the duck from one wing to the other, in contrast to the positioning of the suspension hole in 246.

**248 Necklace of Red Carnelian Beads and Three Pendants**

568 M Pl. 65

Contains beads and three pendants in various shades of brown carnelian, found in Tomb 50 (Trench XXI K). Several of the beads are olive shaped and are well cut and polished. One bead has a thick, flat circular disk shape with convex sides and a suspension hole through the center of the disk. Two other beads have a flat triangular disk shape, with a depression on each side of the center of the triangle that is pierced by a suspension hole. The convex sides of the triangle thin to a narrow, sharp border at the edge. Two of the pendants are made of a streaky red carnelian and have a thick, flat bell shape, with one side of the bell straight and coming to a curve at the top and the other side notched at the top. The edges of these pendants are narrowed and almost sharp, and suspension holes run through the area notched on one side. The other pendant is shaped like a vase with a large neck and a vertical small stand at the bottom. It is very well finished with a highly polished surface.

**249 Necklace of Red Carnelian Beads and Pendants**  
222 M Pl. 65

Contains beads and pendants of light shades of brownish red carnelian, found in Tomb 45 (Trench XXI H). The beads are barrel-shaped, graduated in size; some are well cut and polished, while others are not. The pendants have a flat, thick pear shape, tapering toward the top, which is pierced by a suspension hole.

**250 Necklace of Red Carnelian Beads and Pendant**  
1415 M Pl. 65

Contains beads and a pendant in dark shades of red carnelian, found in Tomb 5 (Trench VIII D). Some of the beads are olive shaped, graduated in size, and are well cut and polished, with a lengthwise suspension hole. Other beads, biconoid in shape, are also well cut and polished with a lengthwise suspension hole. A few beads are globular with a well-

polished surface. The majority of the beads, however, are made in a thick, circular disk shape and are rather small, with many irregularities in the cutting. A broken rectangular flat pendant has a superfluous part on top housing the suspension hole.

**251 Necklace of Red Carnelian Beads and Pendant**  
1417 M Pl. 65

Contains beads and a pendant in shades of brownish carnelian, found in Tomb 45 (Trench XXI H). Some of the beads are olive shaped; they come in a variety of different sizes, the largest being the centerpiece, and have a lengthwise suspension hole. Other beads are globular with some variations in the middle, and still others have a thick circular disk shape. The pendant has an elongated pyramid shape with a suspension hole through the tapering top.

**252 Necklace of Red Carnelian Beads and Pendant**  
1426 M not illustrated

Contains red carnelian beads and a pendant of the same material, found in Tomb 1 (Trench III D<sup>+</sup>). The beads have a thick circular disk shape and come in a variety of sizes. Most of the beads, which are poorly cut with little polishing, are marked by irregularities. The pendant is a solid cylinder with a suspension hole cut through one end.

**253 Necklace of Red Carnelian Beads and Pendant**  
1430 M Pl. 66

Contains olive-shaped red carnelian beads, graduated in size, which are well cut and polished, and a conical pendant with a suspension hole near the base of the cone, found in Tomb 47 (Trench XXII E).

## NECKLACES OF RED CARNELIAN IN COMBINATION WITH OTHER MATERIALS (254–264)

In addition to the examples included in this section, red carnelian beads occur in a number of necklaces incorporating gold as the primary material. These were discussed earlier in the chapter.

**254 Necklace of Gold-Capped Red Carnelian Beads**  
318 M Pl. 66

Found in Tomb 32 (Trench XVII E). Most of the beads are double-conoid in shape and come in a variety of different sizes, some up to 6.0 cm long, with gold caps at each end. They are pierced by lengthwise suspension holes, indicative of the highly developed technology of the time, and are very well cut and polished. The two remaining beads are cylindrical in shape and are also well cut and polished.

A similar type of double-conoid red carnelian bead with gold caps is attributed to the Third Dynasty of Ur.<sup>87</sup> Apparently this type of bead continued in use

to a much later date at Marlik. A still later example of elongated biconical beads with gold caps was found at Ziwiye, dated by Maxwell-Hyslop to the eighth to seventh centuries B.C.<sup>88</sup>

**255 Necklace of Red Carnelian Beads with a Gold Decorated Centerpiece**

447 M Pl. 66

Found in Tomb 23 (Trench XV D). Most of the beads are globular and well polished, with a suspension hole running through their center. Some are date shaped, including two with an angular projecting line around the middle. The large centerpiece, of red carnelian with wavy shades of color like an agate, is double-conoid in shape with a band of gold encircling the middle and is decorated with parallel impressed lines and a central row of short straight lines of 90° hatching. This centerpiece is very finely and elaborately worked.

**256 Necklace of Red Carnelian, Agate, and Transparent Stone Beads**

1180 M Pl. 66

Contains beads of red carnelian, agate, and a whitish transparent substance very similar to glass in appearance, found in the tomb of Ali Karam Bagh. Several of the agate and red carnelian beads have an elongated olive shape; they are graduated in size, with a well-polished surface and a lengthwise suspension hole. Others are globular or disk shaped. The transparent stone beads have a flattened globular shape, while two beads, one of carnelian and one of transparent stone, have a conical shape like a pendant.

A similar necklace of agate and red carnelian beads was found at Dailaman, Ghalekuti I.<sup>89</sup> Similar transparent stone beads appear in two necklaces found at Tepe Hissar.<sup>90</sup>

**257 Necklace of Red Carnelian and Transparent Stone Beads**

1194 M Pl. 66

Contains beads of red carnelian and a semi-transparent mineral, found in Tomb 10 (Trench XI B). The beads have a thick, round disk shape and are graduated in size. They are of poor workmanship with many surface irregularities.

**258 Necklace of Red Carnelian and Transparent Stone Beads**

1423 M Pl. 66

Found in Tomb 14 (Trench XIII B). Some of the beads are olive shaped, and others, including the semitransparent beads, have a thick circular disk shape.

**259 Necklace of Red Carnelian and White Stone Beads**

488 M Pl. 67

Contains beads of red carnelian, some of them gold capped, and of white stone, found in Tomb 18

(Trench XIV D). All the red carnelian beads are well polished. Some have a long double-conoid shape with gold caps at the ends, and others are globular. The white stone beads have a cylindrical tube shape with a large central suspension hole.

**260 Necklace of Red Carnelian Beads with Red Carnelian and Whitish Stone Pendants**

477 M Pl. 67

Found in Tomb 19 (Trench XIV F). Some of the beads, made from lighter shades of red carnelian, are olive shaped, well finished, and polished, with a lengthwise suspension hole; others are globular, also with a well-polished surface. However, the majority of the beads are thick circular disks with convex sides, in various sizes, on the whole neither well finished nor polished, with some examples very roughly cut. The largest pendant, of whitish stone, is triangular with rather uneven sides and a suspension hole near the top of the triangle. A second pendant, also from whitish stone, is pear shaped and smaller, with a suspension hole near the neck. A third, very small pendant has a rather flat conical shape, with a suspension hole near the base of the cone. The two remaining pendants are made from light brownish carnelian. One, shaped like an anchor, has connected double-ribbed wings, the lower wings much thicker and heavier than the upper wings. A suspension hole runs vertically from top to bottom between the wings of the anchor. This pendant is very well finished and polished. The second red carnelian pendant has a flat, thick, rectangular disk shape with a large stand at the base. The rectangular shape is divided vertically into two parts by a very smooth, low, wide groove down the center, and a suspension hole is cut through a superfluous knob at the top of the pendant.

**261 Necklace of Red Carnelian Beads and Black Stone Pendant**

1408 M Pl. 67

Found in Tomb 44 (Trench XX M). Some of the red carnelian beads are olive shaped, graduated in size, with a lengthwise suspension hole. Others have a rather flat, thick disk shape; they are also graduated in size, but are of poorer workmanship. The pendant, of black stone with white spots, is a tapering rectangle with a truncated top pierced by a suspension hole.

**262 Necklace of Red Carnelian Beads with Agate and Red Carnelian Pendants**

1073 M Pl. 67

Found in Tomb 16 (Trench XIII F). Some of the beads have an elongated narrow olive shape and are well cut and polished, with a lengthwise suspension hole; others are perfect spheres in much darker shades of red carnelian, also well cut and polished; and four beads of different sizes are five-sided with a

triangular profile truncated at the ends and a suspension hole running lengthwise near the base. Two pendants, in very light shades of carnelian, have a pointed double-oval obelisk shape, which is six-sided with a neck at the top through which a suspension hole is cut. Another pendant, made of streaky agate in shades of reddish brown and white, has a stylized broad triangular shape with a smoothly curved center and truncated points; a suspension hole runs across the pendant from side to side. The workmanship of this necklace is very fine.

**263 Necklace of Agate and Red Carnelian Beads with a Red Carnelian Pendant**

444 M Pl. 67

Found in Tomb 36 (Trench XVIII C). Some of the beads have a uniform elongated olive shape, with one bead of this type in very colorful streaky shades of dark reddish brown to white. Other beads have a circular thick disk shape with convex sides; still others are globular; and one bead has a rectangular cubic shape with a suspension hole cut through the width of the bead in the center. The pendant is elongated and conical, with a round base and a suspension hole near the top.

**264 Necklace of Red Carnelian and Glass Beads with a Large Glass Pendant**

1443 M Pl. 67

Found in Tomb 26 (Trench XVII B). Most of the red carnelian beads are globular, but two are elongated and cylindrical. The glass beads are globular or oval with black and white decoration. The glass pendant, shaped like a boomerang or broad V, is white, with solid black at the ends and at the triangular bottom.

A similar globular white glass bead with black decoration can be seen on a necklace in the Cyprus Museum of unknown provenance,<sup>91</sup> and other examples of this type of bead are in the Shoshin Collection in Japan.<sup>92</sup>

## SILVER CHAIN (265)

A silver chain that may have been a bracelet, armlet, or necklace was found in Tomb 36, which contained a wide variety of jewelry and other precious objects.

**265 Silver Chain**

373 M Pl. 68

Broken into two pieces, originally about 44.0 cm long, found in Tomb 36 (Trench XVIII C). It is beautifully made in finely woven sextant herringbone bands. The ends are bound by silver wire, with a rather thick closed loop attached at one end and an elongated trapezoid hook loop at the other.

A closely similar silver chain with loops for fastening was found at Sialk Cemetery B.<sup>93</sup> A gold chain bracelet, similar in technique and connecting points, was found at Seven Brothers in Kuban; it is dated by Rostovtzeff to the fifth to fourth centuries B.C. The ends of this gold chain are decorated by snake heads,<sup>94</sup> and its technique and composition suggest Marlik influence.

## NECKLACES AND PENDANTS MADE OF BRONZE (266–276)

### BRONZE NECKLACES (266–268)

Only three bronze necklaces were found at Marlik, all in the same tomb (Tomb 36).

**266 Bronze Necklace**

1450 M Pl. 68

Contains circular band-shaped bronze beads of various sizes, together with a flat disk pendant with an embossed knob in the center circled by two rows of smaller knobs, found in Tomb 36 (Trench XVIII C). A suspension loop is located at the top of the pendant.

The pendant of this necklace is very similar to many embossed disk pendants in gold found at Marlik (see, e.g., 165).

**267 Bronze Necklace**

1449 M Pl. 68

Contains many circular band-shaped beads, two elongated barrel-shaped beads, and a long, thick stick pendant with a suspension hole near one end, found in Tomb 36 (Trench XVIII C).

**268 Bronze Necklace**

1448 M Pl. 68

Contains pear-shaped beads with elongated solid bronze necks pierced by suspension holes, small barrel-shaped beads, and two pendants, found in Tomb 36 (Trench XVIII C). One of the pendants consists of a broken crescent with an added suspension part on the back, and the other is a small plain disk with a suspension loop on top.

### BRONZE PENDANTS (269–276)

Twelve bronze pendants were found at Marlik, in a variety of shapes and workmanship.

**269 Bronze Pendant**

634 M Pl. 68

About 5.0 cm long and 3.4 cm in diameter, found in Tomb 6 (Trench X A<sup>+</sup>). It has the form of a medallion consisting of a thick, almost circular band

of bronze with carination on both sides. The pendant is divided vertically by a double row of thick wire, each wire ending in a projecting knob at the top and bottom, and horizontally by elongated pear-shaped loops formed by thick bronze bars ending in circular knobs at the outside edge of the medallion circle. At the top of the pendant is a vertical suspension hook.

#### 270 Bronze Pendant

1018 M Pl. 68

About 6.5 cm long, now covered in rust, found in Tomb 6 (Trench X A<sup>+</sup>). It is another, more elaborately decorated medallion made of a thick brass bar formed into a circle that is divided vertically and horizontally into four sections by two thick bands decorated with herringbone patterns. The cross-point at the center of the medallion is decorated by a projecting round knob. The horizontal crossbars have pointed round ends that extend beyond the edges of the medallion circle. The vertical band, surrounded by thick bands above and below the circle, ends in a quadruple pointed knob at the bottom and a suspension loop at the top of the pendant. Three of the quarter sections of the medallion are filled with crescents formed of three parallel joined wires; the fourth crescent is missing.

#### 271 Bronze Pendant

433 M Pl. 68

About 2.5 cm in diameter, now covered by rust, found in Tomb 36 (Trench XVIII C). It is made from a circular piece of sheet bronze, and contains a large central embossed knob circled by a row of smaller knobs. A suspension loop is formed by a curled tang at the top.

Many similar pendants in gold were found at Marlik, including 186-189.

#### 272 Bronze Pendant

1460 M Pl. 69

Solid bronze, about 2.3 cm long and covered with a thick coat of rust, found in Tomb 36 (Trench XVIII C). It is pear shaped with a flat base and long neck, which is pierced by a suspension hole and ends in an outward thick rim at the top.

#### 273 Bronze Pendants

408a M Pl. 69

Three pendants, all heavily rusted, found in Tomb 47 (Trench XXII E). The smaller of these measures about 3.5 cm long and is pear shaped. The two larger pendants, each measuring approximately 6.0 cm long, have large conical heads with parallel spaced encircling bands that taper to a rounded end. Suspension holes pierce the pendants below the head.

#### 274 Bronze Pendant

415 M Pl. 69

Solid bronze, about 4.0 cm long, found in Tomb 36 (Trench XVIII C). It has an elongated pear or jar shape, with a narrow vertical neck and a suspension

loop near the top. Like the other examples, it is heavily rusted.

#### 275 Bronze Pendant

939 M Pl. 69

Solid bronze, about 3.5 cm long, found in Gheshlagh. Like the other examples, it is pear shaped, with a rather long neck pierced near the middle by a suspension hole, and is heavily rusted.

#### 276 Bronze Pendants

1457 M Pl. 69

Three pendants, each about 2.5 cm long and heavily rusted, found in Tomb 36 (Trench XVIII C). Each of the pendants is crescent shaped, with a trident bar hanging in the middle and a suspension loop on the back.

## NECKLACES AND PENDANTS MADE OF OTHER MATERIALS (277-309)

### AGATE

Several necklaces incorporating agate beads or pendants in combination with gold and/or red carnelian were found at Marlik. These include 211, 214-216, 256, and 262-263.

### WHITE STONE

White stone beads and pendants occur in combination with red carnelian in several necklaces found at Marlik (see 259 and 260).

### TRANSPARENT STONE (277)

#### 277 Necklace and Pendant of Transparent Stone

1435 M Pl. 69

Contains beads and a pendant made of a mineral that is semitransparent and looks very like glass, found in Tomb 50 (Trench XXI K). The beads, of various sizes, are globular with some irregularities. The pendant is somewhat conical, with irregular sides and a suspension hole near the top.

Transparent stone beads also occur in necklaces incorporating other materials. Those discussed in a previous section of this chapter include 256-258.

### HEMATITE (278)

#### 278 Necklace of Hematite Beads

481 M Pl. 69

Contains almost shapeless pieces of well-polished

hematite of various sizes, each with a suspension hole cut at one end, found in Tomb 19 (Trench XIV F).

### *BLACK STONE (279–280)*

In addition to the examples discussed below, a black stone pendant occurs in **261**.

#### **279 Black Stone Pendant**

374 M Pl. 70

About 3.0 cm high, found in Tomb 36 (Trench XVIII C). It has a cubic shape, with a projecting suspension knob on top.

#### **280 Black Stone Pendant**

426 M Pl. 70

About 2.0 cm high, found in Tomb 36 (Trench XVIII C). It is pear shaped, with a suspension hole near the top.

### *BLACK MATERIAL (281–282)*

#### **281 Black Material Pendant**

407a M Pl. 70

Found in association with 294 in Tomb 24 (Trench XV E). It measures about 4.5 cm long and is similar in shape to **302**; however, it is plain with no surface decoration.

#### **282 Black Material Pendant**

1459 M Pl. 70

About 2.5 cm long, found in Tomb 23 (Trench XV D). It is made from a black material, which may be natural bitumen mixed with other substances, and is cracked all over. The pendant is jar shaped, with a flat-based round bottom and a very thick long neck tapering inward toward the top, which is pierced by a suspension hole.

Beads of a similar black material are found in **217**, which also includes gold beads.

### *GLASS OR GLAZED BEADS (283–287)*

Some necklaces of black and white glass or glazed beads were found at Marlik that in a limited way repeat the shapes of beads in other materials. Most commonly, these beads are barrel shaped with roughly parallel black bands encircling the white beads, but spherical and olive-shaped beads also occur, sometimes with almost straight, solid black bands. These necklaces of glass beads were concentrated in Tombs 26 and 47, with a single necklace combining glass and red carnelian beads (**264**) found in Tomb 26.

#### **283 Necklace of Glass Beads**

70 M Pl. 70

Contains barrel-shaped white glass beads circled with irregular black lines, found in Tomb 26 (Trench XVII B). The centerpiece is a larger bead with black circles or dots of various sizes scattered over the surface.

#### **284 Necklace of Glass Beads**

25 M Pl. 70

Found in Tomb 26 (Trench XVII B). It contains black and white glass beads similar to those of **283**, combined with a large, flat oval centerpiece bead, which is encircled by almost parallel black bands of uneven thickness.

#### **285 Necklace of Glass Beads**

784 M Pl. 70

Contains barrel-shaped beads with a fine decoration of parallel wavy black lines, found in Tomb 47 (Trench XXII E).

#### **286 Necklace of Glass Beads**

785 M Pl. 70

Contains fine barrel-shaped glass beads with a glossy surface, found in Tomb 47 (Trench XXII E). The wavy black lines on some of the beads form a stylized herringbone pattern.

#### **287 Necklaces of Glass Beads**

1431 M and 1432 M Pl. 70

Two necklaces, containing spherical glass beads of various sizes, found in Tomb 47 (Trench XXII E). A broad white band encircles the middle of the beads with solid black bands on either side.

### *FRIT, GYPSUM, AND LIME (288–305)*

Several necklaces and pendants of frit, whitish limestone, and gypsum were found at Marlik. The surface glaze is well preserved on some of the frit beads, but quite deteriorated on others. The limestone and gypsum beads are also decayed, with some examples badly powdered on the surface. All these beads were made in a wide variety of shapes, some of which repeat the shapes of beads of more precious materials, such as the quadruple-spiral or butterfly beads commonly found in gold. The most elaborate of these beads have an animal shape.

#### **FRIT (288–296)**

In addition to the examples discussed below, frit beads also occur in **206** in combination with a gold pomegranate cluster pendant.

**288 Necklace of Frit Beads**

130a M Pl. 71

Found in Tomb 32 (Trench XVII E). It is composed of cylindrical beads with an incised decoration of parallel zigzag bands, bordered by an incised band at each end. The centerpiece is a large spool bead with thick parallel rings.

A number of loose frit beads having similar geometric decoration were found in association with this necklace. These may have served as cylinder seals and are discussed in Chapter 8. A similar type of cylindrical bead was found at Manilbak in Delfan, southern Iran.<sup>95</sup>

**289 Necklace of Frit Beads**

1437 M Pl. 71

Contains flat circular disk beads of faded brown with dentation on the edges, found in Tomb 32 (Trench XVII E).

**290 Necklace of Frit Beads**

132 M Fig. 15; Pl. 71

Contains some flat, circular disk-shaped beads, with a majority of the beads in a stylized ram shape, found in Tomb 47 (Trench XXII E). The body of the animal is composed of geometricized triangular blocks; the eyes are large, round holes; and stylized horns encircle each side of the bead with their tips pointing forward. The glaze on the surface of these beads is deteriorated and partly pulverized.

**291 Necklace of Frit Beads**

1444 M Pl. 71

Contains four ram-shaped beads along with many small disk-shaped beads, found in Tomb 40 (Trench XVIII N).

**292 Necklace of Frit Beads**

544 M Pl. 71

Contains lentoid beads with parallel vertical-ribbed decoration, found in Tomb 50 (Trench XXI L). This decoration extends around some beads lengthwise from one suspension hole to the other, but on others it only occurs on part of the bead around the edge.

Similar beads with dentation at the edge were found Tchila-Khane in Iranian Talish, dated by Schaeffer to Talyche Recent 2, around 1450–1350 B.C.<sup>96</sup>; at Minet-el-Beida, Ras Shamra, dated by Schaeffer to the fourteenth to thirteenth centuries B.C.<sup>97</sup>; and in Giyan Level I, dated by Contenau and Ghirshman to 1400–1000 B.C.<sup>98</sup>

**293 Necklace of Frit Beads**

117 M Pl. 72

Found in Tomb 27 (Trench XVII D). It contains beads with ribbed decoration similar to those of **292**, along with other vertically ribbed or dentated beads. Some of the beads are barrel shaped with vertical ribbing from one side to the other, and still others are circular, with one projecting band bordering each end and the middle dentated. A single bead has

a rectangular cubic shape with concave sides. The centerpiece of this necklace is a cylindrical bead with incised crosshatching bordered at each end by a line.

A similar type of circular dentated bead with a projecting border band was found at Giyan Level I, dated by Contenau and Ghirshman to 1400–1100 B.C.<sup>99</sup>

**294 Frit Pendant**

407b M not illustrated

Found in Tomb 24 (Trench XV E) in association with **281**. It measures about 3.0 cm long and is similar in shape to **302**, but has no surface decoration.

**295 Necklace of Frit and Lime Beads**

1441 M not illustrated

Composed of small disk-shaped frit and lime beads with fairly regular edges, found in Tomb 40 (Trench XVIII N).

**296 Necklace of Frit, Lime, and Clay Beads and Pendant**

1440 M Pl. 72

Found in Tomb 40 (Trench XVIII N). It contains many small disk-shaped beads of lime and clay, along with olive-shaped beads, several quadruple-spiral beads of frit, and a pear-shaped pendant. The quadruple-spiral beads have a pair of double concentric circles incised or impressed on each side of a lengthwise projecting band housing the suspension hole, a copy in frit of the gold quadruple-spiral beads found in several Marlik necklaces including **162**, **163**, and **212**. The elongated pear-shaped pendant has a suspension hole through the neck.

**GYPSUM (297–302)****297 Necklace of Gypsum Beads**

1442 M Pl. 72

Contains various sizes of rectangular cubic beads, some with concave sides, and a single elongated barrel-shaped bead with vertical-ribbed decoration, found in Tomb 40 (Trench XVIII N).

**298 Necklace of Gypsum Beads**

574 M Pl. 72

Contains gypsum beads as well as several centerpieces, found in Tomb 27 (Trench XVII D). Some of the beads are circular with a dentated middle and projecting bands at each end, similar to the beads of **293**, and others are small and irregular. The centerpieces are long and cylindrical in shape with cross-parallel lines forming a checkered design similar to a corncob pattern.

**299 Necklace of Gypsum Beads**

1445 M Pl. 72

Contains several rectangular cubic beads along with irregularly shaped pendant beads having

suspension holes through one end, found in Tomb 45 (Trench XXII G).

### 300 Necklace of Gypsum Beads

1446 M Pl. 72

Several partly broken pendant beads of gypsum, found in Tomb 40 (Trench XVIII N). The only complete one has a vertical olive shape with a large rounded base decorated by incised straight and zigzag lines with cavities cut in the upper, pointed oval shape on one side. A suspension hole pierces the pointed end of this pendant bead.

### 301 Gypsum Pendant

1458 M not illustrated

About 2.5 cm long, also found in Tomb 40 (Trench XVIII N). It is similar to the only complete bead of 300 and has an elongated oval body, pinched in below the middle, with incised V-shaped lines on the bottom and a broken cut on top. A suspension hole is located near the rather pointed top.

### 302 Gypsum Pendant

406 M Pl. 72

Solid gypsum pendant, about 5.0 cm long, found in Tomb 36 (Trench XVIII C). It has a vertically ribbed globular bottom with a long neck pierced near the top by a suspension hole. Another gypsum pendant occurs in 307.

## LIME (303–305)

### 303 Necklace of Lime Beads

1438 M Pl. 73

Found in Gheshlagh. It is composed of small irregular disk-shaped lime beads.

### 304 Necklace of Lime Beads

480 M Pl. 73

Contains many small rounded disk-shaped beads of lime along with shell and stone beads and two spherical centerpieces, found in Tomb 19 (Trench XIV F).

### 305 Necklace of Lime Beads

1179 M Pl. 73

Found in Gheshlagh. It is composed of many small fine cylindrical beads of lime.

## FIRED CLAY (306–307)

In addition to the examples discussed below, fired clay beads in a double-conoid shape occur in 218 in combination with gold beads and a gold centerpiece.

### 306 Necklaces of Fired Clay Beads

1083 M and 1077 M Pl. 74

1083 M (Fig. 145), found in Tomb 10 (Trench XI

B), and 1077 M (Fig. 146), found in Tomb 40 (Trench XVIII N). They contain olive-shaped beads of fired clay.

### 307 Necklace of Fired Clay Beads with a Gypsum Pendant

1439 M Pl. 74

Contains olive-shaped beads of fired clay and a finely made gypsum pendant in the shape of a mulberry, with a bronze suspension loop at the top, found in Tomb 44 (Trench XX M).

Pendant earrings of silver in a similar mulberry shape were found at War Kabud, Luristan and are dated by Vanden Berghe to the eighth to seventh centuries B.C.<sup>100</sup>

## SHELL AND BONE (308–309)

Shell and bone have been used to produce objects of beauty and ornament from early prehistoric times. Since shells are themselves decorative, most often the natural shape of the shell is used, with the only addition being a suspension hole cut in order to string the shells. Bone, however, is usually cut into ornamental shapes.

### 308 Shell Necklaces

573 M Pl. 74

Two shell necklaces, containing beads of natural and cut shell, found in Tomb 50 (Trench XXI L). One necklace is composed of snail shells cut through on one side to expose the spiral section, while the other side is left untouched, with the natural hole in the center used for suspension. The second necklace is formed of small shells, uncut except for some suspension holes.

A similar type of snail shell necklace was found in Sialk Cemetery B.<sup>101</sup>

### 309 Shell and Bone Necklaces

1455 M, 1416 M, 1419 M, 1411 M, 1451 M, 1456 M, and 1424 M Pl. 75

The following necklaces contain beads of shell and bone, often combined: 1455 M (Fig. 156), found in Gheshlagh; 1416 M (Fig. 157) and 1419 M (Fig. 158), both found in Tomb 5 (Trench VIII D); 1411 M (Fig. 159), found in Tomb 52 (Trench XXIII G); 1451 M (Fig. 160), found in Tomb 40 (Trench XVIII N); 1456 M (Fig. 161), found in Tomb 5 (Trench VIII D); and 1424 M (Fig. 162), found in Tomb 14 (Trench XIII B). 1455 M contains natural shell beads with suspension holes, and examples of this type of bead also appear in 1416 M, 1419 M, 1411 M, and 1451 M. 1451 M contains, in addition to the natural shell beads, cut shell and cut bone beads. Flat, disk-shaped cut bone beads appear in 1411 M and 1456 M, and ring-shaped bone beads in 1424 M and 1416 M. Cylindrical tube-shaped bone beads appear in

1416 M, 1411 M, and 1451 M. The latter also has some olive and biconoid bone beads. 1451 M has a ram-shaped pendant of soft lime with large stylized horns, similar to the ram-shaped beads of 290 and 291.

## SEPARATE BEADS (310-343)

### *CENTERPIECES AND SPACER BEADS* (310-321)

The majority of the centerpieces and spacer beads are made of gold. However, several examples of decorative center beads made of agate with gold caps were also found, as were two of a black material.

### GOLD CENTERPIECES AND SPACER BEADS (310-318)

#### **310 Gold and Black Centerpiece with Granulation**

22 M Fig. 15; Pl. 76

About 3.0 cm long, found in Tomb 26 (Trench XVII B). It consists of a cylindrical tube of sheet gold filled with natural bitumen. Parallel files of gold balls in chevron patterns decorate the surface. At one end of the centerpiece is a double-twisted four-sided gold bar and at the other, a projecting round band formed by rolling the metal.

#### **311 Gold Centerpiece with Granulation**

296 M Pl. 76

About 6.0 cm long, found in Tomb 32 (Trench XVII E). It consists of a cylindrical tube of sheet gold, slightly tapering outward toward each end, filled with natural bitumen. Each end has a gold cap with a long, narrow suspension tube in the center reinforced at the rim by rolling the metal outward. The edge is decorated by slanting parallel impressed lines giving a twisted-bar appearance. At each end of the centerpiece near the gold cap is a single file of small gold balls from which equally spaced elongated triangles, formed of eight gold balls each, point inward. The remaining surface is covered by widely spaced files of triangles formed of three small gold balls.

#### **312 Gold Centerpiece with Granulation**

1196 M Pl. 76

About 3.0 cm long, broken in the middle, found in Tomb 36 (Trench XVIII C). Like 311, it is a cylindrical tube of thin sheet gold filled with natural bitumen. At each end is a flat gold cap with a suspension hole in the center. The centerpiece is bordered at the edge by a single file of small gold balls with hanging triangular motifs of small gold balls spaced a-

round the circumference; the remaining surface is plain.

Granulation in triangular patterns also decorates the edges of 184. A bead of tubular sheet gold with gold wire around the edges and a triangular pattern of double lines of granules, made of electrum, was found in Level IV of Alalakh and is dated by Maxwell-Hyslop to the fifteenth to thirteenth centuries B.C.<sup>102</sup> Gold beads with similar triangular decoration in granulation were found at Altin Tepe, dated by an inscription of Argistis II to around 713-697 B.C.<sup>103</sup>

#### **313 Gold Centerpiece Beads**

547 M Fig. 15; Pl. 76

Two centerpieces, each about 2.6 cm long, found in Tomb 14 (Trench XIII B); one is slightly broken and damaged. They are made from thin sheet gold in an elongated barrel shape filled with natural bitumen. Lengthwise parallel ribbed decoration encircles the beads, with each separating line between two ribs decorated by an impressed dotted file band. At the ends of each centerpiece are two thick parallel projecting smooth bands.

A pair of gold beads in a long tubular shape, with parallel vertical ribbing with a single file of dotted lines between the ribs and three parallel grooves at the ends, was found at Sialk Cemetery A.<sup>104</sup> This example is dated by Maxwell-Hyslop to the twelfth to seventh centuries B.C.<sup>105</sup> A somewhat similar centerpiece is classified by Amiet as Elamite, dated to the early second millennium B.C.<sup>106</sup>

#### **314 Gold Spacer Bead**

555 M Pl. 76

Rectangular spacer bead of thin sheet gold, about 3.5 cm long and 1.5 cm wide, found in Tomb 15 (Trench XIII C). It consists of four long cylindrical tubes of gold, filled with natural bitumen, soldered side by side and bound together at each end by a wide supporting band. The tail end of each tube is turned partly over the outer edge of the bordering band, holding the centerpiece firmly together. Suspension holes pierce each of the four cylinders.

#### **315 Gold Spacer Bead**

1211a M Pl. 76

About 2.5 cm long, found in Tomb 47 (Trench XII E). It is made from sheet gold and has three long cylindrical tubes, with only one side covered by connecting plated gold.

Similar spacer beads with three tubes were found at Hissar III C,<sup>107</sup> and spacer beads with granulation were found at Altin Tepe.<sup>108</sup>

#### **316 Gold Center Bead**

450a M Pl. 76

Incomplete center bead, about 3.2 cm long, found in Tomb 23 (Trench XV D). It is made from thin sheet gold in a cylindrical tube shape and was originally filled by natural bitumen, a little of which



remains. The surface is decorated by parallel vertical and horizontal impressed lines crossing each other to form a rectangular checkered pattern.

### 317 Gold Center Bead

556a M Pl. 76

Cylindrical bead, about 3.9 cm long, found in Tomb 15 (Trench XIII C). It is made of thin sheet gold and is decorated by parallel impressed vertical and horizontal lines that cross each other at right angles to produce a rectangular checkered pattern. The bead is slightly flanged at the ends, forming a projecting ring that is reinforced at the edge by rolling inward. Similar decoration appears on 217 and 316.

### 318 Gold Center Bead

67 M Pl. 77

Plain center bead with damaged surface, about 2.5 cm long, found in Tomb 26 (Trench XVII B). It is made from thin sheet gold in a cylindrical tube shape filled with natural bitumen. A gold cap with a wide overlapping brim covers each end of the bead.

## GOLD-CAPPED AGATE CENTER BEADS (319–320)

### 319 Gold-Capped Agate Center Bead

1070 M Pl. 77

Agate center bead, with wide streaks of brown and white, about 3.8 cm long, found in Tomb 2 (Trench VI B<sup>+</sup>). It has a cylindrical shape, tapering toward the ends, which are covered by wide gold caps crowned by a hollow neck with an outward rim.

### 320 Gold-Capped Agate Center Bead

1069 M Pl. 77

Agate center bead in shades from white to dark brown, about 4.0 cm long and 2.3 cm wide, found in Tomb 2 (Trench VI B<sup>+</sup>). It has a broad gold cap at each end with a rolled ring band at the border encircled by a single file of small gold balls. Attached to this granulated band is a row of hanging triangles pointing outward, made up of many small gold balls. The decoration of this colorful center bead is extraordinarily fine.

The triangular granulation decoration of this center bead is similar to that of 184, 311, and 312. A similar bead with a plain gold band at each end found at Ur is classified by Maxwell-Hyslop to the Sargonid period, about 2370–2200 B.C.<sup>109</sup> A similar centerpiece with gold caps at each end appears in a necklace assigned by Maxwell-Hyslop to the Third Dynasty of Ur,<sup>110</sup> and she suggests that this type of bead continued to be used through the First Dynasty of Babylon and into the Kassite period. A later example of similar bobbin-shaped agate beads used as

centerpieces appears in a necklace in the Cyprus Museum dated by Pierides to the seventh to sixth centuries B.C.<sup>111</sup> This example features gold mounting decorated with similar triangular patterns in granulation along with more detailed decoration.

## CENTER BEADS OF BLACK MATERIAL (321)

### 321 Black Gold-Capped Center Beads

300 M and 301 M Pl. 77

Two center beads, 300 M, about 7.0 cm long, and 301 M, about 6.5 cm long, both found in Tomb 32 (Trench XVII E). They are made in a lozenge shape from a black material, possibly natural bitumen mixed with other substances, which is badly deteriorated and cracked. Both beads have gold caps at the ends, with wide brims crowned by long, narrow tube necks with outward rims at the top through which the suspension holes run. The caps are decorated at the shoulders and ends by a twisted narrow four-sided gold wire band.

## LOOSE NECKLACE BEADS (322–343)

Many individual beads were found in the Marlik tombs, some of them in sufficient numbers that they could be strung together to form a necklace. However, because they were not found in an orderly pattern suggesting a necklace during excavation and their arrangement was obscure, they are listed here as loose beads. These loose beads occur in a variety of materials, including gold, carnelian, frit, and clay, and in a variety of shapes, which for the most part repeat the shapes of the beads found in the complete necklaces. Some of the most elaborate beads have an animal head or pomegranate shape, but others are more simple geometric forms.

## GOLD ANIMAL HEAD BEADS (322–325)

### 322 Gold Lion Head Bead

375 M Pl. 77

Bead or pendant, about 3.6 cm long, found in Tomb 36 (Trench XVIII C). It is made from thin sheet gold in repoussé. The bead is hollow inside and filled with natural bitumen. The lion head is round with a rather flat muzzle and a fierce wide-open mouth. The nostrils are shallow round depressions on each side of the straight projecting nose bone, which extends from forehead to upper lip. Whiskers and muscles on the muzzle are indicated by slightly projecting lines, the eyes are almost circular im-

pressed shallow holes, and the ears are oval depressions. The eyebrows and forehead are almost parallel slightly projecting wavy lines. A projecting ring of muscle separates the muzzle from the head, and the mane is indicated by impressed circles with a dot in the center. At the end of the neck the metal is turned inward to form a soft rim, and a suspension loop is attached.

### 323 Gold Lion Head Beads

1200a M Pl. 77

Four hollow gold necklace beads in the shape of lion heads, each about 2.0 cm long, found in Tomb 41 (Trench XIX K). They are made from very thin sheet gold hammered out in repoussé and filled with natural bitumen. Although the lion heads are very small, the features are clearly shown. The round head has a wide round muzzle, round eyes, small lines indicating facial hair, and a thick band at the brow separating the head from the neck. This band is decorated by small straight short lines and round depressions. The round neck is finished with a bronze suspension loop.

Similar animal head beads of gold with a suspension loop are dated by Moorey to the early first millennium B.C.<sup>112</sup>

### 324 Gold Lion and Mountain Goat Head Beads

1195 M Pl. 77

Gold necklace beads, each about 2.0 cm long, found in Tomb 32 (Trench XVII E). Nine of these are lion heads, made of very thin gold sheet, hammered out in repoussé and then filled with natural bitumen. They are very similar to 323.

The mountain goat head beads are each formed of a gold sheath filled with a black pigment, possibly natural bitumen mixed with soil. Most of the beads are deformed, but several that are fairly well preserved show a long round head with a wide round muzzle, oval eyes indicated by dotted lines, horns as projecting curved bands on the head, and more bands of parallel dotted lines encircling the neck. Parallel straight lines appear on both sides of the muzzle and above the eyes. A bronze suspension loop is attached to the open neck end.

### 325 Gold Lion Head Beads

127 M not illustrated

Hollow gold beads, each about 1.5 cm long, found in Tomb 27 (Trench XVII D). They are made of sheet gold hammered out in repoussé and filled with natural bitumen mixed with other materials. The lion heads are round with very flat muzzles, projecting circular rings for eyes, and other projecting soft areas and lines representing various parts of the face, forehead, and neck. A gold suspension loop is fastened at the neck edge.

## GOLD POMEGRANATE BEADS (326–327)

Many gold pomegranate beads were found in the Marlik tombs, often broken and incomplete. They are made from thin sheet gold and have a globular body formed of two halves joined together with an attached truncated conical crown or neck, which is topped with a suspension loop. This complicated construction makes them particularly fragile.

### 326 Gold Pomegranate Beads

302 M and 303 M not illustrated

Gold pomegranate beads 302 M (Fig. 183) and 303 M (Fig. 184), found in two groups in Tomb 32 (Trench XVII E). 302 M consists of three beads, each approximately 1.5 cm in diameter, and 303 M of three beads, each about 1.0 cm in diameter. All of the beads were incomplete when found.

### 327 Gold Pomegranate Beads

445 M, 1479 M, 124 M, and 1201a M Pl. 78

The following gold pomegranate beads share a common shape and workmanship:

445 M, five examples, each about 1.8 cm in diameter, Tomb 36 (Trench XVIII C);

1479 M, one example, 2.0 cm long, Tomb 36 (Trench XVIII C);

124 M, ten examples, 2.0 cm long, Tomb 27 (Trench XVII D);

1201a M, two examples, each about 2.0 cm long, Tomb 5 (Trench VIII D).

Gold pomegranate beads or clusters also appear in 163-165, 170-176, 204-206, 210, and 360-362.

## OTHER GOLD BEADS (328–337)

### 328 Gold Quadruple-Spiral Beads

441 M and 1199b M Fig. 15; Pl. 78

Two gold quadruple-spiral beads, 441 M (Pl. 78), about 1.3 cm long with one spiral broken and missing, and 1199b M, about 1.4 cm long, found in Tomb 36 (Trench XVIII C). On each side of a central suspension tube are two spirals of gold wire, with one end of the wire fastened around the tube.

Similar quadruple-spiral beads also appear in 162, 163, 206, 212, and 296.

### 329 Gold Vertical-Ribbed Beads

556b M and 319a M Pl. 78

Gold beads 556b M and 319a M are round vertical-ribbed beads with slight differences in decoration. 556b M, found in Tomb 15 (Trench XIII C) and measuring approximately 1.0 cm in diameter, has a vertical-ribbed decoration bordered at the top and bottom by a projecting narrow band and edged by a

plain polished wide band with a central suspension hole. 319*a* M, found in Tomb 47 (Trench XXI E) and also measuring about 1.0 cm in diameter, is simpler in design, with vertical-ribbed decoration covering the whole surface.

Vertical-ribbed beads were rather common at Marlik; examples include 160, 292, 293, 297, and 298.

### 330 Gold Four-Sided Beads

319*b* M and 1201*b* M Pl. 78

Gold beads 319*b* M (Fig. 180) and 1201*b* M are four-sided with tapering ends encircled by a ring. 319*b* M measures approximately 1.5 cm long and was found in Tomb 47 (Trench XXI E), and 1201*b* M, which consists of seven examples, each measuring about 1.2 cm long, was found in Tomb 5 (Trench VIII D). Similar beads appear in 159, 166, 167, 204, 217, 293, and 297.

### 331 Gold Flat Discoid Beads

1192*a* M, 549 M, and 1211*b* M Pl. 78

The following gold beads have a flat disk shape and are made from two sheets of gold with a central tubular suspension hole:

1192*a* M, one example, about 1.9 cm in diameter, Tomb 10 (Trench XI B);

549 M, two examples, each about 1.9 cm in diameter, Tomb 23 (Trench XV D);

1211*b* M, two examples, each about 1.6 cm in diameter, Tomb 47 (Trench XXII E).

Flat double-folded disk beads can also be seen in 160.

### 332 Gold Cylindrical Spiral Beads

1192*b* M and 450*b* M Pl. 78

Gold beads 1192*b* M and 450*b* M are cylindrical spirals of gold wire. 1192*b* M consists of three beads, the largest about 1.5 cm long, found in Tomb 10 (Trench XI B), and 450*b* M consists of one bead about 1.8 cm long, found in Tomb 23 (Trench XV D).

Although this was not a particularly common type of bead at Marlik, similar examples in gold can be seen in 160 and 211 and of bronze in 267. A similar type of cylindrical spiral gold bead was found at Vadjalik, Iran.<sup>113</sup>

### 333 Gold Globular Beads

319*c* M, 27 M, 69 M, 1206*a* M, and 128*a* M Pl. 78

The following gold beads have a simple hollow globular shape:

319*c* M, two examples, each about 1.0 cm in diameter, Tomb 47 (Trench XXI E);

27 M, four examples, each about 1.0 cm in diameter, Tomb 26 (Trench XVII B);

69 M, three examples, each about 0.8 cm in diameter, Tomb 26 (Trench XVII B);

1206*a* M, five examples, each about 1.0 cm in diameter, Tomb 52 (Trench XXIII G);

128*a* M, one example, about 1.0 cm in diameter,

Tomb 27 (Trench XVII D).

Globular beads were very common at Marlik and were made of gold, red carnelian, frit, and fired clay.

### 334 Gold Wide Ring-Shaped Beads

1192*c* M and 1211*c* M Pl. 78

Gold beads 1192*c* M and 1211*c* M have a flat, wide ring shape, which is unusual at Marlik. 1192*c* M measures about 1.2 cm in diameter and was found in Tomb 10 (Trench XI B), and 1211*c* M measures about 0.8 cm in diameter and was found in Tomb 47 (Trench XXII E).

### 335 Gold Olive-Shaped Beads

128*b* M, 1211*d* M, and 1201*c* M Pl. 79

The following gold beads have a simple olive or oval shape:

128*b* M, five examples, each about 1.5 cm in diameter, Tomb 27 (Trench XVII D);

1211*d* M, nine examples, each about 1.0 cm long, Tomb 47 (Trench XXII E);

1201*c* M, 22 examples, each about 1.0 cm long, Tomb 5 (Trench VIII D).

This type of bead, found throughout the ancient world, was very common at Marlik.

### 336 Gold Truncated Conical Beads

137 M and 1199*c* M Pl. 79

Gold beads 137 M and 1199*c* M have a truncated conical tube shape and are made from thin sheet gold. 137 M consists of forty beads (not all represented in Fig. 202), each about 0.6 cm long, found in Tomb 32 (Trench XVII E), and 1199*c* M consists of five beads, each about 0.6 cm long, found in Tomb 36 (Trench XVIII C).

### 337 Gold Three-Ring Reel Beads

1206*b* M Pl. 79

These thirty gold beads, each about 0.7 cm long, found in Tomb 52 (Trench XXIII G), have a three-ring reel shape. Few others of this type were found at Marlik.

## RED CARNELIAN BEADS (338–339)

### 338 Red Carnelian Beads

24 M Pl. 80

Eight red carnelian beads, the largest about 3.0 cm long, found in Tomb 26 (Trench XVII B). These are cut in several shapes. Some are oval or biconical with a sextant cut, vertical slightly concave segments, and vertical suspension holes. Two of the beads have a circular disk shape with convex sides and a well-polished surface, and three have a simple barrel shape.

Similar oval or biconical red carnelian beads appear in 219 and 220. Disk-shaped and barrel-shaped red carnelian beads appear in many Marlik necklaces.

**339 Red Carnelian Beads**

1476 M Pl. 80

Five spacer beads, the largest about 2.0 cm wide, found in Tomb 16 (Trench XIII F). Three of the beads, in a rectangular flat disk shape, are well cut and polished, with five parallel suspension holes, equally spaced, piercing the beads lengthwise for use in a five-stringed necklace. The other two beads, flat with deeply concave sides, are also well cut and polished. They have lengthwise suspension holes for use in a two-stringed necklace.

**GLASS, FRIT, CLAY, AND AGATE BEADS (340–343)****340 Glass Frit Bead**

1477 M Pl. 80

Cylindrical bead, with a glassy surface, about 1.5 cm in diameter, found in Tomb 36 (Trench XVIII C). It is white, with a wide encircling black band at each end and a zigzag black band between. Similar glass frit beads appear in 283–285.

**341 Frit Beads**

135 M Pl. 80

Each about 1.5 cm in diameter, found in Tomb 32 (Trench XVII E). They are made of glazed frit, with the glaze almost totally deteriorated. The beads are globular with a central suspension hole and have an

orderly pattern of sparsely projecting circular knobs with convex tops covering the entire surface of the bead.

**342 Fired Clay Beads**

1478 M Pl. 80

Two large oval fired-clay beads, each about 1.4 cm long, with three very small round ring beads, found in Tomb 14 (Trench XIII B).

**343 Agate Bead (Cat's eye)**

484 M Pl. 80

Round bead, about 3.0 cm in diameter, found in Tomb 19 (Trench XIV F). It is thicker in the middle, brown at the center, and is surrounded by a circle of white, which resembles an eye. A very slight engraved line encircles the middle of the white part, and a suspension hole is drilled through the center of the stone.

Similar cat's-eye beads in the British Museum are assigned to the Sargonid and Third Dynasty of Ur periods by Maxwell-Hyslop,<sup>114</sup> and a similar stone from Nuzi, Temple A, Hurrian period, is dated by Eliot to around 1475 B.C.<sup>115</sup> A similar eye-shaped colored stone found in the Assyrian tombs of Mari is dated by Parrot to the fourteenth to thirteenth centuries B.C.<sup>116</sup> Another similar example is a centerpiece of a necklace in the Tehran Museum, said to be from Ziyiye and dated by Ghirshman to the seventh century B.C.<sup>117</sup> Another example of this type of stone was found at Tepe Hissar, Level III C.<sup>118</sup>

*Bracelets and Armlets (344–359)*

A number of bracelets and armlets of gold, silver, and bronze were found in the Marlik tombs, some rather plain and others much more highly decorated. Most of these bracelets consist of an open loop of metal that fits around the wrist or arm. In its most elaborate form this type of bracelet is composed of two hollow curving pieces that fit over each other to make a join in the middle of the loop and are decorated at the ends by animal head finials.

**ANIMAL HEAD BRACELETS (344–348)****344 Gold Bracelet with Lion Head Finials**

357 M Fig. 15; Pl. 81, Color Plate XXVII C

About 7.3 cm in diameter, found in Tomb 36 (Trench XVIII C). It is made from thin sheet gold, deformed and damaged on some parts, and is hollow and filled with natural bitumen. It consists of two pieces connected in the middle and adorned at each

end by a round lion head with an almost flat muzzle and a fiercely open mouth in which separately made fangs are mounted. Details of muscles, hair, and whiskers are indicated by lines and dots. The eyes are circular cavities, with a sharp line surrounded by an impressed file of small circles for eyelashes. The muscles encircling the face and separating it from the neck are shown by a rather thick projecting band in which the ears are indicated by large round impressed cavities surrounded by a flat band with an impressed file of circles. A single file of small impressed circles on the wide band represents the mane. The junction between the round neck and bracelet is covered by two double-twisted four-sided bars, together forming a thick herringbone band. The connection join of the two bracelet sections is also decorated by a double-twisted bar, with the overlapping loose tangs of the larger section left partly curled.

Animal head bracelets, particularly lion head bracelets, have been found in many places in the

Near and Middle East. A bronze bracelet with two lion heads in plated gold is attributed to northern Iran with a suggested date of the thirteenth century B.C.<sup>119</sup> A similar bracelet from Ghalekuti I, Tomb No. 5, of Dailaman is given a suggested date of Bronze Age I,<sup>120</sup> and another found at Agha Evlar is assigned by Schaeffer to Talyche Fer I, with a suggested date of about 1200–1000 B.C.<sup>121</sup> Pudolco discusses several armlets of similar composition found in different regions that are later in date, around the eighth to fifth centuries B.C.<sup>122</sup> A similar bracelet with lion heads from Ziwiye is dated by Porada to the eighth to seventh centuries B.C.,<sup>123</sup> and another bracelet of this type is dated by Bossert to the seventh to sixth centuries B.C.<sup>124</sup> Bracelets with animal heads at each end are worn on an Esarhaddon (681–669 B.C.) relief of the South West Palace at Nimrud,<sup>125</sup> on Ashurbanipal (669–633 B.C.) reliefs of Room C at Nineveh,<sup>126</sup> on an Ashurnasirpal II (884–859 B.C.)<sup>127</sup> relief, and on an alabaster relief from the Palace of Ashurnasirpal II at Nimrud.<sup>128</sup> A similar lion head bracelet attributed to Ziwiye is dated to the eighth to seventh centuries B.C. by Kantor, who discusses the continuation of this type of bracelet in the Median and Achaemenian periods and its representation on the relief of Persepolis in the Scythian gift to the Achaemenian kings.<sup>129</sup>

Bracelets with animal head finials are discussed in detail by Maxwell-Hyslop, who cites examples in gold, silver, and bronze, including bracelets assigned to Karmir Blur, Amlash, Agha Evlar, Pasargadae, Assyria, Zahleh, and Lebanon, along with others of unknown provenance. She suggests that these examples date to between the late second and first half of the first millennium B.C.<sup>130</sup>

Bracelets with more stylized workmanship, which are later in date, include a gold Achaemenian bracelet from Susa II<sup>131</sup>; a bracelet found at Kourion, Cyprus, from an unknown site, dated by Bossert to the fifth century B.C.<sup>132</sup>; another from Cyprus attributed by Pierides to the Cypro-Classic I period (475–400 B.C.)<sup>133</sup>; one in the Bröckelschen Collection attributed to the Median period by Calmeyer<sup>134</sup>; another in the Oxus Treasure, dated by Dalton to the fourth century B.C.<sup>135</sup>; and one in the Adam Collection dated to the late Achaemenian period by Moorey, who suggests that the Achaemenian craftsmen owed much to a tradition that may be traced back to Marlik.<sup>136</sup> Gold animal head bracelets from various archaeological sites are also discussed by Amandry<sup>137</sup> and Vanden Berghe.<sup>138</sup>

This brief survey of examples parallel in composition and design to the Marlik bracelet (if not in detailed style and workmanship, which varied widely) suggests that this type of ornament with animal head finials was produced in a wide area of the ancient world over a long range of time, from the late second to just beyond the middle of the first millennium B.C.

However, apart from one or two examples found in Talish and Dailaman that are given a suggested date corresponding to the Marlik period, most examples are dated from the first half to about the middle of the first millennium B.C. Considering the geographic location of Talish and Dailaman (on the southern shores of the Caspian Sea within the broad area of Marlik dominance), I would suggest that the earliest examples of this type of bracelet or armlet were produced by Marlik craftsmen and that the design then spread throughout the ancient world, influencing later schools of art down into the Historic Period.

#### 345 Gold Bracelet with Horse Head Finials

608 M Pl. 81

Badly deformed gold bracelet, about 9.5 cm in diameter, found in Tomb 2 (Trench VI B<sup>+</sup>). It is made of a hollow gold sheath filled with natural bitumen, the ends of which are shaped into rather long horse heads with upright ears and a flat muzzle, with holes at the sides to indicate nostrils. Some other material, now disintegrated, had originally been inlaid on the top of the muzzle to complete the head.

Bracelets with animal head finials were very common in the ancient world over a long period of time (see previous discussion), and many examples have been found.

#### 346 Silver Bracelet with Gold Animal Head Finials

458 M not illustrated

Semicircular bracelet, about 7.0 cm in diameter, found in Tomb 45 (Trench XXII H), made of silver alloy with gold animal heads, it is heavily rusted and partly deformed. Mounted at each end are rather round hollow animal heads of sheet gold. Because the details of these animal heads are not clear, it is impossible to identify the type of animal portrayed.

#### 347 Bronze Bracelet with Gold Animal Head Finials

646 M Pl. 81

About 7.5 cm in diameter, found in Tomb 24 (Trench XV E). It consists of a bronze circlet decorated at each end with mountain goat heads of sheet gold. The bracelet is heavily rusted, deformed, and bent in the middle, and only certain features of the mountain goat heads are visible. The mouth is a simple impressed line, and small parallel impressed chevrons indicate the hair of the head and neck. At the neck are holes for riveting the head to the bracelet.

A rather closely similar bronze bracelet with animal heads of sheet gold is dated by Moorey to the twelfth to tenth centuries B.C.,<sup>139</sup> although he dates other simpler examples in bronze to the long range of time from the late second to the middle of the first millennium B.C.<sup>140</sup> Legrain dates bronze bracelets with animal head finials to the twelfth century B.C.<sup>141</sup> This type of bracelet with animal head finials continued to be produced for some time. Later examples

include a bracelet from the Taman Peninsula that is classified by Rostovtzeff with Scythian art<sup>142</sup> and other bracelets from Luristan.<sup>143</sup> Still later bracelets in the Oxus Treasure are assigned by Dalton to the Achaemenian period,<sup>144</sup> as is a bracelet with lion heads found at Susa.<sup>145</sup> More examples of this type of bracelet from the Achaemenian period can be seen in the Louvre<sup>146</sup> and in Karlsruhe.<sup>147</sup> A gilded bronze bracelet with mountain goat head finials with very precisely worked details, found in Tomb No. 73 of Cyprus, is dated by Bossert to the fifth century B.C.<sup>148</sup>

**348 Silver Bracelet with Animal Head Finials**  
1188a M Pl. 81

About 5.0 cm in diameter, found in Zeinab Bejar, a very small mound beside the southeastern corner of the Marlik mound. It is badly corroded and encrusted with heavy particles of soil sediment. At each end is an animal head, which cannot be identified because the bracelet has not been cleaned. Cross-lines are spaced sporadically around the bracelet.

## GOLD BRACELETS (349–353)

### *GOLD FLAT-BAND BRACELETS (349)*

**349 Gold Bracelets**

274 M and 275 M Pl. 81, Color Plate XXVII D

Gold bracelets 274 M, about 13 cm long, and 275 M, about 13.50 cm long, both found in Tomb 33 (Trench XVII F). Almost identical, both are made from wide bands of sheet gold and are decorated by two rows of punched circles. The bracelets are wide, curving bands of gold with rounded ends and a double row of embossed knobs, each knob encircled by a file of impressed dots. Between the two rows of embossed knobs are two wavy, roughly parallel impressed dotted lines. Each bracelet has punched holes at the end, by which it could be fastened.

An almost identical gold bracelet, armband, or diadem with rather similar decoration, in the Cyprus Museum, is classified by Pierides to the Late Cypriote II period, with a suggested date of 1400–1230 B.C.<sup>149</sup> It features two rows of small geometric rosettes, each formed of an embossed projecting knob surrounded by many smaller knobs.

### *PLAIN GOLD BRACELET OF TWO JOINED HALVES (350)*

**350 Gold Bracelet**  
532 M Pl. 81

About 7.0 cm in diameter, found in Tomb 50 (Trench XXI L). It is made from thin sheet gold,

damaged and deformed on some parts, and is circular and hollow, filled by natural bitumen. The two halves overlap each other at the join in the middle of the bracelet, and the overlapping end, which is larger in diameter, is decorated by parallel projecting narrow bands.

## *GOLD TWISTED-BAR BRACELETS* (351–352)

**351 Gold Bracelet**  
533 M Pl. 82

Circular bracelet, about 6.0 cm in diameter, found in Tomb 50 (Trench XXI L). It is made from a four-sided twisted-gold bar, which forms a fluent twisted-coil design. The ends are plain and square.

**352 Gold Bracelet**  
276 M Pl. 82

Circular bracelet, partly deformed, about 13.0 cm long, found in Tomb 33 (Trench XVIII F). It is also made from a four-sided twisted gold bar. The twisted pattern is followed to the ends.

Similar bracelets made of twisted gold bar in the Cyprus Museum are dated by Pierides to the Early Roman period, around the first century B.C. to the first century A.D.; unfortunately, they are of unknown provenance.<sup>150</sup> The appearance of comparable examples from Marlik suggests the possibility that this date should be revised downward. Conversely, it may indicate the use of the same technique over a long period of time.

## *PLAIN GOLD OPEN-LOOP BRACELETS* (353)

**353 Gold Bracelets**  
267 M, 460 M, 4 M, 203 M, and 292 M Pl. 82

The following gold bracelets are all plain open circles of gold, some of them somewhat deformed. The larger ones may be armbands:

267 M, about 6.3 cm in diameter, Tomb 33 (Trench XVIII F);

460 M, about 3.2 cm in diameter, Tomb 45 (Trench XXII H);

4 M, about 7.5 cm in diameter, Tomb 24 (Trench XVE);

203 M, about 9.0 cm in diameter, Tomb 45 (Trench XXI H);

292 M, about 19.0 cm long, Tomb 47 (Trench XXI E).

A similar bracelet was found at Tell el-'Ajjul in the cenotaph deposit that is dated by Maxwell-Hyslop to the seventeenth to sixteenth centuries B.C.<sup>151</sup>

**SILVER BRACELET (354)****354 Silver Bracelet**

5 M Pl. 82

About 8.0 cm in diameter, found in Tomb 24 (Trench XV E). It is partly damaged and corroded, with a granulated effect from soil particles. The circular bracelet, made in two halves, is hollow inside and filled by natural bitumen. One end of each half is narrow, encircled by a single projecting ring placed a little back from the end. This narrow end fits into the slightly wider end of the other half, which is decorated with two parallel projecting rings at the edge to form a junction with three parallel projecting rings. Near the ends are traces of riveting holes.

**BRONZE BRACELETS (355–359)**

A number of bronze bracelets or armllets were found at Marlik, mostly repeating the shapes of the gold bracelets. The most elaborate bronze bracelet, with gold animal heads mounted at each end (347), has already been described. Other bronze bracelets are of an open-loop and flat-band type.

**BRONZE OPEN-LOOP BRACELETS AND ARMLETS (355–356)****355 Bronze Open-Loop Bracelets**

231 M and 523 M Pl. 82

Bronze bracelets 231 M and 523 M are simple open loops. 231 M measures about 6.5 cm in diameter and was found in Tomb 25 (Trench XVI F); it is decorated with parallel engraved straight lines at each end. 523 M measures about 7.5 cm in diameter and was found in Tomb 50 (Trench XXI L).

A similar bronze bracelet with an extra globular ending was found at Khurvin, dated by Vanden Berghé to the late second to early first millennium B.C.<sup>152</sup>

**356 Bronze Open-Loop Bracelets or Armllets**

690 M, 1009 M, 720 M, 721 M, 731 M, 758 M, 642 M, 1008 M, 1021 M, 1010 M, 492 M, 414 M, 425 M, 689 M, 691 M, 1049 M, and 936 M Fig. 16; Pl. 83

The following bronze bracelets or armllets are all single open loops:

690 M, about 10.3 cm in diameter, Tomb 36 (Trench XVIII C);

1009 M, a pair of bracelets, each about 6.0 cm in diameter, Tomb 20 (Trench XIV H);

720 M, about 8.5 cm in diameter, Tomb 3 (Trench VI A);

721 M, about 8.8 cm in diameter, Tomb 3 (Trench VI A);

731 M, four examples, each about 9.5 cm in diameter, Tomb 44 (Trench XX N);

758 M, about 7.5 cm in diameter, Tomb 1 (Trench III D<sup>+</sup>);

642 M, about 6.8 cm in diameter, Tomb 2 (Trench VI B<sup>+</sup>);

1008 M, a pair of bracelets, each about 6.5 cm in diameter, Tomb 20 (Trench XIV H);

1021 M, three examples, each about 6.0 cm in diameter, Tomb 6 (Trench X A<sup>+</sup>);

1010 M, about 6.5 cm in diameter, Tomb 30 (Trench XVI L);

492 M, about 7.5 cm in diameter, Tomb 18 (Trench XIV D);

414 M, about 7.7 cm in diameter, Tomb 36 (Trench XVIII C);

425 M, about 5.0 cm in diameter, Tomb 36 (Trench XVIII C);

689 M, five examples, each about 6.8 cm in diameter, Tomb 15 (Trench XIII C);

691 M, two examples, each about 7.0 cm in diameter, Tomb 36 (Trench XVIII C);

1049 M, three bracelets, each about 4.5 cm in diameter, found in the upper tomb of Gheshlagh;

936 M, a pair of bracelets, each about 5.5 cm in diameter, found in Test Trench I at Gheshlagh.

1008 M has engraved zigzag and straight parallel lines at each end; one of the three bracelets of 1049 M has parallel engraved chevrons at each end; and 936 M has wavy decoration at the overlapped ends.

Engraved decoration similar to that of 1008 M appears on the ends of a bronze bracelet found at Sialk Cemetery B.<sup>153</sup> Simple bronze bracelets with open ends were found at Dailaman in Ghalekuti I, dated by Fukai to the end of the Bronze and beginning of the Iron Age.<sup>154</sup>

**BRONZE CLOSED CIRCLETS (357)****357 Bronze Circlets**

99 M and 688 M Pl. 83

Bronze circlets 99 M, about 7.2 cm in diameter, found in Tomb 50 (Trench XXII L), and 688 M, about 6.7 cm in diameter, found in Tomb 36 (Trench XVIII C). They are both closed loops: 99 M is rounded, whereas 688 M has a flat ring shape with traces of textile on the surface. These circles may have been bracelets or loops on horse trappings, or they may have served some other purpose.

**BRONZE FLAT-BAND BRACELETS (358–359)****358 Bronze Bracelet**

715 M Pl. 83

About 14.5 cm in diameter and 6.5 cm wide, found

in Tomb 1 (Trench III D<sup>+</sup>). It is formed of a rather thick band of rusted bronze strengthened by two parallel wide projecting embossed bands running lengthwise from one end to the other, decorated by parallel files of projecting small knobs at each edge. A strong fastening is formed by tangs at each end that curl over each other. In the middle of the bracelet are two small holes near each edge, indicating that it had probably been riveted or attached to another material, possibly a leather lining. Such a lining would have made this heavy-duty bracelet, which might have served as a protective armband, shinlet, or wristlet, more comfortable to wear.

Other examples of protective equipment (such as Protective Wristlet 888) found at Marlik are discussed in Chapter 10.

### 359 Bronze Bracelets

1048 M Pl. 83

Two bracelets, each about 5.8 cm in diameter,

found in the lower tomb of Gheshlagh. They are made from thick bronze plate in a wide band. One band is plain, with a double spiral at each end forming a fastening. The other, decorated with two parallel engraved straight lines at each side near the edge, overlaps at the ends.

A similar type of double-spiral fastening appears on Bronze Belt 874, as well as on a bronze belt from Khurvin, dated by Vanden Berghe to the late second to early first millennium B.C.<sup>155</sup> and by Ghirshman to the ninth to eighth centuries B.C.<sup>156</sup> Another similar example can be seen in the Danish National Museum.<sup>157</sup> More decorative belts with double-spiral terminals, in the Ashmolean, have elaborate scenes and designs. Moorey discusses the development of this type of belt, dating it to the first quarter of the first millennium B.C.<sup>158</sup>

## *Earrings* (360–387)

### GOLD EARRINGS (360–384)

Most of the earrings from Marlik are made of gold, some of them of an extraordinarily delicate and fine technique and workmanship. They range from plain and simple forms to very elaborate types decorated with granulation, fluting, and inlay.

#### *GOLD POMEGRANATE CLUSTER EARRINGS (360–362)*

The pomegranate cluster that appears in pendants was also used for earrings, three examples of which were found at Marlik.

#### 360 Gold Pomegranate Cluster Earring

269 M Pl. 84

About 6.0 cm long, found in Tomb 33 (Trench XVIII F). It consists of a cluster of five pomegranates in a loop. Each pomegranate has a globular body formed of two halves soldered together and a rather large emphasized neck or crown. This pomegranate cluster is soldered to the bottom of a large loop of simple gold wire, thicker in the center and thinning toward the ends, which turn in to form hooks that fasten together.

#### 361 Gold Pomegranate Cluster Earring

295 M Pl. 84

About 4.5 cm long, found in Tomb 47 (Trench

XXI E). Like 360, it contains a cluster of five pomegranates, although on a somewhat smaller loop. Each pomegranate has a globular body of two joined halves and an oversized, slightly conical neck. The cluster is attached to the bottom of a loop made of a twisted-gold bar that thins considerably toward the overlapped ends.

#### 362 Gold Pomegranate Cluster Earring

365 M not illustrated

About 7.0 cm long, found in Tomb 36 (Trench XVIII C). It is very similar to the two examples just described, consisting of a cluster of five pomegranates on a large suspension loop with hook ends. A small gold ball is soldered to the inside of the loop at the top opposite the pomegranate cluster.

Similar examples of pomegranate clusters appear as pendants on 170-174.

#### *GOLD EARRINGS WITH GRANULATION (363–365)*

In addition to the earrings described here, a number of beautiful pendants were made in this technique, including 169, 183, 184, and 202.

#### 363 Gold Granulated Pyramid Earrings

122 M Pl. 84, Color Plate XXVIII A

Pair of earrings, each about 4.0 cm long, found in Tomb 27 (Trench XVII D). Each earring has a



granulated double pyramid suspended from a simple large loop. These double pyramids are formed of small gold balls that decrease in size from the topmost ball of the top pyramid to the bottom ball of the bottom pyramid. Each triangular side of the lower pyramid contains twenty-seven gold balls, twenty-one outlining the triangle and six filling the corners, while each triangular side of the upper pyramid contains nine large gold balls, with the largest, at the top, connected to a large suspension loop of overlapping gold wire.

169 has a very similar double-pyramid pendant on a gold chain. A similar type of granulation can be seen at each end of a ring found at Nymphaeum in the Crimea, dated by Rostovtzeff to the fifth century B.C.<sup>159</sup> This example suggests the possibility of Marlik influence on later Greek art via the Crimea and the Scythians.

### 364 Gold Granulated Hemispherical Earring

364 M Pl. 84

About 2.3 cm in diameter, found in Tomb 36 (Trench XVIII C). The earring is a granulated half sphere attached horizontally to a gold loop. The top edge of this hollow half sphere is decorated by a twisted-gold bar, and above and below this twisted bar are alternately spaced pyramids composed of four small gold balls with a slightly larger pyramid at the bottom of the half sphere. More pyramids of gold balls are attached to the inner side of the gold loop above the half sphere. This loop of thick gold wire is slightly heavier in the center, where the lower part of the earring is attached, and gradually narrows toward the ends, which are turned to form a hook fastening. This is an interesting and most unusual earring.

### 365 Granulated Gold and Lapis Lazuli Earrings

960 M Pl. 84

Pair of gold earrings, each about 3.0 cm in diameter, found in Tomb 10 (Trench XI B). They have a crescent shape decorated with granulation and an inset with a four-pointed star of lapis lazuli. The flat, crescent-shaped base of the earring has a single file of very small gold balls around the outer edges, with sporadic attached triangles, pointing inward, formed of varying numbers of small gold balls. At the bottom of the crescent is a round gold knob surrounded on one earring by a single file of small gold balls and on the other by more files. Spaced along the inner edge of the crescent are small triangles of three small gold balls. Occupying the space inside the crescent is a large four-pointed star, the points outlined by a narrow vertical band of gold originally inlaid with lapis lazuli, of which traces remain in place. At the center of the star is a broad circular gold band inlaid with lapis lazuli on one earring, with traces remaining on the other. The ends of the crescent taper to round gold wire, and attached to the outer edge of the crescent in front is

a large gold ball.

The use of granulation in triangular patterns has many parallels at Marlik (see, e.g., 184). A similar lunar-shaped earring without the central four-pointed star, found at Sialk Cemetery A, is dated by Maxwell-Hyslop to the twelfth to seventh centuries B.C.<sup>160</sup> and by Ghirshman to the end of the Bronze Age.<sup>161</sup>

## GOLD PENANNULAR EARRING (366)

### 366 Gold Penannular Earring

964 M Pl. 84

About 3.0 cm in diameter, found in Tomb 10 (Trench XI B). It is made in a horseshoe shape with a wavy band decoration. Two plain projecting thick, rounded bands encircle the earring, the outer one slightly broader than the inner one. The thick groove between these bands is filled by a wavy vertical gold band, and another such band encircles the outer edge of the earring. At the inner edge of the earring is a twisted four-sided gold bar. A distorted tang attached to one end of the earring was possibly used for some sort of connecting suspension loop.

Earrings of similar horseshoe shape, found at Tell el-'Ajjul, are dated by Maxwell-Hyslop to the seventh to sixteenth centuries B.C.<sup>162</sup>

## GOLD BOAT-SHAPED EARRINGS

(367-372)

A rather large number of gold earrings are boat or crescent shaped. They may be plain or have added decoration in the form of granulation, large balls, round disks, and so on.

### 367 Gold Granulated Boat-Shaped Earring

348 M Fig. 16; Pl. 84, Color Plate XXVIII B

About 2.0 cm in diameter, found in Tomb 44 (Trench XXI N). It is boat shaped and hollow and is made from sheet gold. The body of the earring is decorated by sporadic embossed round knobs encircled at the base by a single file of small gold balls. Thin parallel gold wires border each end of the earring, to which suspension wires, one thicker than the other, are attached. Three large hollow gold balls decorate the front of the earring.

### 368 Gold Boat-Shaped Earring

535 M Pl. 84

About 3.0 cm in diameter, found in Tomb 50 (Trench XXI L). It is a simple type of hollow boat-shaped earring, made from rather thin sheet gold. The surface is plain, with one large hollow gold ball in front. The ends of the earring are bound by two

narrow wires of gold, with a tapering fastening wire extending from outside the bound wires in front to the back end of the earring.

### 369 Gold Boat-Shaped Earrings

526 M Pl. 84

Pair of closely similar gold earrings, found in Tomb 50 (Trench XXI L). They have a hollow boat shape with a plain surface. The front and back ends are bound by three parallel gold wires, and three fairly large connected gold balls are attached to the front end. A tapering gold suspension wire extends from front to back.

### 370 Gold Boat-Shaped Earrings

527 M, 536 M, 534 M, 528 M, 1203a M, and 461 M Pl. 85

The following gold earrings all have a similar boat shape. They are either plain or have attached gold balls in front:

527 M, one example, about 2.0 cm in diameter, Tomb 50 (Trench XXI L);

536 M, one example, partly broken, about 2.0 cm in diameter, Tomb 50 (Trench XXI L);

534 M, a pair, badly damaged, about 2.0 cm in diameter, Tomb 50 (Trench XXI L);

528 M, one example, about 1.8 cm in diameter, Tomb 50 (Trench XXI L);

1203a M, eight examples, badly damaged and incomplete, Tomb 23 (Trench XV D);

461 M, one example, about 2.0 cm in diameter, Tomb 45 (Trench XXII H).

### 371 Gold Boat-Shaped Earrings

1065 M, 1066 M, 1067 M, and 1068 M Pl. 85

The following gold earrings have a hollow boat shape with an attached disk at the front on a round cylindrical base:

1065 M, about 1.7 cm in diameter, Tomb 2 (Trench VI B<sup>+</sup>);

1066 M, 1067 M, and 1068 M, each consisting of a pair of earrings, somewhat deformed and broken, about 3.0 cm in diameter, Tomb 5 (Trench VIII D).

In each of these examples, the disk had originally been inlaid with colored stone, most of which is now missing. The boat-shaped body of each earring is bound at the ends by wire, with a suspension wire extending from front to back.

### 372 Gold Boat-Shaped Animal Earrings

803 M, 804 M, and 805 M Pl. 85

Three gold mountain goat earrings, each about 5.0 cm long and 4.0 cm high, found in Tomb 52 (Trench XXIII G). Each is formed of a hollow gold sheath, now deformed and broken with some parts missing, which is filled with natural bitumen. All have the same boat-shaped body with a small animal head attached at the front. The head is conical, with a curving pointed muzzle that suggests the beak of a bird. Thick circular projecting bands with an im-

pressed hole in the middle form the eyes, and projecting thick bands cross the forehead and nape. Short straight horns point upward from the back of the head. The neck narrows and is encircled by a thick ring where it joins the thick crescent-shaped body; the legs of the animal form the ends of the crescent. A suspension ring or wire, now missing, was originally attached through pierced holes at the ends of the crescent.

### COMMENTS

Maxwell-Hyslop reports that this type of boat-shaped earring and its variations lasted for a long period of time, from Ur III down to the first millennium B.C., and occurred over a wide area of the ancient world from Iran to the Mediterranean Sea, being found at such sites as Ur, Assur, Karmir Blur, Ephesus, Trialeti, Mari, and Crete.<sup>163</sup> Gold earrings of this type found in Troy Treasure A are classified by Maxwell-Hyslop as Anatolian, dating to 2500–2000 B.C.<sup>164</sup> She dates another similar example found in Assur to around 1500–1100 B.C.<sup>165</sup> Boat-shaped earrings found in Khurvin are dated by Ghirshman to the ninth to eighth centuries B.C.;<sup>166</sup> others found at Ur in Neo-Babylonian strata are dated by Maxwell-Hyslop to the eighth to seventh centuries B.C.;<sup>167</sup> a similar earring found in War Kabud in Luristan is dated by Vanden Berghe to the eighth to seventh centuries B.C.;<sup>168</sup> and a boat-shaped earring found in a nonstratified context at al-Mina is dated by Maxwell-Hyslop to the seventh to sixth centuries B.C.<sup>169</sup> A pair of boat-shaped earrings from Amirat in Syria appears in the collection of the Comte du Putyison in Paris.<sup>170</sup> A boat-shaped earring with granulation and attached knobs, said to be from Ziwiye, is dated by Ghirshman to the seventh century B.C.<sup>171</sup> Later examples of this type of earring, one of which has granulation, are housed in the Cyprus Museum. They are classified by Pierides as Cypro-Classic I, about 475–400 B.C., but their provenance remains unknown.<sup>172</sup> Given these similar examples from Marlik, it is possible that the suggested dating is too early.

Boat-shaped earrings in the form of an animal, similar to 372, were found at Khurvin. They are dated by Vanden Berghe to the late second to early first millennium B.C.<sup>173</sup>

### GOLD FLAT LUNATE OR CRESCENT-SHAPED EARRINGS (373–375)

Several flat lunate earrings of gold were found at Marlik, including some rather small examples that decorate the ears of pottery bull figurines (see discussion of 86 and 88 in Chapter 6).

**373 Gold Crescent Earring**

317 M Pl. 85

About 2.2 cm in diameter, found in Tomb 50 (Trench XXII L). It is made from flat sheet gold in a crescent or lunate shape, broad in the center and tapering to a narrow elongated point at one end; the other end is broken. This earring is decorated by embossed parallel diagonal lines at the outer edge, with some short projecting straight lines near the inner edge at the middle.

**374 Gold Crescent Earring**

482 M Pl. 85

About 2.0 cm in diameter, found in Tomb 19 (Trench XIV F). It is made of rather thick sheet gold in a crescent shape, with a wider middle swooping to pointed overlapping ends.

**375 Gold Crescent Earring**

961 M not illustrated

About 2.0 cm in diameter, found in Tomb 10 (Trench XI B). It is made from sheet gold in a crescent shape, with a wide middle narrowing to overlapping pointed ends.

## COMMENTS

Similar flat gold lunate earrings from Ghalekuti I in Dailaman are dated by Fukai to the end of the Bronze and beginning of the Iron Age.<sup>174</sup> A parallel example with overhanging ends in the Cyprus Museum is assigned by Pierides to the Late Cypriote period, with a suggested date of 1400–1230 B.C.<sup>175</sup> Other examples in the Cyprus Museum are crescent shaped and end in a hook and loop with thin spiral wires; Pierides dates these unprovenanced pieces to the Roman period.<sup>176</sup>

### *GOLD SPIRAL-TWIST EARRINGS* (376–377)

**376 Gold Spiral-Twist Earring**

449 M Pl. 85, Color Plate XXVIII B

About 3.0 cm in diameter, found in Tomb 23 (Trench XV D). It consists of a loop of thick spiral-twisted gold, which gradually narrows to a long round wire at one end and a narrow bar continuing the twist at the other. At the front of the earring, near the end of the spiral twist, is a large gold ball.

**377 Gold Spiral-Twist Earrings**

306 M and 307 M Pl. 86

Two pairs of gold spiral-twist earrings—306 M, each about 2.2 cm in diameter, and 307 M, each about 2.1 cm in diameter—found in Tomb 50 (Trench XXII L). The spiral twist tapers to plain gold wire with pointed ends, which, on 307 M, overlap.

## COMMENTS

Gold spiral-twist earrings found at Tell el-'Ajjul in Palestine in Graves 1551 and 1532 are attributed to the Mid-Bronze Age II, with a date of about the seventeenth to sixteenth centuries B.C.<sup>177</sup> Earrings of this type were found in Old Tombs 57 and 92 at Enkomi; Maxwell-Hyslop assigns those from Old Tomb 92 to the Late Cypriote period, around 1500 B.C., and those from Old Tomb 57 to the Bronze II period, dating to the sixteenth to fifteenth centuries B.C.<sup>178</sup> Earrings of twisted grooved strips of gold in the Cyprus Museum are classified by Pierides to Late Cypriote II, with a suggested date of 1400–1230 B.C.<sup>179</sup> Simple twisted earrings of Irish pattern found in the Treasure of Ancient Gaza are dated by Petrie to around the middle of the second millennium B.C.<sup>180</sup>

### *GOLD LOOP EARRINGS (378–384)*

Fairly large numbers of plain gold loop earrings were found, often with solid-knob decoration. Additional examples decorate the ears of some of the pottery bull figurines (see, e.g., 85 and 87 in previous chapter).

**378 Gold Loop Earring**

11 M Pl. 86

About 1.1 cm in diameter, found in Tomb 24 (Trench XV E). A loop of rather narrow gold wire, it has a solid knob with two smaller attached knobs at the bottom of the loop.

**379 Gold Loop Earrings**

551 M, 557 M, and 558 M Pl. 86

Gold earrings—551 M, about 2.5 cm in diameter, found in Tomb 14 (Trench XIII B), and 557 M and 558 M, each about 2.3 cm in diameter, found in Tomb 15 (Trench XIII C). They consist of gold loops that taper from a slightly thick middle to narrower ends. Three gold balls are spaced around the loop, at the front, bottom, and back. 557 M has two parallel engraved lines at the front and back, while 558 M has three at the front and two at the back, with thick parallel engraved lines stretching between.

**380 Gold Loop Earrings**

451 M Pl. 86

Pair of earrings, each about 2.3 cm in diameter, found in Tomb 23 (Trench XV D). They consist of loops of plain gold wire of almost equal thickness throughout, with three solid-gold knobs almost equally spaced around each earring, at the front, bottom, and back.

**381 Gold Loop Earring**

452 M Pl. 86

About 2.0 cm in diameter, found in Tomb 23

(Trench XV D). It consists of a gold loop, thicker in the middle and tapering toward the ends, with a rather large solid-gold knob attached at the front where the loop is encircled by two parallel engraved lines. Other parallel engraved lines encircle the back of the loop near the tapering ends, with parallel engraved grooves extending from front to back.

### 382 Gold Loop Earrings

550 M Pl. 86

Pair of earrings, each about 2.5 cm in diameter, found in Tomb 23 (Trench XV D). They consist of loops of plain gold wire, tapering at the ends, with a solid gold ball attached to the front. One earring has an additional, superfluous piece of gold at the bottom center, which gradually narrows toward the ends.

### 383 Gold Loop Earrings

836 M Pl. 86

Pair of earrings, each about 2.5 cm in diameter, found in Tomb 47 (Trench XXII E). The earrings consist of loops of rather narrow gold wire with attached large decorative balls. Only one was complete when found.

#### COMMENTS

Oval earrings with attached mulberry pendants, found in Old Tomb 57 at Enkomi, are dated by Maxwell-Hyslop to around the sixteenth to fifteenth centuries B.C.<sup>181</sup> Earrings with granulated hanging solid knobs, particularly similar to 378, were found at Tell el-'Ajjul in Grave 1551. They are dated by Maxwell-Hyslop to 1500–1200 B.C.,<sup>182</sup> but she dates similar earrings from the Mid-Assyrian graves of Mari to the thirteenth century B.C.<sup>183</sup> and attached single- or three-knob earrings found at Tell ed-Duweir, Cave 4004, of Lachish to the Late Bronze III period, about 1225–1175 B.C.<sup>184</sup>

Further examples found at Tell Fara, Tomb 605, are dated to the eleventh to tenth centuries B.C.<sup>185</sup> Gold earrings with a cluster of attached gold balls are assigned by Pierides to Cypro-Geometric III, with a suggested date of 850–700 B.C.<sup>186</sup>

### 384 Gold Loop Earrings

483 M, 1204a M, 197 M, 218 M, 442 M, 962 M, and 1187a M Pl. 86

The following simple gold loop earrings are all thicker in the middle and taper slightly to pointed ends, some of them overlapping:

483 M, three examples, the smallest about 1.3 cm in diameter, Tomb 19 (Trench XIV F);

1204a M, one example, about 2.0 cm in diameter, Tomb 14 (Trench XIII B);

197 M, three examples, the largest about 2.0 cm in diameter, Tomb 16 (Trench XIII F);

218 M, a pair, each about 1.7 cm in diameter, Tomb 45 (Trench XXI H);

442 M, four examples, the largest about 1.8 cm in diameter, Tomb 36 (Trench XVIII C);

962 M, two examples, each about 2.5 cm in diameter, Tomb 10 (Trench XI B);

1187a M, four examples, each about 2.5 cm in diameter, Tomb 40 (Trench XVIII N).

#### COMMENTS

Pierides assigns simple gold earrings in the Cyprus Museum to Late Cypriote II, with a suggested date of 1400–1230 B.C.<sup>187</sup> Similar gold loop earrings found in Grave 1203 of Tell el-'Ajjul in Palestine are dated to around the middle of the second millennium B.C.,<sup>188</sup> while other simple gold loop earrings, found in Cave 4004 of Tell ed-Duweir of Lachish, are assigned by Maxwell-Hyslop to Late Bronze III, ca. 1225–1175 B.C.<sup>189</sup>

## SILVER EARRING (385)

A single silver earring was found at Marlik, in the form of a spiral twist.

### 385 Silver Spiral-Twist Earring

1187b M Pl. 86

In two pieces, about 2.2 cm in diameter, found in Tomb 40 (Trench XVIII N).

## BRONZE EARRINGS (386–387)

Several bronze earrings were found at Marlik, in the spiral-twist and simple loop designs found also in gold and silver.

### 386 Bronze Spiral-Twist Earrings

1470 M Pl. 86

Pair of bronze earrings, each about 3.5 cm in diameter, found in Tomb 36 (Trench XVIII C). The earrings are formed in a spiral twist that narrows to a point at the ends.

### 387 Bronze Loop Earrings

1471 M and 1082a M Pl. 86

Bronze earrings 1471 M and 1082a M consist of simple loops of bronze. 1471 M, of which there are three examples, each about 1.5 cm in diameter, was found in Tomb 36 (Trench XVIII C); 1082a M, consisting of two examples, each about 3.5 cm in diameter, was found in Tomb 50 (Trench XXI K). An additional example of this type of earring is worn by Bronze Human Figurine 79.

## *Rings* (388–396)

A number of gold and bronze rings were found at Marlik. The gold rings most often are flat bands, highly decorated in one case, more simply decorated or plain in others. Other gold rings are made in a serpentine form from gold wire, and one ring is a simple loop. The bronze rings are also made in flat band and simple loop styles. Gold rings were found in three tombs, 32, 50, and 36, and bronze rings also occurred in three tombs, 19, 30, and 36. Tomb 36, which was particularly rich in all types of jewelry, produced eighteen rings of gold and bronze.

### GOLD RINGS (388–393)

#### **388 Gold Animal Ring**

360 M Pl. 87

About 2.8 cm in diameter, found in Tomb 36 (Trench XVIII C). This is a wide band of gold, broader on top and tapering slightly underneath. Each edge is bordered by a projecting round band of rolled metal. Decorating the ring are linear designs of animals and birds divided into two registers by a central line. The upper register contains an imaginary birdlike creature in the center with an animal placed symmetrically on each side, and the lower register has a lion in the center with a bird behind. The hair on the lion's body is shown by parallel hatching lines, and the mane by a file of projecting triangles. The tail bends up over the rump. All these designs are rather crudely executed.

A ring in a similar shape, workmanship, and design, containing a large central imaginary figure standing on two horned animals with birds on each side, said to be from Luristan, is dated by Porada to the tenth to ninth centuries B.C.<sup>190</sup>

#### **389 Gold Serpentine Rings**

565 M Pl. 87

Two rings, each about 2.3 cm in diameter, found in Tomb 50 (Trench XXI K). They are made in serpentine form from gold wire soldered side by side. Encircling each ring are two parallel plain wires on one side and three on the other, enclosing three parallel twisted gold wires at one end and four at the other, finely soldered from the middle.

Gold and silver rings in a similar type of workmanship are classified by Pierides to Early Cypriote III, with a suggested date of about 1900–1800 B.C.<sup>191</sup>

#### **390 Gold Band Rings**

361 M and 362 M Pl. 87

Two rings, both found in Tomb 36 (Trench XVIII C). They are broad bands of gold with rolled edges; 361 M measures approximately 1.9 cm in diameter,

and 362 M approximately 2.0 cm. 361 M has a sporadic file of small round embossed knobs encircling the middle of the ring.

#### **391 Gold Band Ring**

363 M Pl. 87

About 1.8 cm in diameter, found in Tomb 36 (Trench XVIII C). It is a plain band of gold, which is wider across the top and tapers somewhat underneath. A similar bronze ring was found at Sialk Cemetery B.<sup>192</sup>

#### **392 Gold Band Rings**

320 M Pl. 87

Two rings, each about 2.0 cm in diameter, found in Tomb 32 (Trench XVII E). They are rather wide bands of sheet gold with open curving ends, decorated over the entire surface with small embossed sporadic knobs.

#### **393 Gold Loop Ring**

1197a M not illustrated

About 2.0 cm in diameter, found in Tomb 32 (Trench XVII E). It is a simple loop of gold wire.

### BRONZE RINGS (394–396)

Very simple bronze rings in the form of flat bands and round loops were found in several of the Marlik tombs.

#### **394 Bronze Flat Band Rings**

468 M Pl. 87

Three rings, each about 2.0 cm in diameter, found in Tomb 19 (Trench XIV F). They consist of curving bands of flat sheet bronze with open ends tapering to rounded points. A similar flat bronze ring from Khurvin is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>193</sup>

#### **395 Bronze Flat Band Rings**

1463 M and 1465 M Pl. 87

Bronze rings 1463 M and 1465 M consist of wide flat bands of bronze with overlapping ends curved at the corners. 1463 M, measuring about 2.0 cm in diameter, was found in Tomb 36 (Trench XVIII C), and 1465 M, which consists of two rings, each about 2.0 cm in diameter, was found in Tomb 19 (Trench XIV F). One ring is outlined completely by a file of small embossed knobs near the edges.

#### **396 Bronze Loop Rings**

1464 M, 1461 M, 1462a M, and 1007 M Pl. 87

The following rings are all simple round loops of bronze wire:

1464 M, three examples, each about 2.3 cm in

diameter, Tomb 36 (Trench XVIII C);

1461 M, four examples, each about 2.2 cm in diameter, Tomb 36 (Trench XVIII C);

1462a M, five examples, each about 2.3 cm in diameter, Tomb 36 (Trench XVIII C);

1007 M, two examples, each about 2.3 cm in diameter, Tomb 30 (Trench XVI L).

1462a M is composed of rather flatter loops than the other examples.

A ring of bronze wire with overlapped ends similar to 1462a M,<sup>194</sup> and a closed-loop bronze ring,<sup>195</sup> both found at Khurvin, are dated by Vanden Berghe to the late second to early first millennium B.C.

### *Diadem or Forehead Bands (397–403)*

A number of gold diadems or forehead bands were found at Marlik. Some of these long narrow bands of gold are plain while others are decorated, most often with embossed knobs. These thin gold bands are rather fragile, and, in addition to the complete examples, many deformed and broken pieces were found.

#### **397 Gold Diadem**

560 M Pl. 88

About 53.5 cm long and 1.5 cm wide, found in Tomb 15 (Trench XIII C). It is a long gold band that narrows slightly toward the rolled ends. It is finely decorated by a single file of small embossed dots near the edges, with groups of repeated motifs equally spaced down the center of the band. At the center front is a seven-pointed star or sun with seven rays, formed of an embossed round knob surrounded by a very fine small file of impressed dotted lines with the points or rays defined by precise straight lines. Between each two rays is a fine embossed knob. This central rosette is circled by a sharp impressed line, and on each side are two embossed knobs, each circled by a fine impressed dotted line that continues from one knob to the other. Six units of almost identical geometric rosettes are spaced along the length of the forehead band, three on each side. The first two rosettes are accompanied by a single embossed knob on each side, while the final one, near the end of the band, is without accompanying knobs. The decoration of this forehead band is very fine.

#### **398 Gold Diadem**

453 M Pl. 88

About 43.5 cm long and 1.4 cm wide, found in Tomb 23 (Trench XV D). It is a long band of gold, tapering near the ends, which are curled for fastening. The band is decorated by seven embossed gold knobs encircled by impressed dotted lines, almost equally spaced along the length of the band.

#### **399 Gold Diadem**

531 M Pl. 88

About 75 cm long and 1.0 cm wide, found in Tomb

50 (Trench XXI L). It is a thin gold band, narrowed at each end and decorated around the edges by a fine impressed dotted line. Eleven embossed knobs are almost equally spaced along the center of the band, with vertical impressed dotted lines between them. At each end are holes for fastening.

#### **400 Gold Diadem**

559 M Pl. 88

About 18.5 cm long and 1.0 cm wide, found in Tomb 15 (Trench XIII C). It is formed of a thin band of gold tapering to narrow ends, decorated by three groups of small embossed knobs, seven in line near the center front and three at each side near the ends that contain fastening holes.

#### **401 Gold Diadem**

563 M Pl. 88

About 34.5 cm long and 1.0 cm wide, found in Tomb 50 (Trench XXI K). It is a rather fine band of gold, decorated at each edge by a very fine impressed dotted line. Eleven fairly small, delicate embossed knobs are spaced along the diadem, one in the center front and a group of four in line on each side, with a single one again near each end.

#### **402 Gold Diadems**

316 M, 1208a M, 1175a M, 1207a M, 1197b M, and 1211e M not illustrated

The following diadems consist of thin bands of gold without any decoration:

316 M, about 41.0 cm long and 0.8 cm wide, Tomb 50 (Trench XXI K);

1208a M, rather distorted and broken into two pieces, Tomb 50 (Trench XXI K);

1175a M, deformed and folded, found with six gold leaves in Tomb 32 (Trench XVII E);

1207a M, deformed and broken, Tomb 45 (Trench XXI H);

1197b M, broken into several pieces, Tomb 32 (Trench XVII E);

1211e M, rather deformed and broken, found in Tomb 47 (Trench XXII E).

Most of these diadems have holes at each end for fastening.

**403 Gold Diadem**1204*b* M not illustrated

This diadem is similar to those described above except that it is decorated with a line of knobs. It was found, broken into several pieces, in Tomb 14 (Trench XIII B).

## COMMENTS

A diadem of gold leaves with high-relief geometric rosettes composed of dots and circles from Enkomi is classified by Schaeffer to the Iron Age with a suggested date of 1250–1050 B.C.<sup>196</sup> Diadems with similar geometric rosette motifs also appear in the reliefs of Samshi Adad V (824–812 B.C.) in the Nabu Temple at Nimrud;<sup>197</sup> Tiglathpileser III (746–727 B.C.)<sup>198</sup> and

Esarhaddon (681–669 B.C.),<sup>199</sup> both in the Southwest Palace at Nimrud; and on a relief in Room C of the Palace of Ashurbanipal (669–663 B.C.) at Nineveh.<sup>200</sup>

Simpler forehead bands have also been found. Ovoid forehead bands in the Louvre are dated by Amiet to the late third and early second millennium B.C.<sup>201</sup> Simple gold bands found at Ghalekuti I in Dailaman are ascribed by Fukai to the end of the Bronze and beginning of the Iron Age.<sup>202</sup> An ovoid frontlet of plain gold leaf with holes at each end is assigned to the Sargonid period by Maxwell-Hyslop.<sup>203</sup> She dates other examples from the Third Dynasty of Ur to the early second millennium B.C.<sup>204</sup> and two forehead bands from Tall Fara to the tenth century B.C.<sup>205</sup>

*Hair Binders (404–408)*

Hair binders of gold, silver, and bronze were found at Marlik. One type consists of a spiral spring with several loops and another of a simple loop with widely overlapping ends.

**GOLD HAIR BINDERS (404–405)****404 Gold Hair Binders**

304 M, 1072 M, and 832 M Pl. 88

Hair binders 304 M, 1072 M, and 832 M are all spirals of gold wire. 304 M measures about 3.5 cm in diameter and was found in Tomb 50 (Trench XXII L); 1072 M measures about 3.0 cm in diameter and was found in Tomb 1 (Trench III D<sup>+</sup>); and 832 M consists of two examples, each about 3.0 cm in diameter, found in Tomb 47 (Trench XXII E). The two hair binders of 832 M are rather shorter spirals than the others.

**405 Gold Hair Binders**

309 M, 123 M, and 561 M Pl. 88

Hair binders 309 M, 123 M, and 561 M are each composed of broadly overlapping loops of gold. 309 M, measuring approximately 3.5 cm in diameter, was found in Tomb 50 (Trench XXII L); 123 M, about 4.0 cm in diameter, was found in Tomb 27 (Trench XVII D); and 561 M, which consists of four examples, each about 5.0 cm in diameter, was found in Tomb 15 (Trench XIII C). The four hair binders of 561 M are made from gold bands rather than gold wire.

**SILVER HAIR BINDER (406)****406 Silver Hair Binder**1188*b* M Pl. 88

This silver hair binder, about 3.0 cm in diameter, was found at Zeinab Bejar, southeast of Marlik.

**BRONZE HAIR BINDERS (407–408)****407 Bronze Hair Binder**1082*b* M Pl. 88

About 3.5 cm in diameter, found in Tomb 50 (Trench XXI K). It consists of a long spiral of bronze wire.

**408 Bronze Hair Binders**

428 M, 1466 M, and 1469 M Fig. 16; Pl. 88

Hair binders 428 M, 1466 M, and 1469 M, all found in Tomb 36 (Trench XVIII C), are composed of overlapping bronze loops. 428 M measures about 4.0 cm in diameter, 1466 M about 3.0 cm in diameter, and 1469 M about 2.0 cm in diameter. 428 M is a wide loop with parallel engraved zigzag decoration.

## COMMENTS

A coiled wire spiral hair ring of gold, found at Ur in a Sargonid grave, is dated by Maxwell-Hyslop to 2370–2200 B.C.<sup>206</sup> A gold and silver spiral band hair binder in the Cyprus Museum is attributed by Pier-

ides to Early Cypriote III, with a suggested date of 1900–1800 B.C.<sup>207</sup> Pierides assigns simple spiral gold rings to Late Cypriote II, with a suggested date of 1400–1230 B.C.<sup>208</sup> A spiral binder of coiled bronze wire from Chagoula-Derre in the Persian Talish is

classified by Schaeffer to Talyche Fer 1, with a suggested date of 1200–1000 B.C.,<sup>209</sup> and a similar bronze spiral hair binder was also found at Sialk Cemetery B.<sup>210</sup>

## *Buttons* (409–444)

Many buttons were found at Marlik, where they apparently had a major decorative and ceremonial function. Most of these buttons are made of gold, although bronze, bone, shell, and frit buttons were also found in limited numbers. Altogether, approximately 250 buttons were found: 204 buttons of gold, 18 of bronze, and 21 of bone, frit, and shell; the majority of these are discussed below. Some of the gold buttons are very large, up to 16.5 cm in diameter, and others are as small as 1.5 cm in diameter. Some of these gold buttons, particularly the larger ones, are very elaborately decorated with geometric designs.

Most of the metal buttons have punched holes on each side of the center by which they could have been fastened to textile or leather. Some idea of their use can be gleaned from Tomb 52 (Trench XXIII G), where 69 gold buttons were found lying on the skeleton of the deceased along with some partly deteriorated pieces of textile. Apparently these gold buttons were sewn down the front of the burial clothes; they may have had the ceremonial function of denoting rank and position. It is also possible that some were used to ornament horse trappings.

The gold and bronze buttons have a rather uniform round shape with an embossed knob in the center, surrounded by one or more files of design, the details of which vary to some extent. The few bone, frit, and shell buttons usually have a circular convex shape with a single hole in the center and are plain or simply decorated.

### GOLD BUTTONS (409–432)

#### 409 Gold Button

217 M Fig. 16; Pl. 89, Color Plate XXVIII C-D

Large button, partly broken and damaged, about 16.5 cm in diameter, found in Tomb 45 (Trench XXI H). It is made from sheet gold. At the center is a large conical boss with a broad rim, surrounded by a single dotted line. This boss is encircled by a number of decorative file bands separated by rounded concentric rings. The first such ring is topped by a single file of projecting small knobs. Surrounding it is a second parallel ring decorated on top by equally

spaced groups consisting of two files of embossed knobs spaced around the circle, each knob encircled by a file of impressed dotted lines. This band contains two pairs of punched holes almost opposite each other. Around this is an outer projecting ring also decorated by groups of a double file of equally spaced embossed knobs, which is surrounded at its outer base by a fine impressed dotted line. The outer decorative band has a single file of seventeen embossed round conical knobs, each encircled by an impressed dotted line. Between the knobs are seventeen triangular motifs, each formed of ten small embossed knobs, four at the base, three in the next line, and so on, which point outward. The decoration of this button forms an interesting rosette possibly representing the sun and its constellations.

#### 410 Gold Button

64 M Pl. 89

About 8.5 cm in diameter, found in Tomb 26 (Trench XVII B). It is a circular disk of gold with a large opening in the center surrounded by a vertical rim that originally held an inlaid stone. Remnants of the material backing this stone remain in place. Around this central inlay is a single file of impressed large dotted lines surrounded in turn by a plain band partly covered by a band of parallel short straight lines. Encircling this plain area are three parallel files of small crescent-shaped dots. Most of the button is covered by a wide band of parallel radiating curved lines of small crescent-shaped motifs. Near the edge of the button is an outer band of twenty-eight small rosettes, each rosette consisting of an embossed knob surrounded by a single file of impressed round dots. At the edge of the button is a final band of small crescent-shaped motifs surrounded by a single file of small knobs. Holes for attaching this button are punched irregularly on both sides of the central core and sporadically near the edge. The small crescent-shaped motifs produce a pattern similar to fish scales.

#### 411 Gold Button

23 M not illustrated

This button, which is partly broken, measures about 10.5 cm in diameter. It was found in Tomb 26 (Trench XVII B) and is made from fine sheet gold. It has a large, polished, embossed conical knob in the



center surrounded by an impressed elongated dotted line bordered by a band of impressed parallel short straight lines. Surrounding this is a broad band of eleven larger units separated by eleven subsidiary units. Each major unit consists of an embossed knob surrounded by an impressed dotted line bordered by a band of very thin impressed parallel short straight lines, with, at the outer side of this unit, two parallel bands of impressed elongated dots. Between these major units are subsidiary units of two small knobs surrounded by a single file of impressed dotted lines. Around the outer edge of the button is a band of impressed parallel short straight lines surrounded by a single file of small knobs. On each side of the central boss are two holes for attachment.

#### 412 Gold Buttons

214 M, 215 M, and 216 M Pl. 89

Three slightly damaged buttons, 214 M, about 6.0 cm in diameter, 215 M, about 5.3 cm in diameter, and 216 M, about 5.5 cm in diameter, found in Tomb 45 (Trench XXI H). They are each made from sheet gold and contain a similar design, featuring a large central embossed conical knob surrounded by two slightly projecting bands, each with a file of projecting knobs on top and a brim decorated by small round embossed knobs—seventeen on 214 M, nine on 215 M, and seven on 216 M. Each of these small knobs is surrounded by a single file of impressed dots, and a band of impressed dots also encircles the edge of each button. The central conical knob of 215 M is topped by a small pointed knob. On each side of each button in the center of the brim are two punched holes.

#### 413 Gold Buttons

244 M, 245 M, 247 M, 248 M, 249 M, 250 M, 252 M, 253 M, and 259 M Pl. 89

These gold buttons, all found in Tomb 42 (Trench XX F, Test Trench 1), are of a very similar pattern with only minor differences. They range in size from 5.0 to 7.5 cm in diameter.

#### 414 Gold Button

207 M Pl. 89

Partly deformed in the center, about 7.5 cm in diameter, found in Tomb 45 (Trench XXI H). Made from sheet gold, it has a large conical center, surrounded by a fine impressed dotted line, and is circled by two parallel large, thick concentric rings separated by a single file of twenty-seven repoussé knobs. Each knob is surrounded by an impressed file of dotted lines bordered on each side by a single file of impressed dotted lines. The outermost band contains twenty-one units, each with an embossed knob surrounded by an impressed dotted line and separated from the next unit by a straight repoussé dividing band decorated at the inner end by a rather small embossed knob circled by an impressed dotted line. The inner side of this decorative band is bordered by an impressed dotted line, and the outer

edge by an embossed single file of fine knobs. Two holes at each side allow for fastening.

#### 415 Gold Button

959 M Pl. 89

Slightly damaged, about 5.0 cm in diameter, found in Tomb 10 (Trench XI B). Made from sheet gold with a star pattern, it has no holes for attachment nor loops for suspension, so its exact purpose (as either a button or pendant) is not certain. A large central embossed conical knob is surrounded by a file band of impressed parallel diagonal short straight lines, like a coil band, which is in turn encircled by a single file of small embossed knobs. Pointing outward from the central knob are six triangular rays or points, each side outlined by three parallel impressed straight lines. The area between these rays, which are not quite equally spaced around the button, is filled in three sections by two embossed knobs and in the other three by a single embossed knob. All of these knobs are in turn surrounded by smaller embossed knobs. The rosette is bordered by a single file of embossed knobs, with a projecting plain band at the edge of the button.

#### 416 Gold Button

208 M Pl. 89

About 8.6 cm in diameter, found in Tomb 45 (Trench XXI H). Made from thin sheet gold, it has a large embossed conical knob in the center, surrounded by two projecting concentric rings, with the area between the rings filled by an embossed zigzag band. Encircling the outer ring are two parallel files of small knobs. Around the rim are ten equally spaced embossed knobs separated by an impressed zigzag line, which forms triangular points. On each side of the button in the area of the parallel files of small knobs are two punched holes.

#### 417 Gold Buttons

205 M and 213 M Pl. 89

Gold buttons 205 M, about 8.5 cm in diameter, and 213 M, about 5.1 cm in diameter, both found in Tomb 45 (Trench XXI H). They are made from rather thin sheet gold and are somewhat deformed by earth pressure. Each has a central conical embossed knob (that of 213 M has a hole in top), which is surrounded by a double file of projecting small knobs. Around the brim of each button are four small round knobs, each confined by a straight double file of knobs extending to the edge of the button. Between these sparsely spaced knobs are large linear impressed "V" shapes with a band of zigzags or smaller "V" shapes at the edge. On each side of the central knob of both buttons are two punched holes.

#### 418 Gold Buttons

311 M, 313 M, 315 M, and 1035 M Pl. 89

The following gold buttons, all partly broken around the edges, contain a similar design of a large

central embossed conical knob surrounded by triangular groups of small knobs and impressed triangles:

311 M, about 4.1 cm in diameter, Tomb 50 (Trench XXII L);

313 M, about 3.6 cm in diameter, Tomb 50 (Trench XXII L);

315 M, about 4.0 cm in diameter, Tomb 50 (Trench XXII L);

1035 M, about 6.5 cm in diameter, Tomb 1 (Trench III D<sup>+</sup>).

The central knob is partly damaged in two of the examples (311 M and 315 M). In addition, 313 M has a file of impressed small holes, and 311 M more linear zigzag lines. Each button has two holes on each side of the central embossed knob.

#### 419 Gold Buttons

18 M, 26 M, 7 M, and 6 M Pl. 90

The following buttons are made of sheet gold in a similar design:

18 M, four examples, each about 5.6 cm in diameter, Tomb 26 (Trench XVII B);

26 M, two examples, each about 7.0 cm in diameter, Tomb 26 (Trench XVII B);

7 M, one example, about 5.6 cm in diameter, Tomb 24 (Trench XV E);

6 M, one example, about 7.0 cm in diameter, Tomb 24 (Trench XV E).

In each of these examples, a large central conical embossed knob is surrounded by a single file of impressed dots, with a broad encircling band of projecting round knobs and added decoration of lines and dots. The four buttons of 18 M and two of 26 M, made from rather solid sheet gold, have a very large central knob and a brim with eight slightly projecting circular knobs. Each of these knobs is surrounded by an impressed file of round dots with, between them, a stylized elongated triangular pattern similar to a pine tree formed of impressed short diagonal lines. At the edge of these buttons is a single file of small knobs. 7 M and 6 M also have central conical knobs, that of 7 M slightly more rounded, with a brim decorated by equally shaped smaller projecting knobs. In 7 M the area between the smaller knobs is decorated by a band of parallel straight short lines and in 6 M by a triangular pattern of three small round projecting knobs. The edges are bordered by a single file of small knobs. All the buttons have two holes on each side of the central knob.

#### 420 Gold Buttons

270 M, 271 M, 272 M, 273 M, 278 M, 279 M, 280 M, 281 M, and 282 M Pl. 90

Made from thick sheet gold, all found in Tomb 33 (Trench XVIII F). They range in size from 3.7 to 5.1 cm in diameter and have a common design of a large central conical embossed knob encircled by a dotted line and a brim decorated with smaller knobs encir-

led by dots with added raised dots and punched lines. At each side of the central knob are holes for attachment.

#### 421 Gold Button

1190 M Fig. 16

About 4.6 cm in diameter, found in Tomb 26 (Trench XVII B). Made from solid sheet gold, it has a large conical embossed knob in the center, which is surrounded by an impressed dotted line and a single file of projecting small round knobs that are equally spaced around the brim. Each of these knobs is surrounded by a fine impressed dotted line. At each side of the central knob are two holes for attachment.

#### 422 Gold Buttons

254 M, 255 M, 256 M, 257 M, and 258 M Pl. 90

Ranging in size from 4.8 to 5.3 cm in diameter, all found in Tomb 42 (Trench XX F, Test Trench 1). They are made from sheet gold and share a similar design. This features a large embossed conical knob, in some examples with a small flattish top, surrounded by a projecting ring decorated at the top by a file of projecting small knobs. The moderate brim has varying numbers of small circular embossed knobs sparsely spaced around the button, each surrounded by a file of impressed small dots. On each side of the central knob are punched holes for attachment.

#### 423 Gold Buttons

209 M, 210 M, 211 M, and 212 M Pl. 90

All slightly damaged with part of the brim missing, found in Tomb 45 (Trench XXI H). Each button measures about 5.8 cm in diameter and is made of sheet gold. The buttons share a common design, consisting of a large central embossed conical knob surrounded by a single file of projecting dots with a brim decorated by five equally spaced round knobs. Cross-impressed dotted lines that encircle these knobs form a lozenge pattern that encircles the brim, at the edge of which is a fine dotted line. On each side of the central knob are two punched holes for attachment.

#### 424 Gold Button

138 M Pl. 90

About 6.0 cm in diameter, found in Tomb 27 (Trench XVII D). It is made from rather solid gold sheet and has an extremely large central embossed knob, encircled by a single file of impressed dots, and a narrow brim with eighteen small, slightly projecting knobs. Each of these knobs is encircled by a single file of impressed dots and a single file of embossed dots at the edge. Two holes are punched at each side of the central boss.

#### 425 Gold Button

297 M Pl. 90

About 6.5 cm in diameter, found in Tomb 32

(Trench XVII E). It is made from solid sheet gold and has a rather simple decoration of a large central embossed conical knob surrounded by a line of impressed dots. The brim is decorated with small rosettes of several small projecting knobs equally spaced around the button and a file band of projecting small knobs at the edge. On each side of the button are two punched holes.

#### 426 Gold Buttons

838 M-861 M Pl. 90

All found in Tomb 47 (Trench XXII E). They are made from sheet gold, and they vary from 2.2 to 3.2 cm in diameter, with some of the buttons being slightly damaged, deformed, or partly missing. Each features a relatively large embossed conical knob, circled by an impressed dotted line, surrounded by a flat brim very simply decorated by projecting small knobs in single files around the central knob and at the edge of the button, or by "V"-shaped patterns of fine projecting dotted lines around the brim. The buttons have two holes for attachment on each side of the central knob.

#### 427 Gold Buttons

862 M-924 M; 926 M-928 M Pl. 91

Varying in size from 2.4 to 3.2 cm in diameter, all found in Tomb 52 (Trench XXIII G). They are made of sheet gold in a similar type of simple pattern. Each button has a relatively large embossed conical knob in the center surrounded by an impressed dotted line and a moderate brim encircled by a file of fine projecting small knobs, on many located near the edge of the button. The buttons have two holes for attachment on each side of the central conical knob.

#### 428 Gold Buttons

8 M not illustrated

Four buttons, one broken and damaged on one side of the brim, each measuring about 3.5 cm in diameter, found in Tomb 24 (Trench XV E). They are made from sheet gold with a very large central conical knob surrounded by an impressed dotted line, encircled by a narrow brim with sporadic single files of projecting small knobs. The buttons have two punched holes for attachment on each side of the central knob.

#### 429 Gold Buttons

21 M Pl. 91

Twenty-five buttons, averaging about 1.5 cm in diameter, all found in Tomb 26 (Trench XVII B). They are made from rather thin sheet gold with a large round embossed central knob and a very narrow brim. On each side of the central knob of the buttons is a single hole for attachment.

#### 430 Gold Buttons

65 M Pl. 91

Twenty-five buttons, some damaged or partly missing, averaging about 1.5 cm in diameter, also

found in Tomb 26 (Trench XVII B). The buttons are made of thin sheet gold, and each has a central round embossed knob with a rather narrow brim. One hole at each side of the central knob of the buttons is for attachment.

#### 431 Gold Button

490 M Pl. 91

About 2.8 cm in diameter, found in Tomb 18 (Trench XIV D). It is a circular disk of sheet gold with a large hole in the center. It has a rather simple decoration of large and small rosettes scattered over the surface of the button, each rosette consisting of a bunch of embossed knobs.

#### COMMENTS AND COMPARISONS

Similar gold buttons with a large central embossed knob and narrow brim from Dailaman are dated by Maxwell-Hyslop to the mid-second millennium B.C.<sup>211</sup> Other comparable examples are also ascribed to Dailaman by Terrace,<sup>212</sup> who suggests a long range of use for this type of punched button, referring to comparable examples from Mari, Ras Shamra, Assyria, Giyan, Susa, and so on, dating from the third to the first millennium B.C.<sup>213</sup>

#### 432 Gold Objects

438 M, 439 M, and 440 M Pl. 91

Each about 1.5 cm in diameter at the larger end, found in Tomb 36 (Trench XVIII C). They are made of solid gold with a round, almost flat base and a concave cylindrical handle or shank. They might be buttons or possibly gaming pieces.

### BRONZE BUTTONS (433–439)

A number of simple bronze buttons, some of them rather large, were found at Marlik. Most follow the pattern of the gold buttons, with a central round knob and a flat brim.

#### 433 Bronze Button

139 M Pl. 92

About 6.7 cm in diameter, found in Tomb 27 (Trench XVII D). It is made from cast bronze, with a large round embossed knob in the center and a plain brim. Three holes for attachment are spaced around the brim.

#### 434 Bronze Button

180 M not illustrated

About 5.0 cm in diameter, found in Tomb 27 (Trench XVII D). It is similar to 433, with two attachment holes on each side of the brim.

#### 435 Bronze Buttons

680 M not illustrated

Pair of buttons, each about 10.5 cm in diameter, found in Tomb 15 (Trench XIII C). Each button has

a central embossed knob and a plain brim, with two attachment holes opposite each other on the embossed knob.

#### 436 Bronze Buttons

948 M Pl. 92

Two buttons, each about 8.5 cm in diameter, found in Tomb 52 (Trench XXXIII G). They have central embossed knobs and plain brims, with two attachment holes opposite each other near the edges of the central knob.

#### 437 Bronze Buttons

995 M Pl. 92

Two buttons, each about 14.0 cm in diameter, found in Tomb 41 (Trench XIX K). They have central round embossed knobs with rims that are plain except for some small embossed decoration near the edges, which are reinforced by rolling. A single hole pierces the top of the central knob on each button.

#### 438 Bronze Button

1467 M Pl. 92

About 4.5 cm in diameter, found in Tomb 52 (Trench XXIII G). It is made from cast bronze in a round convex shape with a rolled edge. There is a large hole in the center for a riveting nail, also made of bronze. This nail has a projecting knob on top and a broken point. Traces of textile can be seen inside the button, which had probably been laid on fabric and the whole nailed to a leather or wooden base. This is the only bronze button of this type found at Marlik.

#### 439 Bronze Buttons

1468 M Pl. 92

Three buttons, each about 1.8 cm in diameter, found in Tomb 52 (Trench XXIII G). They are made from cast bronze, with a round convex top in a shank that is pierced by a hole by which it could be sewn on a backing.

## BONE, FRIT, AND SHELL BUTTONS

(440–444)

A few bone, frit, and shell buttons were found at Marlik. They most often have a circular convex shape and may be plain or decorated.

#### 440 Gold and Bone Buttons

1201d M Pl. 92

Two buttons, each about 3.5 cm in diameter, found in Tomb 5 (Trench VIII D). They are circular

disks of bone with a convex top, which is pierced by a hole. Each button is banded by gold at the edges. A remnant of fabric on the back partly covers the edge of the gold band. These are unique objects at Marlik, consisting as they do of polished bone, gold, and fabric.

#### 441 Frit Button

432 M Pl. 92

About 4.0 cm in diameter, found in Tomb 36 (Trench XVIII C). It is made of frit with a convex circular top and a flat bottom, with a hole in the center for attachment. The glaze on the surface has partly deteriorated.

#### 442 Frit Buttons

183 M Pl. 92

Eighteen buttons, each about 4.0 cm in diameter, found in Tomb 27 (Trench XVII D). They are also made of frit in a circular convex shape, with a flat bottom and a hole in the center. Only three of the buttons are illustrated (Pl. 92). One, which is partly broken, is almost plain, with a slightly impressed circle around the central hole. Another has eight impressed straight lines radiating from the central hole to the edge, and the third has seven impressed straight lines radiating outward, with four rows of straight lines extending from line to line around the button, forming a cobweb pattern.

#### 443 Frit Button

136 M Pl. 92

About 7.5 cm in diameter, found in Tomb 32 (Trench XVII E). It has a circular convex shape with a flat bottom and an attachment hole in the center, and is encircled by two rows of impressed circles with a point in the center; four circles form the inner row and nine the outer row near the edge.

#### 444 Shell Buttons

16 M and 1454 M Pl. 92

These buttons are made of shell in a circular convex shape pierced in the center by a hole: 16 M (Fig. 482), which consists of two buttons, each measuring about 4.5 cm in diameter, found in Tomb 24 (Trench XV E); and 1454 M (Fig. 483), one example measuring about 4.0 cm in diameter, found in the tomb of Ali Karam Bagh.

#### COMMENTS

Less-round shells with circular decoration, found in Nimrud, Kuyunjik, Sippar, and Tepe Giyan, are discussed in detail by Barnett. The examples from Nimrud are dated to the ninth to eighth centuries B.C.<sup>214</sup>

*Leaves, Belt Buckles, and Fibulae* (445–448)**GOLD LEAVES (445–446)**

Decorative gold leaves in simple shapes were found in several tombs at Marlik. Although their purpose is not definitely known, they were most likely used as hair ornaments, as similar gold leaves were used at Ur<sup>215</sup> and Hissar.<sup>216</sup> They could also have been used in necklaces (see 200 and 201) or as dress ornaments, possibly serving to indicate rank or position as the gold buttons seem to have done.

**445 Gold Leaves**

562 M, 566 M, and 934 M Pl. 93, Color Plate XXIX A

Found in Tomb 50 (Trench XXI K). They are made from thin sheet gold in a simple oval shape with an impressed rib down the center. 562 M (Fig. 484) consists of two leaves, each about 11.0 cm long and 6.0 cm wide; 566 M (Fig. 485) of two leaves, each about 13.0 cm long and 6.0 cm wide; and 934 M (Fig. 486) of five rather deformed leaves, each about 5.0 cm wide. The leaves of 934 M are rather less elongated than the others. At the base of each leaf is a curled wire tang for suspension.

**446 Gold Leaves**

1175b M Fig. 16; Pl. 93

Six leaves, each about 10.0 cm long and 4.5 cm wide, found in Tomb 32 (Trench XVII E). They are made of sheet gold in a simple oval shape with a central impressed rib and a wire tang for suspension at the base. They were found together with a long, folded forehead band, suggesting that they originally functioned as ornaments that hung from the forehead. Similar gold leaves, differing somewhat in shape, were found at Ur<sup>217</sup> and Hissar,<sup>218</sup> where they served a similar function.

**GOLD BELT BUCKLE (447)**

A single gold belt buckle was found at Marlik, inlaid with lapis lazuli and colored stones. This is a very unusual piece, and no similar object has been found in either the Marlik tombs or in any other excavation. The lapis lazuli was probably obtained from the mountains east of Marlik, possibly from the Radakshan mountain range of northern Afghanistan, which is still in active production. Oppenheim, aided by ancient records and texts from Mesopotamia, has discussed the question of the source of ancient lapis lazuli.<sup>219</sup>

**447 Gold Inlaid Belt Buckle**

609 M Color Plate XXIX B

About 6.5 cm wide, found in Tomb 2 (Trench VI B<sup>+</sup>). It is made of gold inlaid with lapis lazuli and

colored stone. The buckle consists of four circular parts, three joined together and the fourth connected by an open hinge that fastens the buckle together. Each circular section is made from gold wrought into a flat-based shallow box with vertical sides and a top pierced in a rosette pattern, which houses the lapis lazuli and colored stone inlay. The large central section is decorated with a rosette which has an almost circular core filled by a large piece of lapis lazuli and eight petals filled by oval stones of reddish brown and white. The connected sections at each side have a similar pattern, with one section broken and deformed and its central piece of lapis lazuli missing. The fourth and separate section also has an inlaid rosette pattern with a central core filled by a stone with a brownish central pupil surrounded by white, similar to an eye. The stone inlay of the petals is missing on this section. The edges of all the pierced holes for the stone inlays are bordered by delicate file bands of granulation, which also decorate the upper borders of the buckle. The back of each section of the buckle is made of rather thick flat sheet gold, which is well polished with a shiny surface.

**FIBULA (448)**

A single bronze fibula, used as a clasp for fastening garments, was found at Marlik, in the shape of a bent arm and hand.

**448 Bronze Fibula**

1472 M Pl. 93

Covered with rust and some soil particles, about 5.0 cm across the ends, found in Tomb 36 (Trench XVIII C). It is made of bronze in the shape of an arm with a bent elbow and a half-opened hand at one end and a rather large molding at the other end similar to the top of a shoulder. The base of a pin was installed in this end, and part of this broken base still remains in situ. The upper arm of this fibula is covered by three, and the forearm by four, sizes of bead molding, and the elbow or apex is also emphasized by a low projecting bead molding. The forearm ends in a half-opened hand, which provides a resting place or catch for the pin.

**COMMENTS**

This fibula is the only one of its kind found at Marlik, and it is of great importance in dating because there has been considerable work on fibulae and their use in the Mediterranean Zone and the Near East during the second and first millennium B.C. Schaeffer, who has made a study of these fibulae, describes some early examples from Palestine, in-

cluding a simple geometric bow shape, found in Jericho, Tomb 9, levels b, c, and e, dated to 1750–1600 B.C.<sup>220</sup>; another early example in a simple bow shape found at Gezer, dated to 1750–1600 B.C.<sup>221</sup>; and one in the shape of a simple horseshoe arch found in Gaza, dated to 1350–1230 B.C.<sup>222</sup> Fibulae have also been found in the Caucasian region, including a simple fibula from Samtavro, dated by Schaeffer to around 1300–1100 B.C.<sup>223</sup>; several decorated examples in a simple arch shape from Kuban, dated to 1200–1000 B.C.<sup>224</sup>; and a fibula with a simple arch and spring, found in Maral Dérésî, dated by Kuftin to about the twelfth century B.C. and by Schaeffer to about 1250 B.C.<sup>225</sup> Many fibulae or brooches in a simple shape but with more decoration are in various Russian collections, including twenty-two examples in the Moscow Museum, five examples in the Romanchenk Collection in the Hermitage, and eighteen examples in the Tiflis Museum. Tallgren, who has studied brooches of the Caucasian type including some from Redkin Lager, Kuban, and the Kazbek Treasure, suggests a date of 1200–1000 B.C. for the Caucasian-type fibulae.<sup>226</sup> Schaeffer likewise suggests a date around the thirteenth century B.C. onward for this type of fibula. A similar fibula with some reed molding in addition to the bead molding, in the David-Weill Collection, is dated to the eighth to seventh centuries B.C.,<sup>227</sup> and a similar example with some bead molding and minor differences of detail from War Kabud in Luristan is dated by Vanden Berghé to roughly the same time period.<sup>228</sup> Maxwell-Hyslop, who has also studied these dress fasteners or fibulae, presents examples of simple representative types in a chronological sequence. An early type is a silver dress fastener from Tell el-'Ajjul Grave 1750, classified as Middle Bronze II of Palestine.<sup>229</sup> She follows the development of this type of dress fastener down to the eighth to sixth centuries B.C.<sup>230</sup>

Several other scholars have made rather detailed studies of fibulae leading to a precise classification and suggested dates for each category. Stronach discusses the appearance of fibulae in detail and divides them according to shape into four major categories including: I, Fibulae with Semicircular Bow; II, Fibulae with Arched Bow; III, Fibulae with Triangular Bow; and IV, Fibulae with Triangular Bow, in which the apex is accentuated by additional moulding.<sup>231</sup> He suggests that “the first two types appear to have developed out of older sub-Mycenean forms during the 1st quarter of the 1st mill. B.C., while earlier examples of the third and fourth types appear in the middle of the eighth to seventh centuries respectively,”<sup>232</sup> concluding that fibulae were common in the Near East from the end of the second millennium onward. Since Stronach made his study, additional material has been found, and at present it does not seem reasonable to date the

Marlik example, which is comparable to Stronach's Type III 6 and 7 and Type IV, to the end of the eighth to seventh centuries B.C.<sup>233</sup> Rather, it seems that there should be some revision of the dating of this classification.

Ghirshman also studied about twenty examples of fibulae from the Protohistoric period in the Foroughi Collection, which derive from Gilan, Amlash, Kurdistan, Kermanshah, and Luristan. Ghirshman dates these fibulae, which were not found through systematic excavation, to the ninth to eighth centuries B.C. In this group four examples, said to be from Luristan, are somewhat similar to the Marlik example, with some minor differences in the reed and bead molding, the bead molding having ribbed decoration.<sup>234</sup> Calmeyer also discusses examples of fibulae that were found after Stronach performed his analysis.<sup>235</sup>

Muscarella, in several articles concerned with an arched fibula from the Hasanlu III period, provides an extensive discussion of fibulae found throughout the Near East in which he suggests that “fibulae are unknown in Mesopotamia or Iran before the late eighth century B.C.”<sup>236</sup> Of course, this was written before the discovery of examples from Iran, particularly from northern Iran, including the Marlik fibula. In another article Muscarella, discussing a fibula with somewhat similar bead molding found in Hasanlu Level II, says, “The belief . . . that fibulae were not generally in use in Iran before the late eighth century B.C. is thus reinforced.”<sup>237</sup> Later, he discusses representations of fibulae found on stone reliefs from Khorsabad, Persepolis, Bor, Sinjerli, Marash, Carchemish, and Nimrud comparable to those found in Tumulus MM at Gordion. He notes the similarity between those from the reliefs that postdate the eighth century B.C. and those from Gordion and other places in the Near East, including Iran.<sup>238</sup> In a later article he discusses additional examples from Anatolia, and he dates two from a private collection and two from Tumulus MM at Gordion to the late eighth century B.C.<sup>239</sup>

It can be seen that fibulae have been given rather extensive consideration and study, and consequently they can be used as a means to help date archaeological strata and levels. The Marlik fibula, 448, was found in Tomb 36 (Trench XVIII C), which, although small, was among the richest tombs at Marlik (it also contained four elaborate gold vessels). As a whole the objects found in this tomb suggest an earlier date than the eighth century B.C. Thus we should either believe that fibulae, particularly of this type, were in existence in Iran, specifically in the Marlik region, during the late second to early first millennium B.C., as indicated by other examples found in Luristan, Talish, Gilan, and Caucasia, or bring the date of Tomb 36 down to the late eighth century B.C. The probability that fibulae were known

in this area before the eighth century B.C. seems more likely, particularly when taking into consideration the fact that the region of the southern basin of the Caspian Sea, and in particular the provinces of Gilan and Mazanderan, has received little systematic scientific attention. The area has not been extensively excavated except for clandestine activity in which such small and apparently valueless finds as bronze fibulae are often overlooked. Future scientific excavation in this area may throw more light on this question.

Recent studies have brought to light the close cross-cultural influences that existed between Cauca-

sia, Talish, and Marlik during the late second and early first millennium B.C. These can be seen particularly clearly in terms of the many comparable and even almost identical objects, particularly those of bronze, found in the three areas. Given our present state of knowledge, it is difficult to believe that fibulae were known in only one area, Caucasia, and not in others. One possibility is that the earliest examples of this type of decorative fibula in the form of a bent arm and hand with bead molding were produced at Marlik, and later this type spread into other cultural regions.

## *Pins* (449–465)

### DECORATIVE PINS (449–456)

A number of decorative pins were found at Marlik, of gold and bronze. The more elaborate pins are topped with an animal head.

#### **449 Gold Bird Head Pins**

1200*b* M Pl. 93

Two pins, each about 12.0 cm long, found in Tomb 41 (Trench XIX K). They are made of gold and are decorated at the end by a bird, possibly an eagle, head. The details of the features are not well pronounced. The eyes are marked by smooth high-relief rings, and the beak is pointed. The bird head is made of sheet gold, partly filled with gypsum and partly with bitumen.

#### **450 Gold and Bronze Lion Head Pins**

322 M Pl. 93, Color Plate XXIX C

Two pins, each about 18.5 cm long, found in Tomb 32 (Trench XVII E). They have long tapering tubular bodies topped with lion heads. The upper, thicker half of each pin is made from hollow sheet gold filled with natural bitumen. The lion head, partly damaged, is also made from sheet gold and filled with natural bitumen. It is round with a rather flat muzzle and an open mouth with whiskers and facial muscles shown by soft projecting lines. The nostrils are impressed holes; the nose bone is a projecting band; and the eyes are shallow oval depressions with the muscles around the eyes shown by projecting bands. At the side of the head are ears, which are pushed backward with a central round shallow depression. Projecting small wavy bands form the mane, and the neck edge is rolled to a projecting ring. This lion head is connected to the pin by a bronze wire installed in the bitumen filling of the upper shank. The cover between the neck edge of the lion head and the end of the pin was apparently

made from some perishable material, which is missing. The upper gold shank is covered by a very fine elaborate granulated chevron pattern, the chevrons formed by single files of very small gold balls. A file of granulation encircles the junction of the gold and bronze lower part of the pin, which is distinguished by a projecting ring. The bronze part of the shank is plain and tapers to a narrow round point.

A lion head that is similar in workmanship and decoration, attached to a whetstone found in a funerary deposit in the Inshushinak Temple at Susa, is dated by Amiet to the latter part of the second millennium B.C., around the time of Shilhak-Inshushinak.<sup>240</sup> A plated gold pin from Khurvin, somewhat similar in composition to the Marlik example except for the lion head, is dated by Vanden Berghe to the late second to early first millennium B.C.,<sup>241</sup> and similar bronze pins with lion heads at the end from Sialk Cemetery B are dated by Ghirshman to the early first millennium B.C.<sup>242</sup>

#### **451 Bronze Pin with Mountain Goat Head**

71 M Fig. 16; Pl. 93

About 22.5 cm long, found in Tomb 26 (Trench XVII B). It has a quite small mountain goat head with a hemispherical knob muzzle on its end. This figure has oval incised eyes, long horns curving backward from the top of the head, and a beard or jowls under the jaw. The composition and details of this pin reveal fine craftsmanship.

Because pins decorated with animal, bird, and human heads were made over a long range of time, there are many parallel examples. Pins of this type occur at Susa as early as the second half of the fourth millennium B.C.;<sup>243</sup> at Kish Cemetery A, probably dating to Early Dynastic III;<sup>244</sup> at Chagar Bazar, around 2900–2700 B.C.;<sup>245</sup> in the fourth Shaft Grave of Mycenae, about 1600 B.C.;<sup>246</sup> in Hittite remains at

Alishar;<sup>247</sup> at Kuban, about 1500–1200 B.C.;<sup>248</sup> in Luristan, about 1250–600 B.C.;<sup>249</sup> at Tepe Hissar;<sup>250</sup> and at Harappa and Mohenjo-daro.<sup>251</sup>

Several particularly close parallel examples of pins with mountain goat heads have been found. One from Sialk Cemetery B, which has produced many other bronze objects with extremely close similarities to objects from Marlik, is dated by Ghirshman to the early first millennium B.C., the Iron Age period.<sup>252</sup> Several pins with mountain goat heads in the David-Weill Collection in Paris are dated to the late second to early first millennium B.C.<sup>253</sup> Herzfeld describes pins with mountain goat heads from Gok Tepe near Lake Urmia, dated by Schaeffer to 1200–1000 B.C.,<sup>254</sup> as well as other pins from Luristan.<sup>255</sup> Moorey assigns a pin with a mountain goat head a north Persian origin with a date in the early Iron Age (ca. 1200–1000 B.C.), based on the Marlik finds.<sup>256</sup> A pin with a rather more stylized mountain goat head is in the Boston Museum of Fine Arts.<sup>257</sup> Another, in the Bröckelschen Collection, is classified as Luristan Bronze, dated to the second half of the second millennium B.C.,<sup>258</sup> and a third in the Dr. Audouin Collection in Paris is dated to the beginning of the first millennium B.C.<sup>259</sup> Two pins with mountain goat heads in The University Museum of the University of Pennsylvania are classified by Legrain as Luristan Bronzes,<sup>260</sup> as is an example in the Hamburg Museum, classified by Potratz, which he dates to the twelfth to seventh centuries B.C.<sup>261</sup>

Examples in the David-Weill Collection are dated to the end of the second millennium B.C.;<sup>262</sup> others in the Danish National Museum are categorized by Buhl as Luristan Bronzes;<sup>263</sup> and several more, possibly from Luristan, are dated to the fourteenth to ninth centuries B.C.<sup>264</sup> Additional examples, in the Ashmolean Museum, are dated by Moorey to the early first millennium B.C.;<sup>265</sup> another was found at Ghalekuti II, Tomb 5, in Dailaman by Fukai and Ikeda;<sup>266</sup> other examples are classified by Schaeffer as Luristan Bronzes, dated to the second half of the second millennium B.C.;<sup>267</sup> and still other examples, mentioned by Vanden Berghe, are dated to the late second to early first millennium B.C.<sup>268</sup>

#### 452 Bronze Pin with Humped Bull

344 M Pl. 93

Bronze stick, about 40.0 cm long, with a humped bull about 5.0 cm long at the end, found in Tomb 44 (Trench XXI N). The triangular head has a conical muzzle and crescent horns. At the throat is a small dewlap, and on the back at the shoulder is a large hump. The short body has a flat rump that extends to the long stick on which the small figurine is mounted. The legs are short and conical.

A very similar bronze stick with a humped bull on the end, from northern Iran, has been dated to the late second millennium B.C.<sup>269</sup>

#### 453 Gold Pin

570 M Fig. 16; Pl. 93

About 4.7 cm long, found in Tomb 50 (Trench XXI K). It is made of plated gold, with a circular body and a rectangular handle with a rolled tang at the end. The flat band tapers to a sharp point, and the circular body is decorated by a cross-file of small knobs with another file of knobs around the edges of the pin.

A racquet copper pin in a somewhat similar style, with a flat handle with rolled metal at the end, was found in Tell Aswad and is dated by Maxwell-Hyslop to the Sargonid period, about 2370–2200 B.C.<sup>270</sup> A similar spatulate hairpin ornament with a flat gold sheath rolled at the end was found at Ur.<sup>271</sup> These may be prototypes of the decorative pins of Marlik.

#### 454 Gold Pin

1193 M Pl. 93

About 5.0 cm long, found in Tomb 10 (Trench XI B). It is made from a plated gold sheath with a plain rectangular body tapering to a rather long thin wire point. The shape is spatulate with soft rounded corners.

#### 455 Bronze Pins with Gold Covers

385 M Pl. 93

Two pins, each about 24.0 cm long, found in Tomb 36 (Trench XVIII C). They have a narrow cylindrical shape tapering to a point. A bronze wire installed in the end of the pin probably held a decorative cover of some perishable material, which has completely disintegrated. The upper part of the shank has a thin gold cover bordered at the end by a file of small gold balls. A projecting ring divides this upper part from the plain lower part of the shank.

#### 456 Bronze Pin

1475 M Pl. 93

About 17.0 cm long, found in Tomb 36 (Trench XVIII C). It has a narrow tapering shape, with a bronze wire installed at the end and projecting rings both at the end and part way down the shank.

A bronze pin with a carnelian end, somewhat similar in composition and decoration, is dated by Amiet to the Elamite culture of the early second millennium B.C.<sup>272</sup>

### SIMPLE GARMENT PINS (457–465)

Many straight gold and bronze pins with knob heads, apparently used for fastening garments, were found at Marlik. Some are plain and others are decorated on the upper part of the shank by simple geometric bands with cross-hatching and parallel horizontal and vertical lines.



*GOLD PINS (457–458)***457 Gold Pin**

569 M Pl. 94

About 10.9 cm long, found in Tomb 50 (Trench XXI K). It is solid gold with a conical knob head and a straight shank tapering to a point. Between the knob end, decorated with double concentric lines, and a suspension hole piercing the shank about one-third of the way down, are parallel engraved projecting bands of simple geometric designs. At the top and bottom are cross-hatching bands, with the area between filled by alternating bands of parallel horizontal and vertical lines.

**458 Gold Pins**

957 M and 958 M Pl. 94

Two pins, 957 M (Fig. 501) and 958 (Fig. 502), each about 11.0 cm long, found in Tomb 10 (Trench XI B). They are made of gold with a knob head and a straight shank tapering to a point, with a suspension hole about one-third of the way down the shank. Between the knob head and the suspension hole are interval bands of simple geometric designs, very like those of 457.

## COMMENTS

A similar but undecorated gold pin with a suspension hole in the Louvre is dated by Amiet to the middle of the second millennium B.C.<sup>273</sup> Rather similar silver pins with decorative heads and suspension holes in the Bröckelschen Collection are dated by Calmeyer to the first half of the first millennium B.C.<sup>274</sup> A garment pin without a head knob but with decorative bands and a suspension hole near the middle, from the Treasure of Ancient Gaza, is dated by Petrie to around the middle of the second millennium B.C.<sup>275</sup>

A cast bronze garment pin in the Adam Collection decorated with bead and reel moldings elaborated with traced linear patterns, possibly from Luristan, is classified by Moorey to Iron Age II-III.<sup>276</sup> This type of pin, particularly in gold, may have been used for rolling cylinder seals. Gold pins with a cylinder seal attached by strings or small chains, belonging to the Early Dynastic period, were found in the Royal Cemetery of Ur,<sup>277</sup> and seals mounted on pins have been found at Nuzi and other sites.<sup>278</sup>

*BRONZE PINS (459–465)***459 Bronze Pins**

384 M and 410 M Pl. 94

Two pins, 384 M (Fig. 503), about 12.0 cm long, and 410 M (Fig. 504), about 11.5 cm long, found in Tomb 36 (Trench XVIII C). They have spherical cage heads and plain shanks pierced by suspension

holes. 410 M has an additional circular flange below the head.

**460 Bronze Pins**

1004 M and 1005 M Pl. 94

Two pins, 1004 M (Fig. 505), about 16.0 cm long, and 1005 M (Fig. 506), about 13.5 cm long, found in Zeinab Bejar. They have flat oval heads with rolled ends providing suspension.

**461 Bronze Pins**

37 M and 72a M Pl. 94

Bronze pins 37 M, about 15.5 cm long, and 72a M, which consists of several examples, the largest about 25.0 cm long, found in Tomb 26 (Trench XVII B). They have a four-sided shank, and some also have a large solid ovoid head.

**462 Bronze Pin**

703 M Pl. 94

About 13.5 cm long, found in Tomb 36 (Trench XVIII C). It is mostly plain with a flat, slightly flanged head and interval reel and bead moldings.

**463 Bronze Pins**

1027 M and 1473 M Pl. 94

These bronze pins both have a long head knob and simple geometric decoration on the upper shank ending at the pierced suspension hole: 1027 M, about 11.5 cm long, found in Tomb 10 (Trench XI B), and 1473 M, about 10.5 cm long, found in Tomb 36 (Trench XVIII C).

**464 Bronze Pins**

411 M, 475 M, 476 M, 190 M, and 530 M Pl. 94

The following bronze pins all have a rather small curved convex head knob and a suspension hole near the middle of the pin, with parallel moldings of simple projecting rings in the area of the upper shank between the hole and end knob:

411 M, about 21.5 cm long, Tomb 36 (Trench XVIII C);

475 M, about 18.5 cm long, Tomb 19 (Trench XIV F);

476 M, about 18.5 cm long, Tomb 19 (Trench XIV F);

190 M, about 19.5 cm long, Tomb 50 (Trench XXI K);

530 M, about 17.5 cm long, Tomb 50 (Trench XXI K).

**465 Bronze Pins**

947 M, 946 M, 945 M, 943 M, 702 M, and 1474 M Pl. 94

The following bronze pins are all plain with very small end knobs and a suspension hole in the middle of the shank:

947 M, about 22.5 cm long, Tomb 52 (Trench XXIII G);

946 M, about 18.0 cm long, Tomb 52 (Trench XXIII G);

945 M, about 22.5 cm long, Tomb 52 (Trench XXIII G);

943 M, about 14.0 cm long, Tomb 52 (Trench XXIII G);

702 M, about 13.5 cm long, Tomb 36 (Trench XVIII C);

1474 M, about 18.0 cm long, Tomb 36 (Trench XVIII C).

#### COMMENTS

Bronze pins with spherical cage heads in the Ashmolean are discussed by Moorey, who says that this type of pin is found in Luristan and West Persia and in sites northwest to the Caspian Sea, reflecting the development of a flourishing bronze industry in the tenth to seventh centuries B.C.<sup>279</sup> However, the well-developed objects of cast bronze found at Marlik indicate that this development started earlier, from the latter part of the second millennium B.C.

A pin from Redkin Lager in Caucasia with a flat, almost oval head and a curled tang for suspension is dated by Schaeffer to 1200–1100 B.C.<sup>280</sup> A hairpin in the Bröckelschen Collection, similar to 462, is dated by Calmeyer to the early first millennium B.C.<sup>281</sup> Other similar bronze pins, with flat, slightly domed or flanged heads and interval decoration of striated beads and double reels around the upper shank, in the Ashmolean, are described by Moorey. He discusses in detail this composition of bead and reel molding and its background in the Near East from the mid-second millennium B.C. Examples occur from the Levant to Mesopotamia, in the Mitannian, Caucasian, Caspian, and West Persian regions, as well as at Marlik and later Sialk Cemetery B.<sup>282</sup>

Also in the Ashmolean are large conical head bronze pins similar to 463.<sup>283</sup> A comparable example from Khurvin, with reel molding and the end of the shank missing, is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>284</sup> Other pins,

like those of 464, have small curved convex head knobs and shanks decorated with simple projecting rings. Similar bronze pins from Khurvin are dated by Vanden Berghe to the late second to early first millennium B.C.<sup>285</sup> Bronze pins with clublike heads and horizontal encircling lines on the upper shank in the Ashmolean are also discussed by Moorey, who suggests that this type of pin appeared in Elam in the later third millennium B.C., and afterward in Tepe Giyan in Luristan, Sialk Cemetery B, the area south of the Caspian Sea, Caucasia, and Khurvin.<sup>286</sup>

465 includes plain pins with very small end knobs. A similar type of bronze garment pin in the Adam Collection is dated to Iron Age II-III B by Moorey, who suggests that it is from Luristan.<sup>287</sup> Similar bronze pins with plain domed heads, slight necks, and pierced shanks with horizontal encircling lines on the upper part are housed in the Ashmolean. Moorey suggests that these are products of workshops in the Caspian area dating to the late second to early first millennium B.C.<sup>288</sup> A similar pin with a knob head, parallel grooves, and a suspension hole, found at Temple E of Nuzi, is dated to around the mid-second millennium B.C.,<sup>289</sup> and a similar example from Veri in the Russian Talish is assigned by Schaeffer to Talyche Recent 2-3, around 1450–1200 B.C.<sup>290</sup> Another example, found at Hasan Zamini is dated to Talyche Recent 2, with a suggested date of 1450–1350 B.C.<sup>291</sup> Other similar pins, from Khurvin, are dated by Vanden Berghe to the late second to early first millennium B.C.<sup>292</sup>

It can be seen that bronze hair or garment pins with a common shape, simple geometric decoration, suspension hole, and knob end were widespread during the late second and early first millennium B.C., being found in many excavations in Iran including Sialk, Giyan, Khurvin, Luristan, and the Iranian and Russian Talish, as well as in other excavations in the Near East.

### *Fragments of Gold Sheet (466–468)*

Many pieces of sheet gold were found, mostly broken, deformed, or in pieces. These may have been placed in the tombs as objects of wealth; however, their exact use is unknown.

#### **466 Gold Sheet**

1212 M Pl. 94

About twenty-one pieces of gold, found in Tomb 27 (Trench XVII D). They had apparently been cut into pieces from some complete object or objects. The slightly curving fragments are covered by projecting small knobs.

#### **467 Gold Sheet**

552 M Pl. 94

Two fragments of sheet gold, the larger about 9.8 cm long, found in Tomb 15 (Trench XIII C), rolled together.

#### **468 Gold Pieces**

1211fM, 1206cM, 1216M, 1203bM, 1208bM, 1197cM, 1204cM, and 1207bM Pl. 94

The following pieces are all fragments of sheet gold, some with decoration on the surface. They were probably placed in the tombs as objects of wealth:

1211fM, Tomb 47 (Trench XXII E);  
 1206c M, Tomb 52 (Trench XXIII G);  
 1216 M, Tomb 45 (Trench XXII H);  
 1203b M, Tomb 23 (Trench XV D);

1208b M, Tomb 50 (Trench XXI K);  
 1197c M, Tomb 32 (Trench XVII E);  
 1204c M, Tomb 14 (Trench XIII B);  
 1207b M, Tomb 45 (Trench XXI H).

## *Comments*

By the second half of the second millennium B.C. the artists and craftsmen of Marlik, who produced masterpieces of great delicacy and beauty, were using a well-developed and advanced technology, particularly in metals. By this time the area from the Mediterranean Sea to the Indus Valley had been sufficiently exposed to developments in various parts of the ancient world that it is now rather difficult to distinguish clearly between imported ideas and technology and genuine local elements.

By the second millennium B.C. this vast region already had many overlapping contacts that facilitated the dispersal of the general cultural and technological patterns of the great cultural and political centers of the ancient world. Both friendly and hostile relations and movements of people spread developments in technology as well as aesthetic patterns. However, it is still possible to distinguish some elements that appear more characteristic of certain major cultural centers and others that are more restricted to Marlik and its immediate vicinity. Of course, the material from the ancient world that is being used for comparison may represent only a very small and limited selection of what was produced at the time, and to a certain degree may have been uncovered due to the accident of history. Still, a comparison of the Marlik finds with other excavated material from the ancient world points to some patterns that are widespread and others that are more local and confined to a more specific area.

Some of the more distinctive pieces of jewelry from Marlik that can be compared to findings from other parts of the ancient world are the quadruple-spiral beads, the beads and pendants in the shape of a pomegranate or pomegranate cluster, others in the shape of grape clusters, pendants and earrings decorated with granulation, embossed sun disk pendants, and animal head and fluted beads.

Beads in the shape of a quadruple spiral or butterfly, such as those occurring in 163, 212, and 328, have also been found in other parts of the Caspian Zone and in the Iranian Plateau, as well as at Assur, Mari, and Brak in Mesopotamia and in Alaca Hüyük and Troy in Anatolia. They were produced over a long range of time from nearly the second half of the third millennium B.C. to the first half of the first millennium B.C.; Maxwell-Hyslop suggests a fourteenth- to thirteenth-century date for the type of

quadruple-spiral bead in which, as at Marlik, the four coils appear to be twisted or bound around the end of a central tube.

Pomegranate and pomegranate clusters are a common motif at Marlik, where they occur as beads, pendants, and earrings; examples include 163-165, 170-176, 204-206, 210, and 360-362. Similar pieces have been found at Sialk in the Iranian Plateau, at Tchoga Zanbil in the southwestern alluvial plain of Khuzistan, and in Cyprus and Mesopotamia, where they can be seen in Assyrian reliefs. They occur over a time range falling between the second half of the second millennium and the first half of the first millennium B.C. Grape cluster pendants, such as 177-180, have been found in a rather limited area of the Iranian Plateau (at Hasanlu and Sialk), in a time range between the late second and the early first millennium B.C.

Granulation is found on a number of pieces of Marlik jewelry, including 169, 183-184, 202, 310-312, 363-365, and 367. In Iran it is found at Susa and at Sialk, over a period from the second to the first half of the first millennium B.C. Disk pendants decorated with granulation similar to 183 and 184 have been found in a wide area of the ancient world from Tell el-'Ajjul and Lachish in Palestine on the eastern Mediterranean shores to Alalakh and Altin Tepe in Anatolia.

Embossed sun disk pendants, such as 166-167, 185-189, and 207-208, have been found in Iran at Talish in the Caspian Zone, and at Susa and Tchoga Zanbil in the Khuzistan plain of southwestern Iran, as well as at Nimrud in Mesopotamia and at Alalakh, Tell el-'Ajjul, and Ras Shamra in the Eastern Mediterranean region; they also appear in the Oxus Treasure. This represents a range of production from the middle of the second millennium to the middle of the first millennium B.C.

Animal head beads found at Marlik include 158 and 322-325. This type of bead has been found at Khurvin in the Iranian Plateau and at Enkomi in Cyprus, dated to the late second and early first millennium B.C. Fluted or ribbed beads, such as those of 160, 313, and 329, have been found at Ghalekuti in northern Iran, at Elamite sites in southern Iran, and at Ziwiye in western Iran, as well as in a wide area of the ancient world including Tell el-'Ajjul in Palestine and Larsa in Mesopotamia. They cover a time

range from the late third millennium to the first half of the first millennium B.C.

Other items of jewelry seem to be almost unique to Marlik, with no comparable material as yet found in other parts of the ancient world. Among these are Gold Pendants with Free-Form Rosettes (168, 182, and 209), the Gold Cage Pendant (202), the Gold Pendant with Double Eagle Heads (198), the Gold and Lapis Lazuli Pendant (197), the Gold Double-

Ball Pendant (203), and the Gold Pear-Shaped Pendants (200 and 201).

Thus, although the jewelry makers and artists of Marlik were quite conversant with the technology available in the ancient world and were familiar with traditional patterns, they also produced some unique examples of art for which no counterparts have yet been found.

Table 8. Jewellery

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
157	necklace (chain)	802 M	14882	52	XXIII G					gold
158	necklace (mt. goat beads)	12 M	25046	24	XV E	1.6				gold
159	necklace (beads)	224 M	14824	45	XXI H					gold
160	necklace (beads)	567 M	14826	50	XXI K					gold
161	necklace (beads)	1205 M	25460	52	XXIII G					gold
162	necklace (beads w/centerpiece)	446 M	14821	36	XVIII C					gold
163	necklace (beads w/ pendant)	291 M	14705	32	XVII E					gold
164	necklace (chain w/ pendant)	358 M	14717	36	XVIII C	51.0		4.5		gold
165	necklace (beads w/ pendant)	261 M	14820	47	XXI E			2.0		gold
166	necklace (beads w/ pendant)	474 M	14851	45	XXII H			1.5		gold
167	necklace (beads w/ pendant)	462 M	14852	45	XXII H			1.8		gold
168	necklace (beads w/ pendant)	264 M	14822	33	XVIII F			5.8		gold
169	necklace (chain w/ pendant)	3 M	14827	24	XV E	56.0		3.5		gold
170	pendant (pomegranate)	268 M	14847	33	XVIII F	5.2				gold
171	pendant (pomergranate)	833 M	14881	47	XXII E		3.0			gold
172	pendant (pomergranate)	1210a M	25465	47	XXII E	3.2				gold
173	pendant (pomergranate)	366 M	14838	36	XVIII C	11.0				gold
174	pendant (pomegranate)	1a M	14843	24	XV E	3.0				gold
175	pendant (pomergranate)	359 M	14690	36	XVIII C				5.5	gold
176	pendant (pomergranate)	1199a M	25454	36	XVIII C				4.0	gold
177	pendant (grape)	66 M	25055	26	XVII B	2.5				gold
178	pendant (grape)	17 M	14962	24	XV E	2.0				gold
179	pendant (grape)	126 M	25060	27	XVII D	3.6				gold
180	pendant (grape/2)	1210b M	25465	47	XXII E	2.5				gold
181	pendant (plain disks/2)	1198 M	25453	6	X A+			2.0		gold
182	pendant (disk w/ rosette)	265 M	14709	33	XVIII F			5.7		gold
183	pendant (granulated disk)	62 M	14718	26	XVII B			4.8		gold
184	pendant (granulated disk)	63 M	14710	26	XVII B			4.6		gold
185	pendant (sun disk)	448 M	14846	23	XV D			5.0		gold
186	pendant (sun disk)	1064 M	14716	12	XII E			6.5		gold
187	pendant (sun disk)	554 M	14715	15	XIII C			4.0		gold
188	pendant (sun disk/3)	529 M	25034	50	XXI L			1.8		gold
189	pendant (sun disk)	548 M	14713	23	XV D			3.8		gold
190	pendant (disk w/ flower)	308 M	14712	50	XXII L			6.0		gold
191	pendant (embossed disk)	564 M	14714	50	XXI K			5.5		gold
192	pendant (embossed disks/2)	125 M	14942	27	XVII D			2.0		gold
193	pendant (embossed disks/5)	9 M	25043	24	XV E			2.8		gold
194	pendant (embossed disk)	435 M	14940	36	XVIII C			2.5		gold
	pendant (embossed disk)	436 M	14940	36	XVIII C			2.5		gold
	pendant (embossed disk)	437 M	14940	36	XVIII C			2.5		gold
	pendant (embossed disk)	443 M	14941	36	XVIII C			1.8		gold
195	pendant (embossed disk)	314 M	14943	47	XXI E			1.1		gold
196	pendant (embossed disk/2)	644 M	14950	2	VI B+			3.0		gold
197	pendant	553 M	14711	15	XIII C			5.0		gold, lapis lazuli
198	pendant (eagle head)	1b M	14843	24	XV E			5.5		gold
199	pendant (crescent/5)	310 M	14844	32	XVII E	4.7				gold
200	pendant (pear-shaped/8)	10 M	25044	24	XV E	2.8				gold
201	pendant (pear-shaped/3)	28 M	25053	26	XVII B	2.8				gold
	pendant (pear-shaped/3)	68 M	25057	26	XVII B	2.5				gold
202	pendant (granulated cage)	19 M	14689	26	XVII B			3.8		gold
203	pendant (double ball)	1480 M	31 STO	36	XVIII C	2.5				gold
204	necklace (beads w/pendant)	478 M	25013	19	XIV F					gold, carnelian
205	necklace (beads w/pendant)	299 M	14837	32	XVII E					gold, carnelian

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
206	necklace (beads w/pendant)	195 M	14707	16	XIII F					gold, frit
207	necklace (beads w/pendant)	457 M	14850	45	XXII H					gold, carnelian
208	necklace (beads w/pendant)	116 M	25023	27	XVII D			2.0		gold, carnelian
209	necklace (beads w/pendant)	266 M	14706	33	XVIII F			6.0		gold, carnelian
210	necklace (beads w/pendant)	298 M	14831	32	XVII E					gold, carnelian
211	necklace (beads w/pendant)	479 M	14849	19	XIV F					gold, agate, carnelian
212	necklace (beads)	192 M	25185	16	XIII F					gold, carnelian
213	necklace (beads)	486 M	14958	19	XIV F					gold, carnelian
214	necklace (beads w/centerpiece)	1177 M	25432	AKB						gold, agate, carnelian
215	necklace (beads)	1404 M	31 STO	AKB						gold, agate, carnelian
216	necklace (beads w/pendant)	1436 M	31 STO	16	XIII F					gold, agate, carnelian
217	necklace (beads)	1202 M	25457	2	VI B+					gold, bitumen?
218	necklace (beads w/centerpiece)	226 M	14853	25	XVI F					gold, fired clay
219	necklace (beads)	312 M	25165	47	XXI E					carnelian
220	necklace (beads)	537 M	25168	50	XXI L					carnelian
221	necklace (beads w/centerpiece)	219 M	25180	45	XXI H					carnelian
222	necklace (beads)	193 M	25182	16	XIII F					carnelian
223	necklace (beads)	1405 M	31 STO	AKB						carnelian
224	necklace (beads)	682 M	14947	3	VI A					carnelian
225	necklace (beads)	542 M	25167	50	XXI L					carnelian
226	necklace (beads)	225 M	25179	25	XVI F					carnelian
227	necklace (beads)	220 M	25178	45	XXI H					carnelian
228	necklace (beads)	571 M	25166	50	XXI L					carnelian
229	necklace (beads w/centerpiece)	223 M	14966	45	XXI H					carnelian
230	necklace (beads w/centerpiece)	383 M	25164	36	XVIII C					carnelian
231	necklace (beads w/centerpiece)	199 M	25183	16	XIII F					carnelian
232	necklace (beads)	572 M	25037	50	XXI L					carnelian
233	necklace (beads)	545 M	25170	50	XXI L					carnelian
234	necklace (beads)	1406 M	31 STO	44	XXI N					carnelian
235	necklace (beads)	1407 M	31 STO	44	XX M					carnelian
236	necklace (beads)	1410 M	31 STO	52	XXIII G					carnelian
237	necklace (beads w/centerpiece)	1412 M	31 STO	2	VI B+					carnelian
238	necklace (beads w/centerpiece)	1418 M	31 STO	5	VIII D					carnelian
239	necklace (beads w/centerpiece)	1421 M	31 STO	15	XIII C					carnelian
240	necklace (beads)	1422 M	31 STO	14	XIII B					carnelian
241	necklace (beads)	1429 M	31 STO	47	XXII E					carnelian
242	necklace (beads w/centerpiece)	1434 M	31 STO	50	XXI K					carnelian
243	necklace (beads)	221 M	14968	45	XXI H					carnelian
244	necklace (beads w/pendant)	1178 M	25433	AKB						carnelian
245	necklace (beads w/pendant)	191 M	25181	50	XXI L					carnelian
246	necklace (beads w/bird pendant)	459 M	25177	45	XXII H					carnelian
247	necklace (beads w/bird pendant)	472 M	25174	19	XIV F					carnelian
248	necklace (beads w/ 3 pendants)	568 M	25169	50	XXI K					carnelian
249	necklace (beads w/ pendants)	222 M	25184	45	XXI H					carnelian

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
250	necklace (beads w/ pendants)	1415 M	31 STO	5	VIII D					carnelian
251	necklace (beads w/ pendants)	1417 M	31 STO	45	XXI H					carnelian
252	necklace (beads w/ pendants)	1426 M	31 STO	1	III D+					carnelian
253	necklace (beads w/ pendants)	1430 M	31 STO	47	XXII E					carnelian
254	necklace (beads)	318 M	25163	32	XVII E					gold, carnelian
255	necklace (beads w/centerpiece)	447 M	25175	23	XV D					gold, carnelian
256	necklace (beads)	1180 M	25435	AKB						carnelian, agate, stone
257	necklace (beads)	1194 M	25449	10	XI B					carnelian, stone
258	necklace (beads)	1423 M	31 STO	14	XIII B					carnelian, stone
259	necklace (beads)	488 M	25171	18	XIV D					gold, carnelian, stone
260	necklace (beads w/ pendants)	477 M	25176	19	XIV F					carnelian, white stone
261	necklace (beads w/ pendant)	1408 M	31 STO	44	XX M					carnelian, black stone
262	necklace (beads w/ pendants)	1073 M	25186	16	XIII F					carnelian, agate
263	necklace (beads w/ pendant)	444 M	25173	36	XVIII C					carnelian, agate
264	necklace (beads w/ pendant)	1443 M	31 STO	26	XVII B					carnelian, glass
265	chain	373 M	14954	36	XVIII C	44.0				silver
266	necklace (beads)	1450 M	31 STO	36	XVIII C					bronze
267	necklace (beads)	1449 M	31 STO	36	XVIII C					bronze
268	necklace (beads)	1448 M	31 STO	36	XVIII C					bronze
269	pendant (medallion)	634 M	14986	6	X A+	5.0		3.4		bronze
270	pendant (medallion)	1018 M	14989	6	X A+	6.5				bronze
271	pendant (disk)	433 M	14588	36	XVIII C			2.5		bronze
272	pendant (pear-shaped)	1460 M	31 STO	36	XVIII C	2.3				bronze
273	pendants (3)	408a M	25340	47	XXII E	6.0, 6.0, 3.5				bronze
274	pendant (pear-shaped)	415 M	14592	36	XVIII C	4.0				bronze
275	pendant (pear-shaped)	939 M	14979	GH		3.5				bronze
276	pendant (crescents/3)	1457 M	31 STO	36	XVIII C	2.5				bronze
277	necklace (beads w/ pendant)	1435 M	31 STO	50	XXI K					transparent stone
278	necklace (beads)	481 M	25253	19	XIV F					hematite
279	pendant	374 M	14936	36	XVIII C				3.0	black stone
280	pendant	426 M	7 STO	36	XVIII C				2.0	black stone
281	pendant	407a M	22 STO	24	XV E	4.5				black material
282	pendant	1459 M	31 STO	23	XV D	2.5				black material
283	necklace (beads w/centerpiece)	70 M	25121	26	XVII B					glass
284	necklace (beads w/centerpiece)	25 M	25050	26	XVII B					glass
285	necklace (beads)	784 M	25246	47	XXII E					glass
286	necklace (beads)	785 M	25245	47	XXII E					glass
287	necklace (beads)	1431 M	31 STO	47	XXII E					glass
	necklace (beads)	1432 M	31 STO	47	XXII E					glass

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
288	necklace (beads)	130a M	2396	32	XVII E					frit
289	necklace (beads)	1437 M	31 STO	32	XVII E					frit
290	necklace (ram beads)	132 M	25250	47	XXII E					frit
291	necklace	1444 M	31 STO	40	XVIII N					frit
292	necklace (beads)	544 M	25243	50	XXI L					frit
293	necklace (beads)	117 M	25248	27	XVII D					frit
294	necklace (beads)	407b M	22 STO	24	XV E					frit
295	necklace (beads)	1441 M	31 STO	40	XVIII N					frit, lime
296	necklace (beads w/ pendant)	1440 M	31 STO	40	XVIII N					frit, lime, clay
297	necklace (beads)	1442 M	31 STO	40	XVIII N					gypsum
298	necklace (beads)	574 M	14967	27	XVII D					gypsum
299	necklace (beads)	1445 M	31 STO	45	XXII G					gypsum
300	necklace (beads)	1446 M	31 STO	40	XVIII N					gypsum
301	pendant bead	1458 M	31 STO	40	XVIII N	2.5				gypsum
302	pendant	406 M	14586	36	XVIII C	5.0				gypsum
303	necklace (beads)	1438 M	31 STO	GH						lime
304	necklace (beads)	480 M	25012	19	XIV F					lime
305	necklace (beads)	1179 M	25434	GH						lime
306	necklace (beads)	1077 M	25252	40	XVIII N					fired clay
	necklace (beads)	1083 M	25247	10	XI B					fired clay
307	necklace (beads w/ pendant)	1439 M	31 STO	44	XX M					fired clay, gypsum
308	necklaces (2)	573 M	25251	50	XXI L					shell
309	necklace	1411 M	31 STO	52	XXIII G					shell, bone
	necklace	1416 M	31 STO	5	VIII D					shell, bone
	necklace	1419 M	31 STO	5	VIII D					shell, bone
	necklace	1424 M	31 STO	14	XIII B					bone
	necklace (w/ ram pendant)	1451 M	31 STO	40	XVIII N					shell, bone, lime
	necklace	1455 M	31 STO	GH						shell
	necklace	1456 M	31 STO	5	VIII D					bone
310	bead (centerpiece)	22 M	25048	26	XVII B	3.0				gold, bitumen
311	bead (centerpiece)	296 M	14836	32	XVII E	6.0				gold
312	bead (centerpiece)	1196 M	25451	36	XVIII C	3.0				gold
313	bead (centerpiece/2)	547 M	14869	14	XIII B	2.6				gold
314	bead (spacer)	555 M	25032	15	XIII C	3.5	1.5			gold
315	bead (spacer)	1211a M	25466	47	XXII E	2.5				gold
316	bead (center)	450a M	14969	23	XV D	3.2				gold
317	bead (center)	556a M	25039	15	XIII C	3.9				gold
318	bead (center)	67 M	25056	26	XVII B	2.5				gold
319	bead (center)	1070 M	14829	2	VI B+	3.8				gold, agate
320	bead (spacer)	1069 M	14828	2	VI B+	4.0	2.3			gold, agate
321	bead (center)	300 M	14871	32	XVII E	7.0				gold, bitumen
	bead (center)	301 M	14872	32	XVII E	6.5				gold, bitumen?
322	bead (lion head)	375 M	25066	36	XVIII C	3.6				gold
323	bead (lion head/4)	1200a M	25455	41	XIX K	2.0				gold
324	beads (lion & mt. goat)	1195 M	25450	32	XVII E	2.0				gold
325	bead (lion head/2)	127 M	25061	27	XVII D	1.5				gold
326	bead (pomegranate/3)	302 M	14739	32	XVII E			1.5		gold
	bead (pomegranate/3)	303 M	14729	32	XVII E			1.0		gold
327	bead (pomegranate/10)	124 M	25059	27	XVII D	2.0				gold
	bead (pomegranate/5)	445 M	14963	36	XVIII C			1.8		gold



Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
327	bead (pomegranate/2)	1201a M	25456	5	VIII D	2.0				gold
	bead (pomegranate)	1479 M	31	36	XVIII C	2.0				gold
328	bead (butterfly)	441 M	14965	36	XVIII C	1.3				gold
	bead (butterfly)	1199b M	25454	36	XVIII C	1.4				gold
329	bead (vertical ribbed)	319a M	25065	47	XXI E			1.0		gold
	bead (vertical ribbed)	556b M	25039	15	XIII C			1.0		gold
330	bead (four sided)	319b M	25065	47	XXI E	1.5				gold
	bead (four sided/7)	1201b M	25456	5	VIII D	1.2				gold
331	bead (flat discoid/2)	549a M	25035	23	XIV D			1.9		gold
	bead (flat discoid)	1192a M	25447	10	XI B			1.9		gold
	bead (flat discoid/2)	1211b M	25466	47	XXII E			1.6		gold
332	bead (cylindrical spiral)	450b M	14969	23	XV D	1.8				gold
	bead (cylindrical spiral/3)	1192b M	22447	10	XI B	1.5				gold
333	bead (globular/4)	27 M	25052	26	XVII B			1.0		gold
	bead (globular/3)	69 M	25058	26	XVII B			0.8		gold
	bead (globular)	128a M	25062	27	XVII D			1.0		gold
	bead (globular/2)	319c M	25065	47	XXI E			1.0		gold
	bead (globular/5)	1206a M	25461	52	XXIII G			1.0		gold
334	bead (ring shaped)	1192c M	25447	10	XI B			1.2		gold
	bead (ring shaped)	1211c M	25446	47	XXII E			0.8		gold
335	bead (olive shaped/5)	128b M	25062	27	XVII D			1.5		gold
	bead (olive shaped/22)	1201c M	25456	5	VIII D	1.0				gold
	bead (olive shaped/9)	1211d M	25466	47	XXII E	1.0				gold
336	bead (conical/40)	137 M	25064	32	XVII E	0.6				gold
	bead (conical/5)	1199c M	25454	36	XVIII C	0.6				gold
337	bead (three-ring reel/30)	1206b M	25461	52	XXIII G	0.7				gold
338	bead (8)	24 M	25049	26	XVII B	3.0				carnelian
339	bead (spacer/5)	1476 M	31 STO	16	XIII F		2.0			carnelian
340	bead	1477 M	31 STO	36	XVIII C			1.5		glass frit
341	bead (10)	135 M	25063	32	XVII E			1.5		frit
342	bead (5)	1478 M	31 STO	14	XIII B	1.4				fired clay
343	bead? (cat's eye)	484 M	25254	19	XIV F			3.0		agate
344	bracelet (lion head)	357 M	14816	36	XVIII C			7.3		gold
345	bracelet (horse heads)	608 M	14857	2	VI B+			9.5		gold
346	bracelet (animal heads)	458 M	14585	45	XXII H			7.0		silver, gold
347	bracelet (mt. goat heads)	646 M	14949	24	XV E			7.5		gold, bronze
348	bracelet (animal heads)	1188a M	25444	ZB				5.0		silver
349	bracelet	274 M	14748	33	XVII F	13.0				gold
	bracelet	275 M	14754	33	XVII F	13.5				gold
350	bracelet	532 M	25030	50	XXI L			7.0		gold
351	bracelet	533 M	14757	50	XXI L			6.0		gold
352	bracelet	276 M	14756	33	XVIII F	13.0				gold
353	bracelet	4 M	14752	24	XV E			7.5		gold
	bracelet	203 M	14750	45	XXI H			9.0		gold
	bracelet	267 M	14749	33	XVIII F			6.3		gold
	bracelet or armlet	292 M	14753	47	XXI E	19.0				gold
	bracelet	460 M	14722	45	XXII H			3.2		gold
354	bracelet	5 M	14864	24	XV E			8.0		silver
355	bracelet	231 M	25006	25	XVI F			6.5		bronze
	bracelet (5)	523 M	14973	50	XXI L			7.5		bronze
356	bracelet	414 M	9 STO	36	XVIII C			7.7		bronze
	bracelet	425 M	8 STO	36	XVIII C			5.0		bronze
	bracelet	492 M	25010	18	XIV D			7.5		bronze
	bracelet	642 M	61 STO	2	VI B+			6.8		bronze
	bracelet (5)	689 M	14978	15	XIII C			6.8		bronze
	bracelet or armlet	690 M	25325	36	XVIII C			10.3		bronze

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material	
356	bracelet (2)	691 M	25001	36	XVIII C			7.0		bronze	
	bracelet	720 M	55 STO	3	VI A			8.5		bronze	
	bracelet	721 M	61 STO	3	VI A			8.8		bronze	
	bracelet or armlet (4)	731 M	25150	44	XX N			9.5		bronze	
	bracelet	758 M	61 STO	1	III D+			7.5		bronze	
	bracelet (2)	936 M	14995		GH			5.5		bronze	
	bracelet (2)	1008 M	14994	20	XIV H			6.5		bronze	
	bracelet (2)	1009 M	14994	20	XIV H			6.0		bronze	
	bracelet	1010 M	14994	30	XVI L			6.5		bronze	
	bracelet (3)	1021 M	14993	6	X A+			6.0		bronze	
	bracelet (3)	1049 M	14937		GH			4.5		bronze	
	357	bracelet?	99 M	25351	50	XXII L			7.2		bronze
bracelet?		688 M	14981	36	XVIII C			6.7		bronze	
358	bracelet	715 M	25321	1	III D+		6.5	14.5		bronze	
359	bracelet (2)	1048 M	25115		GH			5.8		bronze	
360	earring (pomegranate)	269 M	14726	33	XVIII F	6.0				gold	
361	earring (pomegranate)	295 M	14825	47	XXI E	4.5				gold	
362	earring (pomegranate)	365 M	14848	36	XVIII C	7.0				gold	
363	earring (pyramid/2)	122 M	14738	27	XVII D	4.0				gold	
364	earring	364 M	14742	36	XVIII C			2.3		gold	
365	earring (crescent/2)	960 M	14735	10	XI B			3.0		gold, lapis lazuli	
366	earring (pennannular)	964 M	14740	10	XI B			3.0		gold	
367	earring (boat shaped)	348 M	14746	44	XXI N			2.0		gold	
368	earring (boat shaped)	535 M	14910	50	XXI L			3.0		gold	
369	earring (boat shaped/2)	526 M	14745	50	XXI L					gold	
370	earring (boat shaped)	461 M	25009	45	XXII H			2.0		gold	
	earring (boat shaped)	527 M	14912	50	XXI L			2.0		gold	
	earring (boat shaped)	528 M	14913	50	XXI L			1.8		gold	
	earring (boat shaped/2)	534 M	14734	50	XXI L			2.0		gold	
	earring (boat shaped)	536 M	14911	50	XXI L			2.0		gold	
	earring (boat shaped/8)	1203a M	25458	23	XV D					gold	
	371	earring (boat shaped)	1065 M	14904	2	VI B+			1.7		gold
		earring (boat shaped/2)	1066 M	14723	5	VIII D			3.0		gold
		earring (boat shaped/2)	1067 M	14732	5	VIII D			3.0		gold
		earring (boat shaped/2)	1068 M	14903	5	VIII D			3.0		gold
372	earring (animal shaped)	803 M	14883	52	XXIII G	5.0			4.0	gold	
	earring (animal shaped)	804 M	14884	52	XXIII G	5.0			4.0	gold	
	earring (animal shaped)	805 M	14916	52	XXIII G	5.0			4.0	gold	
373	earring (crescent)	317 M	14746	50	XXII L			2.2		gold	
374	earring (crescent)	482 M	14736	19	XIV F			2.0		gold	
375	earring (crescent)	961 M	14888	10	XI B			2.0		gold	
376	earring (spiral twist)	449 M	14741	23	XV D			3.0		gold	
377	earring (spiral twist/2)	306 M	14905	50	XXII L			2.2		gold	
	earring (spiral twist/2)	307 M	14724	50	XXII L			2.1		gold	
378	earring (loop)	11 M	25045	24	XV E			1.1		gold	
379	earring (loop)	551 M	14744	14	XIII B			2.5		gold	
	earring (loop)	557 M	14737	15	XIII C			2.3		gold	
	earring (loop)	558 M	25033	15	XIII C			2.3		gold	
380	earring (loop/2)	451 M	14908	23	XV D			2.3		gold	
381	earring (loop)	452 M	14909	23	XV D			2.0		gold	
382	earring (loop/2)	550 M	14743	23	XV D			2.5		gold	
383	earring (loop/2)	836 M	3101	47	XXII E			2.5		gold	
384	earring (loop/3)	197 M	14907	16	XIII F			2.0		gold	
	earring (loop/2)	218 M	14961	45	XXI H			1.7		gold	
	earring (loop/4)	442 M	14964	36	XVIII C			1.8		gold	

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
384	earring (loop/3)	483 M	14959	19	XIV F			1.3		gold
	earring (loop/2)	962 M	14885	10	XI B			2.5		gold
	earring (loop/4)	1187a M	25443	40	XVIII N			2.5		gold
	earring (loop)	1204a M	25459	14	XIII B			2.0		gold
385	earring (spiral twist)	1187b M	25443	40	XVIII N			2.2		silver
386	earring (spiral twist)	1470 M	31 STO	36	XVIII C			3.5		bronze
387	earring (loop/2)	1082a M	14938	50	XXI K			3.5		bronze
	earring (loop/3)	1471 M	31 STO	36	XVIII C			1.5		bronze
388	ring (animal)	360 M	14832	36	XVIII C			2.8		gold
389	ring (serpentine/2)	565 M	14725	50	XXI K			2.3		gold
390	ring (band)	361 M	14727	36	XVIII C			1.9		gold
	ring (band)	362 M	14933	36	XVIII C			2.0		gold
391	ring (band)	363 M	14728	36	XVIII C			1.8		gold
392	ring (band/2)	320 M	14934	32	XVII E			2.0		gold
393	ring (loop)	1197a M	25452	32	XVII E			2.0		gold
394	ring (band/3)	468 M	25011	19	XIV F			2.0		bronze
395	ring (band)	1463 M	31 STO	36	XVIII C			2.0		bronze
	ring (band/2)	1465 M	31 STO	19	XIV F			2.0		bronze
396	ring (loop/2)	1007 M	14994	30	XVI L			2.3		bronze
	ring (loop/4)	1461 M	31 STO	36	XVIII C			2.2		bronze
	ring (loop/5)	1462a M	31 STO	36	XVIII C			2.3		bronze
	ring (loop/3)	1464 M	31 STO	36	XVIII C			2.3		bronze
397	diadem/forehead band	560 M	14859	15	XIII C	53.5	1.5			gold
398	diadem/forehead band	453 M	14862	23	XV D	43.5	1.4			gold
399	diadem/forehead band	531 M	14863	50	XXI L	17.5	1.0			gold
400	diadem/forehead band	559 M	14859	15	XIII C	18.5	1.0			gold
401	diadem/forehead band	563 M	14618	50	XXI K	34.5	1.0			gold
402	diadem/forehead band	316 M	25019	50	XXI K	41.0	0.8			gold
	forehead band (deformed)	1175a M	25097	32	XVII E					gold
	forehead band (broken)	1197b M	25452	32	XVII E					gold
	forehead band (broken)	1207a M	25462	45	XXI H					gold
	forehead band (broken)	1208a M	25463	50	XXI K					gold
	forehead band (broken)	1211e M	25466	47	XXII E					gold
403	forehead band (broken)	1204b M	25459	14	XIII B					gold
404	hair binder	304 M	14721	50	XXII L			3.5		gold
	hair binder (2)	832 M	14835	47	XXII E			3.0		gold
	hair binder	1072 M	14870	1	III D+			3.0		gold
405	hair binder	123 M	14733	27	XVII D			4.0		gold
	hair binder	309 M	14730	50	XXII L			3.5		gold
	hair binder (4)	561 M	25040	15	XIII C			5.0		gold
406	hair binder	1188b M	25444	ZB				3.0		silver
407	hair binder	1082b M	14938	50	XXI K			3.5		bronze
408	hair binder	428 M	5 STO	36	XVIII C			4.0		bronze
	hair binder	1466 M	31 STO	36	XVIII C			3.0		bronze
	hair binder	1469 M	31 STO	36	XVIII C			2.0		bronze
409	button	217 M	14767	45	XXI H			16.5		gold
410	button	64 M	14790	26	XVII B			8.5		gold
411	button	23 M	14791	26	XVII B			10.5		gold
412	button	214 M	14769	45	XXI H			6.0		gold
	button	215 M	14788	45	XXI H			5.3		gold
	button	216 M	14768	45	XXI H			5.5		gold
413	button	244 M	14762	42	XX F			7.5		gold
	button	245 M	14761	42	XX F			7.5		gold
	button	247 M	14792	42	XX F			7.5		gold
	button	248 M	14758	42	XX F			7.5		gold
	button	249 M	14795	42	XX F			7.5		gold

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
413	button	250 M	14793	42	XX F			7.5		gold
	button	252 M	14794	42	XX F			7.5		gold
	button	253 M	14797	42	XX F			7.0		gold
	button	259 M	14777	42	XX F			5.0		gold
414	button	207 M	14766	45	XXI H			7.5		gold
415	button	959 M	14845	10	XI B			5.0		gold
416	button	208 M	14764	45	XXI H			8.6		gold
417	button	205 M	14763	45	XXI H			8.5		gold
	button	213 M	14773	45	XXI H			5.1		gold
418	button	311 M	14786	50	XXII L			4.1		gold
	button	313 M	14808	50	XXII L			3.6		gold
	button	315 M	14809	50	XXII L			4.0		gold
419	button	1035 M	14944	1	III D+			6.5		gold
	button	6 M	14771	24	XV E			7.0		gold
	button	7 M	14778	24	XV E			5.6		gold
	button (4)	18 M	14782	26	XVII B			5.6		gold
420	button (2)	26 M	25051	26	XVII B			7.0		gold
	button	270 M	14787	33	XVIII F			5.0		gold
	button	271 M	14803	33	XVIII F			4.8		gold
	button	272 M	14804	33	XVIII F			4.0		gold
	button	273 M	14805	33	XVIII F			3.7		gold
	button	278 M	14799	33	XVIII F			4.5		gold
	button	279 M	14798	33	XVIII F			4.2		gold
	button	280 M	14800	33	XVIII F			5.1		gold
	button	281 M	14801	33	XVIII F			4.3		gold
	button	282 M	14802	33	XVIII F			5.0		gold
421	button	1190 M	25446	26	XVII B			4.6		gold
422	button	254 M	14774	42	XX F			5.3		gold
	button	255 M	14775	42	XX F			5.2		gold
	button	256 M	14779	42	XX F			4.8		gold
	button	257 M	14776	42	XX F			5.0		gold
	button	258 M	14789	42	XX F			5.0		gold
	button	209 M	14770	45	XXI H			5.8		gold
423	button	210 M	14806	45	XXI H			5.8		gold
	button	211 M	14772	45	XXI H			5.8		gold
	button	212 M	14807	45	XXI H			5.8		gold
	button	212 M	14807	45	XXI H			5.8		gold
424	button	138 M	14760	27	XVII D			6.0		gold
425	button	297 M	14784	32	XVII E			6.5		gold
426	button	838 M	14892	47	XXII E			2.6		gold
	button	839 M	14892	47	XXII E			2.6		gold
	button	840 M	14892	47	XXII E			2.4		gold
	button	841 M	14892	47	XXII E			2.5		gold
	button	842 M	14892	47	XXII E			2.7		gold
	button	843 M	14928	47	XXII E			3.0		gold
	button	844 M	14899	47	XXII E			2.6		gold
	button	845 M	14928	47	XXII E			2.6		gold
	button	846 M	14899	47	XXII E			2.7		gold
	button	847 M	14928	47	XXII E			2.6		gold
	button	848 M	14899	47	XXII E			2.7		gold
	button	849 M	14894	47	XXII E			2.7		gold
	button	850 M	14894	47	XXII E			2.6		gold
	button	851 M	14894	47	XXII E			2.6		gold
	button	852 M	14894	47	XXII E			2.6		gold
button	853 M	14894	47	XXII E			2.8		gold	
button	854 M	14875	47	XXII E			2.6		gold	
button	855 M	14895	47	XXII E			2.7		gold	

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
426	button	856 M	14895	47	XXII E			2.8		gold
	button	857 M	14891	47	XXII E			2.4		gold
	button	858 M	14876	47	XXII E			3.2		gold
	button	859 M	14896	47	XXII E			2.7		gold
	button	860 M	14896	47	XXII E			2.2		gold
	button	861 M	14877	47	XXII E			2.3		gold
427	button	862 M	14926	52	XXIII G			2.5		gold
	button	863 M	14926	52	XXIII G			2.5		gold
	button	864 M	14926	52	XXIII G			2.7		gold
	button	865 M	14926	52	XXIII G			2.7		gold
	button	866 M	14899	52	XXIII G			3.0		gold
	button	867 M	14925	52	XXIII G			2.7		gold
	button	868 M	14925	52	XXIII G			3.2		gold
	button	869 M	14925	52	XXIII G			2.7		gold
	button	870 M	14925	52	XXIII G			2.6		gold
	button	871 M	14900	52	XXIII G			2.5		gold
	button	872 M	14924	52	XXIII G			2.4		gold
	button	873 M	14924	52	XXIII G			2.7		gold
	button	874 M	14924	52	XXIII G			2.7		gold
	button	875 M	14924	52	XXIII G			2.8		gold
	button	876 M	14924	52	XXIII G			2.8		gold
	button	877 M	14900	52	XXIII G			2.8		gold
	button	878 M	14927	52	XXIII G			2.5		gold
	button	879 M	14900	52	XXIII G			2.5		gold
	button	880 M	14927	52	XXIII G			2.6		gold
	button	881 M	14898	52	XXIII G			2.7		gold
	button	882 M	14898	52	XXIII G			2.9		gold
	button	883 M	14923	52	XXIII G			2.6		gold
	button	884 M	14890	52	XXIII G			2.9		gold
	button	885 M	14923	52	XXIII G			2.7		gold
	button	886 M	14923	52	XXIII G			2.7		gold
	button	887 M	14923	52	XXIII G			2.7		gold
	button	888 M	14923	52	XXIII G			2.6		gold
	button	889 M	14923	52	XXIII G			2.5		gold
	button	890 M	14922	52	XXIII G			2.5		gold
	button	891 M	14922	52	XXIII G			2.5		gold
	button	892 M	14878	52	XXIII G			2.9		gold
	button	893 M	14922	52	XXIII G			2.6		gold
	button	894 M	14922	52	XXIII G			3.0		gold
	button	895 M	14900	52	XXIII G			2.6		gold
	button	896 M	14922	52	XXIII G			2.7		gold
	button	897 M	14889	52	XXIII G			3.2		gold
	button	898 M	14900	52	XXIII G			2.7		gold
	button	899 M	14922	52	XXIII G			2.6		gold
	button	900 M	14893	52	XXIII G			2.8		gold
	button	901 M	14893	52	XXIII G			3.2		gold
	button	902 M	14893	52	XXIII G			2.8		gold
	button	903 M	14917	52	XXIII G			2.8		gold
	button	904 M	14917	52	XXIII G			2.4		gold
	button	905 M	14917	52	XXIII G			2.5		gold
	button	906 M	14917	52	XXIII G			2.4		gold
	button	907 M	14917	52	XXIII G			2.8		gold
	button	908 M	14918	52	XXIII G			2.8		gold
	button	909 M	14918	52	XXIII G			2.8		gold
	button	910 M	14918	52	XXIII G			2.8		gold
	button	911 M	14918	52	XXIII G			2.9		gold

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
427	button	912 M	14897	52	XXIII G			2.6		gold
	button	913 M	14897	52	XXIII G			2.8		gold
	button	914 M	14919	52	XXIII G			2.5		gold
	button	915 M	14919	52	XXIII G			2.5		gold
	button	916 M	14919	52	XXIII G			2.4		gold
	button	917 M	14901	52	XXIII G			2.5		gold
	button	918 M	14919	52	XXIII G			2.7		gold
	button	919 M	14919	52	XXIII G			2.8		gold
	button	920 M	14919	52	XXIII G			2.7		gold
	button	921 M	14920	52	XXIII G			2.7		gold
	button	922 M	14901	52	XXIII G			2.8		gold
	button	923 M	14920	52	XXIII G			3.2		gold
	button	924 M	14920	52	XXIII G			2.8		gold
	button	926 M	14920	52	XXIII G			2.7		gold
	button	927 M	14921	52	XXIII G			2.7		gold
	button	928 M	14921	52	XXIII G			2.7		gold
428	button (4)	8 M	14970	24	XV E			3.5		gold
429	button (25)	21 M	25047	26	XVII B			1.5		gold
430	button (25)	65 M	25054	26	XVII B			1.5		gold
431	button	490 M	14695	18	XIV D			2.8		gold
432	buttons or gaming pieces	438 M	14866	36	XVIII C			1.5		gold
	buttons or gaming pieces	439 M	14867	36	XVIII C			1.5		gold
	buttons or gaming pieces	440 M	14868	36	XVIII C			1.5		gold
433	button	139 M	25377	27	XVII D			6.7		bronze
434	button	180 M	25377	27	XVII D			5.0		bronze
435	button (2)	680 M	14990	15	XIII C			10.5		bronze
436	button (2)	948 M	14991	52	XXIII G			8.5		bronze
437	button (2)	995 M	25376	41	XIX K			14.0		bronze
438	button	1467 M	31 STO	52	XXIII G			4.5		bronze
439	button (3)	1468 M	31 STO	52	XXIII G			1.8		bronze
440	button (2)	1201d M	25456	5	VIII D			3.5		gold, bone
441	button	432 M	4 STO	36	XVIII C			4.0		frit
442	button (18)	183 M	25337	27	XVII D			4.0		frit
443	button	136 M	25360	32	XVII E			7.5		frit
444	button (2)	16 M	25348	24	XV E			4.5		shell
	button	1454 M	31 STO	AKB				4.0		shell
445	leaf (2)	562 M	14856	50	XXI K	11.0	6.0			gold
	leaf (2)	566 M	14855	50	XXI K	13.0	6.0			gold
	leaf (5)	934 M	14946	50	XXI K		5.0			gold
446	leaf (6)	1175b M	25097	32	XVII E	10.0	4.5			gold
447	belt buckle	609 M	14697	2	VI B+		6.5			gold, lapis lazuli
448	fibula	1472 M	31 STO	36	XVIII C	5.0				bronze
449	pin (bird head/2)	1200b M	25455	41	XIX K	12.0				gold
450	pin (lion head/2)	322 M	14906	32	XVII E	18.5				gold, bronze
451	pin (mt. goat head)	71 M	25122	26	XVII B	22.5				bronze
452	pin (humped bull)	344 M	14605	44	XXI N	40.0				bronze
453	pin	570 M	14935	50	XXI K	4.7				gold
454	pin	1193 M	25448	10	XI B	5.0				gold
455	pin (2)	385 M	14957	36	XVIII C	24.0				gold, bronze
456	pin	1475 M	31 STO	36	XVIII C	17.0				bonze
457	pin	569 M	14819	50	XXI K	19.0				gold
458	pin	957 M	14817	10	XI B	11.0				gold
	pin	958 M	14818	10	XI B	11.0				gold
459	pin	384 M	25130	36	XVIII C	12.0				bronze
	pin	410 M	25132	36	XVIII C	11.5				bronze

Table 8 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
460	pin	1004 M	14987	ZB		16.0				bronze
	pin	1005 M	14987	ZB		13.5				bronze
461	pin	37 M	25124	26	XVII	15.5				bronze
	pin (6)	72a M	25352	26	XVII B	25.0				bronze
462	pin	703 M	15000	36	XVIII C	13.5				bronze
463	pin	1027 M	14998	10	XI B	11.5				bronze
	pin	1473 M	31 STO	36	XVIII C	10.5				bronze
464	pin	190 M	25123	50	XXI K	19.5				bronze
	pin	411 M	14593	36	XVIII C	21.5				bronze
	pin	475 M	25127	19	XIV F	18.5				bronze
	pin	476 M	25126	19	XIV F	18.5				bronze
	pin	530 M	25128	50	XXI L	17.5				bronze
465	pin	702 M	15000	36	XVIII C	13.5				bronze
	pin	943 M	14997	52	XXIII G	14.0				bronze
	pin	945 M	25125	52	XXIII G	22.5				bronze
	pin	946 M	14996	52	XXIII G	18.0				bronze
	pin	947 M	14996	52	XXIII G	22.5				bronze
	pin	1474 M	31 STO	36	XVIII C	18.0				bronze
466	sheet (fragments)	1212 M	25467	27	XVII D					gold
467	sheet (2 fragments)	552 M	25029	15	XIII C					gold
468	sheet (fragment)	1197c M	25452	32	XVII E					gold
	sheet (fragment)	1203b M	25458	23	XV D					gold
	sheet (fragment)	1204c M	25459	14	XIII B					gold
	sheet (fragment)	1206c M	25461	52	XXIII G					gold
	sheet (fragment)	1207b M	25462	45	XXI H					gold
	sheet (fragment)	1208b M	25463	50	XXI K					gold
	sheet (fragment)	1211f M	25466	47	XXII E					gold
	sheet (fragment)	1216 M	25471	45	XXII H					gold

## Chapter VII Notes

1. Vanden Berghe 1964: Pl. LXIX, No. 354, Pl. XL, No. 357, pp. 45-46, 70.
2. Moorey 1971: Pl. 83, No. 530, p. 311. This is now in the Ashmolean Museum.
3. Maxwell-Hyslop 1971: Pl. 85, p. 120. These are now in the Nicosia Museum.
4. Maxwell-Hyslop 1971: Pl. 99, pp. 129-130. Found in Old Tombs 24, 61, 67, and 58 and Maroni Tomb 2. These are now in the British Museum.
5. Schmidt 1931-33: Fig. 138, p. 227. Maxwell-Hyslop 1971: Pl. 55, p. 79.
6. Vanden Berghe 1964: Pl. LXIX, No. 353, pp. 45, 70.
7. Maxwell-Hyslop 1971: Pls. 19-20, pp. 24, 26.
8. Huet et al. 1978: Pl. VI (L.76.93).
9. Maxwell-Hyslop 1971: Pl. 46e.
10. Maxwell-Hyslop 1971: Pl. 94b, p. 126.
11. Amiet 1966: Fig. 195, p. 263.
12. Fukai and Ikeda 1971: Pl. XXXIV, Nos. 2-3, p. 3.
13. Porada 1964-65: Fig. 423, pp. 84, 144.
14. Maxwell-Hyslop 1971: Pl. 165, p. 207. This is now in the Cincinnati Museum.
15. Pierides 1971: Pl. XIV, No. 5, p. 27. This is now in the Cyprus Museum.
16. Pierides 1971: Pl. XIV, No. 3, p. 26.
17. Pierides 1971: Pl. XXII, No. 1, p. 33. Compare Pl. XIV Nos. 3 and 5 with Pl. XXII No. 1.
18. Schaeffer 1948b: Fig. 168, Nos. 20, 132, p. 292.
19. Schaeffer 1948b: Fig. 176, Nos. 12, 132, p. 292.
20. Maxwell-Hyslop 1971: Fig. 460, p. 71.
21. Parrot 1937: Pl. XV 2, pp. 81-82. Terrace 1962: Fig. 12.
22. K.H.A.A.: Fig. 769, p. 51.
23. Hakemi and Rad 1950.
24. Ghirshman 1964c: Fig. 27, p. 26.
25. Kantor 1957b: Fig. 4, p. 14.
26. Schaeffer 1948b: Fig. 239, Nos. 16, 193, p. 448.
27. Schaeffer 1948b: Fig. 275, Nos. 1, 9, 214, p. 502.
28. Maxwell-Hyslop 1971: Pl. 252, p. 267. Stronach 1969: Pl. VIIIa, p. 15.
29. Maxwell-Hyslop 1960: pp. 108-109, Pl. XII 4, Figs. 2, 4.
30. Maxwell-Hyslop 1971: Fig. 113, Pls. 136, 145, pp. 178, 188-189.
31. Pierides 1971: Pl. VIII, No. 4, p. 18.
32. Ghirshman 1966: Pl. LXXVIII, No. G.T.Z.447; Pl. LXXIX, No. G.T.Z.535f.
33. Ghirshman 1939: Pl. XVII, No. 7, p. 219.
34. Weidner 1939: Fig. 76, p. 91. This is now in the Ashmolean Museum.
35. Weidner 1939: Fig. 91, p. 115.
36. Vanden Berghe 1964: Pl. L, No. 357 (below right), pp. 34-35, 45, 70.
37. Vanden Berghe 1964: Pl. XLIX, No. 354, pp. 34-35, 70.
38. Maxwell-Hyslop 1971: Pl. 142, p. 192.
39. Rostovtzeff 1932: Pl. XVI, No. 3. This ring is now in the Ashmolean Museum.
40. The italicized letters were added by the editors in order to differentiate between different objects bearing the same Marlik number.
41. Maxwell-Hyslop 1971: Pl. 131, pp. 177-178. This is now in the Louvre.
42. Maxwell-Hyslop 1971: Pl. 135, pp. 188-189.
43. Ghirshman 1964c: Fig. 27, p. 26.
44. Vanden Berghe 1959: Pl. 148a, pp. 116, 118, 280.
45. Ghirshman 1939: Vol. 2, Pl. XCV S.1476b.
46. Maxwell-Hyslop 1971: Fig. 81, pp. 116-117.
47. Andrae 1934: Pl. 512, No. 8, p. 681.
48. Bossert 1951: Fig. 782, p. 52.
49. Pierides 1971: Pl. VIII, No. 5, p. 18.
50. Pierides 1971: Pl. XV, Nos. 1-3, pp. 27-28.
51. Amiet 1966: Fig. 357 A, B, C, p. 475.
52. Ghirshman 1939: Vol. 2, Pl. V, No. 7.
53. Rostovtzeff 1932: Pl. VII, No. 3. This is now in the Kiev Archaeological Museum.
54. Maxwell-Hyslop 1971: Pl. 100, No. 2, pp. 135-136. This is now in the British Museum.
55. Maxwell-Hyslop 1971: Pls. 108-109, p. 141. This is now in the Palestine Archaeological Museum.
56. Schaeffer 1938: Figs. 4, 8, Nos. 1, 3-4, 7, and 50, p. 319. Syria, Vol. XVIII, 1937, Pl. XVIII.
57. Bossert 1951: Fig. 772, p. 51. This is now in the Damascus Museum.
58. Maxwell-Hyslop 1971: Pl. 125, p. 162. This is now in the Fine Arts Museum of Boston.
59. MDP 7, Pl. XII 5; Amiet 1966: Fig. 314 A, B, p. 413.
60. Herzfeld 1941: Fig. 261 (right), p. 145.
61. Ghirshman 1966: Pl. LXXXVI, G.T.Z. 201.
62. Barnett 1960: Pl. 5, p. 27; N.A.R., Vol. II, p. 303.
63. Smith 1938: Pl. VIII.
64. Dalton 1905: Pl. XXI, p. 162.
65. Vanden Berghe 1964: Pl. L, No. 357 (below right), pp. 39-45, 70.
66. Oppenheim 1970: pp. 9, 14.
67. Maxwell-Hyslop 1971: Fig. 65b, p. 87.
68. Rostovtzeff 1932: Pl. XVI, No. 3. This is now in the Ashmolean Museum.
69. Ghirshman 1939: Vol. 2, Pl. LXXIX, No. S.933 C, p. 246.
70. Ghirshman 1939: Vol. 2, Pl. LV, No. S.593, p. 231.
71. Maxwell-Hyslop 1971: Pls. 49a, 50b, pp. 68-69, 192.
72. Maxwell-Hyslop 1971: Pl. 165, p. 207.
73. MDP 8, pp. 238 ff. Schaeffer 1948b: Pl. LXI, p. 424.
74. Schaeffer 1948b: Pl. LXI, 180, 191, pp. 426, 443.
75. Maxwell-Hyslop 1971: p. 20.
76. Schaeffer 1948b: Fig. 217, Nos. 20, 165, pp. 406-408.
77. Ghirshman 1939: Vol. 2, Pl. LIX, No. S.645.
78. The tomb of Ali Karam Bagh is located in olive groves about .5 km southwest of Marlik, in the valley of the Gohar Rud (Crystal River).
79. Maxwell-Hyslop 1971: Pl. 48, p. 67.
80. Fukai and Ikeda 1971: Pl. XXXIV, No. 4.
81. Maxwell-Hyslop 1971: Pl. 94 C, pp. 112, 126.
82. Maxwell-Hyslop 1971: Pl. 6b (centerpiece), p. 9.
83. Ghirshman 1939: Vol. 2, Pl. XXVII, No. 11, p. 219.
84. Vanden Berghe 1964: Pl. L, No. 355, pp. 35, 39-45, 70.
85. Hemmy 1935: Part I, Figs. p. 84.
86. Starr 1937: Pl. 122, O, P, W, p. 33. These were found in Zigi 33 of Nuzi City.
87. Maxwell-Hyslop 1971: Pls. 48, 49, pp. 67-68, 192.
88. Maxwell-Hyslop 1971: Pl. 165, p. 207. These are now in the Cincinnati Museum.
89. Fukai and Ikeda 1971: Pl. XXXIV, No. 4.
90. Schmidt 1931-33: Figs. 136-137, p. 226.
91. Pierides 1971: Pl. XVIII, No. 2, p. 29.
92. I was shown examples of these beads in the Shoshin Collection during a trip to Japan in 1968.
93. Ghirshman 1939: Vol. 2, Pl. L S.545d.
94. Rostovtzeff 1932: Pl. XV, No. 1.
95. O.R.W.I., Pl. XVIII 22 (Stein)
96. Schaeffer 1948b: Pl. LX.
97. Schaeffer 1932: Pl. IX 2, pp. 23-24.
98. Contenau 1935: Pl. VII, Tombs 7, 36, 56, pp. 26, 80.
99. Contenau 1935: Pl. XVII, Tomb 45, pp. 26, 80.
100. Vanden Berghe 1968: Pl. 37b (right). These earrings are also described by Maxwell-Hyslop 1971: Pl. 249, p. 264.
101. Ghirshman 1939: Vol. 2, Pl. XCV, No. 26.
102. Maxwell-Hyslop 1971: Pl. 100, Nos. 4-5, pp. 135-136. These are now in the British Museum.
103. Maxwell-Hyslop 1971: Pl. 154a, b, pp. 194, 200-201.



104. Ghirshman 1939: Vol. 2, Pl. V, No. 7 (below), p. 125.
105. Maxwell-Hyslop 1971: Pl. 133a, p. 187. These are now in the Louvre.
106. Amiet 1966: Fig. 195, p. 263.
107. Schmidt 1931-33: Pl. XXXV.
108. Maxwell-Hyslop 1971: Pl. 154a, pp. 194, 200-201.
109. Maxwell-Hyslop 1971: Fig. 19b, p. 26.
110. Maxwell-Hyslop 1971: Pl. 48c (centerpiece), pp. 67-68. This is now in The University Museum of Philadelphia.
111. Pierides 1971: Pl. XVI (top), p. 28.
112. Moorey 1971: Pl. 83, No. 530, p. 311. These are now in the Ashmolean Museum.
113. Maxwell-Hyslop 1971: Pl. 15a, p. 20.
114. Maxwell-Hyslop 1971: Pls. 21, 49b, pp. 26, 68.
115. Starr 1937: Vol. 1, p. 520; Vol. 2, Pl. 119 (K, L, M, N, O), p. 31.
116. Parrot 1937: Pl. XV 2, pp. 81-82.
117. Ghirshman 1964c: Fig. 153, p. 114.
118. Vanden Berghe 1959: Pl. 13 C, p. 261.
119. David Weill Collection 1972: Fig. 169.
120. Sono and Fukai 1968: Pl. LXXXIV, Nos. 1-8; Pl. XLIX, Nos. 1a-4b, 7; Pl. XLVIII, Nos. 7-8.
121. Schaeffer 1948b: Fig. 237, §190, pp. 439-441.
122. Pudelfco 1933-34: Pls. IV, V 1-12, pp. 85-88.
123. Porada 1962: p. 130.
124. Bossert 1942: Pl. 28, No. 165, p. 26.
125. Barnett and Falkner 1962: Pl. CXXVI.
126. Barnett 1960: Pls. 60-61, p. 29; Maxwell-Hyslop 1971: Fig. 144, pp. 246-247.
127. Porada 1946: Pls. III, V, XIII. Budge 1914: Pls. XXVII, XLIX. Maxwell-Hyslop 1971: Figs. 142-143, pp. 246-247.
128. Crawford et al. 1966: p. 20.
129. Kantor 1957b: Figs. 5, 7-9.
130. Maxwell-Hyslop 1971: Pl. 158, p. 203; Pl. 161, p. 205; Pl. 162, p. 205; Pl. 172, p. 210; Pl. 189, p. 214; Pl. 227, p. 246; Pl. 228, p. 246; Pl. 254, p. 267; Pl. 149, p. 196; Pl. 255, p. 267; Pl. 151, p. 197.
131. MDP, Vol. VIII, Pl. V.
132. Bossert 1951: Figs. 319-320, p. 22.
133. Pierides 1971: Pl. XXIV, Nos. 1-6, p. 36.
134. Calmeyer 1964: Pl. 61, No. 116, pp. 54-55.
135. Dalton 1905: Pl. XVII 118, Pl. XVIII 120, Pl. XIX 124, pp. 5-6.
136. Moorey 1974a: Fig. 109, pp. 130-131.
137. Amandry 1958: Figs. 6, 9, 11, 19, 21-23, 39, 44, pp. 10-22.
138. Vanden Berghe 1959: Pl. 106b, p. 273.
139. Moorey 1971: Pl. 63, Nos. 393-394, p. 226; Pl. 61, No. 3. This is now in the Ashmolean Museum.
140. Moorey 1971: Pl. 61, Nos. 374-392, pp. 221-224. These are now in the Ashmolean Museum.
141. Legrain 1934: Pl. IX, Figs. 35-37, p. 10.
142. Rostovtzeff 1932: Pl. XV, No. 2.
143. Potratz 1968: Figs. 151-155, pp. 37-38, 89.
144. Dalton 1905: Pl. XVII, Fig. 138; Pl. XVIII, Figs. 122, 131, 134-135; Pl. XIX, Figs. 133, 146; Pl. XX, Figs. 132, 137, pp. 5-6.
145. Dalton 1905: Fig. 1, p. 4.
146. Dalton 1905: Fig. 2, p. 5.
147. Dalton 1905: Fig. 3, p. 7.
148. Bossert 1951: Fig. 320, pp. 22, 95.
149. Pierides 1971: Pl. IV, No. 2, p. 14.
150. Pierides 1971: Pl. XXX, No. 5, p. 45.
151. Maxwell-Hyslop 1971: Pl. 90, p. 123. This is now in the Palestine Archaeological Museum.
152. Vanden Berghe 1964: Pl. XLI, No. 294, pp. 39-45, 68.
153. Ghirshman 1939: Vol. 2, Pl. XXXVIII, No. 13.
154. Fukai and Ikeda 1971: Pl. XXXVI, Nos. 4-5, p. 3.
155. Vanden Berghe 1964: Pl. XXXIX, No. 277, pp. 39-45, 67.
156. Ghirshman 1964c: Fig. 22, p. 22.
157. Buhl 1950: Fig. 63, p. 206.
158. Moorey 1971: Pls. 70-71, Nos. 460-463, pp. 241-245.
159. Rostovtzeff 1932: Pl. XVI, No. 3. This is now in the Ashmolean Museum.
160. Maxwell-Hyslop 1971: Pl. 133b, p. 187. This is now in the Louvre.
161. Ghirshman 1939: Vol. 2, Pl. X, No. 7 (top), p. 125.
162. Maxwell-Hyslop 1971: Pls. 78-81, pp. 109, 116-117.
163. Maxwell-Hyslop 1960: Pl. XI, 1, 2, 5, 7, Fig. 5, pp. 112-114.
164. Maxwell-Hyslop 1971: Pl. 39, Fig. 33 i, j, k, l, pp. 50-51, 53, 55.
165. Maxwell-Hyslop 1971: Fig. 109, p. 175.
166. Ghirshman 1964c: Fig. 488, pp. 375, 438.
167. Maxwell-Hyslop 1971: Pl. 159, p. 208.
168. Maxwell-Hyslop 1971: Pl. 250b, pp. 240, 264.
169. Maxwell-Hyslop 1971: Pl. 213a, b, p. 229.
170. Maxwell-Hyslop 1971: Pl. 214, p. 230.
171. Ghirshman 1964c: Fig. 153, p. 114.
172. Pierides 1971: Pl. XX, Nos. 5-6, p. 31.
173. Vanden Berghe 1964: Pl. L, Fig. 357, pp. 39-45, 70.
174. Fukai and Ikeda 1971: Pl. XXXIV, No. 1, p. 3.
175. Pierides 1971: Pl. IX, No. 6, p. 19.
176. Pierides 1971: Pl. XXVIII, No. 12, p. 42.
177. Maxwell-Hyslop 1971: Pl. 75a, Figs. 79-80, pp. 115-117.
178. Maxwell-Hyslop 1971: Pls. 97, 98, pp. 130-131. These are now in the British Museum.
179. Pierides 1971: Pl. IX, No. 5, p. 19.
180. Petrie 1934: Fig. 2, pp. 1-2.
181. Maxwell-Hyslop 1971: Pl. 96, pp. 130-131. These are now in the British Museum.
182. Maxwell-Hyslop 1971: Pl. 77, Figs. 79-80, 85, p. 116.
183. Maxwell-Hyslop 1971: Pl. 131, pp. 177-178. These are now in the Louvre.
184. Maxwell-Hyslop 1971: Pl. 101, p. 138. These are now in the Ashmolean Museum.
185. Maxwell-Hyslop 1971: Pl. 200, p. 225. These are now in the Institute of Archaeology of the University of London.
186. Pierides 1971: Pl. XIII, Nos. 5-6, 10, pp. 24-25. These are now in the Cyprus Museum.
187. Pierides 1971: Pl. IX, No. 4, p. 19.
188. Maxwell-Hyslop 1971: Fig. 83, pp. 119-121.
189. Maxwell-Hyslop 1971: Pl. 101, p. 138. These are now in the Ashmolean Museum.
190. Porada 1962: Fig. 48, p. 76. This is now in the Heeramaneck Collection.
191. Pierides 1971: Pl. III, Nos. 9-11, p. 13.
192. Ghirshman 1939: Vol. 2, Pl. LXXIX S.989.
193. Vanden Berghe 1964: Pl. XL, No. 286, pp. 39-45, 67.
194. Vanden Berghe 1964: Pl. XL, No. 289, pp. 39-45, 67.
195. Vanden Berghe 1964: Pl. XL, No. 282, pp. 39-45, 67.
196. Schaeffer 1948a: Pl. VII A, pp. 174, 176-177.
197. Smith 1938: Pl. II.
198. Smith 1938: Pl. VIII.
199. Barnett and Falkner 1962: Pl. CXXVI.
200. Barnett 1960: Pls. 83-84, p. 29.
201. Amiet 1966: Fig. 192, p. 262. This is now in the Louvre.
202. Fukai and Ikeda 1971: Pl. XXIV, No. 6, pp. 3, 28.
203. Maxwell-Hyslop 1971: Pl. 23, p. 22. This is now in the British Museum.
204. Maxwell-Hyslop 1971: Pls. 46-47, pp. 65, 67; Pl. 70, pp. 109, 122. These are now in the British Museum.
205. Maxwell-Hyslop 1971: Pls. 202-203, pp. 224-226. One is now in the Ashmolean Museum; the other in the Institute of Archaeology.
206. Maxwell-Hyslop 1971: Pl. 5a, Fig. 14a, pp. 5, 23.
207. Pierides 1971: Pl. III, Nos. 9-11, p. 13.
208. Pierides 1971: Pl. IX, Nos. 4, 8, pp. 19-20.
209. Schaeffer 1948b: Fig. 232, No. 13, pp. 433, 437-438, 478.
210. Ghirshman 1939: Vol. 2, Pl. XCIV S.1384.
211. Maxwell-Hyslop 1971: Pl. 123, pp. 160-161. These are now in the Boston Museum of Fine Arts.
212. Terrace 1962: Fig. 3, pp. 212-213.
213. Terrace 1962: Fig. 3, pp. 218-224.

214. Barnett 1963: Pls. XV, XVI, pp. 81-85.  
 215. Maxwell-Hyslop 1971: Pls. 2, 3, 55, 56, pp. 3, 79-80.  
 216. Schmidt 1931-33: Pl. XXXV.  
 217. Maxwell-Hyslop 1971: Pl. 56, p. 80.  
 218. Vanden Berghe 1959: Pl. 13 C, pp. 14, 261.  
 219. Oppenheim 1970: pp. 9-14.  
 220. Schaeffer 1948b: Fig. 117, Nos. 51-52, pp. 140-141.  
 221. Schaeffer 1948b: Fig. 157, No. 10, p. 197.  
 222. Schaeffer 1948b: Fig. 130, No. 14, pp. 162-163.  
 223. Schaeffer 1948b: Fig. 296, p. 504.  
 224. Schaeffer 1948b: Fig. 301, Nos. 11, 13, 16, 22, pp. 527-528.  
 225. Schaeffer 1948b: Fig. 275, No. 5, p. 502.  
 226. Tallgren 1930: Figs. 8-11, pp. 120, 152.  
 227. David-Weill Collection 1972: Fig. 243.  
 228. Vanden Berghe 1968: Pl. 36 C, pp. 169-170.  
 229. Maxwell-Hyslop 1971: Pl. 92, Fig. 89, pp. 124-125.  
 230. Maxwell-Hyslop 1971: pp. 260-264.  
 231. Stronach 1959: pp. 181-206.  
 232. Stronach 1959: p. 185.  
 233. Stronach 1959: Figs. 8-9, 11, p. 203.  
 234. Ghirshman 1964b: Pl. XXIII, Nos. 4-6, Pl. XXIV, No. 7, p. 91.  
 235. Calmeyer 1969: pp. 98-99.  
 236. Muscarella 1965: Pl. 57, Fig. 2, p. 234.  
 237. Muscarella 1966: Fig. 38, p. 134.  
 238. Muscarella 1967: Figs. 3-5, p. 84.  
 239. Muscarella 1971: Figs. 1-7.  
 240. Amiet 1966: Fig. 320, p. 422.  
 241. Vanden Berghe 1964: Pl. L, No. 357, pp. 39-45, 70.  
 242. Ghirshman 1939: Vol. 2, Pl. XXIX 1, Pl. XCIII S.1478, S.1351, pp. 94-97.  
 243. De Mecquenem 1934: p. 197, Fig. 34.  
 244. MacKay 1925: Pl. XIX, Nos. 12-14, p. 46.  
 245. Mallowan 1936: Part I, Fig. 8.2; Pl. XLIII 18, p. 27.  
 246. Evans 1929: Fig. 34b, p. 43.  
 247. Von Der Osten 1937: Fig. 283 e.945, p. 253.  
 248. Hancar 1932: Fig. 17 d, p. 146. Schaeffer 1948b: p. 533.  
 249. Hancar 1935: Fig. 42, p. 101. Przeworski: p. 237.  
 250. Schmidt 1933: Pl. CIII, p. 422; Pl. CXXXI, pp. 442-446.  
 251. Khan 1955: Fig. 4, pp. 15-16.  
 252. Ghirshman 1939: Vol. 2, Pl. XXIX, No. 1, pp. 94-97.  
 253. David-Weill Collection 1972: Figs. 214-218.  
 254. Schaeffer 1948b: Fig. 241, p. 448.  
 255. Herzfeld 1941: Fig. 275, p. 154. Schaeffer 1948b: Fig. 241.  
 256. Moorey 1974a: Fig. 93, pp. 20, 120. This is now in the Adam Collection in London.  
 257. Potratz 1968: Fig. 13640, pp. 34-36, 89.  
 258. Calmeyer 1964: Pl. 30, No. 67, pp. 31-33.  
 259. Loudmer and Poulain 1976: Fig. 32.  
 260. Legrain 1934: Pl. IV, No. 18; Pl. VI, No. 21, p. 11.  
 261. Potratz 1955: Fig. 24, pp. 215, 219.  
 262. David-Weill Collection 1972: Fig. 195.  
 263. Buhl 1950: Fig. 71, p. 208.  
 264. Bussagli 1956: Pl. X, Fig. 67, p. 72.  
 265. Moorey 1971: Pl. 54, Nos. 334, 337.  
 266. Sono and Fukai 1968: Pl. XLVII, No. 4a-b.  
 267. Schaeffer 1948b: Fig. 267, Nos. 130-137.  
 268. Vanden Berghe 1959: Pl. 120 C, pp. 91-92, 275.  
 269. Loudmer and Poulain 1976: Fig. 9. This is now in the Dr. Audouin Collection in Paris.  
 270. Maxwell-Hyslop 1971: Fig. 24e, p. 33.  
 271. Maxwell-Hyslop 1971: Fig. 3, p. 4.  
 272. Amiet 1966: Fig. 191, p. 261.  
 273. Amiet 1966: Fig. 246, p. 327.  
 274. Calmeyer 1964: Pl. 11, Nos. 34-35, pp. 16-19.  
 275. Petrie 1934: Fig. 3, pp. 1-2.  
 276. Moorey 1974a: Fig. 89, pp. 114-118.  
 277. Woolley 1934: pp. 88, 541, 546, 555, 569-570.  
 278. Kantor 1957a: Pl. XXV A, p. 156.  
 279. Moorey 1971: Pl. 49, Nos. 309-310, pp. 190-191.  
 280. Schaeffer 1948b: Fig. 298, No. 2, p. 506.  
 281. Calmeyer 1964: Pl. 12, No. 37, pp. 18-19.  
 282. Moorey 1971: Pl. 42, Nos. 231-232; Pl. 46, Nos. 275-276, pp. 176-177, 183.  
 283. Moorey 1971: Pl. 46, Nos. 282-283, p. 184.  
 284. Vanden Berghe 1964: Pl. XLIII, No. 311, pp. 39-45, 68.  
 285. Vanden Berghe 1964: Pl. XLIII, Nos. 300-303.  
 286. Moorey 1971: Pl. 41 (222), Pl. 42 (234, 236), pp. 175-177.  
 287. Moorey 1974a: Fig. 90, pp. 118-119.  
 288. Moorey 1971: Pls. 44-45, Nos. 258-273, pp. 181-182.  
 289. Starr 1937: Pl. 125 T, p. 34.  
 290. Schaeffer 1948b: Fig. 226, No. 36, §178, pp. 422-423.  
 291. Schaeffer 1948b: Pl. LVIII.  
 292. Vanden Berghe 1964: Pl. XLIII, Nos. 305-306, p. 68.

## VIII

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# Seals of Marlik

### *Introduction*

From early times to almost the present day, man used stamp seals of baked clay, bone, stone, and later metal for the purpose of identifying ownership. Cylinder seals, on the other hand, were employed for only about three millennia, from the middle of the fourth millennium B.C. down to the middle of the first millennium B.C. They appeared as early as the protoliterate, or Uruk and Jamdet Nasr, periods, and gradually ceased to be used after the Achaemenid period. The reasons that cylinder seals were no longer made after this time are still obscure, but certain

relevant factors are obvious. More effort and skill are required to make cylinder seals than to make stamp seals. In addition, the material that receives the cylinder seal impression must be soft, like clay, and clay as a writing material was gradually replaced by parchment, papyrus, and later paper, which received the simpler stamp seal impressions more easily than cylinder seal impressions.

Both cylinder and stamp seals were found in the Marlik tombs.

### *Cylinder Seals (469–485)*

The technique of making cylinder seals of very hard materials, including a variety of stones, was highly developed by the third millennium B.C. and continued to be used down to the early first millennium B.C. The precise engraving of detail to produce the negative design is quite remarkable on some seals, particularly on those made of semi-precious stones such as red carnelian. In the middle of the second millennium B.C. a new substance, frit (a primitive porcelain with a rather smooth glaze on the surface), was introduced, and it soon became the most common material used to make seals. These frit seals were much more easily produced than carved stone seals, but the highly precise workmanship used on seals of harder materials could not be applied to frit. The designs appearing on frit seals are therefore much less detailed than those on stone seals, with a simple linear technique prevailing on the frit cylinder seals of the second half of the second millennium B.C.

Scholars have classified cylinder seals in detail according to their workmanship, design, and style, and they are consequently very useful for dating purposes. However, because they were made of long-wearing materials, they may have been used for several generations, particularly those seals without inscriptions identifying the owner. This practice of reusing seals decreases somewhat their precise accuracy for dating, although not over a long period. Seals found in graves may be more reliable for dating than seals found elsewhere because they are likely to have been buried with their original owners. Because of the detailed classification that has been done, cylinder seals are valuable in dating the archaeological strata in which they are found, within the time limits of one or two centuries. This precision in dating is very helpful, especially when compared with the dating of other types of objects that often cover a much longer time span typologically.

Fourteen definite and several possible cylinder

seals were found at Marlik (Tablet 10), made of frit, gypsum, and various types of stone and gold. Most of the cylinder seals are made of frit, and many of these frit seals have a badly damaged surface, so badly damaged in some cases that the design has entirely disappeared. Several seals incorporate gold, and one seal is solid gold. The frit and gypsum seals have simple linear designs, while the hard-stone seals contain more elaborate designs and more precise workmanship. Two of the cylinder seals contain inscriptions, although the writing is only legible on one, and even on this seal the lines are broken and fragmented. Several of the objects included here may not actually be seals at all, but beads. They are described here because of the possibility that they are really cylinder seals with very simple geometric designs.

These cylinder seals have been divided into several groups according to their technique and scene composition.

#### *TYPE I: CYLINDER SEALS WITH SMOOTH LINES AND DRILL HOLES (469–473)*

The majority of the cylinder seals from Marlik are made of gypsum or frit. Their designs are characterized by smooth lines with the use of drill holes, in what is termed the "Mitannian style."

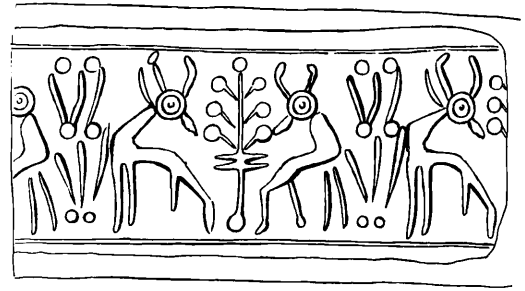
##### **469 Cylinder Seal**

1094 M Pl. 95

About 2.9 cm long and 1.0 cm in diameter, found in Tomb 2 (Trench VI B<sup>+</sup>). It is made either of frit with a badly decayed surface or of very soft gypsum. The design consists of an antithetical group of two mountain goats or antelopes on each side of a palmette or plant, possibly representing the sacred tree of life. The animals are shown in profile, with their hind quarters next to the tree and their heads turned backward to face the tree. Their bodies are rendered in a smooth, stylized manner, with their heads made of concentric circles with drill hole eyes. Between the two antithetical animals is a palmette whose trunk ends in a circle separated by two parallel lines from the symmetrically placed branches, each of which also ends in a circle. A band of two rows of plants formed of three lines with circular drill hole flowers completes the design, which is bordered at the top and bottom by a simple line. This seal, with its smooth rendering of the design, concentric circles, and drill holes, is made in the Mitannian style.

##### COMMENTS

The antithetical group of two mountain goats placed on each side of a palmette or stylized tree appears frequently, not only on cylinder seals,<sup>1</sup> but



*Ill. 13. 469*

also on many other objects belonging to the second half of the second millennium B.C., and can be seen on other objects from Marlik. A cylinder seal very similar in material, technique, composition of the main scene, position of the animals, and details of the central tree was found at Tepe Giyan.<sup>2</sup> Except for its subsidiary design at the end of the main composition, it is almost identical to 469.

A scene of antithetical mountain goats on both sides of a sacred tree, rendered in a similar technique but with the animals in a seated position, can be seen on a seal classified by Wiseman as Mitannian,<sup>3</sup> while a seal with winged animals and a much more simplified tree is described as late Mitannian.<sup>4</sup> Similar seals with antithetical groups are attributed by Weber to the late second and early first millennium B.C.,<sup>5</sup> and seals with similar antithetical groups, made in a technique termed by Porada "Mitannian Elaborate Style with use of fine drill," are attributed to the late Mitannian period.<sup>6</sup>

Mitannian<sup>7</sup> and Middle Assyrian<sup>8</sup> cylinder seals of the Pierpont Morgan Collection, dated between 1500 and 1000 B.C., show similar scenes of antithetical groups, some closely similar in technique to the Marlik seal. A cylinder seal from Tchoga Zanbil in a similar composition and technique is dated to the thirteenth century B.C.<sup>9</sup> Mitannian cylinder seals with similar antithetical designs include a seal assigned by Heidenreich to the middle of the second millennium B.C.<sup>10</sup> and a seal in the collection of the Louvre described by Delaporte as "à comparer avec les plates des tablettes de Kerkouk."<sup>11</sup> This type of scene composition can also be seen on Middle<sup>12</sup> and Neo-Assyrian<sup>13</sup> seals.

An almost identical scene of antithetical animals around a tree, rendered in the same workmanship but without the subsidiary geometric plant band, appears on a seal found at Tell Abu-Hawan.<sup>14</sup> Another seal, excavated at Tell Beth Shan (Beisan) in the area of the Temple of Mekal in a level comparable in time with Thoutmose III, is nearly identical in its scene composition and the rendering of the animals, tree, and geometric plant band to the Marlik seal. It is dated by Nougayrol to 1600–1200 B.C.<sup>15</sup> These examples point to political or commercial connections between the eastern shores of the Mediter-

ranean and the area of Marlik at this time.

A seal with a similar scene, from Beth Shamesh, has a human figure standing next to a sacred tree rather than an antithetical group of two animals.<sup>16</sup> Tell el Gezer has also produced seals in a rather closely similar technique and composition, dated by Nougayrol to 1600–1200 B.C.<sup>17</sup>; another from this site with a similar plant and animal is dated to about 1000–550 B.C.<sup>18</sup> A similar seal was found at Tell el-Hesi in Cité 4, which dates to about 1300–1000 B.C.<sup>19</sup> Tell el-Far'ah also produced a seal with a similar antithetical group of animals, dated to around 1000 B.C.<sup>20</sup> Two seals in the Louvre with a similar scene and technique are classified by Contenau as Kirkouk style, dated to the late second millennium B.C.<sup>21</sup>

The excavation of Nuzi has produced two seals with a similar antithetical group and plant band, described by Starr as typical products of the Hurrian inhabitants of the city.<sup>22</sup> Also from Nuzi are numerous seal impressions with antithetical compositions on both sides of the tree of life.<sup>23</sup> Carchemish too has produced a cylinder seal with antithetical groups on both sides of a tree in a similar style of workmanship. This was found along with bronze and iron objects in the area of the inner town at the south side of the outer gate tower, dated by Woolley to the late- and post-Hittite period.<sup>24</sup> A similar frit cylinder seal was found during the excavation of Norsuntepe, about 30 km southeast of Elazig in Turkey, and has been identified by Hauptmann as a Mitannian seal. It was discovered in a pit and must have belonged to a level later than that in which it was found.<sup>25</sup>

Seals in a similar technique and composition with drill holes are found in the Newell Collection, classified by Von Der Osten as Kirkouk, and Hittite examples have also been found, dated to the late third quarter of the second millennium B.C.<sup>26</sup> A seal in the Walters Art Gallery with a similar plant band is classified by Gordon as Kirkouk glyptic, of uncertain date since it was obtained through a dealer.<sup>27</sup> A similar sacred tree appears on a seal classified by Moortgat as Middle Assyrian-Hurrian, dated to the late second millennium B.C.<sup>28</sup> The same technique with drill hole eyes is also found on a seal from Agha Evlar, which Schaeffer compares to a seal from Ras Shamra, dated to 1450–1364 B.C.<sup>29</sup> A similar technique is also found on a seal from Hasan Zamini, which Schaeffer compares to a seal from Gezer.<sup>30</sup>

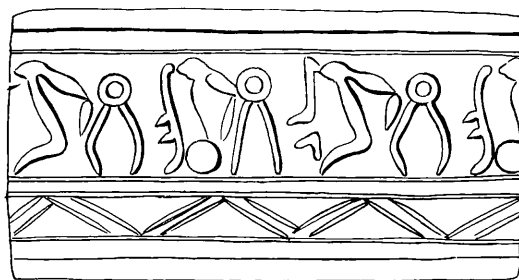
#### 470 Cylinder Seal

1089 M Pl. 95

About 3.0 cm long and 1.3 cm in diameter, found in Tomb 4 (Trench VIII A<sup>+</sup>). It is made of gypsum or lime with a badly damaged surface. The main design, which runs vertically across the seal, consists of a recumbent mountain goat almost identical with that on the following seal, 471. Its body is shown in simple straight lines, with the face and eye in profile, formed of concentric circles in the Mitannian drill

hole technique. A double zigzag band encircles the seal, divided from the main design by double lines, and a single line borders the top and bottom.

The design of a recumbent goat is similar to designs found on Mitannian seals.<sup>31</sup> This type of workmanship is usually found on frit or gypsum seals such as the Marlik seal. A seal impression found at Haft Tepe contains this same design in an almost identical style.<sup>32</sup>

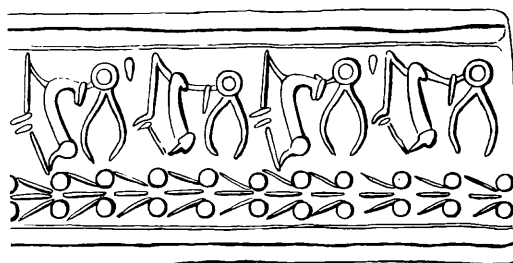


Ill. 14. 470

#### 471 Cylinder Seal

1093 M Pl. 95

About 2.8 cm long and 1.0 cm in diameter, found in Tomb 2 (Trench VI B<sup>+</sup>). It may be made of gypsum with a badly eroded surface; alternatively, it is possible that the seal was made of frit, whose glazed surface has completely disappeared. The main design, which appears vertically across the seal, consists of a row of recumbent mountain goats with a simple plant band encircling the seal in place of the zigzag band of 470. Straight lines at the top and bottom encircle this very simple design, which is rendered in the smooth lines and drill holes of the Mitannian style.



Ill. 15. 471

#### COMMENTS

A closely similar mountain goat or gazelle with a plant band in the same workmanship and style appears on a seal impression from Nippur, which, although classified by Legrain as a Hittite seal, seems typologically more like a Mitannian seal of a slightly later period.<sup>33</sup> A seal found at the excavation of Tell

Abu-Hawan, Strata V (ca. 1400–1200 B.C.), contains a design very similar in its technique and the composition of the animals and plant band.<sup>34</sup> An animal in a similar position and technique appears on a seal classified by Moortgat as a Middle Assyrian Hurrian seal of the third quarter of the second millennium B.C.<sup>35</sup> Seals in the collection of the Danish National Museum classified as Hurrian are made in the same style, with the animal's eye made as a ring or circle with a drill hole cavity in the center.<sup>36</sup> Similar design elements appear on other Mitannian seals with different figure compositions.<sup>37</sup>

A seal with a rather similar plant band is classified by Porada as Elaborate Mitannian style,<sup>38</sup> and a seal impression with a somewhat similar design was found at Nuzi.<sup>39</sup> Another example of a seal with a similar decorative plant band<sup>40</sup> appears in the Louvre. Hogarth classifies a seal in the Ashmolean with a decorative plant band as a Hittite seal, Class III, Group 5, or early Class IV, dated to the late second millennium B.C.<sup>41</sup> Another seal with a plant band in the Walter Art Gallery is said by Gordon to resemble the Kirkouk glyptic style.<sup>42</sup>

The naturalistic plant or flower band on this seal is possibly a prototype of a guilloche or earlier geometric band.<sup>43</sup> Geometric bands first appeared on cylinder seals in the First Dynasty of Babylon, around the middle of the second millennium B.C., and they also appear on many seals classified as Mitannian.<sup>44</sup> It seems likely that the natural band of plants or flowers formed of a row of separate rosettes or plants gradually developed into the more complicated and intricate guilloche band.<sup>45</sup> This transitional process can clearly be seen on certain seals.<sup>46</sup>

A simplified guilloche band appears on seals found in Anatolia and Syria,<sup>47</sup> classified by Frankfort as Hittite and First, Second, and Third group Syrian seals, possibly dated to between 1700 and 1200 B.C. The guilloche band was especially well developed and repeatedly used in a variety of forms on the Marlik objects. The most elaborate guilloche bands can be seen on the rims of gold, silver, and bronze vessels from the site.<sup>48</sup>

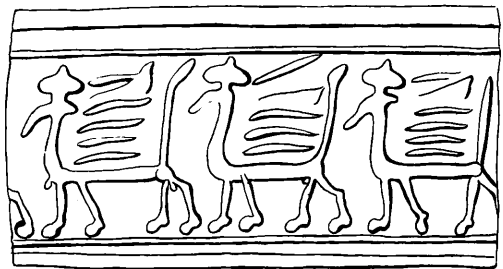
#### 472 Cylinder Seal

1092 M Pl. 96

About 3.0 cm long and 1.1 cm in diameter, found in Tomb 10 (Trench XI B). It is made of frit with a badly decayed surface. The single design, repeated twice around the seal, consists of an imaginary winged figure with the body of an animal, four legs, a long upright tail, and a head which seems to resemble that of a bird, covered with a curious turbanlike cap or topknot. The head is somewhat similar to the head of a griffin or phoenix (also seen on Gold Beaker 12).<sup>49</sup> Wings are indicated by parallel straight lines above the creature's back, and a straight line borders the design at the top and bottom. The design is rendered in a simple linear style with drill

holes (the Mitannian style).

This type of imaginary creature appears on rather older seals from the Akkad dynasty, where it represents the dragon god of ancient Akkad. This creature generally appears seated on a throne on the back of an animal and, unlike the Marlik figure, does not have wings.<sup>50</sup> A winged monster rather similar to the Marlik example appears on a seal classified by Porada as Elaborate Mitannian style,<sup>51</sup> and a winged animal and monster are also present on many seal impressions from Nuzi. However, the style and technique of the pieces are somewhat different from that on the Marlik seal.<sup>52</sup>



Ill. 16. 472

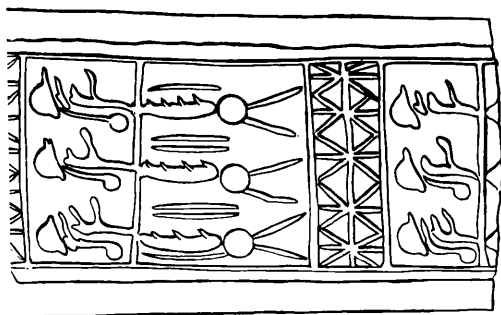
#### 473 Cylinder Seal

1091 M Pl. 96

About 3.1 cm long and 1.4 cm in diameter, found in Tomb 1 (Trench III D<sup>+</sup>). It is made of gypsum or soft limestone with a badly eroded surface. The design, which extends vertically across the seal, consists of a row of three marching men, possibly soldiers, with a geometric band of divided lozenges and triangles at their feet. The men wear helmets with a hanging tail, helmet flap, or bunch of hair at the back. Their shoulders, indicated by straight lines, meet with what appears to be arms, represented by two parallel lines between adjoining figures and one line on the outside of each end figure. Their hips are formed by drill holes, and their legs are simple straight lines. The broad geometric band at their feet may represent the paved or mosaic ground on which they march. A straight line encircles the seal at the top and bottom. Although the technique of engraving the seal with drill holes and smooth straight lines can be termed Mitannian, the design is rather unusual.

#### COMMENTS

The design of marching or standing soldiers seems to be a rather pure product, as far as can now be determined, of the second half of the second millennium B.C. It is rather striking to see an almost identical design of three marching men on a seal classified by Hogarth as a Hittite seal, Class IV, Group A,



Ill. 17. 473

dated to later than the middle of the tenth century B.C.<sup>53</sup>; however, this example features a recumbent animal rather than a geometric band. Another somewhat similar seal shows two standing men wearing armor and helmets and was found at Ras Shamra (Ugarit) in a room of a structure dated by Schaeffer to the late third quarter of the second millennium B.C.<sup>54</sup> A row of five men in a much more simplified form appears on a Mitannian seal.<sup>55</sup> Seal impressions from Nuzi also show a row of men, rendered in a different style from that of the Marlik seal.<sup>56</sup> Another seal, similar in workmanship and technique, is classified by Legrain as Neo-Babylonian (600–400 B.C.), but possibly should be dated earlier. It features a row of four heads below four stars; each head has a round miter with a fillet or horns, a beard, and hair hanging in a tail. Legrain says the figures “perhaps represent vanquished Hittite enemies.”<sup>57</sup>

#### TYPE II: CYLINDER SEALS WITH NATURALISTIC DESIGNS (474–476)

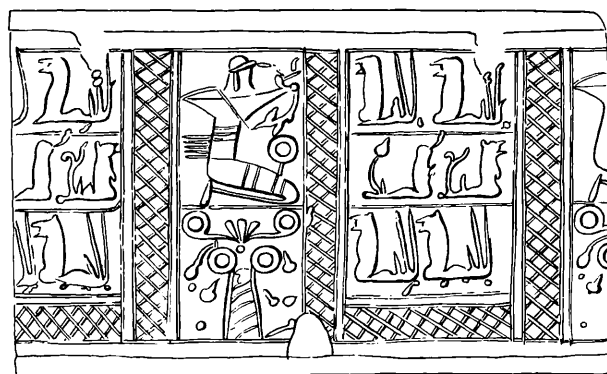
The second group of cylinder seals are made of hard stone and are rendered in a more naturalistic technique most closely related to Assyrian cylinder seals.

##### 474 Cylinder Seal

1090 M Pl. 96

About 4.0 cm long and 1.4 cm in diameter, found in the first test trench, in the area of Tomb 42 (Trench XX F). It is made of greenish stone engraved in a rather simple technique and in flatter relief than most of the Marlik seals. The design is divided vertically by latticework panels into two main sections that are again subdivided. The top of one main section shows a kneeling archer in full armor, as indicated by parallel lines at his waist and leg. He has a quiver at his back and wears a helmet with hanging earflaps similar to the bronze helmets found at Marlik. Above his knees are two well-pronounced concentric circles, possibly representing knee protectors. Below the archer in the same panel is a decorative tree with a very thick trunk, whose bark is

indicated by short parallel diagonal lines, with highly stylized branches formed of concentric circles with flowers on them. The second panel, divided into three horizontal rows each separated by a straight line, contains two fallen animals with long horns in each row, with those in the middle row facing in the opposite direction from those in the top and bottom rows. Possibly these fallen animals were shot by the archer in the first panel. The two vertical panels are separated by a precisely rendered wide band of cross-hatching, which also borders the fallen animal panel at the bottom, so that the fallen animals are bordered on three sides by this wide latticework panel. This may indicate a fenced hunting area with the animals trapped inside, a reflection of the custom of bringing game into a fenced or enclosed target area.<sup>58</sup> In some Neo-Assyrian<sup>59</sup> and Neo-Babylonian<sup>60</sup> seals, plants delineate the hunting area.



Ill. 18. 474

#### COMMENTS

Although the design is rendered in a technique similar to the Mitannian style, the composition of the hunting scene is unique and can possibly be considered a product of local influence. The representation of the tree may suggest a forested area, such as the one that exists in the region around Marlik. Of the limited number of cylinder seals found at Marlik, two show scenes of hunting, a favorite activity of the local inhabitants.

Kneeling archers similar to the archer in the first section of this seal appear on Neo-Assyrian and Neo-Babylonian seals in the Pierpont Morgan Collection<sup>61</sup> and also on Assyrian seals in the collection of the Musée Guimet discussed by Delaporte.<sup>62</sup> The theme of hunting by an archer is rather a common one, appearing on seals of such different periods as Akkadian,<sup>63</sup> Kassite,<sup>64</sup> Mitannian,<sup>65</sup> Assyrian,<sup>66</sup> and Achaemenian.<sup>67</sup> The fallen position of the animals, although it appears on Mitannian seals,<sup>68</sup> is more stylized on this seal from Marlik.

The stylized tree of life has a long history in the Middle East, beginning as early as Uruk,<sup>69</sup> Akkad,<sup>70</sup> and the Third Dynasty of Ur<sup>71</sup>; it also constituted a common design element of Mitannian art.<sup>72</sup> It is seen later in Kassite,<sup>73</sup> in Middle Assyrian,<sup>74</sup> and particularly in Neo-Assyrian art.<sup>75</sup> It appears frequently at Marlik, not only on cylinder seals but also as part of the design of decorative vessels.

The tree of life has a wide variety of forms. A design similar to that of 474 appears at Assur, dated by Weber to the middle or late second millennium B.C.<sup>76</sup> A more stylized version is dated by Weber to the early first millennium B.C.,<sup>77</sup> and the Nuzi excavation has also produced similar designs of the tree of life, associated with Mitannian glyptic work.<sup>78</sup> Many seal impressions found there contain decorative trees that can be compared to the one on the Marlik seal.<sup>79</sup> In the collection of the Pierpont Morgan Library comparable decorative trees appear on seals assigned to the Mitannian glyptic style<sup>80</sup> and also to the Middle Assyrian style,<sup>81</sup> dated to about 1500–1000 B.C. Seals in the Louvre, with a similar type of decorative tree, are assigned by Contenau to the Kirkouk style, dated to the late second millennium B.C.<sup>82</sup> A similar tree on a seal in the collection of Mrs. W. H. Moore is classified by Eisen as Kirkouk style<sup>83</sup>; the same style is called Popular Mitannian by Frankfort and Coarse Mitannian by Porada. Another seal with this sacred tree is classified by Moortgat as an Assyrian seal dating to the second half of the reign of Shalmaneser I or the first half of the reign of Tukulti-Ninurta I, both falling in the thirteenth century B.C.<sup>84</sup>

The sacred tree also appears on Hittite seals from Anatolia. One example may be seen in the Newell Collection; this seal, classified by Von Der Osten as Hittite, dates to the late third quarter of the second millennium B.C.<sup>85</sup> The extension of this design can be found in much more remote areas as well. A somewhat similar tree appears on Cypriote seals, dated between 1550 and 1050 B.C.<sup>86</sup> Although the original motif of the Mitannian tree is reflected in these Cypriote seals, they are not exactly parallel, and local influence is discernible in their workmanship.

#### 475 Cylinder Seal

1095 M Pl. 97

About 3.0 cm long and 1.1 cm in diameter, found in the first test trench, in grid XX F in the area of Tomb 42. It is made of hard black hematite, decorated with a gold cap at each end. It contains a hunting scene in which a kneeling archer pulls powerfully on a bow, aiming at a lion standing on its hind legs. The lion has attacked an animal, possibly a bull or horse, which has fallen on its knees between the archer and lion. The archer wears a round cap with a little hanging tail at the back and a rather thick belt, possibly a bronze belt like those found at Marlik. The archer may be shooting the lion to rescue the fallen animal. Two birds appear at the top

of the design, one flying toward the lion and the other toward the hunter; they may be falcons or hawks, birds that are often trained for hunting. A round disk (representing the sun) appears above the lion's head, and a crescent and many-pointed star above the archer's head. The signs of the crescent, star, and sun can be interpreted as symbols of different deities; the sun disk as old Shamash, the crescent as Sin the moon god or Ningal the moon goddess, and the star as Ishtar.<sup>87</sup> The design is lively and forceful, with well-proportioned figures made in a rather naturalistic style, and seems to fit with the Assyrian tradition of seal making. It may be a little later in date than the other Marlik seals.



Ill. 19. 475

#### COMMENTS

A kneeling archer with a cap on his head, rendered in a technique similar to 475, appears on a seal classified by Wiseman as Mitannian. However, there are no other scenes comparable in either composition or technique among almost one thousand seal impressions found at Nuzi.<sup>88</sup> A seal with a similar design of an archer is classified by Porada as Neo-Assyrian, dated between 1000–612 B.C.,<sup>89</sup> and a similar hunting scene with flying birds appears on a seal classified by Moortgat as Assyrian, dated to the second half of the reign of Adadnareis I or Shalmaneser I.<sup>90</sup> Other seals featuring a similar archer are classified by Moortgat as Assyrian seals of the reign of Tukulti-Ninurta I<sup>91</sup> and Adadnareis I.<sup>92</sup> Two black steatite seals with a similar kneeling archer were found in the temple of Ninurta at Nimrud. One is dated by Parker to the ninth to eighth centuries B.C.<sup>93</sup> and the other to the seventh century B.C.<sup>94</sup> Similar kneeling archers also appear on cylinder seals of the Neo-Assyrian<sup>95</sup> and Neo-Babylonian<sup>96</sup> periods.

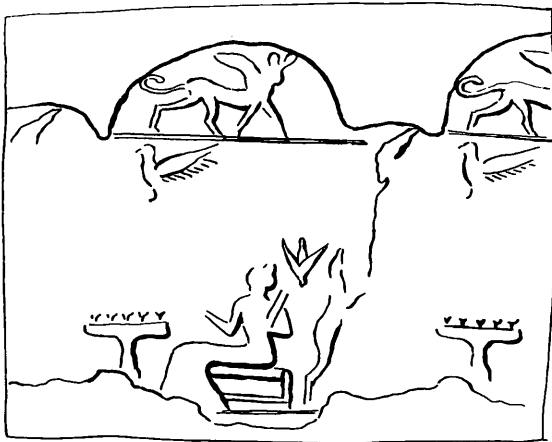
#### 476 Cylinder Seal

1096 M Figs. 15 and 16

Broken, about 2.3 cm in diameter, found in Tomb 3 (Trench VI A). It is made of a hard light-green frit. The design on the seal seems to consist of two registers, with the lower main register containing a god or king sitting on a bench. This figure is wearing



a long garment and a turban-shaped headdress and holds a stick or standard in his left hand; his right hand is bent from the elbow and points outward. In front of this figure is a table holding plants, flowers, or flames, with a single support, similar to a fire altar. Behind this main figure is a flying bird with open wings, and near the top of the register, almost above the table, is another standing bird. Behind the bench, near the broken part of the seal, the leg of an animal is discernible. Most of the top register is broken off, but an imaginary creature, possibly a winged lion or cow, can be seen, somewhat similar to the grif-fin or phoenix that appears on other objects from Marlik. A straight line divides the two registers. This design is done in a simple naturalistic style.



Ill. 20. 476

#### COMMENTS

A figure seated on a bench in front of a fire table or plant stand was a common design over a long range of time, almost one and one-half millennia, and over a wide geographic area. A very closely comparable design with a fire stand in front of a seated figure appears on a cylinder seal from Tell Fakhariyeh, found in the sounding of the VI floor, which is dated to the reign of Shalmaneser I, 1272–1243 B.C.<sup>97</sup> The very close similarity of this seal to the Marlik seal leads to the supposition that they must have been made at approximately the same time. A robed man seated on a chair with a fire stand before him appears on a seal that is unclassified but may be middle Babylonian,<sup>98</sup> and a similar robed figure can be seen on a seal classified by Porada as Mitannian.<sup>99</sup> Frankfort classified a similar seal as Mitannian; he suggests that this type of seal represents a transitional stage between those produced during the First Dynasty of Babylon and later Mitannian seals.<sup>100</sup>

This scene composition apparently was used over a long period of time and may be found in Kassite,

First Dynasty of Babylon, Isin-Larsa, Akkadian, and even earlier times. A comparable seated figure holding a plant appears on a seal classified by Frankfort as Mitannian.<sup>101</sup> Another figure, seated on a bench representing a snake with a fire altar before him, appears on a seal assigned by Weber to the middle of the second millennium B.C.<sup>102</sup> The same seated figure without the fire stand appears on seal impressions from Nuzi.<sup>103</sup> Sometimes the seated figure holds a plant, possibly representing the god planting or holding the sacred tree of life. This may be the case on the Marlik seal, where the table may hold plants rather than flames. A seated figure with a tree, similar to that on 469, may be found in the Louvre and is classified by Contenau as Kirkouk style, late second millennium B.C.<sup>104</sup> A seal with a similar seated figure and a row of three rosettes or flowers, along with a winged monster similar to that on the Marlik seal, is classified by Hogarth as Hittite Class III, Group 5, dated to the late second millennium B.C.<sup>105</sup>

A similar seated figure with a fire or plant stand appears on a seal identified by Ward as containing Assyrian or Hittite deities, dated to around 2000–1000 B.C.<sup>106</sup> Another seal with a similar scene is classified by Moortgat as an Assyrian seal dating to the time of Shalmaneser I.<sup>107</sup> Near the water gate at Carchemish a relief with a similar design of a seated figure on a bench with a plant or fire table before him was found, dated by Woolley to after 1200 B.C.,<sup>108</sup> when the water gate was reconstructed. Another similar scene occurs on a relief funerary stele from Sinjerli, for which Vieyra has suggested a date of about 850 B.C.,<sup>109</sup> and a seated figure before a table can be seen on a banquet relief from Carchemish, dated by Vieyra to the eighth century B.C.<sup>110</sup>

#### TYPE III: CYLINDER SEALS WITH INSCRIPTIONS (477–478)

Two cylinder seals from Marlik contain inscriptions. These also seem to be contemporary with Assyrian seals.

##### 477 Cylinder Seal

1167 M Pl. 97

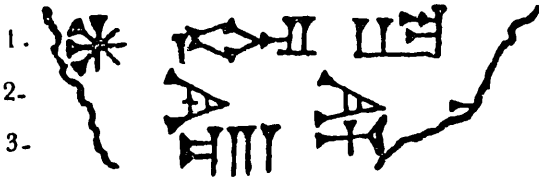
About 2.5 cm long and 1.0 cm in diameter, found in Tomb 8 (Trench IX D). Made of frit or a very soft stone such as gypsum, it is one of two seals with inscriptions found at Marlik and the only one on which the writing is at all legible. The seal is broken from the middle so that half of the lines are unfinished, and part of the surface is also damaged.

This seal contains three unfinished lines<sup>111</sup>:

1. possibly = d nin- [ ] ib
2. possibly = i li [su]
3. possibly = u (?) - hu (?) ] [...]

Another reading is<sup>112</sup>:

1. – dM?X (lords like GIN)
  2. – 1? li ?s u?
  3. – E d X
- Adad ?X? ilisu The temple of the god? X



This seal is possibly contemporary with Middle Assyrian forms and probably dates no later than the reign of Adad-Niruri or Tiglathpileser I.<sup>113</sup>

#### 478 Cylinder Seal

1168 M Pl. 97

About 3.1 cm long and 1.0 cm in diameter, found in Tomb 8 (Trench IX D). It is made of frit and is very badly broken. There are some traces of writing in a very bad state of preservation that cannot be clearly read.<sup>114</sup>

#### TYPE IV: UNIQUE (POSSIBLY LOCAL) CYLINDER SEALS (479–480)

These two seals are unique and likely to have been a local product of Marlik. Both incorporate gold, which was used lavishly there.

#### 479 Cylinder Seal

1165 M Pl. 97

About 1.1 cm long and 0.7 cm in diameter, found in Tomb 36 (Trench XVIII C). It is made of solid gold in crude workmanship. The design shows a large standing bird, difficult to identify but possibly a vulture or eagle, followed by an animal that may be a lion or a cow. Stretched above the bird and animal is a snake with a triangular head. The design is left open with no edge decoration.

The fact that the seal is made of gold, a material commonly used at Marlik, and the design is unique

and crudely made suggests that this seal was possibly made locally by craftsmen attempting to copy an unfamiliar form.

#### 480 Cylinder Seal

1166 M Pl. 98

About 2.2 cm long and 0.7 cm in diameter, found in Tomb 5 (Trench VIII D). It is made of some material like natural bitumen and is covered with a gold sheath. The seal is so badly crushed that the design cannot be identified, but it is bordered at each end by a simple straight line.

#### TYPE V: CYLINDER SEALS OR BEADS WITH SIMPLE GEOMETRIC DESIGNS (481–482)

The objects falling in this group may have been very simple cylinder seals or beads. Only two examples will be described here, but similar cylinders with geometric designs were found in large quantities in several of the Marlik tombs. It is possible that those made of frit, which abounded in the area, were used as beads (see Chapter 7) and those made of gypsum, found alone or in pairs, used as cylinder seals.

#### 481 Cylinder Seal

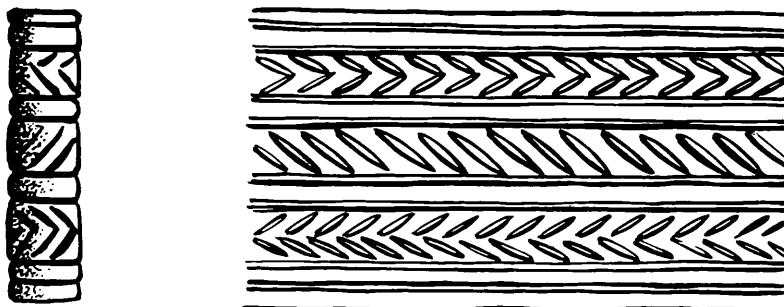
1169 M Pl. 98

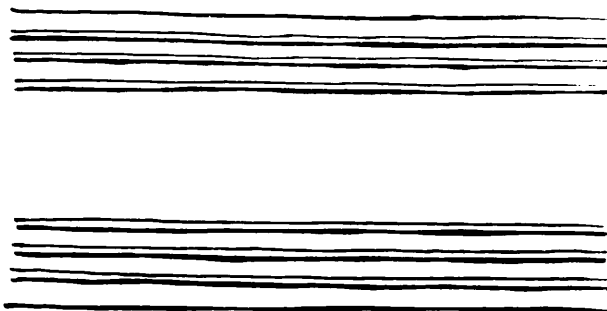
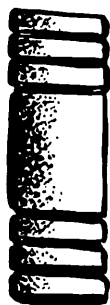
About 3.2 cm long and 1.0 cm in diameter, found in Tomb 32 (Trench XVII E). It is made of gypsum in a poor state of preservation. The design is divided into two horizontal bands, with, above, an open band of parallel chevrons and, below, unconnected lines of parallel zigzags. The two registers are divided by a straight line, and the top is also bordered by a double straight line; the lower edge is broken but possibly had a similar double line.

#### 482 Cylinder Seal

130b M Pl. 98

About 4.0 cm long and 1.0 cm in diameter, found in Tomb 32 (Trench XVII E). Made of frit, it is arranged in three horizontal bands bordered by doubled parallel lines. The top and bottom bands contain open chevrons, the middle band has a line of





III. 22. 288

oblique slashes. This is one of the cylinders that may have been a bead, as many were found. It was found in association with a group of frit beads believed to have formed a necklace (288), of which the seal with two sets of parallel bands illustrated above was the centerpiece.

Another group of these cylinders contains two rows of cross-hatching bands; a third is bordered at each end by projecting bands; a fourth contains open chevron bands; a fifth, open zigzag bands; a sixth, simple straight parallel bands; and a seventh, chevron and hatching bands.

**TYPE VI: CYLINDER SEALS WITH UNIDENTIFIED DESIGNS (483-485)**

Three cylinder seals had designs so worn that they cannot be identified.

**483 Cylinder Seal**  
1097 M Pl. 98

About 2.8 cm long and 1.0 cm in diameter, found in Tomb 10 (Trench XI B). It is made of whitish stone with a design so worn that it is not recognizable.

**484 Cylinder Seal**  
1098 M Pl. 98

About 2.2 cm long and 0.8 cm in diameter, found in Tomb 10 (Trench XI B). It is made of greenish stone with a design so badly worn that it cannot be identified.

**485 Cylinder Seal**  
1099 M Pl. 98

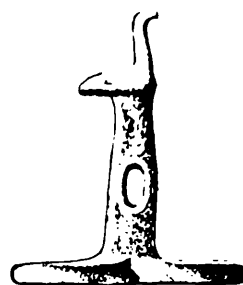
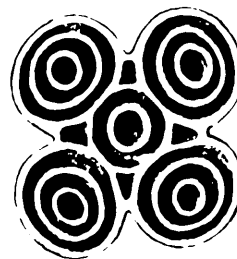
About 3.0 cm long and 0.9 cm in diameter, found in Tomb 14 (Trench XIII B). It is made of pinkish stone, bordered at one end by a gold band, and the surface is so badly worn that the design cannot be determined.

**Stamp Seals (486-490)**

Five stamp seals were discovered at Marlik. They are made of cast bronze and seem to have been locally produced; they are very similar in design and workmanship to other bronze objects from Marlik. They have simple geometric designs, with handles at the back pierced by holes for suspension, and four of the five seals have a small bird or animal figurine at the end of the handle.

**486 Stamp Seal**  
405 M Pl. 99

About 5.8 cm in diameter and 5.2 cm high, found in Tomb 36 (Trench XVIII C). It is made of cast bronze. The design on the seal face is a rosette four large three-ringed concentric circles around a smaller two-ringed circle. The pierced handle at the back ends in a small bird, identifiable by its long neck as a goose or similar fowl.

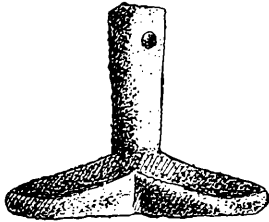
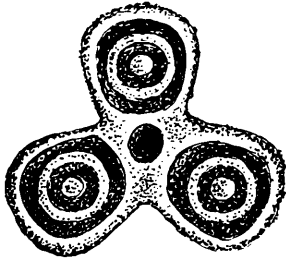


III. 23. 486

**487 Stamp Seal**

679 M Pl. 99

About 4.5 cm in diameter, found in Tomb 23 (Trench XV D). It is made of cast bronze, and on its face is a three-part cloverleaf, each part formed of two concentric circles. The pierced handle is a plain shaft without the bird or animal decoration at the end found on the other stamp seals.



III. 24. 487

**488 Stamp Seal**

601 M Pl. 99

About 6.1 cm high and 4.0 cm in diameter, found in Tomb 27 (Trench XVII D). It is made of cast bronze. The design on the face of this seal is similar to a Maltese cross, with four equal arms expanding in width outward. Each arm of the cross contains either parallel chevrons or straight lines, and a small circle is located at the center of the cross. The pierced handle on the back ends in a small bird, possibly a falcon, with parallel lines along the body indicating wing feathers.

A similar bronze stamp seal with a bird on the handle is dated by Moorey, based on the Marlik example, to Iron Age I, about 1250–1000 B.C.<sup>115</sup>

**489 Stamp Seal**

1390 M Pl. 99

About 4.8 cm in diameter and 5.3 cm high, found in Tomb 36 (Trench XIII C). It is made of cast bronze, and its design is a rather more elaborate Maltese cross than that of the previous seal, having curving arms outlined with curving lines and triangles and a circle inside a square at the center of the cross. The pierced handle at the back ends in a small stylized bird with a long curving neck, with the hole in the handle piercing the body of the bird.



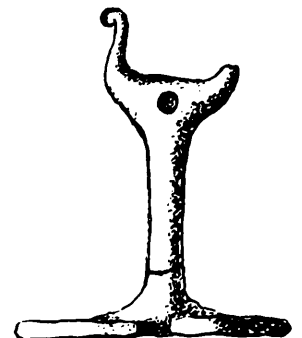
III. 25. 488

**490 Stamp Seal**

1170 M Pl. 99

Bronze seal, about 5.3 cm in diameter and 5.6 cm high, found in Tomb 36 (Trench XVIII C). On the face of the seal is a circle divided into four sections by parallel chevrons that become progressively smaller toward the outer edge of the seal. The handle at the back ends in a small bull with a long round muzzle and conical upstanding horns. The short neck has a small hanging dewlap, and set on the back at the shoulder is a highly stylized hump, elongated and conical with a pointed top. The narrow body has a small rump and short tapering legs. A suspension loop is located on the back behind the hump. The handle of the stamp seal joins the figure under the body between the fore- and hind legs.

Decorating the end of the upstanding handle of a similar bronze stamp seal is a bull figure with a suspension loop between the fore- and hind legs. This is dated by Moorey, based on the Marlik examples, to Iron Age I, ca. 1250–1000 B.C.



III. 26. 489

### Conclusions

The limited number of cylinder seals found at Marlik exhibit a variety of designs, workmanship, and techniques that point to the wide range of interrelationships throughout the ancient world, from the Mediterranean Sea to the Indus Valley. In some cases almost identical seals have been found thousands of kilometers distant from each other, and it is possible that some workshops were massively producing seals of a special type and design that were then traded throughout the ancient world.

Although it is rather difficult to make judgments on the basis of such a limited number of seals, the Marlik examples have been divided into several groups according to their designs and workmanship. The first and largest group, including 469-473, consists of cylinder seals of gypsum or frit made in the Mitannian style, characterized by smooth lines with the use of drill holes and attributable to a time range of the fifteenth to eleventh centuries B.C. (Table 9). The second group, including 474-476, consists of cylinder seals of hard stone, which are rendered in a more naturalistic technique most closely related to Assyrian cylinder seals. These seals may be slightly later in date than the first group, falling into a time range between the twelfth and ninth centuries B.C. The third group includes the two cylinder seals containing inscriptions (477 and 478) which also seem contemporary with Assyrian cylinder

seals. The fourth group contains two seals, 479 and 480, which incorporate gold; they are unique and seem likely to have been a local product of Marlik. The fifth group, including 481 and 482 as examples, consists of cylinders of frit or gypsum with simple geometric designs, also apparently of local manufacture, for which a date of the late second millennium B.C. can be suggested. The final group of cylinder seals includes three, 483, 484, and 485, that are so badly worn that the design has entirely disappeared, and consequently they cannot be dated. In addition to the cylinder seals, five stamp seals of cast bronze, which also appear to be local products, were found.

These comparisons show that the larger group of seals (in the Mitannian style) may be attributed to the fifteenth to eleventh centuries B.C., whereas those in the Assyrian style reflect a somewhat later date (the beginning of the first millennium B.C.). Because these two groups of seals were both found in the same cemetery in tombs dating to a comparable time period, we must accept the latter part of the time range as indicating the date of the burials. This suggests a date falling between the fourteenth and the tenth centuries B.C. On this basis, the cemetery itself can be attributed to the late second to early first millennium B.C., a date well supported by the other available evidence.

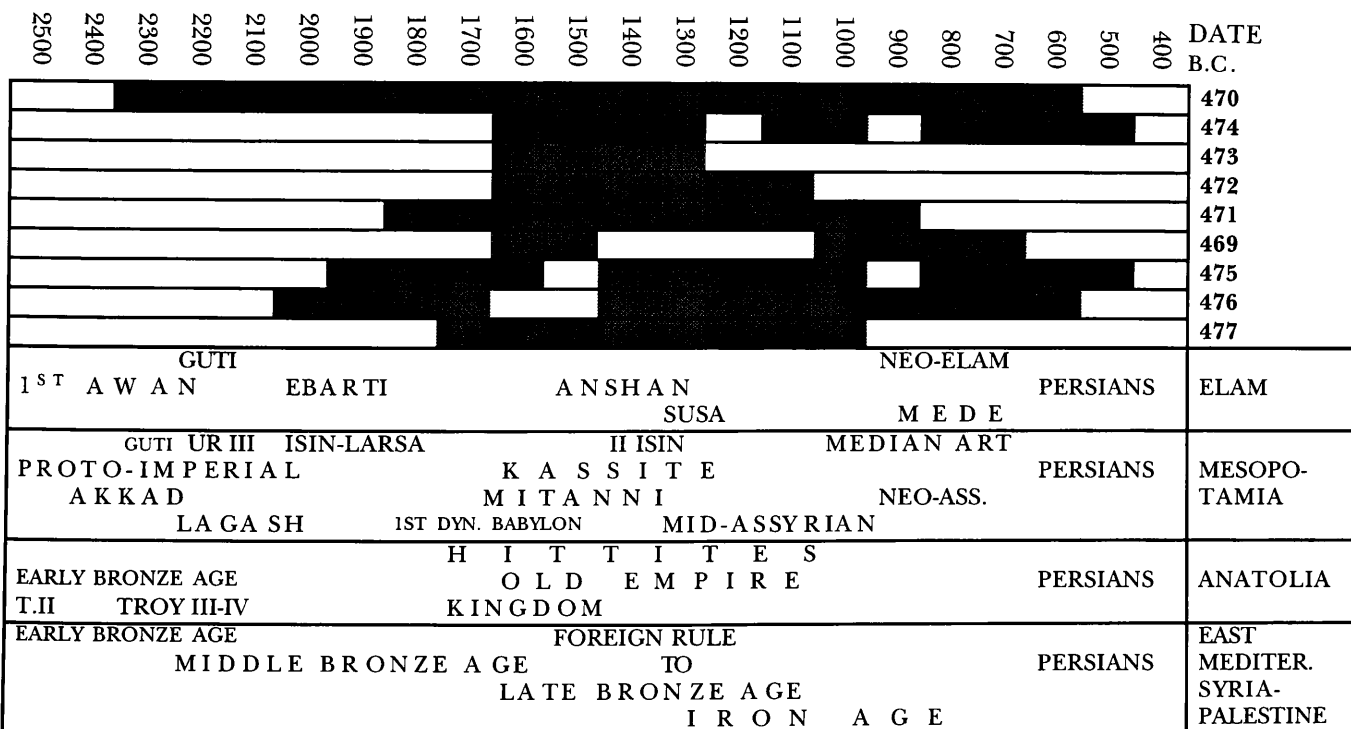


Table 9. Comparative Chronology and Time Range of Marlik Cylinder Seals

Table 10. List of Cylinder and Stamp Seals of Marlik

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L cm	Diam cm	H cm	Material
469	cylinder seal	1094 M	2389	2	VI B+	2.9	1		frit or gypsum
470	cylinder seal	1089 M	2382	4	VIII A+	3	1.3		gypsum or lime
471	cylinder seal	1093 M	2385	2	VI B+	2.8	1		gypsum or frit
472	cylinder seal	1092 M	2386	10	XI B	3	1.1		frit
473	cylinder seal	1091 M	2380	1	III D+	3.1	1.4		gypsum or limestone
474	cylinder seal	1090 M	2383	42	XX F	4	1.4		green stone
475	cylinder seal	1095 M	2381	42	XX F	3	1.1		hematite, gold
476	cylinder seal	1096 M	2388	3	VI A	4.3	1.5		frit
477	cylinder seal	1167 M	2390	8	IX D	2.5	1		frit or gypsum
478	cylinder seal	1168 M	2391	8	IX D	3.1	1		frit
479	cylinder seal	1165 M	2377	36	XVIII C	1.1	0.7		gold
480	cylinder seal	1166 M	2378	5	VIII D	2.2	0.7		bitumen?, gold
481	cylinder seal	1169 M	2392	32	XVII E	3.2	1		gypsum
482	cylinder seal	130b M	2396	32	XVII E	4	1		frit
483	cylinder seal	1097 M	2384	10	XI B	2.8	1		white stone
484	cylinder seal	1098 M	2387	10	XI A	2.2	0.8		green stone
485	cylinder seal	1099 M	2379	14	XIII B	3	0.9		stone, gold
486	stamp seal (w/ bird handle)	405 M	2395	36	XVIII C		5.5	5.2	bronze
487	stamp seal	679 M	14975	24	XV D		4.5	4.5	bronze
488	stamp seal (w/ bird handle)	601 M	2393	27	XVII D		6.4	6.1	bronze
489	stamp seal (w/ bird handle)	1390 M	31 STO	36	XVIII C		4.8	5.3	bronze
490	stamp seal (w/ bull handle)	1170 M	2394	36	XVIII C		5.3	5.6	bronze

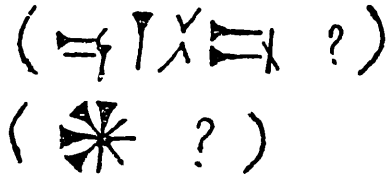
## Chapter VIII Notes

1. Frankfort 1939: Pl. XXXI c, d, Figs. 44, 49, 51-52.
2. Contenau 1935: Pl. 38, No. 1. This seal is dated by Contenau to 1400 and 1000 b.c. and by McCown 1954 to the late second millennium b.c. In Ehrich 1954 (pp. 65-67), it is given a date of around the early first millennium b.c.
3. Wiseman 1959: Pl. 50.
4. Wiseman 1959: Pl. 54.
5. Weber 1920: Figs. 478-480, 486, 487.
6. Porada 1948a: Pls. CLIX 1046 E, CLX 1050, 1053.
7. Porada 1947a: Figs. 59, 63, p. 50.
8. Porada 1947a: Fig. 64, p. 52.
9. Erlenmeyer, M. L. and H. 1965: Table VI, 33, p. 10.
10. Heidenreich 1925: Figs. 13, 16, pp. 35-40.
11. Delaporte 1923: Pl. 97; Fig. 21 (A.949); Pl. 117.
12. Porada 1948a: Pl. LXXXIII, p. 597; Pl. LXXXIV, p. 600.
13. Porada 1948a: Pl. XC, p. 625; Pl. XCII, pp. 637-638.
14. Nougayrol 1939: Pl. I, A.H.1 [XXVI], p. 13; (DAP IV, p. 63, Pl. XXXVIII, 466.
15. Nougayrol 1939: Pl. VII RB.4 [LVI], p. 26.
16. Nougayrol 1939: p. 27, LX (GR.4).
17. Nougayrol 1939: Pl. III, FG.18 [LI], p. 24.
18. Nougayrol 1939: p. 26, LVII (EG.30).
19. Nougayrol 1939: Pl. XI, TH.4 [LXIV], p. 29.
20. Nougayrol 1939: Pl. X, TF.7 [LIII], p. 24.
21. Contenau 1926: Figs. 82, 100, pp. 41, 66, 72.
22. Starr 1937: Pl. 118 E, G; p. IV.
23. Porada 1947b. In most of the plates one or two examples can be seen.
24. Woolley 1921: pp. 80-81.
25. Mellink 1970: Pl. 42, Fig. 6, p. 164.
26. Von Der Osten 1934: Pl. XXI, 289-293, pp. 2-12.
27. Gordon 1939: Pl. VII, 52, p. 4.
28. Moortgat 1940: Pl. 68 (568-569), p. 61.
29. Schaeffer 1948b: Fig. 30, Nos. 2, 5-6, p. 410.
30. Schaeffer 1948b: Fig. 30, Nos. 1, 4, p. 410.
31. Wiseman 1959: Pl. 50.
32. Negahban 1984: Pl. 4, Fig. 17, pp. 8-9, 10.
33. Legrain 1925: Pl. LII, 498 (Nippur CBS 14279).
34. Nougayrol 1939: Pl. I, AH 1, Pl. XXVI, p. 13.
35. Moortgat 1940: Pls. 68, 570, 572, p. 61. This is now in the Staatliche Museum in Berlin.
36. Ravn 1960: Nos. 92, 94, p. 83.
37. Frankfort 1939: Pl. XXXIa, Pl. XLIIIc, j, Text Fig. 46, p. 183.
38. Porada 1948a: Pl. CLXI, 1067.
39. Porada 1947b: Pl. IX, 137; Pl. X, 156; Pl. XV, 272; Pl. XXIV, 492.
40. Delaporte 1923: Pl. 97, Fig. 21.
41. Hogarth 1920: Fig. 73, pp. 71, 95.
42. Gordon 1939: Pl. VII, 52, p. 4.
43. Frankfort 1939: Pl. XXIX 1.
44. Frankfort 1939: Pl. XXI a, c, d; Pl. XLII b; Pl. XLIII a-c, i, j; Text Figs. 46, 48.
45. Frankfort 1939: Pl. XLII e, g; Pl. XLIV g-h, n.
46. Frankfort 1939: Pl. XLIV g-h.
47. Frankfort 1939: Pl. XLI e, f, h, i, j, o, q; Pl. XLII h, i, j, k, m, n, o; Pl. XLIII n, o; Pl. XLIV c, f, i, m, n, q; Pl. XLV, l, n; Text Fig. X 85-86, 92.
48. Negahban 1977: Figs. 112, 143.
49. Negahban 1977: Fig. 111, Pl. XII.
50. Frankfort 1939: Pl. XXI i.
51. Porada 1948a: Pl. CLVII, 1030; Pl. CLIX, 1040 E, 1046 E; Pl. CLX, 1049.
52. Porada 1947b: Pl. IV, 65, 68; Pl. VII, 103, 105, 107; Pl. IX, 145; Pl. X, 150; Pl. XII, 192; Pl. XVII, 316; Pl. XXIX, 580, 583, 586, 587; Pl. XXXVII, 732, 734, 737; Pl. XLII, 836-837, 844, 848-852, and many others.
53. Hogarth 1920: Pl. VIII, 232, pp. 41, 95-96.
54. Schaeffer 1943: Pl. XXXV, pp. 144-146.
55. Porada 1948a: Pl. CLXI 1065.
56. Porada 1947b: Pl. XIX, 352-371, 374-383; Pl. XX, 384-403; Pl. XXI, 409-411; Pl. XXIV, 497.
57. Legrain 1925: Pl. XXXII, 633 (Nippur, 1891, CBS 8919), pp. 8, 312, No. 633.
58. The guiding of game into a fenced hunting area is still practiced in Iran. In the area of Bam and Narmashir in southeastern Iran, deer hunting on camelback utilizes this technique.
59. Porada 1948a: Pl. LXXXVIII, 612-614, E; Pl. LXXXIX, 615-618.
60. Porada 1948a: Pl. CVIII, 725 E.
61. Porada 1948a: Pl. LXXXVIII, 612-614 E; Pl. LXXXIX, 615-618; Pl. CVIII, 725 E.
62. Delaporte 1909: Pl. VII, No. 98; Pl. VIII, No. 116.
63. Frankfort 1939: Pl. XIX a; Pl. XXII f; Pl. XXIII g.
64. Frankfort 1939: Pl. XXX i; Pl. XXXI k.
65. Frankfort 1939: Pl. XLIII l.
66. Frankfort 1939: Pl. XXXIV a, d, g; Pl. XXV a, b, l.
67. Frankfort 1939: Pl. XXXVII d, h, n.
68. Frankfort 1939: Pl. XLIII d, g, i, j, k, l.
69. Frankfort 1939: Pl. IV j.
70. Frankfort 1939: Pl. XVII h; Pl. XXIV d.
71. Frankfort 1939: Pl. XXV c.
72. Frankfort 1939: Pl. XXXI c; Pl. XLIII c, d, h, j; Text Figs. 44, 46, 49-50, 52, 54.
73. Frankfort 1939: Pl. XXXI g.
74. Frankfort 1939: Pl. XXXI h-l; Pl. XXXII b, c, d.
75. Frankfort 1939: Pl. XXXIII a, h; Pl. XXXV a, j.
76. Weber 1920: Figs. 470, 474.
77. Weber 1920: Figs. 476, 480-481, 484.
78. Porada 1948a: Pl. CLIII, 1008 E; Pl. CLVI, 1025 E; Pl. CLVII, 1029 E, 1030; Pl. CLIX, 1046 E; Pl. CLX, 1050-1051.
79. Porada 1947b: Pl. XIX, 370; Pl. XXIII, 467, 472; Pl. XXIV, 477-478, 481; Pl. XXVI, 526-527; Pl. XXIX, 572; Pl. XXXII, 650; Pl. XXXIII, 651, 656, 658, 661-662; Pl. XL, 789, 794; Pl. XLII, 857, 861; Pl. XLIII, 882, 885; Pl. XLIV, 897, 910; Pl. XLV 923-925.
80. Porada 1947a: Fig. 59, p. 50.
81. Porada 1947a: Fig. 64, p. 52.
82. Contenau 1926: Fig. 82, pp. 41, 66.
83. Eisen 1940: Pl. XV 174, p. 37.
84. Moortgat 1942: Fig. 76, pp. 85-86.
85. Von Der Osten 1934: Pl. XXIV 360, p. 12.
86. Porada 1948b: Pl. IX 16-17, pp. 178-179, 188.
87. Frankfort 1939: pp. 157, 253.
88. Wiseman 1959: Pl. 51.
89. Porada 1947a: Fig. 84, p. 65. This is now in the Pierpont Morgan Library.
90. Moortgat 1942: Fig. 3, p. 56.
91. Moortgat 1942: Fig. 12, p. 58.
92. Moortgat 1942: Fig. 17, pp. 59-60.
93. Parker 1962: Pl. XIII, No. 2, p. 31.
94. Parker 1962: Pl. XIII, No. 3.
95. Porada 1948a: Pl. LXXXVIII, 612-613, 614 E; Pl. LXXXIX, 615-618.
96. Porada 1948a: Pl. CVIII, 725 E.
97. McEwan 1958: Pl. 74 F. 197, pp. 86-87, 93.
98. Wiseman 1959: Pl. 118.
99. Porada 1948a: Pl. CLVI, 1022, 1026 E, 1027; Pl. CLVII, 1028, 1030; Pl. CLVIII 1035, 1038.
100. Frankfort 1939: Pl. XXXI e.
101. Frankfort 1939: Pl. XLIII a, b, c, l.
102. Weber 1920: Figs. 392-393, pp. 103-104.
103. Porada 1947b: Pl. I, 17-19; Pl. XIII, 215-216, 218-224; Pl.

- XLIV, 894, 896; Pl. XLVII, 956, 958-963; Pl. XLVIII, 979.
104. Contenau 1926: Fig. 100, pp. 41, 72.
105. Hogarth 1920: Pl. VI, No. 184, pp. 71, 95.
106. Ward 1910: Figs. 721-722, pp. 239, 241.
107. Moortgat 1942: Fig. 72, pp. 82-83.
108. Woolley 1921: Pl. B 30, p. 104.
109. Vieyra 1955: Pl. 83, pp. 79-80.
110. Vieyra 1955: Pl. 56, pp. 71-72.
111. This reading is by George Cameron of the University of Michigan. He points out that the signs may be read "To the god Ninurta," who is possibly more an Assyrian than a Babylonian god.
112. This reading is by I. J. Gelb of the University of Chicago. He points out that one should be more aware of the size of the missing portion, and he feels that the date of the seal cannot be determined, although the sign "lords" is Old Babylonian, with a possible extension to the end of the second millennium B.C.
113. Cameron suggests this date and says that we may guess

some of the missing signs, with the third line possibly reading "Samhu upah."

114. To complete the record, the sign on this seal, copied carefully, seems to be something like this:



115. Moorey 1974a: Fig. 177, pp. 20, 178-180. This is now in the Adam Collection in London.
116. Moorey 1974a: Fig. 178, pp. 20, 178-180. This is now in the Adam Collection in London.



## IX

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# Pottery Vessels

### *Introduction*

The pottery vessels of Marlik were found in tombs, not in residential areas, and many seem to have been made for funerary purposes rather than for daily domestic use. Although these funerary vessels do not differ too widely from the pottery ordinarily produced, they tend to be rather more elaborate and ornamental in nature. At Marlik many highly decorative and valuable objects were placed in the tombs, and the more finely made pottery vessels seem to fall in this category. The tombs also contained some plain pottery vessels apparently made for daily use. These had been filled with food before they were buried, as shown by the animal and bird bones remaining in them.

Painted pottery was not found at Marlik. The period of the beautiful painted pottery of prehistoric times had passed, and painting was rarely done on the pottery of the second half of the second millennium B.C. Later, however, during the early first millennium B.C., a revival of painted pottery appeared at such places as Sialk Cemetery B.<sup>1</sup> The potters of Marlik expended their talent in making beautiful decorative and stylized forms that were well fired and had a polished and burnished surface, sometimes with the addition of pattern-burnished decoration.

The clay of which these vessels are made is extraordinarily fine, well levigated and tempered with very fine grit. The firing was well controlled and produced an even color, with the core and section giving evidence of the careful firing and excellent control of air currents in the kiln. The pottery appears in three main colors, red, brown, and gray, with each of these colors exhibiting a variety of shades. Whatever the shade, each vessel shows a very even color over the whole surface and through the core of the vessel.

The surface treatment is also of high quality. A very fine and smooth slip covers the surface, and in addition to this slip, the surface is often highly polished and burnished to a lustrous sheen, with traces of the burnishing process still evident. Most of the pottery has an even burnished surface, but a few items are decorated with geometric burnished patterns. Some vessels are also decorated with simple incised geometric designs or bands of simple impressed designs applied on the surface, and one group has an unusual decoration of scratched or scraped geometric.

The pottery from Marlik has been divided into fourteen types according to the shape of the vessels. Several examples of each type are described below.

### *Bottles* (491–494)

#### **491 Pottery Bottle** 994 M Pl. 100

About 46.0 cm high and 4.1 cm in diameter at the mouth, found in Tomb 47 (Trench XXII E). It is made of dark brownish gray pottery with a highly polished and burnished surface. The very narrow tall

bottle has a larger diameter near the shoulder and a flat base with a somewhat concave body between. The shoulder curves gently inward to an upright neck, which slants slightly outward toward the rim. A ring handle is connected at the shoulder and near the rim. Animal designs of simple impressed dotted lines

cover the shoulder area. This vessel is so tall and narrow that it would easily topple over if set on its base, and it must have been laid in a diagonal position when at rest.

#### 492 Pottery Bottle

1532 M Pl. 100

Extremely tall bottle, found broken in many pieces and later reassembled, about 57.0 cm high and 4.9 cm in diameter at the rim, found in Tomb 47 (Trench XXII E). It is made of dark brown pottery with a highly polished and burnished surface. It has the shape of a long tubular body set on four variously shaped globular containers, one balanced above the other. The base is flat, with the outer edge mostly broken, and would not have been useful, even when complete, in holding this very tall bottle upright. The shoulder slants inward to an upright outward-slanting neck with a slightly inward rim. A ring handle is attached at the shoulder and near the rim. The body of the vessel, in the area of the globular containers, is decorated by simple parallel geometric bands of straight and zigzag impressed dotted lines. This bottle could not have been of practical use and must have been made solely as a funerary object.

#### 493 Pottery Bottle

1300 M Pl. 100

About 22.0 cm high and 5.5 cm in diameter at the

mouth, found in Tomb 5 (Trench VIII D). Found broken in several pieces and later reassembled, it is made of dark gray pottery. It has a flat base, globular body, and long neck. A pottery pipe connected at one side of the inner neck extends much higher than the rim of the jar, with its lower end near the bottom of the container. Liquid could have been sucked up through this pipe as through a straw.

A vessel with a drinking pipe that is similar in concept was found at Sialk Cemetery B, Tomb 7.<sup>2</sup> A similar drinking vessel with a pipe, from Chandar in the area of Khurvin, is classified by Vanden Berghe to the style of Sialk Cemetery A and B and of Darouse, near Tehran.<sup>3</sup>

#### 494 Pottery Bottle

1110 M Fig. 17; Pl. 100

Small bottle, about 5.0 cm high and 1.2 cm in diameter at the rim, found in the wheat field of Geshlagh. It is made of light reddish pottery with a very thin slip. It has a rounded base and a pear-shaped body with a rather short, narrow neck. A rounded ring surrounds the rim, with two suspension holes, one at each side of the neck.

A pottery bottle with a handle was found at Ghalakuti I in the Dailaman region of Gilan.<sup>4</sup>

## *Jars* (495–537)

### JARS WITH BURNISHED PATTERN DESIGNS (495–497)

These pottery jars have a ring base, a globular body, and an almost vertical large neck. The surface of these vessels is covered by a very smooth slip and is decorated, particularly on the shoulder, by burnished pattern geometric designs.

#### 495 Pottery Jar

1261 M Fig. 17; Pl. 100

About 22.0 cm high and 8.7 cm in diameter at the rim, found in Tomb 20 (Trench XIV H). Broken when found and later restored with some parts missing, it is made of grayish brown pottery. It has a rather thick ring base, an onion-shaped body, and a large vertical neck, which gradually opens toward the plain rim. A loop handle is attached below the rim and on the shoulder, which is divided into wide vertical panels, each decorated by burnished pattern cross-hatching designs.

#### 496 Pottery Jar

1282 M Fig. 17; Pl. 100

About 23.5 cm high and 10.0 cm in diameter at the rim, found in Tomb 10 (Trench XI B). It is made of grayish brown pottery. It is rather similar in general shape and in its burnished pattern decoration to 495, with additional parallel burnished pattern bands on the loop handle.

#### 497 Pottery Jar

1287 M Fig. 17; Pl. 100

About 21.5 cm high and 9.5 cm in diameter at the rim, found in Tomb 15 (Trench XIII C). It is made of grayish brown pottery, and is very similar in general shape and in its burnished pattern designs to 495, but has a projected flat base and no handle.

#### COMMENTS

Burnished pattern decoration was highly developed in the northeastern Central Plateau of Iran, and many pottery vessels of unique shape with sophisticated burnished geometric patterns were found

in Levels III B and III C of Hissar, possibly representing earlier examples than those from Marlik.<sup>5</sup> This technique was well developed in the Asterabad region of Gurgon, with examples found at Shah Tepe and Tureng Tepe.<sup>6</sup> A jar similar in shape and in its burnished pattern decoration was found at Ghalekuti I in the Dailaman region of Gilan, dated by Fukai and Ikeda to the end of the Bronze and beginning of the Iron Age;<sup>7</sup> additional examples with burnished pattern decoration were found at Khurvin, dated by Vanden Berghe to the late second and early first millennium B.C.<sup>8</sup>

## JARS WITH TRIPOD BASES (498–499)

### 498 Pottery Jar

1106 M Fig. 17; Pl. 101

About 13.0 cm high and 4.5 cm in diameter at the rim, found in the wheat field of Gheshlagh. It is made of dark gray pottery with a shiny burnished surface. The body of the jar is globular, with the shoulder slanting very gradually to a neck that spreads outward to a plain rim. Three short narrow conical legs are equally spaced around the flat base.

### 499 Pottery Jar

1015 M Pl. 101

About 26.0 cm high and 5.3 cm in diameter at the rim, found in Tomb 1 of Zeinab Bejar. It is made of light red pottery with a cream-colored coat of soil sediment. It has a round base, a globular body with a vertical slightly projecting platform shoulder, and a tall vertical neck curving gently outward near the plain outward rim. A loop handle is attached to the lower part of the neck and at the edge of the circular platform shoulder. Three conical projecting knobs are equally spaced around the bottom of the jar.

#### COMMENTS

Several other tripod vessels were found at Marlik, including Pottery Bowl 587 and Pottery Plate 623. These are discussed in a later section of this chapter. Examples of tripod vessels from other sites include a rather more decorative vessel, found in Level III of Tepe Giyan, which Herzfeld describes as having legs resembling the legs and tail of a cow.<sup>9</sup> Additional examples were found in Giyan Levels III<sup>10</sup> and I,<sup>11</sup> Tepe Djamshidi Level III,<sup>12</sup> and Tepe Bad Hora,<sup>13</sup> as well as northern Iran.<sup>14</sup> A comparable example with a tripod stand from Agha Evlar in Persian Talish is dated by Schaeffer to Talyche Recent 2, around 1450–1350 B.C.,<sup>15</sup> while he dates a bowl with a tripod stand from Djonu in Russian Talish to Bronze Recent 3 or Talyche Recent 3, around 1350–1200 B.C., and Talyche Fer 1, around 1200–1000 B.C.<sup>16</sup>

Jars with tripod knob stands and long necks, particularly similar to 499 from Zeinab Bejar, were

found in the upper level of Tombs C L and B III of Ghalekuti in the Dailaman region of Gilan.<sup>17</sup> A shallow bowl with three stand legs from Khurvin in central Iran is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>18</sup> A jar with a tripod stand was found at Sialk Cemetery A and is dated by Ghirshman to the end of the Bronze period;<sup>19</sup> while a bowl with a tripod base was found in Sialk Cemetery B.<sup>20</sup> Vessels with tripod legs from Kalardasht are dated by Vanden Berghe to 1000–800 B.C.<sup>21</sup>

## JARS WITHOUT HANDLES (500–503)

### 500 Pottery Jar

1534 M Pl. 101

Found broken in many pieces and later reassembled, about 15.0 cm high and 5.0 cm in diameter at the rim, found near the surface in grid XXV L. It is made of gray pottery with a polished and burnished surface. It has a flat base and a globular body that curves into a rather long vertical neck, which turns out to a straight vertical rim.

### 501 Pottery Jar

673 M Fig. 17; Pl. 101

Small jar, broken when found and later restored with parts missing at the rim, about 9.5 cm high and 6.0 cm in diameter at the rim, found in Tomb 3 (Trench VI A). It is made of charcoal black pottery now covered by a cream-colored encrustation of soil sediment. The clay is extraordinarily fine and well levigated, and the vase is made with very thin walls so that it is light and brittle. It has a flat base, a rounded convex body, a rather tall concave neck, and an outward rim. From the top of the shoulder to the rim the vessel is decorated with parallel horizontal rib bands.

A vessel of similar shape but with no decoration at the neck and not as thin and fine as the Marlik example was found at Sialk Cemetery A. It is dated by Ghirshman to the latter part of the second millennium B.C.<sup>22</sup>

### 502 Pottery Jar

1328 M Fig. 17

About 18.0 cm high and 9.0 cm in diameter at the rim, found in the tomb of Ali Karam Bagh. It is made of dark charcoal gray pottery now covered with a whitish cream coat of soil sediment. It has a flat base and a convex body curving gently inward at the shoulder to the concave neck, which turns outward toward the beveled rim. A decorative ridge extends from the shoulder to near the base.

### 503 Pottery Jar

1338 M Pl. 101

About 18.0 cm high and 9.0 cm in diameter at the

rim, found in the upper tomb of Gheshlagh. It is made of dark gray pottery, and has a flat base and an oval body that curves gently inward to the almost horizontal shoulder. A rather large concave neck gradually opens toward an out-turned rim. Vertical impressed bands decorate the body of the vessel.

## JARS WITH HANDLES (504–532)

### *OVOID JARS (504–508)*

This subtype includes jars of fine levigated clay with grit temper in brown, gray, and cream-colored pottery, which are well fired with a smooth, even slip and a very highly burnished shiny surface. These jars have a small flat base, an ovoid body, and a tall narrow neck that flares slightly toward the rim. A small loop handle attaches to the lower part of the neck and to the shoulder with projecting ring bands, sometimes decorated with impressed lines surrounding the neck at the junction of the handle and on the shoulder.

#### **504 Pottery Jar**

118 M Pl. 101

About 21.0 cm high and 4.0 cm in diameter at the rim, found in Tomb 27 (Trench XVII D). It is made of gray pottery from very fine levigated clay with grit temper, and the surface has a fine smooth slip. The vessel has a flat base, an elongated ovoid body with even convex sides, and a rather tall narrow neck, which gradually enlarges toward the inward-turned rim. A rounded loop handle is attached at the middle of the neck and on the shoulder, with a plain projecting rounded band encircling the neck at the handle junction and another, wider band with impressed parallel short straight lines encircling the shoulder at the base of the neck.

#### **505 Pottery Jar**

618 M Fig. 17; Pl. 101, Color Plate XXX A

About 22.5 cm high and 3.5 cm in diameter at the rim, found in Tomb 13 (Trench XII G). It is made of dark reddish brown pottery with a highly burnished surface and is closely similar in shape and decoration to 504 except that it is somewhat wider in the middle of the body.

#### **506 Pottery Jar**

500 M Fig. 17; Pl. 101

About 22.0 cm high and 4.7 cm in diameter at the rim, found in Tomb 19 (Trench XIV E). It is made of dark brown pottery from fine levigated clay, which is grit-tempered with a fine smooth slip and a burnished surface. It has a flat small base and a broader body than the previous examples, with convex sides

curving to a tall, narrow, vertical neck, which enlarges toward the plain, thin, slightly inward rim. A rounded loop handle is attached to the lower part of the neck at its narrowest point and to the shoulder. A projecting rounded ring surrounds the neck at the junction of the upper end of the handle, and another, decorated with short, straight impressed lines, encircles the shoulder at the base of the neck.

#### **507 Pottery Jar**

152 M Fig. 18

About 20.2 cm high and 3.5 cm in diameter at the rim, found in Tomb 32 (Trench XVII E). It is made of brown pottery and is closely similar in shape and decoration to 500 M except that the body is more ovoid.

#### **508 Pottery Jar**

148 M Fig. 18; Pl. 101

About 17.0 cm tall and 3.0 cm in diameter at the rim, found in Tomb 27 (Trench XVII D). It is made of cream-colored pottery and is closely similar to 506, except that the body is more egg shaped and the rings that surround neck and shoulder are decorated with short, straight impressed lines with two more parallel rows of impressed lines on the shoulder.

## *CONICAL JARS (509–512)*

This group includes pottery jars similar to the previous examples, with a well-balanced body, a rather long vertical neck flaring slightly toward the rim, and a small loop handle. They differ from the previous examples in that they have extremely small flat bases and inverted conical bodies. Several examples are illustrated below.

#### **509 Pottery Jar**

147 M Fig. 18; Pl. 102

Broken when found and later reassembled and restored, about 16.0 cm high and 3.5 cm in diameter at the rim, found in Tomb 27 (Trench XVII D). It is made of gray pottery from fine levigated clay with a smooth slip and a burnished surface badly affected by corrosion. It has a very small flat base and a conical body, much broader near the shoulder, with convex sides turning in a gentle curve at the shoulder to a rather tall, narrow neck, which spreads slightly to the inward rim. Connected to the neck and shoulder is a loop handle with a projecting ring encircling the neck at the junction of the handle and another at the base of the neck that is ornamented by parallel impressed elongated lines. Around the base of the handle are more impressed parallel short lines.

**510 Pottery Jar**

288 M Fig. 18; Pl. 102

About 15.0 cm tall and 4.0 cm in diameter at the rim, found in Tomb 33 (Trench XVIII F). Made of gray pottery with a smooth burnished surface, it is very similar to 509 except that it has more parallel decorative bands around the neck and shoulder.

**511 Pottery Jar**

60 M Pl. 102

About 15.0 cm tall and 3.5 cm in diameter at the rim, found in Tomb 24 (Trench XV E). It is made of dark gray pottery with a burnished surface, and has a conical body with a very small flat base that is almost rounded and a tall, narrow neck that flares slightly to a plain rim. A loop handle is attached to the middle of the neck and to the shoulder with a projecting band encircling the neck at the junction of the handle and another band impressed with parallel short lines surrounding the base of the neck. More rows of parallel impressed short lines decorate the shoulder and base of the handle.

**512 Pottery Jar**

142 M Fig. 18; Pl. 102

About 15.5 cm tall and 3.6 cm in diameter at the rim, found in Tomb 24 (Trench XV E). It is made of dark red pottery with a smooth slip and a burnished surface and is very similar in general shape and in the decoration of the neck and shoulder to 511.

*GLOBULAR JARS (513–528)*

These well-proportioned pottery jars are similar to the previous examples, but have more globular bodies. Several subtypes are included in this category.

**SUBTYPE A (513–524)**

This subtype includes globular jars with a narrow, sometimes flaring neck and a loop handle that extends from the shoulder to midway or below on the neck. Certain of the examples are decorated with rounded bands and incised designs.

**513 Pottery Jar**

283 M Fig. 18; Pl. 102

About 14.5 cm high and 3.4 cm in diameter at the rim, found in Tomb 33 (Trench XVIII F). It is made of dark brown pottery with a smooth slip and a burnished surface, which has deteriorated. It has a globular body with a very small flat base and a tall neck spreading very slightly to a plain rim. A loop handle is attached to the middle of the neck and to the shoulder, and around the lower part of the neck

are four parallel impressed bands with a projecting band decorated with impressed short parallel lines around the base of the neck. A number of parallel rows of impressed dotted lines decorate the shoulder, with hanging circles of impressed short lines below.

**514 Pottery Jar**

766 M Fig. 18; Pl. 102

About 25.5 cm high and 5.5 cm in diameter at the rim, found in Tomb 47 (Trench XXII E). It is made of gray pottery and is similar in general shape and decoration to the other examples of this subtype.

**515 Pottery Jar**

1315 M Fig. 18; Pl. 102

About 25.0 cm high and 4.0 cm in diameter at the rim, found in Tomb 52 (Trench XXIII G). It is made of light gray pottery and is similar to 513 except for minor differences in the decoration. It has three rather sporadically placed impressed parallel bands around the lower part of the neck.

**516 Pottery Jar**

1375 M Fig. 18; Pl. 102

About 21.0 cm high and 4.2 cm in diameter at the rim, found in Tomb 47 (Trench XXII E). It is made of grayish brown pottery with a burnished surface and is very similar to the other examples of this subtype. It has two parallel impressed plain bands encircling the neck.

**517 Pottery Jar**

51 M Fig. 18; Pl. 102, Color Plate XXX A

About 15.0 cm tall and 3.5 cm in diameter at the rim, found in Tomb 26 (Trench XVII B). It is made of dark gray pottery with a burnished surface and is similar in general shape to 511 but has a more globular body. The decoration of the neck and shoulder is also similar except that the projecting band around the neck is decorated by parallel impressed short lines.

**518 Pottery Jar**

286 M Fig. 19; Pl. 103

About 22.0 cm tall and 4.1 cm in diameter at the rim, found in Tomb 32 (Trench XVII E). It is made of dark red pottery with a fine smooth slip and a burnished surface. It has a spherical body with an extraordinarily small flat base, which makes it difficult for the vessel to stand upright.

**519 Pottery Jar**

96a M Fig. 19; Pl. 103

About 28.5 cm high and 4.3 cm in diameter at the rim, found in Test Trench 2 in the area of Tomb 50 (Trench XXII L). It is made of dark red pottery with a rather smooth slip and burnished surface, and is similar to the other pottery jars of this subtype except that it has a somewhat more spherical body. The impressed concentric bands of parallel short lines

around the shoulder and base of the handle are very strongly pronounced.

### 520 Pottery Jar

763 M Pl. 103

Found broken in many pieces and later reassembled and restored, about 24.5 cm high and 4.5 cm in diameter at the rim, found in Tomb 47 (Trench XXII E). It is made of dark gray pottery with a smooth slip and a burnished surface. It has an almost rounded base, a rather large conical onion-shaped body with gentle convex sides, and a narrow vertical neck with concave sides that enlarges toward the plain rim. A loop handle connects to the lower neck and to the shoulder with a rounded projecting ring encircling the neck at the point at which the handle is attached. Another, wider band impressed with elongated dots encircles the base of the neck. Two parallel bands of impressed elongated dots decorate the shoulder and the base of the handle.

### 521 Pottery Jars

1349 M and 1342 M Fig. 19; Pl. 103

These two jars are fairly similar in general shape to **520**: 1349 M, broken when found and later reassembled and restored with some parts missing, about 24.0 cm high and 4.2 cm in diameter at the rim, Tomb 52 (Trench XXIII G); and 1342 M, broken with the middle part missing, about 22.0 cm high and 4.2 cm in diameter at the rim, dark gray ware, Tomb 52 (Trench XXIII G).

1349 M has three parallel impressed bands around the lower part of the neck and three more parallel impressed dotted bands encircling the shoulder; 1342 M has a more oval body with an emphasized flat base and three projecting parallel rings encircling the lower part of the neck.

### 522 Pottery Jar

1133 M Fig. 19; Pl. 103

About 36.0 cm high and 7.0 cm in diameter at the rim, found in the wheat field of Gheslugh. Made of brick red pottery, it is rather similar to **520** except that the body is more spherical, the neck decorated by many parallel impressed bands, and the surface covered by a very thin washed slip.

### 523 Pottery Jar

1105 M Fig. 19; Pl. 103

About 26.0 cm high and 4.5 cm in diameter at the rim, found in the wheat field of Gheslugh. It is made of gray pottery from well-levigated clay with a fine smooth slip and a burnished surface, which is badly affected and damaged by soil sediment. It has a very well-balanced spherical body with a rounded base and a relatively short vertical neck with concave sides that gradually open toward the plain rim. A rather short loop handle is connected to the lower part of the neck and to the shoulder. Two parallel impressed bands encircle the neck at the point at which the upper end of the handle is attached.

### 524 Pottery Jar

1319 M Fig. 19

About 35.0 cm high and 7.5 cm in diameter at the rim, found in Tomb 52 (Trench XXIII G). Made of brick red pottery, it is very similar in general shape and decoration to **523** except that it has three impressed parallel bands around the neck.

### SUBTYPE B (525–526)

This group includes very large pottery jars with a flat, relatively small base, a rounded body, and a short vertical neck that is wider than on the vessels of the previous subtype. A loop handle extends from the shoulder fairly far up the neck, on some vessels reaching to the rim. Several examples illustrate this subtype.

### 525 Pottery Jar

1249 M Fig. 20

Large jar, about 35.5 cm high and 8.0 cm in diameter at the rim, found in Tomb 19 (Trench XIV E). It is made of brick red pottery from a rather coarse but levigated clay with a solid slip. It has a rather small, very slightly concave base, a globular body, a rather short vertical wide neck with concave sides, and a solid loop handle connecting to the rim and shoulder.

### 526 Pottery Jars

672 M, 1378 M, 1100 M, 1101 M, and 1305 M Fig. 20; Pl. 104

These jars are all similar in general shape to **525**: 672 M, about 35.0 cm high and 10.4 cm in diameter at the rim, brick red ware, Tomb 5 (Trench VIII D); 1378 M, about 37.0 cm high and 8.5 cm in diameter at the rim, brick red ware, Tomb 47 (Trench XXII E); 1100 M, about 38.0 cm high and 11.0 cm in diameter at the rim, brick red ware, wheat field of Gheslugh; 1101 M, about 35.0 cm high and 35.0 cm in diameter at the rim, brick red ware, wheat field of Gheslugh; 1305 M, about 22.0 cm high and 7.5 cm in diameter at the rim, dark gray ware, area of grid XVIII G.

672 M is less bulbous in the body than the others, with the upper end of the handle attached below the rim.

### SUBTYPE C (527–528)

The vessels in this subtype are similar to those in the previous group except for having a flaring neck. In all cases, the handles extend to the rim.

### 527 Pottery Jar

1351 M Fig. 20

About 27.0 cm high and 7.0 cm in diameter at the

rim, found in Tomb 41 (Trench XIX K). Made of brick red pottery, it is rather similar in general shape to 520 except that the handle, with a projecting knob on top, is connected on the upper end to the rim.

### 528 Pottery Jars

678 M and 1346 M Fig. 20; Pl. 104

Both very similar to 527. 678 M, about 28.0 cm high and 8.3 cm in diameter at the rim, is made of dark gray pottery and was found in Tomb 23 (Trench XV D). 1346 M, about 23.0 cm high and 5.0 cm in diameter at the rim, was found in the lower tomb of Gheshlagh and is made of brick red pottery.

#### COMMENTS

A pottery jar with an outward neck and small handle, similar to 528, was found at Ghalekuti I in the Dailaman region of Gilan and is assigned by Fukai to the end of the Bronze and beginning of the Iron Age.<sup>23</sup>

A large pottery jar with a globular body and small handle, similar to those in Subtype B, was found in Cemetery A, Sialk V and is classified by Ghirshman to the end of the Bronze Age.<sup>24</sup>

### DEPRESSED GLOBULAR JARS (529–532)

These pottery jars have a flat base, depressed globular body, vertical neck, and loop handle. Of brown, dark red, and gray pottery, they have a very smooth slip and a well-burnished surface. They bear some similarity to the previous type but have a much broader flat base, a neck that may be either short or long with a loop handle reaching the rim of the short-necked vessels, and less decoration, with many of the jars being completely plain.

#### SUBTYPE A (529–530)

These vessels have a depressed globular shape and feature a flat base, a short, wide vertical neck, and a loop handle that extends from the neck to the rim.

### 529 Pottery Jar

153 M Fig. 20; Pl. 104

About 17.0 cm high and 6.5 cm in diameter at the rim, found in Tomb 32 (Trench XVII E). It is made of dark brown pottery from well-levigated clay with a fine even slip and a highly burnished surface. It has a large flat base, a depressed globular body, and a vertical neck, which gradually opens toward a plain, slightly inward rim. A rather large curving handle is connected to the rim and shoulder, and two parallel rows of large impressed elongated dots surround the shoulder and the base of the handle.

### 530 Pottery Jars

623 M, 284 M, 285 M, and 1324 M Fig. 21; Pl. 104

The following jars are all similar in general shape to 529: 623 M, about 19.3 cm high and 7.0 cm in diameter at the rim, dark red ware, Tomb 13 (Trench XII G); 284 M, about 7.5 cm high and 3.7 cm in diameter at the rim, dark red ware, Tomb 33 (Trench XVIII F); 285 M, about 8.0 cm high and 3.5 cm in diameter at the rim, gray ware, Tomb 33 (Trench XVIII F); 1324 M, about 20.0 cm high and 6.5 cm in diameter at the rim, dark red ware, Tomb 44 (Trench XX M).

Except for 623 M, these examples are all plain with no decoration. 284 M and 285 M are much smaller than the others.

#### SUBTYPE B (531)

Only one vessel is included in this subtype. Like those in subtype A, it has a depressed globular shape and a flat base. Unlike the previous examples, however, it has a tall, flaring neck with the loop handle attached below the midway point of the neck.

### 531 Pottery Jar

1299 M Fig. 21; Pl. 105

About 15.0 cm high and 4.0 cm in diameter at the rim, found in Tomb 17 (Trench XIV C). It is made of gray ware.

#### SUBTYPE C (532)

Only one vessel is included in this subtype. It has a depressed globular body, a ring base, a short flaring rim, and a loop handle that extends from the shoulder almost to the rim.

### 532 Pottery Jar

456 M Fig. 21; Pl. 105

About 27.0 cm high and a 9.0 cm in diameter at the rim, found in the area of grid XVIII G. It is made of brick red ware.

#### COMMENTS

Pottery jars similar to the depressed globular jars from Marlik have been found in northern Iran, south of the Caspian Sea. A similar example with a flat base and hatching decoration on the body was found at Tulu, and another with a similar general shape but a round base was found at Djonu, both in Russian Talish. They are dated by Schaeffer to Talyche Recent 3 and Talyche Fer I, around 1350–1000 B.C.<sup>25</sup>

A pottery jar from Khurvin, with a small base, carinated body, and handle, comparable to 532, is dated by Vanden Berghé to the late second and early first millennium B.C.<sup>26</sup>

## DOUBLE JARS (533–534)

Several sets of double jars, two almost identical small jars connected at the middle of the body, were found at Marlik. These double jars are well polished and burnished. Two examples are discussed below.

### 533 Double Jar

1218 M Pl. 105

Broken when found and later reassembled and restored, about 15.2 cm high and 3.2 cm in diameter at each mouth, found in Tomb 36 (Trench XVIII C). It is made of dark grayish brown pottery of fine clay with a very smooth slip and a polished and burnished surface. The two similar jars, each with an ovoid body with a very small flat base and a rather tall, slightly tapering neck with a slightly inward rim, are joined at the middle of the body. Attached to the middle of the neck and to the shoulder of each jar is a loop handle, with a projecting rounded band impressed with parallel short straight lines encircling the neck at the point where the handle is attached. Another projecting band decorated with short, straight impressed lines appears around the base of the neck. Each jar also has bands of double-impressed parallel short, straight lines in the area of the shoulder and the base of the handle. This double jar is finely made and well balanced.

### 534 Double Jar

611 M Pl. 105

About 11.2 cm high and 4.7 cm in diameter at each mouth, found in Tomb 18 (Trench XIV D). It is made of dark brown pottery with a burnished surface. Part of the body and handle is broken and missing. The two very similar jars, each with a wide flat base, a rounded body, and a tall, slightly concave neck that gradually extends outward toward a simple, slightly inward rim, are joined at the middle of the body. A flat handle with rounded edges connects to the rim and shoulder of each vessel, with a band of parallel impressed short, straight lines encircling the base of the neck and the base of the handle; the connection between the two jars is decorated in the same manner.

#### COMMENTS

Similar examples of double-bodied jars have been found at other sites. A double jar with a loop handle placed between the jars above the connection, found at Sialk Cemetery B, is assigned by Ghirshman to the beginning of the Iron Age.<sup>27</sup> A double jar that is not exactly similar except in concept, found at the North East Court of Tchoga Zanbil, is dated by Ghirshman to 1250 B.C.<sup>28</sup>

Examples similar in concept have also been found at more distant sites. A double jar from Beisan in Palestine is dated by Schaeffer to around the late third millennium B.C.<sup>29</sup> Another example similar only

in concept, consisting of two connected deep bowls with conical legs, a lid, and incised decoration, said to be from Yortan Tepe in Anatolia, is dated to the first half of the third millennium B.C.<sup>30</sup> A triple jar with a large handle on top is dated by Forsdyke to the Late Mycenaean period, around 1400–1100 B.C.<sup>31</sup> Still another example, not similar in detailed shape, from Hissarlik, is assigned by Schaeffer to Troy II level 11.<sup>32</sup> A rather later double jar, of which one container is broken and mostly missing, from Bastam in northwestern Iran, is assigned to Urartian times.<sup>33</sup>

A double jar with similar elongated dotted decoration is dated by Dubiner to 1000–500 B.C.<sup>34</sup> Double jars from Cyprus are assigned by Bossert to the Early Bronze Age, around the early third millennium B.C.,<sup>35</sup> and a double jar similar in concept was also found at Byblos.<sup>36</sup> A final example, for which there could be no significant point of cultural contact, neither geographical nor chronological, is a double pottery jar, joined at the body, from Peru, classified by Weinberg to the Chimu period, around 1300–1400 A.D.<sup>37</sup>

## CUBIC JARS (535–537)

These vessels have a plain cubic body and a short neck set in the center of the flat shoulder.

### 535 Cubic Jar

454 M Pl. 105

About 12.0 cm high and 5.0 cm in diameter at the rim, found near the surface in grid XVIII G. Made of brick red pottery, it has a flat base, a cubic body, and a short neck, concave on the lower part and convex on the upper, extending to a plain simple rim.

### 536 Cubic Jar

597 M Pl. 10

About 21.5 cm high and 6.0 cm in diameter at the rim, found in Tomb 44 (Trench XX N). Made of red pottery, it has a plain cubic shape very similar to 535 except that the neck has concave sides.

### 537 Cubic Jar

616 M Pl. 105

About 13.5 cm high and 8.5 cm in diameter at the rim, found in Tomb 5 (Trench VIII D). It is made of gray pottery covered with a coat of soil sediment and is closely similar to 536.

#### COMMENTS

Several cubic vessels have been found in the Central Plateau of Iran. A comparable example with more decoration around the neck and rim was found at Sialk Cemetery B,<sup>38</sup> while much smaller, crudely made cubic jars were also found at Khurvin, dated by Vanden Berghe to the late second and early first millennium B.C.<sup>39</sup>



*Pitchers* (538–546)

## SMALL PITCHERS (538–539)

This group includes small pitchers with a flat base, an almost pear-shaped body, and a loop handle connected to the rim and shoulder.

**538 Pitcher**

765 M Fig. 21; Pl. 106

Small pitcher, rim somewhat damaged, about 13.0 cm high and 5.5 cm in diameter at the rim, found in Tomb 47 (Trench XXII E). It is made of dark gray pottery from fine levigated clay with a very smooth slip and a burnished surface with a fine sheen. It has a flat base and a pear-shaped body, rather heavier in the lower part, with a neck that gradually opens upward reaching a simple turned-out rim. A rather large loop handle, thicker at the lower end, is attached to the rim and shoulder. Three parallel impressed bands surround the neck, with two parallel bands of impressed elongated dots encircling the top of the shoulder above a zigzag band of impressed elongated dots.

**539 Pitchers**

1358 M, 198 M, 677 M, 1354 M, and 675 M Fig. 22; Pl. 106

The following pitchers are all rather similar in general shape to 538:

1358 M, about 13.5 cm high and 3.5 cm in diameter at the rim, dark gray ware with a smooth slip and burnished surface, Tomb 52 (Trench XXIII G);

198 M, about 9.5 cm high and 4.5 cm in diameter at the rim, dark gray ware, Tomb 50 (Trench XXI K);

677 M, about 9.5 cm high and 3.5 cm in diameter at the rim, gray ware, Tomb 15 (Trench XIII C);

675 M, about 10.5 cm high and 4.5 cm in diameter at the rim, gray ware, Tomb 15 (Trench XIII C);

1354 M, about 8.0 cm high and 5.0 cm in diameter at the rim, dark gray ware, Tomb 50 (Trench XXI K).

On 1358 M a small loop handle is attached to the base of the neck and to the shoulder; 198 M has a more gentle concave curve to the rim and a loop handle extending to the rim; and 677 M and 1354 M have very short necks, with that of 1354 M wide and almost straight.

## ELONGATED PITCHERS (540–541)

This subtype includes elongated pitchers with loop handles; they are not very well made or balanced.

**540 Elongated Pitcher**

455 M Fig. 22; Pl. 106

About 16.3 high and 5.5 cm in diameter at the rim,

found near the surface in grid XVIII G. It is made of light gray pottery from crude clay with a rough surface. It has a flat base and a cylindrical body, narrower near the bottom, which tapers toward a rather rough rim slanting toward one side. A loop handle is attached to the rim and upper body.

**541 Elongated Pitcher**

627 M Fig. 22; Pl. 106

About 16.5 cm high and 5.9 cm in diameter at the rim, found in Tomb 13 (Trench XII G). Made of light red pottery, it is similar to 540 except that it is better made, with no slanting of the rim.

PITCHERS WITH A TREFOIL RIM  
(542–546)

These pottery pitchers are rather crudely made, with a flat base, a globular body, a vertical neck with concave sides, and a trefoil rim. A loop handle, sometimes with a control knob on top, usually is connected below the rim and at the shoulder. Some of these pitchers are decorated with impressed, projecting, or simple dotted bands. They were not found in the tombs, but near the surface, and may have been left accidentally, possibly from a later period.

**542 Pitcher**

579 M Fig. 22; Pl. 106

About 21.5 cm high and 7.1 cm in diameter at the base, found near the surface of Trench XXV H. It is made of brick red pottery from rather solid levigated clay with a very thin slip. It has a flat base, a globular body, and a vertical neck, heavier on the lower part, which tapers upward to a rather thick vertical-sided trefoil rim. A loop handle with a projecting control knob on top is attached below the rim and on the shoulder. Somewhat irregular parallel bands of elongated dots surround the base of the neck.

**543 Pitcher**

582 M Pl. 106

About 23.0 cm high and 6.5 cm in diameter at the base, found near the surface in Trench XXII L. Made of light brick red pottery with cream-colored soil sediment on the surface, it is similar in general shape and in its trefoil rim to 542 except that it has a control knob on the handle. It is decorated by many parallel projecting bands encircling the neck.

**544 Pitcher**

976 M Pl. 106

About 22.0 cm high and 9.0 cm in diameter at the base, found near the surface in Trench XXV L. Made

of light brick red pottery, it is similar in general shape and in its trefoil rim to 542 except that it has a control knob on the handle. Parallel plain bands encircle the neck and body.

#### 545 Pitcher

977 M Pl. 106

About 23.0 cm high and 7.5 cm in diameter at the base, found near the surface of Trench XXV L. It is made of light brick red pottery and is similar in general shape, handle, trefoil rim, and decoration to 544.

#### 546 Pitcher

1541 M Pl. 107

About 21.0 cm high and 10.0 cm in diameter at the base, found near the surface of Trench XXV L. It is made very crudely of light brick red pottery and is similar in general shape and in its trefoil rim to 542. It has no decoration and no central knob.

#### COMMENTS

A small pitcher similar to those in the first group was found at Ghalekuti I in the Dailaman region of Gilan, dated by Fukai to the end of the Bronze and

beginning of the Iron Age.<sup>40</sup> Other comparable examples were found at Khurvin on the Central Plateau of Iran, where a similar vessel with a flat base and convex body with a loop handle is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>41</sup> A vessel with a flat base and loop handle, almost identical to 539 (677 M), was found at Djonu, in Russian Talish, and is assigned by Schaeffer to Talyche Recent 3 and Talyche Fer 1, around 1350–1000 B.C.<sup>42</sup>

Elongated pitchers are rather rare, but an example similar in shape to the Marlik examples with a loop handle at mid-height was found at Ras-El-Ain in Palestine, assigned by Schaeffer to Ugarit Moyen 2, around 1900–1750 B.C.<sup>43</sup>

A pottery vessel with a trefoil rim similar to the Marlik examples was found at Tamadjan in Mazandaran.<sup>44</sup> Another example, found at Agha Evlar in Iranian Talish, is classified by Schaeffer to Talish Recent 2, around 1450–1350 B.C.<sup>45</sup> A similar vessel with a trefoil rim from Ras Shamra in Syria is dated by Schaeffer to the fourteenth to thirteenth centuries B.C.,<sup>46</sup> and another from Anatolia is dated by Bossert to the seventh to sixth centuries B.C.<sup>47</sup>

### *Beaker* (547)

#### 547 Beaker

1313 M Fig. 22; Pl. 107

Found broken in many pieces and later reassembled, about 24.0 cm high and 12.5 cm in diameter at the mouth, found in Tomb 25 (Trench XVI F). It is made of dark gray pottery with a highly burnished surface. The body has an outward-turned rim and slanting convex sides, rather straight on the

upper part, which join the flat base in a gentle curve. A large curving handle extends from near the base almost to the middle of the body.

Two similar but less elegant beakers with a flat button base and a higher handle, one with painted geometric designs on the upper part and the other plain, were found at Sialk Cemetery B.<sup>48</sup>

### *Chalices* (548–549)

The pottery vessels in this group have the shape of a chalice with a bowl-like body set on a stand. These chalices are made in different shades of gray and red pottery. Two examples illustrate this type.

#### 548 Chalice

1538 M Pl. 107

Broken when found and later restored, about 16.5 cm high and 15.0 cm in diameter at the rim, found in Tomb 29 (Trench XVI H). It is made of gray pottery with a burnished surface. The small, half-globular body sits on a hollow conical base with convex sides; it has an angular narrow shoulder

slanting slightly inward to a very large neck, which extends upward in a slightly diagonal line to a simple plain rim. This unusual vessel is beautifully proportioned.

#### 549 Chalice

1221 M Pl. 107

Found broken in many pieces and later reassembled and restored, about 9.0 cm high and 10.5 cm in diameter at the rim, found in Tomb 36 (Trench XVIII C). It is made of dark red pottery from very fine levigated clay with a fine smooth slip, which is highly burnished and polished. The almost

hemispherical body sits on a hollow, slightly conical base with a rounded, well-polished edge. The body ends in a beveled rim, which is slightly convex on the outside but on the whole is turned inward. This fine chalice is well proportioned and balanced.

#### COMMENTS

A number of vessels similar to these pottery chalices have been found at other sites. Earlier examples with a similar general shape and stand but a slight difference in proportions occur in abundance in Tepe Hissar Level II in the Central Plateau

of Iran.<sup>49</sup> An example comparable to 549 was found at Sialk Cemetery A,<sup>50</sup> classified by Ghirshman to the end of the Bronze Age. Examples even more similar to 549 were found at Khurvin, dated by Vanden Berghe to the late second and early first millennium B.C.<sup>51</sup> A vessel similar in general shape but not as elaborate as the Marlik examples was found at Ghalekuti I in Dailaman, dated by Fukai to the end of the Bronze and beginning of the Iron Age.<sup>52</sup> A chalice comparable to 548 with a large open neck and button base and with an additional loop handle was found in Level IV of Hasanlu.<sup>53</sup>

## Mugs (500–553)

These mugs have a flat base and straight or tapering sides, usually without a distinct neck, with a loop handle attached at mid-height. A similar vessel was found at Kalardasht.<sup>54</sup>

### 550 Mug

1042 M Pl. 107

About 13.0 cm high and 8.0 cm in diameter at the rim, found in Zeinab Bejar. Made of red pottery, it has a flat base and a globular body curving gently to a rather vertical neck, which spreads slightly at the rim. A loop handle is attached at mid-height.

### 551 Mug

1332 M Fig. 22; Pl. 107

About 18.0 cm high and 8.0 cm in diameter at the rim, found in Zeinab Bejar. Made of light red pottery, it is similar to 550 except that it tapers diagonally

from near the base to the rim, with a slight concavity near the neck.

### 552 Mug

1344 M Fig. 22; Pl. 107

About 9.0 cm high and 6.5 cm in diameter at the rim, found in Gheshlagh. It is made of gray pottery with a very thin slip. It has a small flat base with a round body that tapers gradually to a plain, slightly outward rim. A loop handle is attached at mid-height.

### 553 Mug

1041 M Pl. 107

About 8.0 cm high and 6.5 cm in diameter, found in the lower tomb of Gheshlagh. It is made of gray pottery, and resembles 552 both in shape and in the position of the vertical loop handle.

## Cups (554–558)

These pottery cups are quite varied in shape. All have handles.

### CUPS WITH LARGE HANDLES (554–555)

These pottery cups have a round base, hemispherical body, and a very large loop handle. Two examples are described here.

### 554 Cup

629 M Pl. 107

About 4.5 cm high and 7.3 cm in diameter at the rim, found in Tomb 4 (Trench VIII A<sup>+</sup>). It is made of

cream-colored pottery with a very thin slip and has a very small flat base, a hemispherical body, and a very large rounded loop handle connected to the rim and body.

### 555 Cup

424 M Fig. 23; Pl. 107

Partly broken when found and later restored, about 5.0 cm high and 7.0 cm in diameter at the rim, found in Tomb 36 (Trench XVIII C). Made of gray pottery from a fine levigated clay with a smooth slip and burnished surface, it is closely similar to 554.

## LARGE CUPS (556–557)

These large pottery cups have a flat base, a rounded body, and a short vertical neck with a loop handle attached to the rim and the body on one side. Three examples are described here.

### 556 Cup

149 M Fig. 23; Pl. 108

About 11.0 cm high and 9.0 cm in diameter at the rim, found in Tomb 27 (Trench XVII D). It is made of reddish pottery, and has a large flat base and a globular body with a very short neck that turns to an outward rim. A loop handle is attached to the rim and body.

### 557 Cups

287 M and 1269 M Fig. 23; Pl. 108

These cups are similar to 556 except that 1269 M has a more oval body and a longer neck: 287 M, about 11.5 cm high and 10.0 cm in diameter at the rim, found in Tomb 33 (Trench XVIII F) and made of reddish pottery; and 1269 M, incomplete with a diameter of 11.0 cm at the rim, found in Tomb 5 (Trench VIII D) and made of dark gray pottery.

## CARINATED CUPS (558)

### 558 Cup

1162 M Fig. 23; Pl. 108

About 10.0 cm high and 7.7 cm in diameter at the rim, found in Tomb 27 (Trench XVII D). It is made of gray pottery with a fine burnished slip; its surface is now strongly affected by soil sediment. It has a flat

base and a carinated body that is diagonal on the lower side and rather convex on the shoulder. This carinated body curves gently to a large neck, which gradually opens upward to a fine thin rim. A loop handle is attached at mid-height on the neck and almost to the point of carination of the body.

### COMMENTS

Cups with large handles have also been found at other sites. An example was found at Sialk Cemetery B<sup>55</sup> and another with a smaller handle at Khurvin, both dated by Vanden Berghe to the late second to early first millennium B.C.<sup>56</sup> A similar example found at Djonu in Russian Talish is classified by Schaeffer to Talyche Recent 3 and Talyche Fer 1, around 1350–1000 B.C.<sup>57</sup> Comparable examples have also been found at more distant sites. A cup with a very large handle, from Vounous-Bellapais in Cyprus, is classified by Schaeffer to Ugarit Ancient 3, around the late third millennium B.C.<sup>58</sup> Another similar example with painting around the rim and handle, found at Appolakia, is assigned by Bossert to the late Helladic period,<sup>59</sup> while he classifies another somewhat similar cup from Troy to Troy VII.<sup>60</sup> Similar cups with large handles were found at Ialysos, dated by Fosdyke to the late Mycenaean period, around the fourteenth to the eleventh century B.C.<sup>61</sup>

Pottery cups with a large open mouth and loop handle, similar to those from Marlik, were found at Khurvin, dated by Vanden Berghe to the late second and early first millennium B.C.<sup>62</sup> Other similar examples with large open mouths and two loop handles were found at Sialk Cemetery A, dated by Ghirshman to the end of the Bronze Age.<sup>63</sup>

## *Pots* (559–584)

### POTS WITH INCISED DESIGNS (559–561)

These pots have a ring base and a carinated body with simple geometric incised decoration on the shoulder. All three examples described here were found in the same tomb.

### 559 Pot

1265 M Fig. 23; Pl. 108

Broken when found and later restored with some parts missing, about 17.0 cm high and 7.0 cm in diameter at the rim, found in Tomb 20 (Trench XIV H). It is made of dark gray pottery with a smooth slip and burnished surface. It has a ring base, a carinated

body with convex shoulders and side walls, and a broken rim whose shape is not clear. The pot is encircled by horizontal bands of incised geometric decoration formed of reverse triangles, the lower one filled by parallel straight lines and the reverse upper ones left plain. Two parallel straight lines border the design above and below and distinguish the limits between the two major bands of the design.

### 560 Pot

1266 M Fig. 23

Incomplete, about 8.0 cm in diameter at the base, found in Tomb 20 (Trench XIV H). It is made of dark gray pottery with a burnished surface and incised decoration and is very similar in general shape and decoration to 559.

**561 Pot**

1267 M Fig. 23

Broken vessel, found in Tomb 20 (Trench XIV H), made of brown pottery. It has a burnished surface and incised decoration similar to 559.

## COMMENTS

Incised decoration similar to that of these Marlik vessels can be seen on a jar found at Ghalekuti.<sup>64</sup> This type of incised decoration also appears on a pottery bowl from Khurvin, dated by Vanden Berghe to the late second or early first millennium B.C.<sup>65</sup>

**COOKING POTS (562–571)**

This group includes small round pots with a flat base, resembling cooking pots. They may have a small loop handle on each side, or no handle at all. Some of these pots are rather crudely made. They are divided into three subtypes.

***FINE ROUND POTS WITHOUT HANDLES***  
**(562–564)**

These round pots are similar to those in the following subtype except that they are much finer in quality and are often decorated by fine parallel projecting bands around the neck.

**562 Cooking Pot**

1308 M Fig. 23; Pl. 108

Broken when found and later reassembled and restored, about 13.5 cm high and 11.5 cm in diameter at the rim, found in Tomb 52 (Trench XXIII G). It is made of brick red pottery with a burnished surface and somewhat irregular marks all over the body. It has a round base, a globular body, and a short, diagonally outward neck and rim. Fine projecting parallel bands decorate the neck.

**563 Cooking Pots**

1309 M, 1240 M, 1274 M, and 1327 M Fig. 24; Pl. 108

The following pots are all similar in shape to 562: 1309 M, about 15.0 cm high and 12.5 cm in diameter at the rim, light red ware, Tomb 52 (Trench XXIII G); 1240 M, broken with the lower part missing, with a diameter of 13.0 cm around the rim, gray ware, Tomb 36 (Trench XVIII C); 1274 M, broken with the lower part missing, about 13.0 cm in diameter at the rim, red ware, Tomb 5 (Trench VIII D); 1327 M, about 12.0 cm high and 11.0 cm in diameter

at the rim, gray ware, upper tomb of Gheshlagh.

1274 M has more pronounced projecting bands around the neck than the other examples, whereas 1327 M has a projecting area at the bottom, which serves as a base.

**564 Cooking Pot**

1291 M Fig. 24

Broken with the lower part missing, about 13.0 cm in diameter at the rim, found in Tomb 13 (Trench XII G). It is made of red pottery, and is similar in shape to 1274 M.

***ROUND POTS WITHOUT HANDLES***  
**(565–569)****565 Round Pot**

993 M Pl. 108

About 10.5 cm high and 8.5 cm in diameter at the rim, found near the surface in the area of Trench XXII E. Made of brick red pottery, it has a small flat base and a globular body with a rather short concave neck reaching a simple rounded outward-turning rim.

**566 Round Pots**

1219 M, 1364 M, and 1542 M Fig. 24; Pl. 109

The following pots are all rather similar to 565: 1219 M, about 12.0 cm high and 8.5 cm in diameter at the rim, made of brown pottery, found in Tomb 36 (Trench XVIII C); and 1364 M, about 14.0 cm high and 13.0 cm in diameter at the rim, made of light gray pottery, and 1542 M, about 13.0 cm high and 10.0 cm in diameter at the rim, both found in the upper tomb of Gheshlagh. 1219 M has a slightly concave base, and 1542 has more diagonal convex sides than do the other examples, with a gentle curve on the shoulder.

**567 Round Pot**

1352 M Fig. 24; Pl. 109

About 15.0 cm high and 12.5 cm in diameter at the rim, found in Tomb 30 (Trench XVI L). It is made of gray pottery with a rather smooth slip covered with granulated soil sediment. It has a round base with a spherical body, no neck, and a rim turned diagonally outward.

**568 Round Pots**

522 M and 1038 M Pl. 109

Both similar in shape to 1352 M except that 1038 M has a rather concave neck: 522 M, about 10.0 cm high and 7.3 cm in diameter at the rim, made of cream-colored pottery, found in Tomb 50 (Trench XXI L); and 1038 M, about 9.5 cm high and 7.0 cm in diameter at the rim, made of gray pottery, found in the lower tomb of Gheshlagh.

**569 Round Pot**

829 M Fig. 24; Pl. 109

About 31.0 cm high and 13.5 cm in diameter at the rim, found in Tomb 47 (Trench XXII E). Made of red pottery, it has a round base, a large oval body, and a short concave neck, which turns to a simple outward rim.

*ROUND POTS WITH HANDLES (DIZIES)*  
(570–571)

These pots have a flat base and a round body with two opposing handles, similar to the pottery known as “dizie” used in Iran for cooking bean and mutton stew.

**570 Pottery Dizie**

1355 M Fig. 24

About 14.0 cm high and 9.5 cm in diameter at the rim, found in Tomb 50 (Trench XXI L). It is made of gray pottery from rather coarse clay with a solid slip. It has a flat base and a globular body, with a rather short concave neck reaching an outward plain rim. Two loop handles, located opposite each other, connect the upper end to the rim and the lower end to the body of the vessel.

**571 Pottery Dizies**

1321 M, 1025 M, 1039 M, and 521 M Fig. 24; Pl. 109

The following dizies are all very similar to 1355 M:

1321 M, about 20.0 cm high and 17.0 cm in diameter at the rim, red ware, Tomb 52 (Trench XXIII G);

1025 M, about 14.0 cm high and 10.5 cm in diameter at the rim, dark gray ware, upper tomb of Gheshlagh;

1039 M, about 12.0 cm high and 11.5 cm in diameter at the rim, gray ware, upper tomb of Gheshlagh;

521 M, a miniature pot about 6.0 cm high and 5.0 cm in diameter at the rim, gray ware, Tomb 50 (Trench XXI L).

## COMMENTS

Cooking pots without handles comparable to those from Marlik were found at Ghalekuti I in the Dailaman region of Gilan, dated by Fukai to the end of the Bronze and the beginning of the Iron Age.<sup>66</sup> Pots similar to 569 as well as dizies similar to the Marlik examples were found at Beshtasheni in the Caucasian region, dated by Schaeffer to the end of the Bronze and beginning of the Iron Age, around 1200–1000 B.C.<sup>67</sup>

## POTS WITH SPOUTS (572–581)

*POTS WITH LONG BENT SPOUTS*  
(572–573)

**572 Spouted Pot**

1312 M Fig. 25; Pl. 109

About 12.0 cm high and 5.8 cm in diameter at the rim, found in Tomb 41 (Trench XIX K). It is made of charcoal gray pottery of very fine clay with a smooth slip and a beautiful burnished sheen. Except for having a shorter body, its general shape is very similar to Pottery Vase 633. It has a flat base, a convex body, and a half-closed, half-open spout swelling at the base just above the middle of the body where it curves upward to a narrower neck; this turns with a backward crest to a horizontal open beaklike end. Directly opposite the spout is a decorative vertical ridge. The rim is encircled by a rounded smooth projecting ring and the closed neck of the spout by seven parallel slanting smoothly impressed lines.

**573 Spouted Pot**

1323 M Fig. 25; Pl. 109

Partly broken when found and later restored, about 10.0 cm high and 5.2 cm in diameter at the rim, found in Tomb 27 (Trench XVII D). It is made of brown pottery from fine clay with a smooth slip and a burnished shiny surface. It is very similar in general shape to 572 except that the spout is connected much lower on the body. Three parallel slanting impressed lines encircle the neck of the spout.

*GLOBULAR POTS WITH LONG BENT*  
*SPOUTS (574–577)*

These pots are similar to those discussed above, except that they have a much more globular body. Several examples illustrate this group.

**574 Spouted Pot**

816 M Pl. 109

About 8.0 cm high and 6.0 cm in diameter at the rim, found in Tomb 52 (Trench XXIII G). It is made of olive-brown pottery of very fine grit-tempered clay, with a well-polished and burnished surface. The globular body has a flat base and an inward-projecting rounded rim distinguished by an impressed line around the mouth. The join between the body and

the swelling spout is not smoothly made. A single projecting slanting band encircles the top of the neck below the open part of the spout.

#### 575 Spouted Pot

1297 M Fig. 25; Pl. 109

Found broken in many pieces, particularly in the spout area, and later restored, about 18.0 cm high and 9.0 cm in diameter at the rim, found in Tomb 2 (Trench VI B<sup>+</sup>). It is made of dark gray pottery from fine levigated clay with a burnished surface, and is similar in general shape to 574 except for a slightly curved carinated body and a less projecting spout. A rounded ring covers the join of the swelling spout and the body, while two parallel projecting slanting bands decorate the neck of the spout. The short upward rim of the vessel is distinguished by an impressed groove. Opposite the spout is a projecting vertical ridge extending from the rim halfway down the body.

#### 576 Spouted Pot

1102 M Pl. 110

About 18.0 cm high and 10.5 cm in diameter at the rim, found in Test Trench 2 of Gheshlagh. It is made of gray pottery from fine clay with a smooth slip and a polished and burnished surface. It is very similar to 574 except for minor details of decoration. A rounded uplifted rim is distinguished from the shoulder by a very fine impressed line, with two parallel bands of elongated dots below. Parallel impressed slanting bands surround the closed neck of the spout.

#### 577 Spouted Pot

1377 M Fig. 15

Found broken with some parts missing, about 12.0 cm high and 6.5 cm in diameter at the rim, found in Tomb 47 (Trench XXII E). It is made of olive-brown pottery from fine clay. It has a smooth slip and a highly burnished and polished surface, and is closely similar in general shape to 574.

### *POT WITH RIM-CONNECTED BENT SPOUT (578)*

These pots are closely similar to those in the previous group except that the backward-projecting point of the open top of the spout connects to the rim of the vessel. One example illustrates this group.

#### 578 Spouted Pot

1298 M Fig. 25; Pl. 110

About 19.5 cm high and 13.0 cm in diameter at the rim, found in Tomb 13 (Trench XII G). It is made from reddish brown pottery of fine clay with a smooth slip and a highly polished and burnished surface. It has a globular body with a flat base and a

rather short upright concave neck with a projecting rounded outward rim. The half-closed, half-open spout swells at the base, where it connects to the middle of the body and turns up to a vertical neck decorated by six parallel, slightly slanting, fine bands. Atop this vertical neck is the horizontal open part of the spout, which curves at the back to a crest attached to the rim of the vessel. Opposite the spout is a projecting ridge extending from the shoulder halfway down the body.

### *POTS WITH LONG, ALMOST STRAIGHT SPOUTS (579–581)*

These pots have a rather globular body with a long, almost straight spout, which is open for the most part but closed near the body. It lacks the swelling at the base and bend of the previous subtypes. Several examples illustrate this group.

#### 579 Spouted Pot

1288 M Fig. 25; Pl. 110

Mostly broken at the lower part and restored, about 19.0 cm high and 11.0 cm in diameter at the rim, found in Tomb 17 (Trench XIV C). It is made of dark gray pottery of fine levigated clay with a highly burnished surface. It has a convex barrel-shaped body with a flat base and a very thin, short, uplifted rim. A slightly curving open spout, closed near the body, is attached near the shoulder with a fine projecting ring covering the join.

#### 580 Spouted Pot

1279 M Fig. 25

Broken with most of the body missing except for the spout and part of the rim, about 8.5 cm in diameter at the rim, found in Tomb 11 (Trench X C). It is made of brown pottery with a highly burnished surface. Attached to the shoulder is a long, slightly curving open spout, closed near the base, where it is encircled by three parallel impressed lines. Two graceful concentric grooves encircle the rim, a decoration closely similar to that of Pottery Vessel 722 M.

#### 581 Spouted Pot Fragment

1237 M Fig. 25

Mostly broken and missing except for the spout, found in Tomb 36 (Trench XVIII C). It has a slightly curving open spout, closed near the base, where it is encircled by a rather thick band with two finer impressed bands on one side and one on the other.

#### COMMENTS

Examples similar to the Marlik spouted pots have been found at other sites. A vessel similar in particular to 572, found at Sar in the Elburz Mountains, is dated to 1000 B.C. by Herzfeld. He suggests a rather

late development for these long-spouted vessels, which, he says, were very common both in metal and in pottery at this time throughout Iran, before occupation by the Aryans around the tenth century B.C.<sup>68</sup> Other vessels, similar in particular to **572** and **573**, are attributed by Dubiner to the Pile Kouh area of Gilan and are dated to 1000–500 B.C. They have a body like a crane and a long open spout, one with an extra decoration of an animal figure on the spout<sup>69</sup> and the other with stands or legs.<sup>70</sup>

A pottery vessel with a long open spout, similar to **574**, **575**, and **576**, was found at Khurvin and is dated by Vanden Berghe to the late eleventh century B.C.<sup>71</sup> Similar examples were also found at Geoy Tepe, Tomb K, which is considered to be contemporary in date with Hasanlu Level V, dated by Dyson to 1250–1000 B.C.<sup>72</sup>

Vessels similar to **578** from Khurvin are dated by Vanden Berghe to the late second and early first millennium B.C.<sup>73</sup> Another vessel similar to **578** with a long open spout and flat base, and a silver vessel similar to **579**, were found at Tepe Hissar III C.<sup>74</sup> Similar vessels with additional animal figures and geometric decoration were also found at Hasanlu.<sup>75</sup> Three other examples similar to **579**, from Chandar near Khurvin, are described by Vanden Berghe as contemporary with the Sialk Cemetery A and B and Darrous periods.<sup>76</sup> A vessel with a half-open spout and flat base, found at Pile Kouh,<sup>77</sup> and another with a similar shape and additional animal decoration, found at Marabou in the highlands of Gilan,<sup>78</sup> are dated by Dubiner to 1000–500 B.C. Vessels similar to **579** were also found at Shah Tepe II b, in north-eastern Iran.<sup>79</sup>

## POTS WITH SPOUTS AND HANDLES (582–584)

### **582 Spouted Pot**

1043 M Pl. 110

About 22.0 cm high and 14.5 cm in diameter at the rim, found in one of the deeper graves of Gheslgh.

It is made of red pottery with a coat of soil sediment covering the polished surface and is closely similar in general shape to **578** except that opposite the spout is a loop handle connected at the rim and shoulder. Five impressed slanting lines encircle the closed neck of the spout.

### **583 Spouted Pot**

930 M Pl. 110

Partly broken when found and later restored, about 12.5 cm high and 5.5 cm in diameter at the rim, found near the surface of grid XII G. It is made of light red pottery with a polished surface covered by a coat of soil sediment. It has a globular body with a round base, on which three projecting knobs equally spaced form a stand, and an almost uplifted neck with concave sides reaching to an outward rim. The partly open spout, closed near its base, is attached to the shoulder of the vessel opposite a handle formed of a curved pottery stick with a flattish straight end, roughly similar in shape to a horse's neck and head. Impressed parallel straight lines decorate the area of the handle.

### **584 Spouted Pot**

1341 M Pl. 110

About 15.0 cm high and 6.0 cm in diameter at the rim, found in the tomb of Ali Karam Bagh. It is made of dark gray pottery with a smooth slip and a burnished surface, and is not very similar to the others of this subtype except for its oval body combined with a projecting flat base. A diagonal pottery pipe spout is located at the shoulder, with an opposing loop handle connected to the rim and shoulder.

#### COMMENTS

A pot with a spout and loop handle from Kalardasht, similar to **582**, is dated by Vanden Berghe to 1000–800 B.C.,<sup>80</sup> and an almost identical vessel with a similar spout and handle from Khurvin is described by Vanden Berghe as parallel to examples from Sialk Cemetery A and B, Giyan I B and C, and Hasanlu, with a suggested date around the end of the eleventh century B.C.<sup>81</sup> Stylized decoration similar to that seen on **583** appears on a vessel from Kalardasht.<sup>82</sup>

## *Bowls* (585–617)

### BOWLS WITH DECORATION (585–586)

The large bowls in this group were made with great care from well-levigated clay with sand temper and are well fired with a very fine thin slip that has been scratched or scraped in a geometric pattern. The bowls have a rather small flat base, a rounded body,

and even convexity from the base to the convex curved rim, which is beveled outward. Surrounding the rim is a wide cross-hatching band, with each line formed of several parallel fine lines.

### **585 Decorated Bowl**

1030 M Fig. 26; Pl. 110

Found broken in many pieces and later reas-



sembled and restored, about 20.0 cm high and 34.0 cm in diameter at the rim, found in Tomb 52 (Trench XXIII G). It is made of pottery from fine sand-tempered clay with excellent even firing and a burnished slip. It has a small flat base and round body, with even convexity of the sides reaching to a smoothly turned beveled rim with a sharp angular edge. The rim is encircled by a thick band of cross-hatching, of which each line is formed of several parallel fine lines.

#### 586 Decorated Bowls

1031 M and 1242 M Fig. 26; Pl. 110

Both very similar to 585 except that 1242 M has a decorative band of cross-hatching made of single lines: 1031 M, about 25.0 cm high and 36.5 cm in diameter at the rim, made of grayish brown pottery, found in Tomb 47 (Trench XXII E); and 1242 M, incomplete with the lower part missing, about 36.0 cm in diameter at the rim, made of gray-brown pottery and found in Tomb 36 (Trench XVIII C).

### BOWL WITH TRIPOD BASE (587)

#### 587 Bowl with Tripod Base

975 M Pl. 111

About 10.0 cm high and 13.0 cm in diameter at the rim, found in Tomb 52 (Trench XXIII G). It is made of light red pottery from fine levigated clay, with a cream-colored coat of soil sediment. The bowl has a round base, an angular carinated body, and a flat, horizontal outward rim. Three rather long diagonal legs, with tips bent outward like a foot, are equally spaced around the bottom of the bowl, forming a stand.

Tripod vessels from other sites, including several examples, are discussed in the "Comments and Comparisons" section on page 221.

### PLAIN BOWLS (588–599)

#### *PLAIN BOWLS WITH ROUND BASES*

(588–589)

#### 588 Plain Bowl

1333 M Fig. 26; Pl. 111

Found broken in many pieces and later re-assembled and restored, about 18.5 cm high and 27.0 cm in diameter at the rim, found in Tomb 52 (Trench XXIII G). It is made of light gray pottery from solid clay with a very thin slip that is covered and partly affected by soil sediment. It has a rounded

base and body and a convex curved rim with a slightly outward bevel.

#### 589 Plain Bowl

1339 M Pl. 111

About 17.0 cm high and 29.0 cm in diameter at the rim, found in Tomb 21 (Trench XV F). It is made of gray pottery and is very similar in shape to 588.

#### *PLAIN BOWLS WITH FLAT BASES*

(590–592)

These plain pottery bowls are similar in shape to those in the previous subtype except for having a flat base.

#### 590 Plain Bowl

1248 M Pl. 111

About 20.0 cm high and 30.0 cm in diameter at the rim, found in Tomb 19 (Trench XIV E). It is made of well-fired clay with a very thin slip affected by soil sediment, and has a flat base, a rounded body, and a flat rim with a soft angle at the edge.

#### 591 Plain Bowls

1285 M, 1286 M, 1348 M, 1350 M, 1385 M, and 1340 M Fig. 26

The following bowls are all similar in shape to 590:

1285 M, incomplete with only the lower section and the flat base remaining, about 8.0 cm in diameter at the base, gray ware, Tomb 8 (Trench IX D);

1286 M, incomplete with the upper part missing, about 7.5 cm in diameter at the base, dark red ware, Tomb 13 (Trench XII G);

1348 M, incomplete with the lower part of the vessel remaining, about 11.0 cm in diameter at the base, reddish brown ware, Tomb 52 (Trench XXIII G);

1350 M, about 17.0 cm high and 26.0 cm in diameter at the rim, reddish brown ware, Tomb 41 (Trench XIX K);

1385 M, about 16.5 cm high and 24.0 cm in diameter at the rim, reddish brown ware, Tomb 41 (Trench XIX K);

1340 M, about 18.0 cm high and 28.0 cm in diameter at the rim, grayish brown ware, tomb of Ali Karam Bagh.

1350 M has a curved inward-slanting rim, and 1385 M has a slanting inward-beveled rim.

#### 592 Plain Bowl

1223 M Fig. 26; Pl. 111

About 15.0 cm high and 15.5 cm in diameter at the rim, found in Tomb 18 (Trench XIV D). It is made of brick red pottery and has a flat base, convex slanting sides, and a slanting inward-beveled rim.

*SHALLOW BOWLS (593–596)*

These shallow pottery bowls are usually large with a flat, concave, or sometimes projecting base and may have vertical or horizontal handles. They have a smooth slip and sometimes have a burnished surface.

**593 Shallow Bowl**

1535 M Pl. 111

Shallow bowl, broken in some parts and restored, about 16.5 cm in diameter at the rim, found near the surface in grid XXIV A. It is made of dark gray pottery covered by a cream-colored coat of soil sediment. It has a very small flat base that curves gradually to the body in an angular turn, concave side walls, and an outward rim.

A similar pottery bowl from Tulu in Russian Talish is dated by Schaeffer to Talyche Recent 3 and Fer 1, around 1350–1000 B.C.<sup>83</sup> He dates another similar example from Beshtasheni in Caucasia to the end of the Bronze and beginning of the Iron Age, around 1200–1000 B.C.<sup>84</sup>

**594 Shallow Bowl**

984 M Pl. 111

Shallow bowl, broken with some pieces missing, about 10.0 cm high and 15.3 cm in diameter at the rim, found near the surface of Trench XXIV H. Made of brick red pottery with a thin slip, it has a flat base and rounded convex sides with a simple, slightly turned-out rim.

**595 Shallow Bowls**

1307 M and 1337 M Fig. 26; Pl. 111

Two shallow bowls, 1307 M, about 9.0 cm high and 29.0 cm in diameter at the rim, made of gray pottery, and 1337 M, about 8.0 cm high and 27.0 cm in diameter at the rim, made of olive gray pottery, both found in Tomb 52 (Trench XXIII G). They are similar in shape to 594 except that they are much shallower in proportion to their size and 1337 M has a beveled rim.

**596 Shallow Bowl**

1225 M Fig. 26

About 4.2 cm high and 32.5 cm in diameter at the rim, found in Tomb 18 (Trench XIV D). It is made of dark brick red pottery and has a flat base, concave sides, and a wide brim with a diagonal straight rim.

*SHALLOW BOWLS WITH A  
DISTINGUISHED BASE (597–599)*

These shallow pottery bowls have a rather distinguished flat, ring, or concave base.

**597 Shallow Bowl**

681 M Fig. 27; Pl. 112

Shallow bowl, broken when found and later reassembled, about 5.5 cm high and 36.0 cm in diameter at the rim, found in Tomb 5 (Trench VIII D). Made of gray pottery, it has a flat ring base and convex sides with a plain rounded rim.

**598 Shallow Bowl**

1381 M Fig. 27

Shallow bowl, about 8.0 cm high and 33.0 cm in diameter at the rim, found in Tomb 17 (Trench XIV C). Made of gray pottery, it has a projecting flat base with concave-convex slanting sides and a beveled rim encircled by an impressed groove.

**599 Shallow Bowl**

1369 M Fig. 27

About 10.5 cm high and 27.0 cm in diameter at the rim, found in the upper tomb of Gheshlagh. Made of light gray pottery, it has a concave base and convex body extending to a concave neck with a simple outward rim.

*BOWLS WITH HANDLES (600–605)**PLAIN BOWLS WITH LOW HANDLES  
(600–601)*

These bowls are similar in shape to the other plain bowls except that they have a rather unusual handle located on the lower part of the body, providing an easy and practical way to lift and balance the vessel.

**600 Plain Bowl**

173 M Fig. 27; Pl. 112

About 18.0 cm high and 25.0 cm in diameter at the rim, found in Tomb 25 (Trench XVI F). It is made of brick red pottery with a rather thin slip, and has a flat base, a round body, an outward-beveled rim, and a vertical loop handle attached to the lower part of the vessel.

**601 Plain Bowls**

760 M, 1382 M, and 1222 M Fig. 27; Pl. 112

The following bowls are all similar to 600: 760 M, about 12.2 cm high and 17.5 cm in diameter at the rim, made of brown pottery, and 1382 M, about 23.5 cm high and 25.0 cm in diameter at the rim, made of gray pottery, both found in Tomb 40 (Trench XVIII N); and 1222 M, about 18.5 cm high and 27.5 cm in diameter at the rim, made of dark red pottery, found in Tomb 18 (Trench XIV D). On 1222 M and 1382 M the handle is placed lower on the body than on the other examples.

## COMMENTS

A bowl with a handle, similar to these examples from Marlik, was found at Ghalekuti I in the Dailaman region of Gilan. Fukai dates this piece to the end of the Bronze and beginning of the Iron Age.<sup>85</sup>

### SHALLOW BOWLS WITH HANDLES (602–605)

These shallow bowls are similar to the shallow bowls discussed previously but are distinguished by the addition of different types of handles.

**602 Shallow Bowl**

1336 M Fig. 27; Pl. 112

Found broken in many pieces and later reassembled and restored, about 5.0 cm high and 24.0 cm in diameter at the rim, found in Tomb 18 (Trench XIV D). It is made from well-levigated clay with sand temper and a very thin slip. It has a flat base, slanting convex sides, and a rim almost vertically beveled on the outside but beveled slightly inward on the inside. A vertical loop handle is located on one side, attached below the rim and to the body.

**603 Shallow Bowl**

1329 M Fig. 27

About 8.0 cm high and 28.0 cm in diameter at the rim, found in Tomb 18 (Trench XIV D). Made of brick red pottery, it has a flat base, convex slanting sides, a rounded simple rim, and a horizontal loop handle attached below the rim on one side.

**604 Shallow Bowl**

1224 M Fig. 27; Pl. 112

Incomplete, about 5.5 cm high and 31.5 cm in diameter at the rim, found in Tomb 17 (Trench XIV C). It is made of brick red pottery and has a flat base, slanting straight sides, and a rounded plain rim. Located below the rim on one side is a horizontal flat, pierced handle.

**605 Shallow Bowl**

1108 M Fig. 27; Pl. 112

About 10.5 cm high and 25.5 cm in diameter at the rim, found at Gheshlagh. Made of brick red pottery, it has a projecting flat base and convex sides, which are more vertical in an angular bend inward and extend upward to a plain thin rim. Three vertical loop handles with gear dentation are equally spaced around the rim.

## COMMENTS

A shallow bowl with a horizontal handle from Khurvin, similar to **603**, is dated by Vanden Berghe to the late second and early first millennium B.C.<sup>86</sup> Another similar bowl with a horizontal handle was

found at Ghalekuti, Tomb B-III, in the Dailaman region of Gilan.<sup>87</sup>

### BOWLS WITH SPOUTS (606–617)

#### BOWLS WITH OPEN SPOUTS (606–608)

This type includes pottery bowls with a flat base, rounded body, and open spout at one side of the beveled rim. A large number of these spouted bowls were found at Marlik, including complete restored examples from Tombs 13, 15, 18, 19, 24, 26, 29, 44, 47, and 52. A few examples are given here to illustrate the variety of this shape.

#### BOWLS WITH WIDE OPEN SPOUTS (606–607)

This group includes round bowls with a small flat base and a wide-open spout. Some are decorated by simple geometric designs, but most have a plain burnished surface.

**606 Spouted Bowl**

969 M Pl. 112

Found broken in many pieces and later reassembled and restored, about 9.5 cm high and 15.5 cm in diameter at the rim, found in Tomb 52 (Trench XXIII G). It is made of reddish brown pottery of very fine levigated clay with a fine slip and a well-burnished surface. The body is hemispherical with a small flat base and an outer convex beveled rim, which turns inward inside the bowl. Parallel bands of short, elongated impressed dots surround the base of the spout.

**607 Spouted Bowls**

1302 M, 580 M, 1311 M, 1314 M, 764 M, 1246 M, and 144 M Fig. 28; Pl. 113

These bowls are all very similar in shape to **606**:

1302 M, about 9.0 cm high and 15.0 cm in diameter at the rim, brick red ware, Tomb 13 (Trench XII G);

580 M, about 7.0 cm high and 11.0 cm in diameter at the rim, light gray ware, Tomb 26 (Trench XVII B);

1311 M, about 10.0 cm high and 14.0 cm in diameter at the rim, reddish brown ware, Tomb 44 (Trench XX N);

1314 M, about 10.0 cm high and 19.0 cm in diameter at the rim, dark gray ware, Tomb 29 (Trench XVI H);

764 M, about 10.5 cm high and 18.0 cm in diameter at the rim, gray ware, Tomb 47 (Trench XXII E);

1246 M, about 13.0 cm high and 18.0 cm in diam-

eter at the rim, light reddish ware, Tomb 19 (Trench XIV E);

144 M, about 11.0 cm high and 21.5 cm in diameter at the rim, gray ware, Tomb 24 (Trench XV E).

#### BOWL WITH NARROW OPEN SPOUT (608)

This group includes pottery bowls with a rounded body, flat base, thin rim, and narrow spout. Only one example is given below.

##### 608 Spouted Bowl

1306 M Fig. 28; Pl. 113

About 8.5 cm high and 10.0 cm in diameter at the rim, found in Tomb 15 (Trench XIII C). It has a rather large flat base, a rounded body, a thin, narrow, slightly inward rim, and a narrow open spout, which slants upward.

#### PEDESTAL-BASED BOWL WITH SPOUT (609)

##### 609 Spouted Bowl

1231 M Fig. 28; Pl. 113

Broken and partly missing at the spout, about 14.0 cm high and 11.0 cm in diameter at the rim, found in Tomb 36 (Trench XVIII C). It is made of dark gray pottery with a smooth slip and a highly burnished surface. It has a rather tall, large, hollow conical base with slightly concave sides and a hemispherical body with a beveled rim. The rim exhibits a slight convexity on the top of the outer side, while it is turned inward inside. At one side of the rim is a slightly curving open spout. This vessel is similar in shape to 616 and 617 except that it lacks a handle.

#### BOWLS WITH SPOUTS AND HANDLES (610–617)

##### FLAT-BASED BOWLS WITH SPOUTS AND HANDLES (610–611)

These pottery bowls have a flat base, a globular body, and an open, slightly curved spout with an opposing loop handle. Two examples are given below.

##### 610 Spouted Bowl

1331 M Fig. 28

About 7.0 cm high and 12.0 cm in diameter at the rim, found in the deep tomb of Gheslagh. Made of reddish pottery with a burnished surface, it has a

rather large flat base, a globular body, a rounded, slightly outward rim, an open spout, and an opposing vertical loop handle placed below the rim.

##### 611 Spouted Bowl

1356 M not illustrated

About 11.0 cm high and 13.5 cm in diameter at the rim, found in the Gheslagh wheat field. It is made of dark red pottery and is very similar in shape to 610 except that the loop handle is proportionately larger.

#### COMMENTS

A pottery bowl with a very small stand and a large open spout, found at Khurvin, is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>88</sup> Several similar examples with a flat base and a large open spout were found at Ghalekuti in the Dailaman region of Gilan.<sup>89</sup> Similar pottery bowls with large open spouts were found at Hissar in Levels III A and B, while examples in metal were found in III C.<sup>90</sup> Rather similar globular pottery bowls with a flat base, open spout, and loop handle were found also at Sialk Cemetery B.<sup>91</sup>

#### RING-BASED BOWLS WITH SPOUTS AND HANDLES (612–615)

This group includes pottery bowls with a ring base, open spout, and opposing small vertical pierced or loop handles. They are rather finely made. Several examples are described.

##### 612 Spouted Bowl

626 M Pl. 113

Broken when found and later reassembled and restored, about 5.0 cm high and 8.0 cm in diameter at the rim, found in Tomb 4 (Trench VIII A<sup>+</sup>). It is made of dark red pottery with a fairly thick slip and a burnished surface. It has a pronounced ring base, a hemispherical body that extends on one side to a rather large, diagonally uplifted, open spout with convex edges, and an opposing vertical loop handle. The rounded rim is outward beveled, distinguished from the body by an impressed line.

##### 613 Spouted Bowl

1023 M Pl. 113

About 7.5 cm high and 11.5 cm in diameter at the rim, found near the surface of Trench XXV K, which did not contain any tombs. It is made of dark gray pottery with a burnished surface and is rather similar in shape and decoration to 612 except that the handle and spout are larger in comparison to the body.

##### 614 Spouted Bowl

1088 M Fig. 28; Pl. 113

About 8.0 cm high and 14.0 cm in diameter at the

rim, found in Tomb 29 (Trench XVI H). It is made of dark gray pottery and is very similar in shape and decoration to 613 except that the loop handle has an angular corner on top.

#### 615 Spouted Bowl

1296 M not illustrated

About 8.0 cm high and 14.5 cm in diameter at the rim, found in Tomb 13 (Trench XII G). It is made of dark red pottery and is closely similar in shape to 614.

#### COMMENTS

Vessels comparable to these Marlik examples have been found at other sites. One example with an open spout and handle, similar to 613, was found at Garmabak in Mazandaran in northern Iran.<sup>92</sup> From Sialk Cemetery B in the Central Plateau come example with an open spout and vertical loop handle in the shape of an animal head.<sup>93</sup> Several other vessels comparable in general shape with an open spout and opposing vertical handles, from Khurvin, are dated by Vanden Berghe to the late second and early first millennium B.C.<sup>94</sup> From western Iran comes an example with a long spout and a loop handle, found at Level I B of Tepe Giyan, dated by Contenau and Ghirshman to around 1400–1100 B.C.<sup>95</sup>

### PEDESTAL-BASED BOWLS WITH SPOUTS AND HANDLES (616–617)

#### 616 Spouted Bowl

577 M Fig. 25

Broken when found and later reassembled and re-

stored, about 14.5 cm high and 9.5 cm in diameter at the rim, found in Tomb 30 (Trench XVI L). It is made of dark red pottery from fine clay with a smooth slip and a highly burnished surface. Its shape is closely similar to 609 except that the base is more vertical and the open spout rather straighter. A vertical flat flap handle with a hole in the center is located near the rim at a ninety-degree angle to the spout.

#### 617 Spouted Bowl

1539 M Pl. 113

About 12.0 cm high and 8.0 cm in diameter at the rim, found in Tomb 30 (Trench XVI L). It is made of red pottery from fine clay with a smooth slip and burnished surface. In general shape it is closely similar to 609 except for an additional vertical flat handle with a suspension hole in the center, located near the rim at a ninety-degree angle to the spout. A simple burnished pattern of parallel horizontal lines encircles the rim, extending to the outer sides of the open spout, while parallel vertical burnished lines cover the rest of the surface.

#### COMMENTS

A pottery vessel with a loop handle on one side with a pedestal base, comparable to 616, was found at Sialk Cemetery B.<sup>96</sup> From Khurvin comes another example similar in general shape with an open spout and opposing loop handle,<sup>97</sup> while a comparable vessel was found in Level I of Tepe Giyan in western Iran.<sup>98</sup> Another vessel, from Level IV of Hasanlu, is similar to 615 and 616 in general shape, with an open spout.<sup>99</sup>

### *Basins* (618–622)

These vessels have a central container bowl surrounded by a very wide brim and may have been used as milk or wash basins just as similar metal vessels were used up to the last century. These basins, which are made from solid heavy pottery and are similar in general shape, are divided into three subtypes according to minor decorative details. Basins were found in many tombs, indicating their importance as objects of domestic or religious use, with complete or partly restored examples found in Tombs 5, 12, 13, 19, 21, 25, 44, and 47.

### BASINS WITH SLOT-CUT PROJECTING RIDGES (618–619)

These large and small basins have a projecting

ridge spaced with slot cuts distinguishing the brim from the central container. The brim is very wide and the container small.

#### 618 Basin

676 M Fig. 29; Pl. 114

Small basin, found broken in several pieces and later reassembled, about 5.0 cm high and 15.5 cm in diameter at the basin, found in Tomb 12 (Trench XII E). It is made of reddish brown pottery from an almost solid coarse clay with a slip that is not quite smooth. The central container, with a flat base and convex sides, is surrounded by a wide brim slanting upward toward a beveled outward rim. A projecting ridge distinguishes the container from the brim, with four slot cuts equally spaced around the ridge to allow liquid to drain into the central container. A suspension hole pierces the brim.

**619 Basin**

238 M Pl. 114

Wash or milk basin, broken when found and later restored, about 11.5 cm high and 38.5 cm in diameter at the brim, found in Tomb 25 (Trench XVI F). It is made of reddish brown pottery from well-levigated clay with a fine slip and a smooth polished and burnished surface, affected by soil sediment. The central container, with a flat base and convex walls, is surrounded by a flat, upward-slanting brim edged by a fine projecting upward ring. A projecting ridge with four equally shaped cuts distinguishes the container from the brim. A suspension hole with a raised edge pierces the brim.

### BASINS WITH A DECORATIVE GROOVE (620–621)

These basins are closely similar in general shape to the previous examples, with the addition of a decorative groove, which encircles the edge of the central container.

**620 Basin**

583 M Fig. 29; Pl. 114

About 10.0 cm high and 39.0 cm in diameter at the brim, found in Tomb 13 (Trench XII G). It is made of reddish brown pottery from fine levigated clay with a smooth burnished slip, now affected by soil sediment. The central container, with a flat base and convex walls, is surrounded by a wide brim that slants upward to a vertical flat rim. A groove and a thin projecting ridge encircle the top of the central container, distinguishing it from the brim.

**621 Basins**

1122 M, 1215 M, and 1247 M Fig. 29; Pl. 114

The following basins are all closely similar in shape to 620: 1122 M, about 13.0 cm high and 42.0 cm in diameter at the brim, found in Tomb 44 (Trench XXI N), made of brick red pottery; 1215 M, about

10.5 cm high and 42.0 cm in diameter at the brim, found in Tomb 45 (Trench XXII H), made of brick red pottery; and 1247 M, about 13.0 cm high and 37.0 cm in diameter at the brim, found in Tomb 19 (Trench XIV E), made of reddish brown pottery. On 1122 M a small raised ridge borders the edge of the brim; on 1215 M two deep and one shallow parallel impressed grooves encircle the central container and form three parallel raised ridges on the surface of the brim; and on 1247 M two parallel impressed grooves encircle the top of the central container, forming two parallel raised rounded ridges on the brim.

### PLAIN BASIN (622)

The plain basins are similar in general shape to types 1 and 2 but have no decoration.

**622 Basin**

1121 M Fig. 29; Pl. 114

About 13.0 cm high and 44.0 cm in diameter at the rim, found in Tomb 44 (Trench XXI M). It is made of reddish brown pottery from solid levigated clay with a thin slip now badly affected by soil sediment and mostly deteriorated. The central container, with a flat base and convex side walls, is surrounded by a wide brim that slants upward to a plain rounded edge.

## COMMENTS

Pottery basins similar to 618, with a small container, a large wide brim with central ridges, and a suspension hole, were found at Ghalekuti in the Dailaman region of Gilan.<sup>100</sup> Apparently this type of pottery basin was a local product of Gilan, since its distribution is restricted to this region. This suggests that its use must have been connected with the life of the people of the highlands of the Elburz Mountains in Gilan.

### *Plates* (623–630)

#### PLATE WITH TRIPOD BASE (623)

**623 Plate**

1537 M Pl. 114

Found broken in many pieces and later restored and reassembled, about 32.0 cm in diameter and 6.5 cm high, found in Geshlagh. Made of brownish gray pottery, it has a rather deep body with thick walls and a smooth beveled rim. A diagonal stick handle, pierced in the center, is located on one side of the

plate a little below the rim. Three conical short legs are equally spaced around the bottom of the plate.

#### PLATE WITH RING BASE (624)

**624 Plate**

1014 M Pl. 115

Found broken in many pieces and later reassem-

bled and restored, about 4.5 cm high and 19.0 cm in diameter at the rim, found in Grave 5 of Zeinab Bejar. Made of brick red pottery with a thin slip, it has a projecting ring base and convex sides with a plain rounded rim, below which on one side is a half handle. A rather similar example of a projecting half handle was found at Tell Ras-El-Ain in Palestine, dated by Bossert to the middle of the Bronze Age.<sup>101</sup>

### PLAIN PLATES (625–630)

Included here are solid pottery plates, mostly plain, with a simple common shape, made with a very light thin slip in red, gray, and olive.

#### 625 Plate

1543 M Pl. 115

About 5.0 cm high and 34.0 cm in diameter at the rim, found in Tomb 21 (Trench XV G). It is made of olive-gray pottery from a well-leigated and well-fired clay with a solid slip. It has a large flat bottom with standing side walls and a flat, undulating festoon rim. Two concentric bands encircle the center of the plate, and a zigzag impressed band extends around the inner side wall.

#### 626 Plate

980 M Pl. 115

About 4.0 cm high and 17.0 cm in diameter at the rim, found near the surface of Trench XXV L. Made of light brick red pottery, it has a flat bottom and short vertical side walls with a flat horizontal rim.

#### 627 Plate

1544 M Pl. 115

Broken with the central part missing, about 32.5 cm in diameter at the rim, found in Tomb 18 (Trench XIV D). Made of dark brick red pottery, it is flat and plain with an impressed line encircling the plate near the edge.

#### 628 Plate

336 M Pl. 115

About 7.0 cm high and 39.0 cm in diameter at the rim, found in Tomb 40 (Trench XX E) in the first test trench. It is made of light gray pottery and has a flat bottom and convex sides with a plain rim.

#### 629 Plate

1303 M Fig. 29; Pl. 115

About 4.0 cm high and 23.0 cm in diameter at the rim, found in Tomb 13 (Trench XII G). Made of reddish pottery, it has a flat bottom, convex sides, and a curved beveled rim.

#### 630 Plate

707 M Pl. 115

About 6.0 cm high and 38.0 cm in diameter at the rim, found in Tomb 3 (Trench VI A). Made of reddish pottery, it has a flat bottom with convex sides and a plain rounded rim.

#### COMMENTS

A plain pottery plate, similar to 630, was found at Sialk Cemetery B, assigned to the beginning of the Iron Age.<sup>102</sup>

### *Miscellaneous Vessels (631–637)*

#### VASES (631–635)

#### 631 Vase

576 M Color Plate XXX B

Three-branched flower vase, about 25.5 cm high, 7.3 cm in diameter at each mouth, and 10.0 cm in diameter at the base, found in Tomb 36 (Trench XVIII C). It is made of gray pottery covered by a cream-colored coat of soil sediment. The vase, which was broken into several pieces, has been reassembled, with only minor parts missing from the rim of one of the containers. The trifurcated shape consists of three rather elegant containers, each in a stylized pomegranate shape with an enlargement and emphasis of the neck and crown. These three containers, connected to one another at the inner side, are joined to the hollow conical base by three gently curved solid pottery rods with a fourth rod in the center.

This flower vase is highly decorative in shape and is the only known example of its kind. The pomegranate is a favorite motif at Marlik, where it was used in gold beads and pendants as well as in bronze bells, and its reproduction here reflects the unity of Marlik art. Although no really similar pottery vessels have been found at other sites, a vessel with several containers was found at Sialk Cemetery B,<sup>103</sup> and a trifurcated pottery vase, similar in concept but not in shape, was found at Troy Excavation Level II-V.<sup>104</sup>

#### VASE WITH SPOUT (632)

#### 632 Vase

722 M Fig. 30; Pl. 116, Color Plate XXX C

Found broken in many pieces and later re-assembled, about 17.3 cm high and 13.0 cm in diameter at

the rim, found in Tomb 12 (Trench XII E). It is made of brownish olive pottery with a highly polished and burnished surface. The body has a conical shape, resting on its point, with graceful convex sides joining a round, flat base in a gentle curve. The turned-in rim has a wide, flat surface decorated by two parallel concentric impressed bands forming three concentric rings. The very long open spout curves slightly downward toward the end, and opposite the spout is a half-tab handle with a downward tip. This very decorative and elegant vase was obviously not designed for practical use, since the long spout overbalances the vessel so that it tips over easily. It must have been specially made as a decorative funerary object.

A vessel from Hasanlu, similar only in the base, is classified to the button-base phase of gray pottery, dated, according to carbon 14 analysis, to  $1125 \pm 122$  or  $1042 \pm 120$  B.C.<sup>105</sup> Examples of button base vessels, similar only in the base but not in the body, spout, or handle, are also found among the Middle Elamite pottery of Haft Tepe and Susa.<sup>106</sup> Two similar vessels with a button base, long open spout, and opposing symmetrical half handle on one and loop handle on the other were found at the Ghalekuti excavation in the Dailaman area of Gilan.<sup>107</sup> A similar example with a long open spout, symmetrical loop handle, and round button base was found in northern Iran.<sup>108</sup>

### VASES WITH LONG BENT SPOUTS (633–635)

These vessels have a tall body with a curving half-closed, half-open spout and a vertical ridge opposite the spout. Many broken examples of this type were found. The long spout combined with the tall body produces a vessel that is elegant but unstable. Its proportions make it impractical for daily use, and it seems likely that these vessels were made solely as decorative funerary objects. A few examples illustrate this type.

#### 633 Vase

578 M Fig. 30; Pl. 116, Color Plate XXX D

Broken when found and later reassembled and partly restored, about 25.5 cm high and 7.5 cm in diameter at the rim, found in Tomb 26 (Trench XVII B). It is made of olive-gray pottery of extraordinarily fine clay with a very fine slip and a burnished and polished surface. Its general outline is very similar to that of a crane. It has a flat base; a rather tall body with convex sides extending to an inward-turned rim, which is surrounded by a projecting soft rounded ring distinguished by a single impressed line; and a half-closed, half-open spout connected just above the middle of the body. Swelling at the base, the spout curves upward to a narrower neck, which curves in

back to a pointed crest from which the now open spout extends in a horizontal line. Opposite the spout is a projecting vertical ridge extending from the rim down to the middle of the body. A projecting ring band decorated by an impressed band covers the junction of the swelling spout and the body of the pitcher, and two parallel concentric bands of impressed elongated dotted lines encircle the base of the spout. The horizontal neck is circled by ten parallel slanting rib bands; the topmost one is distinguished by a higher projection and ornamented by a band of impressed short diagonal straight lines, with a line of impressed dots filling the groove between the next-lower rib band.

#### 634 Vase

1536 M Pl. 116

About 21.0 cm high and 9.0 cm in diameter at the rim, found in Tomb 27 (Trench XVII D). It is made of olive-brown pottery of very fine clay with a polished and burnished surface and is closely similar in shape to 633 but slightly different in decoration. Below the rim are two parallel bands of impressed elongated dots. The junction between the body and the swelling spout is covered by a projecting flat band decorated by an impressed dotted line, and the neck of the spout is encircled by six parallel slanting impressed lines.

#### 635 Vase

1241 M Fig. 30

Partly broken and missing the upper part of the body, about 8.0 cm in diameter at the base, found in Tomb 36 (Trench XVIII C). It is made of brown pottery with a burnished surface, and is closely similar in shape to 633 except that the base is slightly concave. A projecting ring with an impressed elongated dotted line covers the junction between the body and the swelling base of the spout. The neck of the spout is encircled by four parallel slanting projecting bands with an additional decoration of parallel diagonal short straight lines on the topmost band.

### SIEVE (636)

Several pottery bowls are pierced on one side to filter or strain some material, either liquid or ground. These pierced bowls could have been set on another vessel to catch the material filtered. One example illustrates the complete shape.

#### 636 Sieve

1304 M Fig. 30; Pl. 116

Filter or sieve, found broken in several pieces and later restored, about 12.0 cm high and 10.5 cm in diameter at the rim, found in Tomb 13 (Trench XII G). It is made of red pottery from fine clay with a very thin slip that is slightly polished and burnished.



The sieve has a round base and globular body, with a neck that slants outward to a plain rim. The body is pierced on one side by many small round holes. The vessel is decorated by very fine parallel impressed horizontal lines produced by a pottery wheel.

#### COMMENTS AND COMPARISONS

Pottery sieves found at other sites include a similar example with horizontal handles from Khurvin, dated by Vanden Berghe to the late second and early first millennium B.C.;<sup>109</sup> a pottery sieve from Sialk Cemetery B, dated by Ghirshman to the beginning of the Iron Age;<sup>110</sup> and pottery sieves found at Darouse in northern Tehran.<sup>111</sup> Pottery sieves or filters from Sialk Cemetery B, Darouse, and Khurvin are all presently in the Tehran Archaeological Museum (Muzeh Iran Bastan).<sup>112</sup>

### LAMP (637)

#### 637 Lamp

1533 M Pl. 116

Made of two parts, a platelike base and a pierced

cylindrical shade, together measuring about 27.0 cm in diameter and 18.0 cm high, found broken in many pieces in Tomb 3 (Trench VI A) and was later reassembled. It is made of light brick red pottery with a thick body. The platelike base has a small flat bottom and a slanting beveled flat rim. In the center is a circular cavity with an uplifted rim, which held a candle or oil; the area around the rim of this cavity is black from soot. The pierced cylindrical shade, thickened at the upper and lower edges, fits the inner side rim of the plate base. Around the shade are two rows of pierced hanging triangles through which the light could shine.

This type of pottery lamp shade and base occurs infrequently at other sites. An example with an oil burner, stand, and pierced shade was found at Haft Tepe in southern Iran, which, although not similar in detail to the Marlik lamp, indicates a connection in technology between Marlik and Haft Tepe during the middle part of the second half of the second millennium B.C.<sup>113</sup> A pierced, tall perfume burner jar, which was probably used for the same purpose, was found at Ay in Palestine. It is dated by Bossert to Iron Age 1, around 1200–1050 B.C.<sup>114</sup>

## Conclusions

These funerary and domestic pottery vessels from Marlik apparently belong to a particular culture of northern, central, and western Iran whose remains are reflected at such sites as Dailaman, Gheytaieh, Sialk, and Hissar. This area also has produced certain types of bronze tools, utensils, and vessels comparable and in some cases almost identical to one another, dating to the late second and early first millennium B.C. The distribution map for this type of pottery clearly indicates an authentic cultural assem-

blage that is distinctive to the region and does not occur with such coherence elsewhere.

A close similarity can be seen between the pottery vessels discovered in the Marlik tombs and those uncovered during the excavation of the graves of Gheytaieh.<sup>115</sup> This site is located north of Tehran on the slopes of the Elburz Mountains and is associated with the early Medes and with Raga, one of the great centers in the early first millennium B.C.

Table 11. Specifications of Pottery Vessels

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
491	Bottle	994 M	14675	47	XXII	pottery
492	Bottle	1532 M	31	47	XXII	pottery
493	Bottle	1300 M	31	5	VIII	pottery
494	Bottle	1110 M	25394			pottery
495	Jar w/handle (burnished design)	1261 M	31	20	XIV	pottery
496	Jar w/handle (burnished design)	1282 M	31	10	XI	pottery
497	Jar (burnished design)	1287 M	31	15	XIII	pottery
498	Jar (tripod base)	1106 M	25190			pottery
499	Jar (tripod base)	1015 M	57	1		pottery
500	Jar	1534 M	31		XXV	pottery
501	Jar	673 M	25395	3	VI	pottery
502	Jar	1328 M	31			pottery
503	Jar	1338 M	31			pottery
504	Jar with handle	118 M	25362	27	XVII	pottery
505	Jar with handle	618 M	25136	13	XII	pottery
506	Jar with handle	500 M	25142	19	XIV	pottery
507	Jar with handle	152 M	25137	32	XVII	pottery
508	Jar with handle	148 M	25145	27	XVII	pottery
509	Jar with handle	147 M	25363	27	XVII	pottery
510	Jar with handle	288 M	14602	33	XVIII	pottery
511	Jar with handle	60 M	25276	24	XV	pottery
512	Jar with handle	142 M	25287	24	XV	pottery
513	Jar with handle	283 M	14601	33	XVIII	pottery
514	Jar with handle	766 M	25285	47	XXII	pottery
515	Jar with handle	1315 M	31	52	XXIII	pottery
516	Jar with handle	1375 M	31	47	XXII	pottery
517	Jar with handle	51 M	25286	26	XVII	pottery
518	Jar with handle	286 M	25277	32	XVII	pottery
519	Jar with handle	96 M	25194	50	XXII	pottery
520	Jar with handle	763 M	57	47	XXII	pottery
521	Jar with handle	1342 M	31	52	XXIII	pottery
521	Jar with handle	1349 M	31	52	XXIII	pottery
522	Jar with handle	1133 M	25400			pottery
523	Jar with handle	1105 M	25275			pottery
524	Jar with handle	1319 M	31	52	XXIII	pottery
525	Jar with handle	1249 M	31	19	XIV	pottery
526	Jar with handle	1100 M	25147			pottery
526	Jar with handle	1378 M	31	47	XXII	pottery
526	Jar with handle	1305 M	31		XVIII	pottery
526	Jar with handle	672 M	25344	5	VIII	pottery
526	Jar with handle	1101 M	25139			pottery
527	Jar with handle	1351 M	31	41	XIX	pottery
528	Jar with handle	1346 M	31			pottery
528	Jar with handle	678 M	57	23	XV	pottery
529	Jar	153 M	32		XVII	pottery
530	Jar with handle	623 M	57	13	XII	pottery
530	Jar with handle	284 M	25278	33	XVIII	pottery
530	Jar with handle	285 M	25279	33	XVIII	pottery
530	Jar with handle	1324 M	31	44	XX	pottery
531	Jar with handle	1299 M	31	17	XIV	pottery
532	Jar with handle	456 M	14581		XVIII	pottery
533	Double jar	1218 M	31	36	XVIII	pottery
534	Double jar	611 M	14619	18	XIV	pottery
535	Cubic jar	454 M	14580		XVIII	pottery
536	Cubic jar	597 M	14596	44	XX	pottery

Table 11 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
537	Cubic jar	616 M	25392	5	VIII	pottery
538	Pitcher (small)	765 M	25284	47	XXII	pottery
539	Pitcher (small)	1358 M	31	52	XXIII	pottery
539	Pitcher (small)	198 M	25021	50	XXI	pottery
539	Pitcher (small)	677 M	14623	15	XIII	pottery
539	Pitcher (small)	1354 M	31	50	XXI	pottery
539	Pitcher (small)	675 M	58	15	XIII	pottery
540	Pitcher (elongated)	455 M	14587		XVIII	pottery
541	Pitcher (elongated)	627 M	25326	13	XII	pottery
542	Pitcher (trefoil rim)	579 M	14597		XXV	pottery
543	Pitcher (trefoil rim)	582 M	11		XXII	pottery
544	Pitcher (trefoil rim)	976 M	3105		XXV	pottery
545	Pitcher (trefoil rim)	977 M	3107		XXV	pottery
546	Pitcher (trefoil rim)	1541 M	31		XXV	pottery
547	Beaker	1313 M	31	25	XVI	pottery
548	Chalice	1538 M	31	29	XVI	pottery
549	Chalice	1221 M	31	36	XVIII	pottery
550	Mug	1042 M	58			pottery
551	Mug	1332 M	31			pottery
552	Mug	1344 M	31			pottery
553	Mug	1041 M	59			pottery
554	Cup	629 M	59	4	VIII	pottery
555	Cup	424 M	14606	36	XVIII	pottery
556	Cup	149 M	25282	27	XVII	pottery
557	Cup	1269 M	31	5	VIII	pottery
557	Cup	287 M	25283	33	XVIII	pottery
558	Cup	1162 M	25411	27	XVII	pottery
559	Pot (w/ incised design)	1265 M	31	20	XIV	pottery
560	Pot (w/ incised design)	1266 M	31	20	XIV	pottery
561	Pot (w/ incised design)	1267 M	31	20	XIV	pottery
562	Pot	1308 M	31	52	XXIII	pottery
563	Pot	1327 M	31			pottery
563	Pot	1240 M	31	36	XVIII	pottery
563	Pot	1274 M	31	5	VIII	pottery
563	Pot	1309 M	31	52	XXIII	pottery
564	Pot	1291 M	31	13	XII	pottery
565	Pot	993 M	56		XXII	pottery
566	Pot	1219 M	31	36	XVIII	pottery
566	Pot	1542 M	31			pottery
566	Pot	1364 M	31			pottery
567	Pot	1352 M	31	30	XVI	pottery
568	Pot	1038 M	59			pottery
568	Pot	522 M	28	50	XXI	pottery
569	Pot	829 M	25333	47	XXII	pottery
570	Pot (dizie)	1355 M	31	50	XXI	pottery
571	Pot (dizie)	1025 M	56			pottery
571	Pot (dizie)	1039 M	56			pottery
571	Pot (dizie)	521 M	14603	50	XXI	pottery
571	Pot (dizie)	1321 M	31	52	XXIII	pottery
572	Pot (with spout)	1312 M	31	41	XIX	pottery
573	Pot (with spout)	1323 M	31	27	XVII	pottery
574	Pot (with spout)	816 M	25417	52	XXIII	pottery
575	Pot (with spout)	1297 M	31	2	VI	pottery
576	Pot (with spout)	1102 M	25290	2		pottery
577	Pot (with spout)	1377 M	31	47	XXII	pottery

Table 11 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
578	Pot (with spout)	1298 M	31	13	XII	pottery
579	Pot (with spout)	1288 M	31	17	XIV	pottery
580	Pot (with spout)	1279 M	31	11	X	pottery
581	Pot (with spout)	1237 M	31	36	XVIII	pottery
582	Pot (w/spout & handle)	1043 M	56			pottery
583	Pot (w/ spout & handle)	930 M	56		XII	pottery
584	Pot (w/ spout & handle)	1341 M	31			pottery
585	Bowl (decorated)	1030 M	25240	52	XXIII	pottery
586	Bowl (decorated)	1031 M	25212	47	XXII	pottery
586	Bowl (decorated)	1242 M	31	36	XVIII	pottery
587	Bowl (tripod base)	975 M	3122	52	XXIII	pottery
588	Bowl	1333 M	31	52	XXIII	pottery
589	Bowl	1339 M	31	21	XV	pottery
590	Bowl	1248 M	31	19	XIV	pottery
591	Bowl	1285 M	31	8	IX	pottery
591	Bowl	1286 M	31	13	XII	pottery
591	Bowl	1348 M	31	52	XXIII	pottery
591	Bowl	1350 M	31	41	XIX	pottery
591	Bowl	1385 M	31	41	XIX	pottery
591	Bowl	1340 M	31			pottery
592	Bowl	1223 M	31	18	XIV	pottery
593	Bowl (shallow)	1535 M	31		XXIV	pottery
594	Bowl (shallow)	984 M	31		XXIV	pottery
595	Bowl (shallow)	1307 M	1	52	XXIII	pottery
595	Bowl (shallow)	1337 M	31	52	XXIII	pottery
596	Bowl (shallow)	1225 M	31	18	XIV	pottery
597	Bowl (shallow)	681 M	14617	5	VIII	pottery
598	Bowl (shallow)	1381 M	31	17	XIV	pottery
599	Bowl (shallow)	1369 M	31			pottery
600	Bowl (w/ handle)	173 M	25289	25	XVI	pottery
601	Bowl (w/ handle)	760 M	14613	40	XVIII	pottery
601	Bowl (w/ handle)	1222 M	31	18	XIV	pottery
601	Bowl (w/ handle)	1382 M	31	40	XVIII	pottery
602	Bowl (shallow w/ handle)	1336 M	31	18	XIV	pottery
603	Bowl (shallow w/ handle)	1329 M	31	18	XIV	pottery
604	Bowl (shallow w/handle)	1224 M	31	17	XIV	pottery
605	Bowl (shallow w/handle)	1108 M	25195			pottery
606	Bowl (with spout)	969 M	25416	52	XXIII	pottery
607	Bowl (with spout)	1302 M	31	13	XII	pottery
607	Bowl (with spout)	580 M	25281	26	XVII	pottery
607	Bowl (with spout)	1311 M	31	44	XX	pottery
607	Bowl (with spout)	1314 M	31	29	XVI	pottery
607	Bowl (with spout)	764 M	25292	47	XXII	pottery
607	Bowl (with spout)	1246 M	31	19	XIV	pottery
607	Bowl (with spout)	144 M	25293	24	XV	pottery
608	Bowl (with spout)	1306 M	31	15	XIII	pottery
609	Bowl (with spout & handle)	1231 M	31	36	XVIII	pottery
610	Bowl (with spout & handle)	1331 M	31			pottery
611	Bowl (with spout & handle)	1356 M	31			pottery
612	Bowl (with spout & handle)	626 M	59	4	VIII	pottery
613	Bowl (with spout & handle)	1023 M	59		XXV	pottery
614	Bowl (with spout & handle)	1088 M	29	29	XVI	pottery
615	Bowl (with spout & handle)	1296 M	31	13	XII	pottery
616	Bowl (with spout & handle)	577 M	25294	30	XVI	pottery
617	Bowl (with spout & handle)	1539 M	31	30	XVI	pottery

Table 11 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
618	Basin	676 M	14622	12	XII	pottery
619	Basin	238 M	14599	25	XVI	pottery
620	Basin	583 M	14579	13	XII	pottery
621	Basin	1215 M	25470	45	XXII	pottery
621	Basin	1247 M	31	19	XIV	pottery
621	Basin	1122 M	25193	44	XXI	pottery
622	Basin	1121 M	25192	44	XXI	pottery
623	Plate (tripod base)	1537 M	31			pottery
624	Plate (with handle)	1014 M	59	5		pottery
625	Plate	1543 M	31	21	XV	pottery
626	Plate	980 M	3123		XXV	pottery
627	Plate	1544 M	31	18	XIV	pottery
628	Plate	336 M	29	40	XX	pottery
629	Plate	1303 M	31	13	XII	pottery
630	Plate	707 M	59	3	VI	pottery
631	Vase (three-branched)	576 M	25117	38	XVIII	pottery
632	Vase (with spout)	722 M	25291	12	XII	pottery
633	Vase (w/ spout)	578 M	26		XVII	pottery
634	Vase (with spout)	1536 M	27		XVII	pottery
635	Vase (with spout)	1241 M	31	36	XVIII	pottery
636	Sieve	1304 M	31	13	XII	pottery
637	Lamp	1533 M	31	3	VI	pottery
	Vessel	674 M	15			pottery
	Jar fragments	1263 M	20			pottery
	Jar fragments	1262 M	20			pottery
	Vessel	1260 M	24			pottery
	Vessel	1280 M	10			pottery
	Vessel	1257 M	24			pottery
	Vessel	1253 M	24			pottery
	Vessel	1258 M	24			pottery
	Vessel	671 M	5			pottery
	Vessel	1275 M	5			pottery
	Jar fragments	1264 M	20			pottery
	Vessel	1277 M	5			pottery
	Vessel	1276 M	5			pottery
	Vessel	1228 M	18			pottery
	Vessel	1270 M	5			pottery
	Vessel	1272 M	5			pottery
	Vessel	1271 M	5			pottery
	Vessel	1273 M	5			pottery
	Vessel	1233 M	36			pottery
	Vessel	1236 M	36			pottery
	Vessel	1235 M	36			pottery
	Vessel	1234 M	36			pottery
	Vessel	1255 M	24			pottery
	Vessel	1256 M	24			pottery
	Vessel	1230 M	18			pottery
	Vessel	1229 M	18			pottery
	Vessel	1232 M	36			pottery
	Vessel	1251 M	19			pottery
	Vessel	1238 M	36			pottery
	Vessel	1254 M	24			pottery
	Vessel	971 M	52			pottery
	Vessel	1283 M	10			pottery
	Vessel	1239 M	36			pottery

*Table 11 continued*

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
	Vessel	1244 M	36			pottery
	Vessel	1243 M	36			pottery
	Vessel	1245 M	36			pottery
	Vessel	1227 M	18			pottery
	Vessel	1361 M	52			pottery
	Vessel	985 M	52			pottery
	Vessel	1374 M	47			pottery
	Vessel	982 M	52			pottery
	Vessel	1376 M	47			pottery
	Vessel	970 M	52			pottery
	Vessel	1363 M	52			pottery
	Jar (broken)	1289 M	17			pottery
	Vessel	1362 M	52			pottery
	Vessel	1373 M	47			pottery
	Vessel	987 M	52			pottery
	Vessel	986 M	52			pottery
	Vessel	1380 M	47			pottery
	Vessel	1220 M	36			pottery
	Vessel	1360 M	52			pottery
	Vessel	52 M	26			pottery
	Vessel	95 M	50			pottery
	Vessel	1003 M	47			pottery
	Vessel	1226 M	18			pottery
	Vessel	1284 M	10			pottery
	Vessel	1320 M	52			pottery
	Vessel	1290 M	13			pottery
	Vessel	1292 M	13			pottery
	Vessel	1293 M	13			pottery
	Vessel	1334 M	13			pottery
	Vessel	1294 M	13			pottery
	Vessel	1347 M	52			pottery
	Vessel	1301 M	13			pottery
	Vessel	1316 M	52			pottery
	Vessel	1317 M	52			pottery
	Vessel	1318 M	52			pottery
	Vessel	1295 M	13			pottery
	Vessel	1322 M	44			pottery
	Vessel	1259 M	24			pottery

## Chapter IX Notes

1. Ghirshman 1939: Vol. 2, Pls. IX-X, XI, XIV-XVII.
2. Ghirshman 1939: Vol. 2, Pl. XVI, No. 2; Pl. LII S.566, pp. 214, 229.
3. Vanden Berghe 1959: Pl. 158 c, pp. 124, 282. This is now in the Maleki Collection in Tehran.
4. Fukai and Ikeda 1971: Pl. XXXI, No. 5, pp. 3, 25.
5. Schmidt 1931-33: Figs. 106-107, pp. 179, 181. Pope 1938: Vol. 4, Nos. A, C, D, p. 13.
6. Wulsin 1932: No. 3, Pls. IV-IX. Pope 1938: Vol. 4, Nos. B, C, D, p. 14.
7. Fukai and Ikeda 1971: Pl. XXXVIII, No. 5, p. 3.
8. Vanden Berghe 1964: Pl. XVII, 148-149; Pl. XVIII, 161; Pl. XIX, 164-165; Pl. XXII, 182; Pl. XXV, 195, pp. 39-45.
9. Herzfeld 1941: Fig. 219 (two right examples), p. 111.
10. Contenau 1935: Pl. 25, Tomb 83, No. 1; Pl. 26, Tomb 85, No. 3; Pl. 27, Tomb 90, No. 2; Tomb 91, Nos. 4-5; Tomb 92, Nos. 2-4, and many others in Pls. 28-29.
11. Contenau 1935: Pl. 13, Tomb 26, No. 1. Schaeffer 1948b: Fig. 242, No. 69.
12. Contenau 1935: Pl. 74, Tomb 3, Nos. 8-9; Tomb 4, No. 3; Pl. 75, Tomb 5, No. 2; Tomb 6, No. 1, and others in Pls. 76-78.
13. Contenau 1935: Pl. 82, Tomb II, Nos. 5-6; Tomb III, Nos. 5-6.
14. Herzfeld 1941: Pl. XXIII (third register, left), p. 111.
15. Schaeffer 1948b: Fig. 217, No. 37, §165, p. 407.
16. Schaeffer 1948b: Fig. 235, §186, pp. 431-432.
17. Egami, Fukai, and Masuda 1965: Pl. LXXIII, No. 2, Pl. LXVI, No. 1.
18. Vanden Berghe 1964: Pl. XXII, Nos. 181, 183; Pl. XXIII, No. 184, pp. 39-45, 62.
19. Ghirshman 1939: Vol. 2, Pl. II, No. 2, p. 125.
20. Ghirshman 1939: Vol. 2, Pl. LII, S.567.
21. Vanden Berghe 1959: Pl. 4 a-b, pp. 5-6.
22. Ghirshman 1939: Vol. 2, Pl. XLVII S.677 b, pp. 94-97, 228.
23. Fukai and Ikeda 1971: Pl. XXXI, No. 6, pp. 3, 26.
24. Ghirshman 1939: Vol. 2, Pl. XXXVIII, S.451 b, p. 125.
25. Vanden Berghe 1964: Pl. XVII, No. 150, pp. 39-45.
26. Schaeffer 1948b: Fig. 236, No. 19, Fig. 235, No. 42, §186, 188, pp. 431-432, 438-439.
27. Ghirshman 1939: Vol. 2, Pl. XIX, No. 1, p. 125. Schaeffer 1948b: Fig. 258, No. 9, §202, p. 471.
28. Ghirshman 1966: Pl. LXX, G.T.Z. 805.
29. Schaeffer 1948b: Fig. 151, No. 47, §98, p. 189.
30. Loudmer and Poulain 1976: Fig. 86. This is now in the Dr. Audouin Collection in Paris.
31. Forsdyke 1925: Pl. X, A 943.
32. Schaeffer 1948b: Fig. 163, No. 4, §107, pp. 218-220.
33. Kleiss 1979: No. 6, Pl. 62, No. 2, p. 205.
34. Dubiner 1966: Fig. 32. This is now in the Galerie Israel in Tel Aviv.
35. Bossert 1951: Figs. 175, 187, pp. 1, 12-13.
36. Bossert 1951: Figs. 732, 735, p. 49.
37. Weinberg 1963: Fig. 6.
38. Ghirshman 1939: Vol. 2, Pl. XX, No. 9, p. 125. Vanden Berghe 1959: Pl. 173 a, p. 285. Schaeffer 1948b: Fig. 258, No. 19, §202, p. 471.
39. Vanden Berghe 1964: Pl. XXVI, Nos. 198, 204, pp. 39-45.
40. Fukai and Ikeda 1971: Pl. XXXVII, No. 2, p. 3.
41. Vanden Berghe 1964: Pl. XVII, No. 154, pp. 39-45.
42. Schaeffer 1948b: Fig. 235, No. 19.
43. Schaeffer 1948b: Fig. 149, No. 1, §44, p. 78.
44. Samadi 1959a: Fig. 31.
45. Schaeffer 1948b: Fig. 217, No. 31, §165, pp. 406-407.
46. Schaeffer 1933: Pl. VI, No. 1, pp. 23-24.
47. Bossert 1942: Pls. 39, 217, p. 28.
48. Ghirshman 1939: Vol. 2, Pl. XVI, No. 6; Pl. XX, Nos. 5, 7, p. 125. Schaeffer 1948b: Fig. 258, No. 17, §202, p. 471.
49. Schmidt 1933: Pls. XCVII-CI.
50. Ghirshman 1939: Vol. 2, Pl. XLVI, S.699, S.666; Pl. XLVII S.671 C, p. 125.
51. Vanden Berghe 1964: Pl. XVI, Nos. 126, 128, pp. 39-45, 59.
52. Fukai and Ikeda 1971: Pl. XXXVII, No. 1, p. 3; Pl. XXXVI, No. 3.
53. Dyson 1964b: No. 9, p. 37.
54. Samadi 1959a: Fig. 8. This is now in the Tehran Archaeological Museum.
55. Ghirshman 1939: Vol. 2, Pl. XX, No. 1, p. 125.
56. Vanden Berghe 1964: Pl. XI, Nos. 59, 62.
57. Schaeffer 1948b: Fig. 235, No. 25.
58. Schaeffer 1948b: Fig. 200, No. 6, §151, p. 345.
59. Bossert 1937: Pl. 262, 470, p. 41.
60. Bossert 1942: Pl. 13, 67, p. 21.
61. Forsdyke 1925: Pl. XIV, Nos. A854, A855, pp. XLI-XLIII.
62. Vanden Berghe 1964: Pl. XI, Nos. 65-66, Pl. XII, Nos. 79-80, Pl. XIII, 98.
63. Ghirshman 1939: Vol. 2, Pl. IV, Nos. 1-2, p. 125.
64. Fukai and Ikeda 1971: Pl. XXVII, No. 2.
65. Vanden Berghe 1964: Pl. X, No. 46, pp. 39-45.
66. Fukai and Ikeda 1971: Pl. XXIX, No. 6, Pl. XXX, No. 2, Pl. XXXVI, No. 2, pp. 3, 29.
67. Schaeffer 1948b: Fig. 278, No. 3, Fig. 285, No. 2, p. 503.
68. Herzfeld 1941: Fig. 215, p. 110.
69. Dubiner 1966: Fig. 46. This is now in the Galerie Israel in Tel Aviv.
70. Dubiner 1966: Fig. 59. This is now in the Galerie Israel in Tel Aviv.
71. Vanden Berghe 1959: Pl. 153 C, pp. 123-124, 281; this is now in the Maleki Collection in Tehran. Vanden Berghe 1964: Pl. III, Nos. 10-13; Pl. IV, No. 18.
72. Dyson 1965: Pl. XXXII, Fig. 2 (32-37), p. 196; Pl. XLIV, Fig. 13 (Hasanlu V, broken spout).
73. Vanden Berghe 1959: Pl. 11 b (left), pp. 13, 260.
74. Schmidt 1933: Pl. CXXIV.
75. Vanden Berghe 1959: Pl. 145 a-d, pp. 116, 279. This is now in the Tehran Archaeological Museum.
76. Vanden Berghe 1959: Pl. 158 f, pp. 124, 282.
77. Dubiner 1966: Fig. 54. This is in the Galerie Israel in Tel Aviv.
78. Dubiner 1966: Fig. 57. This is in the Galerie Israel in Tel Aviv.
79. Herzfeld 1941: Fig. 211, p. 107.
80. Vanden Berghe 1959: Pl. 4 a, pp. 5-6.
81. Vanden Berghe 1959: Pl. 153 d, pp. 124, 281. This is now in the Maleki Collection in Tehran.
82. Samadi 1959a: Fig. 29. This is now in the Tehran Archaeological Museum.
83. Schaeffer 1948b: Fig. 236, No. 20, §188, pp. 438-439.
84. Schaeffer 1948b: Fig. 278, No. 4, §214, pp. 502-503.
85. Fukai and Ikeda 1971: Pl. XXXVIII, No. IV, p. 3.
86. Vanden Berghe 1964: Pl. 1, No. 5, pp. 39-45.
87. Egami, Fukai, and Masuda 1965: Pl. LXVI, No. 14.
88. Vanden Berghe 1964: Pl. VI, No. 35, pp. 39-45.
89. Egami, Fukai, and Masuda 1965: Pl. LXXIV, Nos. 14-15, 17, Tomb C-I; Pl. LII, No. 18, Tomb A-V; Pl. XLVIII, No. 35, Tomb A-IV, Fukai and Ikeda 1971: Pl. XXVI, No. 7.
90. Schmidt 1931-33: Pl. XXXVI H.2141; Pl. XXXVIII H.4104; Pl. LVII H.3270, H.4883.
91. Ghirshman 1939: Vol. 2, Pl. LXII, S.772 a, c, S.777; Pl. LXIV, S.864.
92. Samadi 1959a: Figs. 25-26.
93. Ghirshman 1939: Vol. 2, Pl. XVII 1-3; Pl. LXIX, S.946. Vanden Berghe 1959: Pl. 172 a, p. 285.
94. Vanden Berghe 1964: Pl. VII, Nos. 36-37, Pl. VI, Nos. 30-32.

95. Contenau 1935: Pl. XIV 5, pp. 80, 142.  
 96. Ghirshman 1939: Vol. 2, Pl. LII, S.568.  
 97. Vanden Berghe 1964: Pl. VII, No. 37, pp. 39-45.  
 98. Contenau 1935: Pl. 17, Tomb 48, No. 2.  
 99. Dyson 1964b: No. 4, p. 38.  
 100. Egami, Fukai, and Masuda 1965: Pl. LXXXI, No. 19, Tomb C-II; Pl. LXXIX, No. 208, Tomb C-I; Pl. LXII, No. 19, Tomb A-VII, and Pl. LII, No. 23; Pl. XXVI, No. 2, Tomb A-V.  
 101. Bossert 1951: Fig. 1134, No. 1, p. 88.  
 102. Ghirshman 1939: Vol. 2, Pl. LXIII, S.852, p. 125.  
 103. Ghirshman 1939: Vol. 2, Pl. XIX, No. 3.  
 104. Bossert 1942: Pl. 13, 61, p. 21.  
 105. Dyson 1960b: p. 129.  
 106. Negahban 1977a: Figs. 27-28. See also Negahban 1973: Figs. 31-32.
107. Egami, Fukai, and Masuda 1965: Pl. XXV, No. 1; Pl. LII, No. 17. Fukai and Ikeda 1971: Pl. XXXI, No. 8.  
 108. Herzfeld 1941: Pl. XXIII (fourth row right).  
 109. Vanden Berghe 1964: Pl. XI, Nos. 54-57, pp. 39-45.  
 110. Ghirshman 1939: Vol. 2, Pl. LII, S.570, p. 125.  
 111. Samadi 1955: Figs. 3-5, pp. 142-143.  
 112. Samadi 1960: Figs. 5-7.  
 113. Negahban 1977a: Fig. 30. See also Negahban 1973: Fig. 30, 43.  
 114. Bossert 1951: Fig. 758, p. 51.  
 115. The excavation of Gheyta-rieh was carried out during 1968-69 by Mr. S. Kambakhsh Fard of the Iranian Archaeological Service.



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# Weapons and Military Equipment

The tombs of Marlik contained a large number and wide variety of weapons, primarily made of bronze but also including a few of iron, stone, bone, copper, and gold. The number of various kinds of weapons in some of the tombs was astounding. In addition to ritual vessels, animal figurines, jewelry, and equipment for cooking and for personal use, Tomb 26 contained eleven maceheads; three swords; fourteen spearheads; twenty-five daggers; two axes; several hundred arrowheads; various items of protective equipment including two helmets, three protective belts, and a protective wristband; and many broken pieces and fragments of arms. These items were all buried alongside the deceased in an elaborate funerary ritual.

The large number of weapons placed in some of the tombs seems to indicate that the deceased was a formidable warrior. The inclusion of extremely large heavy swords, spearheads, and maceheads in certain cases suggests that the tomb's occupant was a warrior of great physical strength. Some of the weapons, such as the many bronze arrowheads of various types and sizes, could also have been used for hunting, and

their inclusion along with pottery and bronze figurines of wild game suggests that the occupant of the tomb was an outstanding hunter.

The bronze weapons found at Marlik illustrate the very advanced and flourishing bronze industry of the northern highlands of Iran in the late second and early first millennium B.C. Of several thousand fairly complete weapons found in the Marlik tombs, fewer than forty were made of some material other than bronze, including about twenty-five weapons of stone and a lesser number of iron. This suggests that by the beginning of the Marlik period the use of stone for weapons was already outdated, and by the end of the Marlik occupation iron was just beginning to be introduced, although it was still far from being in common use.

Many of the descriptions in the following pages have been condensed. For a complete discussion representing the variety of different categories of weapons discovered in the Marlik excavation, readers are referred to the volume *Weapons from Marlik*, *Archäologische Mitteilungen aus Iran, Ergänzungsbände*, Band 16, 1995.

## *Maceheads and Halberds (638–666)*

Twenty-one bronze and seven stone maceheads were found in the tombs of Marlik, along with one weapon possibly representing a halberd.<sup>1</sup> The maceheads thus form one of the few groups of Marlik weapons in which a sizable number of nonbronze examples were found. It is likely that the stone maceheads, as well as many of the bronze ones, had a purely ceremonial function.

### **BRONZE MACEHEADS AND HALBERDS (638–659)**

The twenty-two examples in this category were made in a wide variety of shapes and designs including short and spherical, pear-shaped or ovoid, and long and narrow. They may have a plain surface,

or be spiked, knobbed, or elaborately decorated with human and animal heads. Two of the examples have hammer heads and may actually have been used as sledgehammers; a third example may have served as a halberd. All the bronze maceheads have hollow interiors in which a wooden handle could have been inserted, and several have holes by which the handle could have been nailed or riveted in place. The bronze of which they are made is now deteriorated, with a rusted or corroded surface, and consequently some are crumbling and partly broken.

Dr. Vatandoost-Haghighi has analyzed the composition and technology of several of the bronze maceheads, as discussed below.

### 638 Bronze Macehead in Form of Stylized Human Head

80 M Fig. 31; Pl. 117, Color Plate XXXI A

About 8.5 cm long and 4.7 cm across at the broadest part, found in Tomb 26 (Trench XVII B). It is covered by a coat of rust, granulated in many places. The dome-shaped head has deeply molded elongated diamond-shaped and triangular protuberances, alternately spaced and incised with double concentric circles filled with a white material, producing the effect of a stylized human head that repeats itself as the macehead is rotated. The plain cylindrical neck, encircled at the end by a thick, wide, flat rim, is hollow with an inner diameter of 1.2 cm at the neck end. The composition and technology of this macehead have been analyzed by Vatandoost-Haghighi.<sup>2</sup>

#### COMMENTS

Similar bronze maceheads are in the Bröckelschen Collection<sup>3</sup> and the Ashmolean Museum.<sup>4</sup> There is also a Luristan bronze<sup>5</sup> and a similar bronze macehead from Tchogha Zanbil.<sup>6</sup> An example with two zones of four larger protuberances, each with an eye inlaid in its small circular surface, is from Giyan, Nihavand.<sup>7</sup> A hematite example is in the Adam Collection.<sup>8</sup>

### 639 Bronze Macehead with Nine Projecting Human Heads

164 M Fig. 31; Pl. 117, Color Plate XXXI B

About 14.3 cm long and 6.0 cm across the broadest part, found in Tomb 45 (Trench XXII H). The metal now in a bad state of preservation. The basic shape of the macehead is tubular, and it is hollow all the way through with an inside diameter of 2.7 cm. The body of the macehead is decorated with three rows of human heads alternately spaced, with three heads in each row. In the lowest row the heads are upside down, while in the upper two rows they are right side up. On each head, which projects well outward from the body of the macehead, ears, a large nose, mouth, eyebrows, and forehead creases are clearly detailed. The eyes are inlaid with bone, with a central depres-

sion that had been filled with a black material representing the pupil, now missing in most cases. Around the top of the hollow macehead is a molding band or ring, and more molding bands encircle the top and bottom of the short neck.

#### COMMENTS

A macehead with six projecting human heads facing downward and six triangular cutouts interspersed between the heads is in the Norbert Schimmel Collection.<sup>9</sup> The decorative technique may be related to the animal head decoration in the round that appears on some of the metal vessels of Marlik.<sup>10</sup>

### 640 Bronze Macehead with Reclining Rams

78 M Pl. 117

About 11.7 cm long and 7.2 cm in diameter at the broadest part, found in Tomb 26 (Trench XVII B). It is now heavily corroded. The spherical head is covered by parallel vertical ribbed bands, which reach to a small impressed ring encircling the top of the macehead. Below this ribbed banding, as the head curves inward to the cylindrical neck, is a projecting molding ring, and another raised ring encircles the neck itself. Spaced at equal intervals around the base of the neck are three reclining rams with loop-crescent horns, facing downward (Fig. 4). The hollow macehead has an inner diameter of about 2.0 cm. Below the raised ring encircling the neck is a hole by which its wooden handle could be fastened.

#### COMMENTS

A similar bronze macehead without the ram decoration on the neck rim was found in the vicinity of Nihavand, Luristan.<sup>11</sup>

### 641 Bronze Macehead with Mountain Goat Heads

76 M Pl. 117

About 17.5 cm long and 3.5 cm in diameter at the broadest part, found in Tomb 26 (Trench XVII B). It is badly corroded, particularly at the edges of the projecting bands that cover the surface. It has a long narrow truncheon shape divided into two sections by different types of decorating ridges. Spiral-twisted bands surround the upper two-thirds of the macehead, ending in a projecting ring around the conical top. The bottom third is encircled by horizontal bands down to the neck edge, where two opposing mountain goat heads face upward, each with a finely detailed muzzle, eyes, nose, and crescent horns. The hollow macehead has an inner diameter of about 1.8 cm.

#### COMMENTS

Bronze maceheads with mountain goat heads, differing somewhat in composition and detail, are in the Ashmolean Museum<sup>12</sup> and The University Museum of the University of Pennsylvania.<sup>13</sup>

**642 Bronze Macehead with Spikes**

77 M Pl. 117, Color Plate XXXI C

About 10.5 cm long and 7.0 cm in diameter at its broadest part, found in Tomb 26 (Trench XVII B). It is now covered by a thick coat of rust. The globular head with four rows of projecting spikes directly above one another is set on a long cylindrical neck. A thickened projecting rim at the neck edge surrounds the hollow interior, 1.9 cm in diameter, while another thickened projecting rim surrounds the interior hole at the head end.

## COMMENTS

Similar spiked bronze macehead with a cuneiform inscription: Luristan (Dossin and Ghirshman 1962: Pl. XXVI, No. 16, pp. 149 ff.).<sup>14</sup>

**643 Bronze Macehead with Knobs**

120 M Fig. 31; Pl. 117

About 9.0 cm long and 5.0 cm in diameter at the broadest part, found in Tomb 24 (Trench XV E). It has a heavily corroded surface and is ovoid in shape with extensions at the top and bottom. It is surrounded by four rows of horizontal knobs, arranged directly above one another. It tapers to an encircling ridge below which is a cylindrical neck, thickened and slightly flared at the base. An inner hole, 1.7 cm in diameter, pierces the macehead. A high circular projecting rim encircles the hollow interior at the top of the macehead.

**644 Bronze Macehead with Knobs**

109 M Pl. 117

About 7.5 cm long and 6.7 cm in diameter at the broadest part, found in Tomb 44 (Trench XX N). Similar in general shape to 643, it has two rows of elongated oval projecting knobs encircling the head in an alternating pattern. The macehead is hollow, with an inner diameter of 2.1 cm at the base. Thick projecting rings may be found at the neck edge and at the top of the head.

## COMMENTS

A similar macehead was found in Beshtasheni, Safarharab, Tomb 13, Caucasus.<sup>15</sup>

**645 Bronze Macehead with Knobs**

771 M Fig. 31; Pl. 117, Color Plate XXXI D

About 18.0 cm long and 4.8 cm in diameter at its broadest part, found in Tomb 47 (Trench XXII E). Now covered with a heavy coat of rust, it has a long truncheon shape and is covered with projecting knobs arranged in vertical lines reaching to the plain flat top of the head. Below these projecting knobs is a short, narrow neck encircled at the middle by a projecting ridge. The neck edge, which is thickened and projected outward, extends downward in two triangular points, each with a hole in the center. The inner diameter of the hollow macehead is about 2.8 cm. A wooden handle could have been nailed into

place through the holes in the projecting points.

## COMMENTS

Similar knobbed maceheads are in the David-Weill Collection.<sup>16</sup> There are similar examples from Ur, Susa, and Luristan.<sup>17</sup>

**646 Bronze Macehead with Conical Knobs**

770 M Pl. 117, Color Plate XXXI D

Truncheon-shaped macehead, 20.0 cm long and 4.7 cm in diameter at its broadest part, also found in Tomb 47 (Trench XXII E; Fig. 11). Similar in most respects to 645, it differs from the previous example in only having projecting knobs on the upper part. Below this, a pronounced vertical band separates the head from the long plain neck.

## COMMENTS

See 645 and also Nagel<sup>18</sup>; De Mequenem<sup>19</sup>; Potratz.<sup>20</sup>

**647 Bronze Macehead with Corncob Pattern**

953 M Pl. 118

About 22.5 cm long and 3.0 cm in diameter at its broadest part, found in Tomb 52 (Trench XXIII G). Now completely covered by a thick coat of rust, it has the long narrow shape of a truncheon, enlarging very slightly from the neck to the head end. The macehead is divided by four projecting lengthwise bands into four sections, which are divided in turn into several parallel bands of rectangular segments, forming a woven pattern very similar to a corncob. A thick impressed band separates this corncob pattern from the plain rounded top. The neck end is encircled by ten parallel molding bands. A hole, about 2.4 cm across the neck end, pierces the macehead lengthwise. Three additional examples (see below), all very similar to 953 M, were found at Marlik.

## COMMENTS

There are similar maceheads with corncob decoration from Luristan<sup>21</sup>; an unprovenanced example, possibly from Luristan<sup>22</sup>; Group 8 examples from Luristan<sup>23</sup>; and those at The University Museum of the University of Pennsylvania.<sup>24</sup> A macehead similar in shape but with chevron decoration comes from Susa, early Larsa period level.<sup>25</sup> An elongated macehead with low projecting knob decoration was found at Sirchavande-Ballukaja.<sup>26</sup>

**648 Bronze Macehead with Corncob Pattern**

954 M Pl. 118

23.5 cm long and 2.7 cm in diameter at its broadest part, Tomb 52 (Trench XXIII G). Similar to 647.

**649 Bronze Macehead with Corncob Pattern**

955 M Fig. 31

22.0 cm long and 2.8 cm in diameter at its broadest part, Tomb 52 (Trench XXIII G). Similar to 647.

**650 Bronze Macehead with Corncob Pattern**

956 M not illustrated

21.0 cm long and 3.0 cm in diameter at its broadest part, Tomb 52 (Trench XXIII G). Similar to 647.

**651 Heavy Elongated Bronze Macehead**

33 M Fig. 31; Pl. 118

About 34.0 cm long and 4.8 cm in diameter at its broadest part, found in Tomb 26 (Trench XVII B). It has a heavily rusted surface. This long, narrow macehead, shaped like a truncheon or baseball bat, is the largest found at Marlik, weighing about 1200 grams. The long tapering head, rounded at the top, is plain, with eleven parallel molding rings around the neck end. The hollow macehead has an inner diameter at the handle end of 2.9 cm. A nail hole is located just above the molding rings, with another hole above, halfway up the macehead.

## COMMENTS

A similar elongated macehead without molding rings is from Sirchavande-Ballukaja.<sup>27</sup>

**652 Bronze Macehead with Decorative Moldings**

79 M Fig. 31; Pl. 118

About 15.5 cm long and 5.0 cm in diameter at its broadest part, found in Tomb 26 (Trench XVII B). It has a badly rusted surface. The macehead has a long tubular or truncheon shape, broadest at the rounded top. Elongated U-shaped moldings, a smaller one right side up inside larger ones upside down, are repeated several times around the head. Below, two parallel projecting molding bands encircle the top, and three the bottom of the neck. The hollow macehead has an interior diameter of 2.4 cm at the neck end.

**653 Bronze Globular Macehead**

75 M Pl. 118

About 18.5 cm long and 8.7 cm in diameter at its broadest part, found in Tomb 26 (Trench XVII B). It has a surface that is badly corroded, particularly around the handle end. The head is spherical and solid, sitting on a long tubular neck. Three parallel projecting molding bands encircle the neck near the head, with another projecting ring near the handle end, which is thickened and turned outward. The hollow interior is about 3.5 cm across at the neck end. Two similar examples are illustrated below. They differ from 75 M in having no handles.

## COMMENTS

Similar maceheads with decorative molding are in the Bröckelschen Collection,<sup>28</sup> and were found at Sialk Cemetery B<sup>29</sup> and Luristan.<sup>30</sup>

**654 Bronze Globular Macehead**

113 M not illustrated

6.5 cm long and 5.7 cm in diameter at its broadest part, Tomb 50 (Trench XXII L). Similar to 653 but missing the handle.

## COMMENTS

Similar macehead with small knobs encircling the head in two registers: Luristan (Herzfeld 1941: Fig. 240 [right], p. 124).

**655 Bronze Globular Macehead**

114 M not illustrated

6.0 cm long and 4.1 cm in diameter at its broadest part, Tomb 50 (Trench XXII L). Similar to 653 but without the handle.

**656 Bronze Macehead with Ovoid Head**

34 M Pl. 118

About 20.0 cm long and 4.0 cm in diameter at its broadest part, found in Tomb 26 (Trench XVII B). It is badly corroded, with some parts of the long neck crumbling and broken. The ovoid head is set on a long tubular neck, which broadens slightly from the rim of the neck to the head. This long neck is hollow with an inner diameter of 2.5 cm at the neck edge.

**657 Bronze Macehead or Sledgehammer**

82 M Fig. 31; Pl. 118, Color Plate XXXII A

About 8.0 cm long and 9.0 cm across the hammer head, found in Tomb 26 (Trench XVII B). It has a heavily corroded surface. It is shaped like a sledgehammer and may actually have been used as such. The hammer head, set on a long tubular neck, divides along a central projecting ridge into wings that taper outward to broad, slightly curved ends. A hole 2.5 cm across pierces the macehead lengthwise. The composition and technology of this macehead have been analyzed by Vatandoost-Haghighi.<sup>31</sup>

**658 Bronze Macehead or Sledgehammer**

83 M Pl. 118

8.5 cm long and 9.0 cm across, found in Tomb 26 (Trench XVII B). This example is very similar to 657 in shape but has a slight conical projection at the top of the head surrounding the interior hole.

**659 Bronze Halberd**

45 M Fig. 31; Pl. 118, Color Plate XXXII B

Halberd,<sup>32</sup> about 35.2 cm long and 8.0 cm across its widest part, found in Tomb 26 (Trench XVII B). Now covered by a thick coat of rust, it has a long pointed bowstring-shaped blade with a parallel comb-decorated handle shaft set approximately opposite the center of the blade. One end of the long blade seems to have an applied stylized animal head decoration. The handle shaft, which is ribbed with nine butt spikes, is pierced by a hole 1.9 cm across in which a wooden handle could be inserted parallel to the head of the halberd. Vatandoost-Haghighi has analyzed the composition and technology of this piece.<sup>33</sup>

## COMMENTS

Similar bronze objects were found at Khurvin<sup>34</sup>; Luristan, Giyan Level I35; and Luristan.<sup>36</sup> There is an unprovenanced example, assigned to Luristan<sup>37</sup>; and

one in the Bröckelschen Collection<sup>38</sup>; the Audouin Collection<sup>39</sup>; and the Ashmolean Museum.<sup>40</sup>

### STONE MACEHEADS (660–666)

Seven stone maceheads, of limestone, marble, hematite, and basalt, were found at Marlik. They are all globular or pear shaped with one exception, a flattened basalt macehead shaped like an adze. Of the six somewhat similar maceheads, 660 differs in having a more globular shape and almost no neck. The other examples are more pear shaped and have short necks. Each of the maceheads is pierced lengthwise by a hole through which a handle could have been inserted.

Because the bronze industry was so highly developed in this area in the late second and early first millennium B.C., the stone maceheads may have been only ceremonial in nature. Not all of the examples included below are described in detail. For a complete discussion of the stone maceheads, the reader is referred to Negahban 1992.

#### 660 Limestone Macehead

81 M not illustrated

6.0 cm long and 7.2 cm in diameter at the broadest part, Tomb 26 (Trench XVII B).

#### 661 Limestone Macehead

119 M Pl. 119

9.0 cm long and 6.8 cm in diameter at the broadest part, Tomb 27 (Trench XVII D).

#### 662 Marble Macehead

143 M Pl. 119

6.0 cm long and 5.7 cm in diameter at the broadest part, Tomb 44 (Trench XX N).

#### 663 Limestone Macehead

108 M not illustrated

10.5 cm long and 8.0 cm in diameter at the broadest part, Tomb 44 (Trench XX N).

#### 664 Limestone Macehead

115 M not illustrated

8.0 cm long and 5.8 cm in diameter at the broadest part, Tomb 50 (Trench XXII L).

#### 665 Hematite Macehead

196 M Pl. 119

About 6.1 cm in length and 4.5 cm in diameter at the broadest part, found in Tomb 16 (Trench XIII F). It is made of hematite with a well-polished surface, with some cracks and dentation indicating use. It is ellipsoid in shape, tapering to a short neck, which flares slightly outward at the handle end. Around the head are three large incised circles spaced equally. A hole about 1.0 cm across pierces the macehead lengthwise.

#### 666 Basalt Adze-shaped Macehead

607 M Pl. 119

About 6.0 cm across, 5.0 cm wide, and 2.1 cm thick, found in Tomb 50 (Trench XXII L). It is made of black basalt with a well-polished surface and is quite different in shape from the rest of the stone maceheads, having the form of an adze (flattened, broad at one end and slightly tapering at the other, much larger horizontally than vertically). The corners of the head are well polished to a very smooth curvature. A hole 1.7 cm across, surrounded by a projecting ring at one end, pierces the body of the macehead. This may have been a hammer or pounding tool, although it was more likely ceremonial in nature.

#### COMMENTS

Simple stone maceheads comparable to 660 were found at Gözlü Kuli, Section A, Tarsus,<sup>41</sup> and at Assur.<sup>42</sup>

There are stone maceheads similar to 661 at the Temples of Gal and Kiririsha, Tchogha Zanbil<sup>43</sup>; Tepe Giyan, Nihavand<sup>44</sup>; and Assur.<sup>45</sup>

A macehead similar in shape to 662 was found at Tepe Giyan, Nihavand.<sup>46</sup> A hematite macehead similar to 665 was found at Kiririsha Temple, Tchogha Zanbil.<sup>47</sup> A hematite macehead, ellipsoid in shape but less elongated than 665, with an almost square top and incised circles at each corner is in the Ashmolean Museum.<sup>48</sup>

### CONCLUSIONS

The presence of large numbers of weapons, and most particularly of maceheads, in some of the tombs seems to identify them as belonging to warriors or warrior kings. Maceheads were found in only nine of the fifty-three tombs at Marlik, suggesting that these nine tombs apparently belonged to persons who, apart from their probable royal rank, were notable warriors.

Tomb 26, which contained eleven maceheads and a halberd, must certainly have belonged to a warrior of the highest rank and most outstanding reputation, probably a warrior king. The twelve examples found there, 638, 640–642, 651–653, and 656–660, many of them extremely unusual and interesting, constitute more than one-third of all the maceheads found at Marlik. These examples, along with other objects found in the tomb including Marlik Gold Bowl 8, with winged bulls in relief, and a wide variety of weapons, serve to reinforce the impression of the high position and martial reputation of its owners.<sup>49</sup>

Other tombs contained a smaller number of maceheads. Tomb 50 had four maceheads, two of stone and two of bronze, 654–655, 664, and 666;

Table 12. Comparative Chronology of Maceheads from Marlik

2500	2400	2300	2200	2100	2000	1900	1800	1700	1600	1500	1400	1300	1200	1100	1000	900	800	700	600	DATE B.C.
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1 <sup>ST</sup> AWAN		GUTI		EBARTI		ANSHAN		SUSA		NEO-ELAM		MEDIAN ART		MEDE		Persians		ELAM		
PROTO-IMPERIAL		GUTI UR III		ISIN-LARSA		II ISIN		KASSITE		MID-ASSYRIAN		NEO-ASS.		Persians		MESOPO-TAMIA				
AKKAD		LAGASH		1ST DYN. BABYLON		HITTITES		OLD EMPIRE		KINGDOM		FOREIGN RULE TO		LATE BRONZE AGE		IRON AGE		EAST MEDITER. SYRIA-PALESTINE		

Tomb 52 contained four maceheads, all of them bronze, 647–650; Tomb 44 had three maceheads, two in stone (662 and 663) and one in bronze (644); Tomb 47 had two bronze maceheads, 645 and 646; and four tombs each held one macehead: Tomb 16 a hematite macehead (665); Tomb 24 a bronze macehead (643); Tomb 27 a stone macehead (661); and Tomb 45 a most decorative and unusual bronze macehead (639).

Not only did Tomb 26 contain by far the largest number of maceheads, but it also contained the widest possible variety, including some types not found elsewhere. The other tombs containing multiple maceheads were more likely to have maceheads of only one particular type. Thus the maceheads in Tomb 50 are simple and globular; Tomb 44 contained long truncheon-shaped maceheads with a corn-cob pattern; and Tomb 47 held two truncheon-shaped maceheads covered with spikes.

When these maceheads, particularly the bronze ones, are compared with the limited number of similar maceheads found elsewhere in the ancient world, it can be seen that the latter come from sites in northern and western Iran and surrounding areas, including Tepe Giyan, Luristan, Tepe Sialk, Khurvin, Susa, Tchogha Zanbil, Beshtasheni in Talish, Sarchauande in the Caucasus, Ur and Assur in Mesopotamia, and Gözlü Kuli and Tarsus in Anatolia. For the most part, these comparable maceheads have been assigned a date around the second half of the second millennium B.C., more often the latter part of this period (Table 12). The shape, style, type, and workmanship of the maceheads discovered at Marlik, when compared with the examples found elsewhere, suggest that bronze workshops throughout the whole area were in contact and shared a common tradition in composition, ideas, and technology.

### *Daggers and Swords (667–728)*

Of the many complete or reasonably complete examples of daggers and swords with bronze blades found in the tombs of Marlik,<sup>50</sup> fifty-nine are described below. In addition, a number of small, broken, and incomplete pieces of such weapons were found, which, because they are so extensively damaged and in any case represent repeated types, are not included in the discussion which follows. These hand weapons with a hilt and a sharp blade have been divided into three types with a number of subtypes. Some are decorated with engraved geometric designs, have a handle, pommel, or blade shaped with projecting bands or additional ending or extensions to the guard, or have varied shaping of the pommel or guard with added decoration. Among the unusual and unique examples included in Type I are some with decorative handles ornamented with gold, lapis lazuli, and inlaid stone mosaic. Most of these hand weapons are made of cast bronze, but several examples have iron blades.

#### *TYPE I: UNIQUE DECORATIVE EXAMPLES (667–674)*

These items are grouped together because of the richness and individuality of their decoration, rather than for any similarity of design or form.

**667 Bronze Dagger with Gold and Marble Handle**  
165 M Fig. 31; Pl. 119

About 48.0 cm long, found in Tomb 45 (Trench

XXII H). It has a cast bronze blade, broken and partly missing, and an attached marble hilt. This hilt, which is rather small in proportion to the blade, is cylindrical, enlarging to a circular pommel, with a very smooth and polished surface. The lower half near the guard is covered by a wide gold band that borders the blade on one side and on the other by a projecting double gold molding band. Each half is decorated by reverse parallel diagonal engraved hatching, which forms a rather elaborate herringbone band. The gold cover is attached to the blade by small double tangs on each side, made in one piece with the cover. The hilt is attached to the blade by long overlapping metal tangs passing through a hole that extends along the total length of the hilt and pommel. The circular center hole on the pommel housing the blade tangs is camouflaged by a geometric rosette of four almond-shaped petals radiating from a circular core, with each petal of greenish stone inlaid in a narrow vertical gold band that borders the central circular core. The bronze blade, completely covered with rust, has parallel projecting ribs, with straight sides tapering toward a sharp point, the midrib wider than the side ribs. A penannular rib decorates the top of the midrib near the guard. The immediate side ribs converge near the top to form ribs that extend in curves to join the side ribs near the top, encircling the penannular rib. Grooves near the top of the blade in the midrib guard and side ribs are inlaid with lapis lazuli,<sup>51</sup> most of which is still in situ. The tapering triangular blade has rectangular shoulders.

**668 Bronze Dagger with Ax Handle**

91 M Pl. 119

Covered with rust, made from cast bronze, found in Tomb 26 (Trench XVII B). The blade is broken and incomplete, with the part remaining measuring about 36.0 cm long. The hilt, cast onto the blade, has four parallel ridges, one above the other, and a curved cylindrical grip with empty housing for inlay. The end of the hilt is an elaborately modeled double-headed ax with crescent blades. The guard is rectangular and slightly convex on the lower side next to the blade, which is broken, with damaged edges on the remaining parts. Two parallel low projecting flat ribs extend lengthwise down the middle of the blade. This piece, combining a dagger with an ax, is a unique product of the Marlik artisans.

**669 Bronze Sword**

740 M Pl. 119

Found in Tomb 1 (Trench III D<sup>+</sup>), has a broken blade; the remaining part measures about 41.5 cm long. It is made of bronze, with different alloys apparently having been used for the blade and hilt, since the blade is covered with a thick coat of rust while the hilt is clean. The grip is cylindrical, with a rather high projecting ridge in the middle enlarging toward the end to form a circular pommel having a flat top attached by an additional flat circular plaque. The guard has an elongated horseshoe shape enclosing and pinching in the top of the blade, which is rectangular with straight sides, slightly thicker in the middle but without a pronounced midrib. The blade tapers slightly toward the end, which is broken with the point missing.

**670 Bronze Sword**

1503 M Fig. 31

Broken, covered with rust, with part of the blade near the point missing, about 59.0 cm long, found in Tomb 26 (Trench XVII B). The hilt has a crescent pommel, a rounded grip flanged to receive inlays, which enlarges to a rectangular cubic shape near the end. A double-molding ring decorates the juncture of the cubic end of the grip and the guard, which is enlarged in width and decorated by engraved parallel lines with an inward slit at the lower side near the blade. The long straight blade, which is slightly wider at the top, is broken off at the end.

**671 Bronze Sword**

751 M Pl. 119

About 42.0 cm long, found in Tomb 1 (Trench III D<sup>+</sup>). It is very similar to **669** except for minor differences in the hilt, which is flanged for a wood or other inlay and has a crescent-shaped pommel.

## COMMENTS

Swords with a similar reinforced guard were found at southern Phoenicia,<sup>52</sup> as was a northwest Persian type.<sup>53</sup> A dagger with a similar elongated reinforced

guard hemming in the blade comes from Agha Evlar, Iranian Talish.<sup>54</sup> An iron dagger with a similar reinforcement of the guard, but with straight horns, was found at Hasanlu IV.<sup>55</sup>

**672 Bronze Sword with Iron Blade**

228 M Fig. 31; Pl. 119

Broken and incomplete, about 44.0 cm long overall, found in Tomb 25 (Trench XVI F). It has a bronze hilt approximately 24.0 cm long and an iron blade, now incomplete, measuring about 20.0 cm long. The hilt is composed of several parts including a concave-sided plain grip with an edge flanged to receive an inlay, a crescent-shaped guard, and a decorative cylindrical pommel with three separate reels, one above the other, and a rectangular tang at the top, probably originally covered by a decorative pommel top. The narrow, straight iron blade, very severely oxidized, has only a few pieces remaining.

## COMMENTS

Swords with a similar combination of bronze handle and iron blade were found at Chagoula Derre, Persian Talish<sup>56</sup>; others are in the Ashmolean Museum.<sup>57</sup> A dirk with a bronze handle and iron blade was found in Sialk Cemetery B.<sup>58</sup> See also Note 65.

**673 Bronze Sword Hilt**

1490 M Fig. 31

About 15.0 cm long, found in Tomb 7 (Trench IX B). Covered with a thick coat of rust, it contains traces of oxidized iron at the guard, indicating that it probably had an iron blade. The hilt has an almost cylindrical grip, gradually becoming more like a cube at the lower end, which is decorated by engraved parallel diagonal lines. The hilt is hollow, with metal strips in the middle that housed an inlay, possibly of wood or another more decorative material. It ends in a crescent-shaped pommel with a flat base, which is also flanged to hold an inlay. The guard is rectangular, with three extensive horns to grip the blade, and is decorated by triangular or epsilon-shaped depressions originally inlaid with lapis lazuli, of which traces remain in situ. Across the back are zig-zag ridges extending from one side to the other.

## COMMENTS

Similar examples with horned guards were found in Tsalka, Kushi, Caucasia<sup>59</sup>; Ani Mohart, Caucasia<sup>60</sup>; Chagoula Derre, Persian Talish<sup>61</sup>; Sialk Cemetery B<sup>62</sup>; and some are in the Ashmolean Museum.<sup>63</sup> There is also an unprovenanced example.<sup>64</sup>

The two swords with bronze hilts and iron or possibly steel blades (**672** and **673**) found at Marlik suggest a technology dating to the end of the Bronze and beginning of the Iron Age in northern and northwestern Iran, Persian and Russian Talish, Armenia, and Caucasia.<sup>65</sup> This subject has been discus-



sed by Moorey, Schaeffer, and Maxwell-Hyslop. The parallel examples from Marlik now provide more support for this technology, showing that some of the Marlik tombs, particularly the ones with iron specimens, belong to the Late Bronze and beginning of the Iron Age. However, it should be remembered that among thousands of bronze objects recovered from Marlik, there were only six almost complete iron blades and a few broken pieces of iron. This proportion of bronze to iron suggests that iron was in a very early stage of use and still very rare, valuable, and difficult to obtain. The generally accepted date for these combined bronze and iron swords correlates with the later stage of the Marlik cemetery, about the twelfth to eleventh centuries B.C.

#### 674 Gold and Bronze Handle

289 M Pl. 120

About 7.0 cm long, found in Tomb 33 (Trench XVIII F). It is made of bronze, with a gold sheath cover over part of it that has parallel impressed decoration on one side near the edge. It seems to be the handle of a knife or other object from which the blade has broken off.

### *TYPE II: EXAMPLES WITH A HILT CAST ONTO THE BLADE, CRESCENT POMMEL, CYLINDRICAL OR OCCASIONALLY ALMOST CUBIC HAND GRIP, MOST OFTEN A RECTANGULAR GUARD, AND A TAPERING TRIANGULAR BLADE*

(675–711)

The examples in this group have a similar shape and method of construction, with minor differences of decoration. The hilt is cast onto the blade, and the pommel is crescent shaped with ridge or rib decoration across the top and openings on the front and back for inlays, through which the tip of the blade tang often can be seen. Usually the grip is cylindrical and variously decorated with encircling ribs and ridges, with openings for inlays in which traces of wood may still remain. The guard is most often rectangular and may have a slightly convex angular bend on the lower edge. In one group the guard is very narrow and does not completely encase the top of the blade. The elongated triangular blades have a square or angular shoulder, slightly rounded in one group, and a softer or more pronounced midrib. Some blades show a slight concavity on the edges, probably owing to frequent sharpening. Most of these examples are covered by a heavy coat of rust, and on many of them the blade was broken into two or more pieces when found. The technology of similar weapons from northwestern Iran has been studied by Moorey,<sup>66</sup> Hodges,<sup>67</sup> and Maxwell-Hyslop

and Hodges.<sup>68</sup>

Many of the bronze daggers described below are not discussed in detail. For a complete discussion of these pieces, the reader is referred to Negahban 1992.

#### *SUBTYPE A: SOLID DAGGERS WITH MANY PARALLEL ENCIRCLING RIBS ON THE GRIP*

(675–687)

#### 675 Bronze Dagger

1492 M Fig 31

About 48.0 cm long, found in Tomb 47 (Trench XXII E). It has a hilt cast onto the blade. The crescent-shaped pommel with a raised rib across the top is open in the front and back revealing the tip of the blade tang rising from the cylindrical grip, which has sixteen parallel encircling ribs. The angular guard is bent downward in the middle and is decorated with a chevron or arrowhead band bordered by parallel straight lines. The blade, which has square shoulders and a tapering triangular form with a broad, low midrib, is partly broken, with pieces missing.

Several of the Marlik daggers are closely similar in design and workmanship, differing only slightly in decoration (see below). Certain of these have openings for inlays in either the grip or pommel; traces of wood remain in situ in 677, 678, 681, 684, and 687.

#### 676 Bronze Dagger

1493 M Fig. 31

49.0 cm long, Tomb 47 (Trench XXII E).

#### 677 Bronze Dagger

53a M Pl. 120

43.0 cm long, Tomb 26 (Trench XVII B).

#### 678 Bronze Dagger

88 M Fig. 32

82.0 cm long, Tomb 26 (Trench XVII B).

#### 679 Bronze Dagger

39 M not illustrated

Broken, about 49.0 cm long, Tomb 26 (Trench XVII B). Accompanied by three similar broken daggers.

#### 680 Bronze Dagger

46 M not illustrated

Broken with part of the blade missing, 33.0 cm long, Tomb 26 (Trench XVII B). Accompanied by two similar broken and incomplete daggers.

#### 681 Bronze Dagger

146 M Fig. 32

Broken into several pieces, 48.0 cm long after repair, Tomb 26 (Trench XVII B). Accompanied by

seven other broken and incomplete examples very similar in design and workmanship.

**682 Bronze Dagger**

331 M not illustrated

41.5 cm long, Tomb 33 (Trench XVIII F).

**683 Bronze Dagger**

775 M Pl. 120

47.5 cm long, Tomb 47 (Trench XXII E).

**684 Bronze Dagger**

1494 M Fig. 32

Broken and later repaired, 48.0 cm long, Tomb 47 (Trench XXII E).

**685 Bronze Dagger**

1495 M Fig. 32

Broken, the remaining part about 36.0 cm long, Tomb 47 (Trench XXII E). Accompanied by another similar dagger.

**686 Bronze Dagger**

1496 M Fig. 32

Broken, the remaining part about 25.0 cm long, Tomb 52 (Trench XXIII G).

**687 Bronze Dagger**

1497 M Fig. 32

Broken, the remaining part about 24.0 cm long, Tomb 52 (Trench XXIII G).

**SUBTYPE B: SOLID DAGGERS WITH SEPARATE SETS OF ENCIRCLING RIBS ON THE GRIP (688–695)**

These bronze daggers are very similar to those in Group A except for the encircling ribs on the grip, which are not continuous but are separated into two or more sets. In addition, the crescent-shaped pommel is usually smaller than in the first group and may be more curved. Traces of wood remain in situ in five of these examples (688, 690–692, 695).

There are several rather complete examples of the Subtype B daggers, with many more broken pieces.

**688 Bronze Dagger**

53b M Pl. 120

Broken, 50.0 cm long, Tomb 26 (Trench XVII B).

**689 Bronze Dagger**

141 M not illustrated

46.0 cm long, Tomb 27 (Trench XVII D).

**690 Bronze Dagger**

780 M Pl. 120<sup>69</sup>

49.5 cm long, Tomb 47 (Trench XXII E).

**691 Bronze Dagger**

1060 M not illustrated

Broken in two places with parts missing, about 48.0 cm long, Tomb 47 (Trench XXII E).

**692 Bronze Dagger Hilt**

1498 M Fig. 32

Broken, the remaining part about 19.0 cm long, Tomb 33 (Trench XVIII F).

**693 Bronze Dagger**

466 M Pl. 120

43.0 cm long, Tomb 29 (Trench XVI H).

**694 Bronze Dagger**

58a M Fig. 32

Broken into two pieces and repaired,<sup>70</sup> about 50.0 cm long, Tomb 26 (Trench XVII B). One of three daggers given the same excavation number (see also 695 below).

**695 Bronze Dagger**

58b M Fig. 32

Broken and repaired, 44.0 cm long, Tomb 26 (Trench XVII B).

**SUBTYPE C: DAGGERS WITH THREE RAISED PARALLEL RIDGES ON THE HILT (696–701)**

These daggers are similar to those in the previous subtypes except for the decoration of the hilt, which is flanged to hold wood inlay and is encircled by three raised parallel ridges that form a finger grip. Several examples illustrate this subtype.

**696 Bronze Dagger**

324 M Pl. 120

38.5 cm long, Tomb 33 (Trench XVIII F).

**697 Bronze Dagger**

160 M not illustrated

43.0 cm long, Tomb 27 (Trench XVII D).

**698 Bronze Dagger**

161 M not illustrated

32.0 cm long, Tomb 27 (Trench XVII D).

**699 Bronze Dagger**

464 M not illustrated

38.0 cm long, Tomb 29 (Trench XVI H).

**700 Bronze Dagger**

695 M not illustrated

42.5 cm long, Tomb 16 (Trench XIII F).

**701 Bronze Dagger Hilt**

1499 M Fig. 32

16.0 cm long, Tomb 16 (Trench XIII F). The blade is broken off and missing.

**SUBTYPE D: SOLID DAGGERS WITH A FINGER GRIP ON THE FLANGED HILT, NARROW GUARD, AND ELONGATED BLADE (702–708)**

The solid bronze daggers in this subtype have the same triple-ridged finger grip on a flanged hilt of the previous group combined with a very narrow guard that does not completely encase the top of the blade. Although this type of guard would appear to be too weak to protect the blade, the tang of the blade runs completely through the length of the hilt, forming a quite strong whole. The blades of this group have angular or rounded shoulders, often with a very long narrow blade with a long sharp point. Several examples illustrate this subtype.

**702 Bronze Dagger**

232 M not illustrated  
48.0 cm long, Tomb 45 (Trench XXI H).

**703 Bronze Dagger**

233 M Pl. 120  
46.1 cm long, Tomb 25 (Trench XVI F).

**704 Bronze Dagger**

511 M Pl. 121  
44.0 cm long, Tomb 25 (Trench XVI F).

**705 Bronze Dagger**

513 M not illustrated  
44.0 cm long, Tomb 18 (Trench XIV D).

**706 Bronze Dagger**

514 M not illustrated  
46.0 cm long, Tomb 18 (Trench XIV D).

**707 Bronze Dagger**

727 M not illustrated  
43.5 cm long, Tomb 13 (Trench XII G).

**708 Bronze Dagger**

724 M not illustrated  
41.5 cm long, Tomb 30 (Trench XVI L). Unlike the other examples in this subtype, this dagger has only two raised ridges for the finger grip instead of three.

**SUBTYPE E: SWORDS WITH FLANGED GRIP AND POMMEL, RECTANGULAR GUARD, AND LONG BLADE (709–711)**

The three examples in this subtype are classified as swords rather than daggers based on the length of their blades. They have a simple shape with a flanged grip that tapers slightly outward toward the rectangular guard and the crescent-shaped flanged pommel. Only the first example (709) retains its complete blade. This has square shoulders, with a rounded wide midrib on the upper part which

becomes a distinguished central line on the lower part. The edges of the blade are markedly concave at the top and then extend almost parallel and straight until they reach the tip, which gently tapers to a round point. Traces of textile can be seen on the grip.

**709 Bronze Sword**

86 M not illustrated<sup>71</sup>  
59.3 cm long, Tomb 26 (Trench XVII B).

**710 Bronze Sword**

330 M not illustrated  
Broken, the remaining part about 28.5 cm long, Tomb 33 (Trench XVIII F).

**711 Bronze Sword**

742 M not illustrated  
Broken, the remaining part about 41.5 cm long, Tomb 1 (Trench III D<sup>+</sup>).

COMMENTS

Daggers similar to those in Subtype A, with parallel encircling ribs on the grip were found at northwestern Iran;<sup>72</sup> Agha Evlar, Persian Talish;<sup>73</sup> Veri, Russian Talish;<sup>74</sup> Djonu, Russian Talish.<sup>75</sup> Examples are also in the Bröckelschen Collection,<sup>76</sup> the Ashmolean Museum,<sup>77</sup> and the Louvre.<sup>78</sup>

Daggers similar to those in Subtype B, with separate sets of encircling ribs on the grip, were found at Hiveri, Russian Talish,<sup>79</sup> and in the vicinity of Lahijan.<sup>80</sup> There are also examples in the Bröckelschen Collection.<sup>81</sup>

Daggers similar to Subtype C, with raised ridges (usually three) on the hilt to form a finger grip are in the Ashmolean Museum.<sup>82</sup> One example is from "Amlash,"<sup>83</sup> and another is in the possession of Professor Amandry.<sup>84</sup> A dagger with a closely similar hilt, a crescent-shaped pommel, flanges curved over to form a cylindrical grip, and three ridges spacing the fingers, combined with a dagger blade with a penannular cast on the guard that is different from the blades of Type II but similar to those of Type III, is classified as the Kalardasht type,<sup>85</sup> and is in the Bröckelschen Collection.

Dirks or daggers similar to those of Subtype D, with a triple-ridged finger grip and hilt flanged to hold an inlay but with a very narrow guard that does not completely enclose the top of the blade, were found in northwest Persia.<sup>86</sup> One is in the Museum für Vor- und Frühgeschichte, Berlin.<sup>87</sup> The famous gold dagger of Kalardasht also has a very closely similar hilt with curved-over flanges to take inlays, three interspersed raised ridges on the grip, and a crescent-shaped pommel, but it differs in other details.<sup>88</sup>

An example similar to those in Subtype E, with a flanged hilt, rectangular guard, and a broad low rectangular midrib, was found in Khurvin.<sup>89</sup>

**TYPE III: BRONZE DAGGERS WITH AN OPEN OR CLOSED CYLINDRICAL GRIP, CRESCENT POMMEL, PENANNULAR GUARD, AND TAPERING TRIANGULAR BLADE (712–726)**

These daggers share a common workmanship and form, with minor differences of detail and size. They are made in cast bronze, with the blade and hilt usually cast in one piece. The hilt is completely outlined by flanges to hold inlays, probably of wood, which could form a soft cylindrical grip. The crescent-shaped pommel is formed in one piece with the grip. A rather heavy penannular ring band, cast onto the junction of the hilt and blade, hems in between its open ends the top of the well-pronounced projecting thick midrib of the blade. The blade usually has an elongated, tapering triangular shape with uplifted sharp shoulders and a slight convexity at the side edges reaching to a long sharp point. The rectangular sectioned midrib is thicker at the top of the blade, tapering to a very narrow line at the point. The metal is often covered by a thick coat of rust mixed with soil particles, and in some cases traces of textile can be seen on the hilt. The technology of a closely similar dagger was studied by Maxwell-Hyslop and Hodges, who state that "Blade, flanged handle and pommel are a single casting while the closed crescent [guard] has been cast on afterwards as a completely non-functional embellishment."<sup>90</sup>

**SUBTYPE A: DAGGERS WITH AN OPEN FLANGED HILT AND PENANNULAR GUARD (712–721)**

The daggers in this group are all very similar to each other. For this reason, only one example (712) will be discussed in full.

**712 Bronze Dagger**

342 M Pl. 121

About 39.0 cm long, found in Tomb 44 (Trench XXI N). It has a hilt and blade cast in a single piece, with a penannular guard or rib cast on afterward. The grip and pommel are flanged to take inlays. The grip curves gently outward toward the crescent-shaped pommel, which has a raised ridge on the top. The penannular guard or rib covers and protects the lower part of the hilt and the upper part of the blade, curving to nearly touch the midrib between its open ends. The elongated, tapering triangular blade displays sharp, angular, uplifted shoulders, a well-pronounced projecting midrib with a rectangular section, and a slight convexity of the edges, extending to a sharp point. Traces of textile can be seen on the handle near the pommel.

**713 Bronze Dagger**

343 M not illustrated

43.0 cm long, Tomb 44 (Trench XXI N).

**714 Bronze Dagger**

736 M not illustrated

47.8 cm long, Tomb 2 (Trench VI B<sup>+</sup>).

**715 Bronze Dagger**

743 M not illustrated

Damaged, 42.0 cm long, Tomb 13 (Trench XII G).

**716 Bronze Dagger**

719 M Pl. 121

46.5 cm long, Tomb 3 (Trench VI A).

**717 Bronze Dagger**

726 M not illustrated

46.5 cm long, Tomb 13 (Trench XII G).

**718 Bronze Dagger**

1501 M Fig. 32

Incomplete, the remaining part about 26.0 cm long, Tomb 3 (Trench VI A).

**719 Bronze Dagger**

738 M not illustrated

41.0 cm long, Tomb 1 (Trench III D<sup>+</sup>).

**720 Bronze Dagger**

750 M Pl. 121

Damaged, 40.0 cm long, Tomb 1 (Trench III D<sup>+</sup>).

**721 Bronze Dagger**

752 M not illustrated

Damaged, 37.5 cm long, Tomb 1 (Trench III D<sup>+</sup>).

**SUBTYPE B: DAGGERS WITH A CLOSED CYLINDRICAL GRIP, AN OPENING FOR INLAY NEAR THE CRESCENT POMMEL, AND A PENANNULAR GUARD (722–726)**

Like the examples in the previous group, the Subtype B daggers are quite similar. Only one example (722) will be discussed in full below.

**722 Bronze Dagger Hilt**

1528 M Fig. 32

This bronze dagger hilt, the remaining part about 17.0 cm long, found in Tomb 2 (Trench VI B<sup>+</sup>), has a cylindrical grip decorated by two registers of parallel zigzag bands separated by a thick band of four parallel horizontal lines. The upper register is bordered by a band of four parallel horizontal lines, and the lower register by a band of three parallel horizontal lines. The upper part of the hilt, spreading to the crescent-shaped pommel with a ridge on top, is flanged to take an inlay. The guard is penannular, gripping and partly overlapping the midrib of the blade between its open ends, which

have small cuts as though suggesting hands gripping the midrib. The remaining part of the broken blade has square uplifted shoulders, partly damaged, and a projecting rectangular midrib.

### 723 Bronze Dagger Hilt

1491 M Fig. 32

18.0 cm long, Tomb 2 (Trench VI B<sup>+</sup>). Part of the blade is still attached.

### 724 Bronze Dagger

739 M not illustrated

44.0 cm long, Tomb 1 (Trench III D<sup>+</sup>).

### 725 Bronze Dagger

1502 M Fig. 32

Broken, the remaining part about 23.0 cm long, Tomb 2 (Trench VI B<sup>+</sup>). Traces of the original wood can be seen in the opening of the hilt and pommel.

### 726 Bronze Dagger

1500 M Fig. 32

Broken, the remaining part about 31.0 cm long, Tomb 5 (Trench VIII D).

#### COMMENTS

Examples parallel to the Marlik daggers of Type III, Subtype A, with the blade and hilt cast in one piece, a flanged hilt with crescent pommel, and a penannular guard, were found at Agha Evlar, Persian Talish;<sup>91</sup> Tchila-Kaane, Persian Talish;<sup>92</sup> Hassan Zamini, Persian Talish;<sup>93</sup> and Veri, Russian Talish.<sup>94</sup> Additional examples are from Veri;<sup>95</sup> Chagoula-Derre, Persian Talish;<sup>96</sup> northwest Persian type;<sup>97</sup> Talish type;<sup>98</sup> Ghalekuti II, Area D, Dailaman;<sup>99</sup> Kalar-dasht;<sup>100</sup> and Khurvin.<sup>101</sup> There are also examples in the Ashmolean Museum<sup>102</sup> and The University Museum of The University of Pennsylvania.<sup>103</sup> A similar dagger can be seen in the narrative scene of the Hasanlu Gold Bowl.<sup>104</sup>

Daggers similar to Subtype B, with a closed hilt decorated with engraved lines and a pommel with an open top to take an inlay are in the Adam Collection;<sup>105</sup> and were found at Tulu, Russian Talish.<sup>106</sup> An example similar to 726, with a split upper part and a middle molding on the cylindrical grip, a different pommel, and a slightly different penannular grip, is classified as belonging to the Luristan Bronze Group.<sup>107</sup>

The number of daggers comparable to Type III found in other excavations shows that this type of dagger must have been in production for a long period of time during the second half of the second millennium B.C., and in very common use in the last quarter, possibly continuing into the early part of the first millennium B.C.

## BRONZE AND IRON BLADES (727-728)

Several simple bronze and iron blades were found at Marlik (discussed below and under the category "Iron Spearheads").<sup>108</sup> Iron objects were very rare there, and only six iron blades were found among several thousand metal objects.<sup>109</sup> This suggests that Marlik ceased to be used as a cemetery as early as the beginning of the Iron Age.

### 727 Iron Blade

188 M Pl. 121

Blade, possibly belonging to a dagger, about 22.0 cm long, found on the surface in the area of the first test trench, near Trench XX F. It is still complete, although the metal is very heavily oxidized and corroded. The blade has a tapering triangular shape with a rounded midrib, pointed square shoulders, and a small flat tang with a riveting hole at the end.

### 728 Bronze Blade

333 M Pl. 121

Small sword, about 29.0 cm long, found in Tomb 33 (Trench XVIII F). It is made of cast bronze, now covered by a heavy coat of rust. The blade has rounded shoulders, a long swordlike shape almost parallel in width to the gently curving point, and a small square-sectioned bar tang.

## CONCLUSIONS

About seventy-four daggers and swords were found at Marlik complete enough to be registered individually by the Tehran Archaeological Museum, in addition to many small broken pieces of no particular identity. Of these seventy-four registered items, sixty-two, representing the complete variety of types, designs, and technology, have been described (Table 13). These examples come from eighteen of the fifty-three Marlik tombs, apparently being concentrated in those tombs belonging to warriors and warrior kings.

The largest number of daggers, twenty-four, were found in Tomb 26, including two examples of Type I (Elaborate Decorative Daggers) and twenty-two examples of Type II (Daggers with a Hilt Cast onto the Blade, Cylindrical Grip, Crescent Pommel, Rectangular Guard, and Tapering Triangular Blade). Tomb 47 contained eight examples of Type II; Tomb 1 seven examples, two of Type I, one of Type II, and four of Type III (Daggers with a Cylindrical Grip and Penannular Guard); Tomb 33 five examples, one of

Table 13. Daggers, Dirks, and Swords

Tomb No.	TYPES								Total No.
	I	II A	II B	II C	II D	II E	III A	III B	
1	2					1	3	1	7
2							1	3	4
3							2		2
5								1	1
7	1								1
13					1		2		3
16				2					2
18					2				2
25	1				2				3
26	2	17	4			1			24
27			1	2					3
29			1	1					2
30					1				1
33	1	1	1	1		1			5
44							2		2
45	1				1				2
47		6	2						8
52		2							2

Table 14. Comparative Chronology of Swords and Daggers from Marlik

2500	2400	2300	2200	2100	2000	1900	1800	1700	1600	1500	1400	1300	1200	1100	1000	900	800	700	600	DATE B.C.	
																				671	
																				672	
																				673	
																				A	II
																				B	
																				C	
																				D	
																				E	
																				A	III
																				B	
																				Persians	
																				ELAM	
																				Persians	
																				MESOPOTAMIA	
																				Persians	
																				ANATOLIA	
																				Persians	
																				EAST MEDITER. SYRIA-PALESTINE	

Type I and four of Type II; Tomb 2 four examples of Type III; Tomb 13 three examples of Type II; and Tomb 25 three examples, one of Type I and two of Type II. Seven tombs each produced two daggers: Tomb 3 two examples of Type III; Tomb 16 two examples of Type II; Tomb 18 two examples of Type II; Tomb 29 two examples of Type II; Tomb 44 two examples of Type III; Tomb 45 two examples, one of Type I and one of Type II; and Tomb 52 two examples of Type II. Tomb 5 had one example of Type III; Tomb 7 one example of Type I; and Tomb 30 one example of Type II (Chart 30).

Type I groups together unusual decorative examples without any particular common pattern, but in Types II and III are items quite closely similar, in some cases so similar that they are almost identical. Twelve tombs, 26, 47, 1, 33, 13, 25, 27, 16, 18, 29, 52, and 30, produced daggers of Type II. Of these, Tomb 26, by far the most productive tomb of Marlik in terms of weapons, produced twenty-two Type II daggers. Tomb 47 was also very productive in weapons, producing eight Type II daggers, and Tomb 52, also productive, produced two Type II daggers. Type II

daggers, with a hilt cast onto the blade, cylindrical grip, crescent pommel, rectangular guard, and tapering triangular blade, are the predominant type at Marlik.

Type III daggers, with a cylindrical grip and penannular guard, were found in six tombs—1, 2, 3, 5, 13, and 44—with Tomb 1 containing four examples along with Type I and II daggers; Tomb 2 also containing four examples of Type III; Tomb 13 containing two examples of Type III along with one of Type II; Tomb 3 containing two examples of Type III; Tomb 44 containing two examples of Type III; and Tomb 5 containing one example of Type III.

It seems probable that tombs producing the same type of dagger were reasonably contemporaneous. Two tombs, 1 and 13, contain examples of both Type II and III daggers, suggesting that there was a period when these two types of daggers overlapped in use. The many bronze daggers and swords found in the tombs of Marlik point to the flourishing state of the bronze industry in northern Iran during the latter part of the second millennium B.C. (Table 14).

## *Spearheads (729–823)*

A very large number of spearheads with various shapes of blade and handles in different sizes were discovered in the tombs of Marlik. Except for the arrowheads, spearheads form the largest category of weapons found in the excavation. The large number of spearheads found in the Marlik tombs suggests they were a popular weapon much favored by the Marlik warriors, possibly as a particularly handy weapon to use in the forested mountainous region. Nearly 119 complete spearheads were found as well as many broken fragments. A well-balanced selection of complete and partly broken spearheads representing the variety of shapes and sizes found at Marlik is described here, presenting a comprehensive picture of the Marlik spearheads. They are divided according to composition (bronze vs. iron); the bronze spearheads are further divided according to shape and decoration into nine major types, some with a number of subtypes.

Where possible, the descriptions of the bronze spearheads have been condensed. For a complete discussion of the spearheads from Marlik, the reader is referred to Negahban 1992.

### BRONZE SPEARHEADS (729–818)

#### *TYPE I: UNUSUAL AND DECORATIVE SPEARHEADS (729–735)*

##### **729 Bronze Spearhead**

1482 M Fig. 29

Broken spearhead, the remaining part about 11.6 cm long, found in Tomb 2 (Trench VI B<sup>+</sup>). It could have been used as a dagger. It has a cylindrical shaft with a finely traced parallel chevron hatching pattern with two long rectangular openings, possibly for inlays, ending in a plain, solid cylindrical tang, which is broken at the tip. A decorative guard has a wide horizontal band on top with elongated shallow oval holes that had an inlay of lapis lazuli, of which small traces remain in situ, connected to three hanging joined penannular horns enclosing the blade ribs. The remaining part of the broken blade reveals an elongated triangular shape with square shoulders and a wide rectangular midrib with angular side corners and narrower projecting ribs on either side,

forming stylized, emphasized blood channels. The edges of the blades are serrated and badly damaged.

### 730 Bronze Spearhead

90 M Fig. 33

About 48.0 cm long, found in Tomb 26 (Trench XVII B). It is made of cast bronze, now completely covered by a coat of rust. The rectangular sectioned tang is solid and long, with its lower part covered by a cylindrical thick socket or shaft with a hole in the middle decorated by twelve parallel connected narrow ribs. This shaft is joined to a flat-based semicircular guard decorated by two files of engraved circles. The elongated triangular blade has round shoulders and a sharp triangular projecting midrib, forming an angular central line.

### 731 Bronze Spearhead

1484 M Fig. 33

Blade broken with parts missing, about 49.0 cm long, found in Tomb 47 (Trench XXII E). It is made of cast bronze, the surface covered with a coat of rust. The broken tang is narrow and flat with a rectangular section. It connects to a rather wide triangular blade tapering with a gentle curve to a sharp point. The blade has curved shoulders on top turning to an angle at the side edges. The round projecting midrib has five parallel fine tracelines of blood channels on either side, extending toward the point. Beginning from the outside, the lines end in turn until only the inner one near the midrib continues to the point.

#### COMMENTS

Similar bronze spearheads with decorative parallel blood channels were found at Beshtasheni, Caucasia<sup>110</sup>; Kourgane XXIX, Trialeti, Caucasia<sup>111</sup>; and Kvemo-Sasireth, Caucasia.<sup>112</sup> There is also one of unknown provenance, from Caucasia.<sup>113</sup>

### 732 Bronze Spearhead

1485 M Fig. 33

Broken at the tang, with the remaining part about 23.0 cm long, found in Tomb 47 (Trench XXII E). It is made from cast bronze, now covered with a coat of rust. The narrow flat tang has a rectangular section. It joins an elongated ovate blade with round shoulders and a narrow projected midrib, which is hemmed in by two long impressed shallow channels with a round wide base that taper toward the blade point.

### 733 Bronze Spearhead

169 M Pl. 121

About 42.5 cm long, found in Tomb 24 (Trench XV E). Made from cast bronze, it has a rather small rectangular sectioned narrow tang, a semicircular reinforced guard with a shallow round hole in the center, and a crescent-shaped base. The elongated triangular blade has round shoulders and a projecting midrib.

### 734 Bronze Spearhead

1481 M Fig. 33

Small spearhead, about 21.0 cm long, found in Tomb 26 (Trench XVII B). It is made of cast bronze, the metal covered by a heavy coat of rust. It has a rather unusual shape among the Marlik spearheads. The blade is an elongated, tapering pyramidal square-sectioned shape extending to a sharp point. The spearhead has a hollow cylindrical socket decorated with six interspersed projected moldings.

### 735 Bronze Spearhead

1160 M Fig. 33

About 52.0 cm long, found in the tomb of Ali Karam Bagh, Trench II. It is made in one piece from cast bronze now covered by a coat of rust. The blade has an elongated, tapering triangular form rounded at the point with concave crescent-shaped shoulders, which together have a penannular outline, an angular projecting midrib with an emphasized central line tapering slightly to the point, and concave edges, possibly caused by frequent sharpening. The flat rectangular-sectioned tang is partly broken at the end.

#### COMMENTS

Similar bronze spearheads with penannular shoulders were found at Chir-Chir, Persian Talish.<sup>114</sup> Other examples of this shape may be seen among the bronze arrowheads at Marlik (see 828, Pl. 126).

## *TYPE II: SPEARHEADS WITH TRIANGULAR BLADES (736-751)*

The spearheads with triangular blades are divided into two subdivisions according to the size and proportions of the blade, shaft, and tang. Subtype A has a rather short blade and shaft with a long tang, the total length of the blade less than that of shaft and tang together. Subtype B has a much longer blade with a short shaft and tang, with the length of blade surpassing that of the shaft and tang together.

### *SUBTYPE A: LIGHT SPEARHEADS (736-738)*

These three rather light spearheads were probably very practical for mountain fighting. They have an ovate blade with smoothly curved shoulders and a midrib that may be rectangular-sectioned on the lower part of the blade and more rounded on the upper part. The cylindrical shaft broadens toward the tang and may be decorated with parallel grooves. The thick flat rat-tang may be bent near its button end.



**736 Bronze Spearhead**

341 M not illustrated

44.0 cm long, Tomb 44 (Trench XXI N).

**737 Bronze Spearhead**

339 M Pl. 121

51.0 cm long, Tomb 44 (Trench XXI N).

**738 Bronze Spearhead**

1486 M not illustrated

Broken, the remaining part about 35.0 cm long, Geshlagh, Trench II.

## COMMENTS

**736** and **737** were both found in the same tomb and are remarkably similar, except for a slight difference in size. They were undoubtedly produced in the same workshop.

*SUBTYPE B: LIGHT SPEARHEADS WITH LONGER BLADES (739–751)*

Many more examples of Type II B than of II A were found at Marlik, all made of cast bronze, often with a very heavy coat of rust mixed with soil particles. They are similar in general shape and technology to Subtype II A except that the blade is proportionately much longer in relation to the shaft and tang, often longer than the total length of the shaft and tang together. These blades have an elongated tapering form often with slightly concave edges, angular rounded or gently curved shoulders, and a projecting rectangular-sectioned midrib. They have a shaft that is usually cylindrical but sometimes square-sectioned with rounded corners, occasionally decorated with engraved geometric patterns (see **739** below). There may be an additional thick metal reinforcement at the base bordering the brim, hemming in the tang, which is rectangular-sectioned (sometimes thicker or flatter), with a sharp bend near its plain or button end.

**739 Bronze Spearhead**

666 M Pl. 122

55.0 cm long, Tomb 5 (Trench VIII D).

**740 Bronze Spearhead**

667 M not illustrated

49.0 cm long, Tomb 5 (Trench VIII D).

**741 Bronze Spearhead**

111 M not illustrated

60.0 cm long, Tomb 50 (Trench XXII K).

**742 Bronze Spearhead**

745 M not illustrated

46.8 cm long, Tomb 13 (Trench XII G).

**743 Bronze Spearhead**

756 M Pl. 122

41.5 cm long, Tomb 1 (Trench III D<sup>+</sup>).**744 Bronze Spearhead**

757 M not illustrated

58.3 cm long, Tomb 1 (Trench III D<sup>+</sup>).

## COMMENTS

Bronze spearheads **740–744** show a close similarity of shape and technology, with slight differences of size, suggesting that they may well have been made in the same workshop and possibly by the same craftsman. This indicates a connection of time or tradition between the tombs in which they were found. At the very least, I am inclined to suggest that they share a closer time range with one another than with the remaining tombs of Marlik.

**745 Bronze Spearhead**

716 M not illustrated

45.0 cm long, Tomb 3 (Trench VI A).

**746 Bronze Spearhead**

717 M not illustrated

Broken at its tang with the remaining part about 38.0 cm long, Tomb 3 (Trench VI A).

**747 Bronze Spearhead**

718 M Pl. 122

44.5 cm long, Tomb 3 (Trench VI A).

**748 Bronze Spearhead**

737 M not illustrated

48.0 cm long, Tomb 2 (Trench VI B<sup>+</sup>).

## COMMENTS

The similarity of these spearheads found in Tombs 2 and 3 suggests that these tombs may have been closely related in time.

**749 Bronze Spearhead**

697 M not illustrated

35.0 cm long, Tomb 15 (Trench XIII C).

**750 Bronze Spearhead**

512 M not illustrated

42.0 cm long, Tomb 18 (Trench XIV D).

**751 Bronze Spearhead**

701 M Pl. 122

46.0 cm long, Tomb 15 (Trench XIII C).

## COMMENTS

Bronze spearheads **749–751** differ from the others in this subtype in the shape of their blades, which are ovate rather than having an elongated tapering form. They are closely similar to each other, suggesting that they may have been produced in the same workshop. This suggests a closely related time range for Tombs 15 and 18 in which they were found.

Spearheads similar to Subtype A, with an ovate blade, a long rectangular-sectioned handle, and a tang with bent end, were found at Tepe Giyan, Tomb

112;<sup>116</sup> Level IV, Tell Brak, Syria;<sup>117</sup> Kara Hassan, Syria;<sup>118</sup> Tarsus, Asia Minor;<sup>119</sup> Section A, Gözlü Kuli, Tarsus;<sup>120</sup> Soli, Asia Minor;<sup>121</sup> and Ras Shamra (Ugarit), Syria.<sup>122</sup> These parallel examples, having a common general shape and only minor differences in proportions and workmanship, suggest that the production of this type of spearhead was concentrated in Anatolia as well as in the Eastern Mediterranean.

Similar examples from neighboring areas are from Georgia, Caucasia;<sup>123</sup> northwest Persia;<sup>124</sup> and Tureng Tepe, near Asterabad.<sup>125</sup> They are also in The University Museum of the University of Pennsylvania.<sup>126</sup>

Spearheads comparable to Subtype II B, showing similar proportions of the blade, shaft, and tang, were found at Kara Hasan, Syria;<sup>127</sup> Luristan;<sup>128</sup> Ras Shamra, Syria;<sup>129</sup> and Turan Tepe, near Asterabad;<sup>130</sup> also in the Museum für Vor-und Frühgeschichte, Berlin.<sup>131</sup> A spearhead similar in shape but made of copper was found at Treasure Hill of Hissar, Hoard I of Hissar III C.<sup>132</sup>

### *TYPE III: LONG SPEARHEADS (752–762)*

Type III includes fairly long bronze spearheads, which, except for some minor differences of size and detail, are all closely similar. These spearheads are made in one piece of cast bronze that is now covered by a thick coat of rust mixed with soil particles. The elongated, tapering triangular blade has a projected midrib which may be rather broad with a triangular or rectangular section, and in some examples there is a sharp, angular center line. The shoulders of the blade may slant down toward sharp corners with reinforced ridges at the brim or extend horizontally with no reinforcement, curving slightly at the corners. The edges of the blade usually have some concavity of both sides, probably caused by frequent sharpening.

#### *SUBTYPE A: LONG SPEARHEADS WITH MORE-ROUNDED CORNERS (752–760)*

The Type III A spearheads are characterized by a long, square-sectioned tang that tapers toward a sharply bent end. This may be plain on some examples, but others have a slight button end. Traces of textile remain on the tang on some of these examples (752, 758, 760). This suggests that the tang was originally set into a long, probably wooden handle.

#### **752 Bronze Spearhead**

504 M Pl. 122

64.0 cm long, Tomb 27 (Trench XVII D).

#### **753 Bronze Spearhead**

235 M not illustrated

78 cm long, Tomb 25 (Trench XVI F).

#### **754 Bronze Spearhead**

234 M not illustrated

69.0 cm long, Tomb 25 (Trench XVI F).

#### **755 Bronze Spearhead**

694 M Pl. 122

55.0 cm long, Tomb 16 (Trench XIII F).

#### **756 Bronze Spearhead**

744 M Pl. 122

57.5 cm long, Tomb 13 (Trench XII G).

#### **757 Bronze Spearhead**

158 M not illustrated

76.0 cm long, Tomb 27 (Trench XVII D).

#### **758 Bronze Spearhead**

664 M Pl. 122<sup>133</sup>

47.0 cm long, Tomb 5 (Trench VIII D).

#### **759 Bronze Spearhead**

663 M not illustrated

Broken, the total length of two parts about 69.7 cm, Tomb 5 (Trench VIII D).

#### **760 Bronze Spearhead**

171 M Color Plate XXXII C<sup>134</sup>

50.0 cm long, Tomb 24 (Trench XV E).

#### COMMENTS

In addition to the bronze examples discussed above, one of the iron spearheads (822) has a similar shape.

#### *SUBTYPE B: LONG SPEARHEADS WITH A SHORTER TANG (761–762)*

The spearheads in this subtype differ from those in Type III A primarily in terms of their length. They tend to have a shorter tang, which gives them a shorter overall length. The two examples in this subtype are closely similar, suggesting the possibility of a closely related time range for Tombs 5 and 1 in which they were found.

#### **761 Bronze Spearhead**

668 M Pl. 122

45.3 cm long, Tomb 5 (Trench VIII D).

#### **762 Bronze Spearhead**

755 M not illustrated

53.5 cm long, Tomb 1 (Trench III D<sup>+</sup>).

#### COMMENTS

Spearheads closely similar to Type III A with very long tangs, commonly found at Marlik, are rare in other excavation sites of the immediate neighboring

regions of northern and northwestern Iran and at more distant sites. This particular type may have been a special product of Marlik.

Spearheads similar to Type III B are an unprovenanced example;<sup>135</sup> and one from Ghalekuti I, Dailaman.<sup>136</sup> An example in copper with a similar general shape, a blade that is convex on the upper part, concave in the middle, and convex again near the point, was found at Tepe Hissar III C.<sup>137</sup>

#### *TYPE IV: SPEARHEADS WITH OVATE BLADES (763–771)*

Several examples of this type of spearhead are discussed below; they are similar in general shape but show some variation in the proportions of the parts and in their total length. These spearheads are made from cast bronze in one piece, and most are covered with a heavy coat of rust often mixed with soil particles. Sometimes pieces of textile wrapping remain on the tang. The blade is ovate, with round shoulders and varying degrees of curvature. Most examples have a broad low midrib tapering toward the point, while the tang is usually long and rectangular-sectioned, tapering toward the sharply bent end, forming a strong fastening to its probably wooden handle.

##### *SUBTYPE A: SPEARHEADS WITH OVATE BLADES WITH ROUNDED SHOULDERS (763–766)*

The examples in this subtype are characterized by an ovate blade with round shoulders, a broad low midrib, and a rectangular-sectioned bronze tang that tapers toward the sharply bent end. Traces of textile or cord wrapping were found on the tangs of certain examples (763, 766).

##### **763 Bronze Spearhead**

54 M not illustrated

Four examples, average dimensions about 37.0 cm long, Tomb 26 (Trench XVII B).<sup>138</sup>

##### **764 Bronze Spearhead**

170 M Pl. 123<sup>139</sup>

49.0 cm long, Tomb 24 (Trench XV E).

##### **765 Bronze Spearhead**

290 M Pl. 123<sup>140</sup>

39.0 cm long, Tomb 33 (Trench XVIII F).

##### **766 Bronze Spearhead**

332 M not illustrated<sup>141</sup>

36.0 cm long, Tomb 33 (Trench XVIII F).

##### *SUBTYPE B: SPEARHEADS WITH OVATE BLADES WITH SLANTING SHOULDERS (767–768)*

The two spearheads in this group are similar to those in the previous subtype except for the shoulder, which slants slightly on the baseline extending to curved corners. Both examples have traces of textile wrapping on their long tangs.

##### **767 Bronze Spearhead**

463 M Pl. 123

39.5 cm long, Tomb 29 (Trench XVI H).

##### **768 Bronze Spearhead**

698 M not illustrated

35.0 cm long, Tomb 15 (Trench XIII C).

##### *SUBTYPE C: SPEARHEADS WITH OVATE BLADES WITH STRAIGHT TANGS (769–771)*

The examples in this subtype are all closely similar to 763 except for having a straight tang. Note, however, that 771 has angular rather than rounded shoulders.

##### **769 Bronze Spearhead**

89 M not illustrated

48.0 cm long, Tomb 26 (Trench XVII B).

##### **770 Bronze Spearhead**

1488 M not illustrated

49.0 cm long, Tomb 24 (Trench XV E).

##### **771 Bronze Spearhead**

134 M Pl. 123, Color Plate XXXII C

62.5 cm long, Tomb 32 (Trench XVII E).

##### COMMENTS

Spearheads similar to Type IV were found at Megiddo, Palestine<sup>142</sup>; Tamadjan, Gilan<sup>143</sup>; and a Luristan Bronze.<sup>144</sup>

#### *TYPE V: HEAVY SPEARHEADS (772–785)*

Many heavy spearheads were found at Marlik, mostly intact and well preserved. They are cast in one piece and have a coat of rust now covering the surface. They have an ovate blade with rounded, gently curved shoulders and a rounded midrib near the tang that becomes a more pronounced central line toward the sharp point. The tang is a flat rectangular-sectioned bar tapering toward the sharply bent end, which is usually plain but sometimes button-ended. Traces of textile can be seen on some of the tangs.

**772 Bronze Spearhead**772 M Pl. 123<sup>145</sup>

55.0 cm long, Tomb 47 (Trench XXII E).

**773 Bronze Spearhead**

773 M not illustrated

55.0 cm long, Tomb 47 (Trench XXII E).

**774 Bronze Spearhead**774 M Pl. 123<sup>146</sup>

Damaged on one edge of the blade, 52.0 cm long, Tomb 47 (Trench XXII E).

**775 Bronze Spearhead**

776 M not illustrated

48.5 cm long, Tomb 47 (Trench XXII E).

**776 Bronze Spearhead**

777 M not illustrated

55.0 cm long, Tomb 47 (Trench XXII E).

**777 Bronze Spearhead**

778 M not illustrated

55.0 cm long, Tomb 47 (Trench XXII E).

**778 Bronze Spearhead**779 M Pl. 123<sup>147</sup>

47.5 cm long, Tomb 47 (Trench XXII E).

**779 Bronze Spearhead**

781 M not illustrated

52.5 cm long, Tomb 47 (Trench XXII E).

**780 Bronze Spearhead**

782 M Pl. 123

51.5 cm long, Tomb 47 (Trench XXII E).

**781 Bronze Spearhead**

783 M not illustrated

55.0 cm long, Tomb 47 (Trench XXII E).

**782 Bronze Spearhead**

823 M Pl. 123

40.0 cm long, Tomb 52 (Trench XXIII G). Traces of parallel blood channels can be seen on each side of the midrib.

**783 Bronze Spearhead**824 M not illustrated<sup>148</sup>

47.0 cm long, Tomb 52 (Trench XXIII G).

**784 Bronze Spearhead**

825 M Pl. 123

Broken at the end of the tang, 52.0 cm long, Tomb 52 (Trench XXIII G).

**785 Bronze Spearhead**

168 M not illustrated

40.0 cm long, Tomb 24 (Trench XV E).

examples, while Tomb 52 (Trench XXIII G) had three examples and Tomb 24 (Trench XV E) had only one example. The close similarity of these spearheads would suggest that they were made in the same workshop, and consequently that these three tombs may be closely related in time.

Similar bronze spearheads with an ovate blade, a rather broad projecting midrib, and bent-button tang were found at Tureng Tepe, near Asterabad;<sup>149</sup> an example is in the Tehran Archaeological Museum.<sup>150</sup>

*TYPE VI: SPEARHEADS WITH A LONG  
BLADE AND SHORT TANG (786–792)*

Type VI spearheads, which have relatively long blades with very short tangs, may have been used as spearheads or lances, or possibly even as daggers or swords because the handle is completely missing. Cast of bronze in one piece, they are covered with a rather thick coat of rust mixed with soil particles. The blades have a long tapering shape with curved shoulders and a gentle curve near the point. The midrib is usually rounded with a slightly pronounced central line on some examples. The tang is usually small and flat with a riveting hole near the base. Riveting nails may still be in situ, one on each side near the shoulder.

**786 Bronze Spearhead**

683 M Pl. 124

35.5 cm long, Tomb 12 (Trench XII E).

**787 Bronze Spearhead**

684 M Pl. 124

49.0 cm long, Tomb 12 (Trench XII E).

**788 Bronze Spearhead**

685 M not illustrated

29.0 cm long, Tomb 12 (Trench XII E).

**789 Bronze Spearhead**

699 M not illustrated

40.0 cm long, Tomb 15 (Trench XIII C).

**790 Bronze Spearhead**

693 M Pl. 124

54.0 cm long, Tomb 15 (Trench XIII C).

## COMMENTS

The fact that these five Type VIII examples were found in two tombs, Tomb 12 (Trench XII E) and Tomb 15 (Trench XIII C), suggests the possibility of a close relationship in time between these tombs.

**791 Bronze Spearhead**

1052 M not illustrated

40.0 cm long, Gheshlagh.

## COMMENTS

These Type V spearheads were found in three tombs of Marlik. Tomb 47 (Trench XXII E) had ten

**792 Bronze Spearhead**

1051 M Pl. 124

47.0 cm long, Gheshlagh.

## COMMENTS

Comparable spearheads with a riveting hole on the shoulder and a short, small tang were found in Building II, Temple of Byblos, Lebanon;<sup>151</sup> Kizil Wank, Caucasia;<sup>152</sup> Veri, Russian Talish;<sup>153</sup> Tchila-Khane, Persian Talish;<sup>154</sup> Hovil, Russian Talish;<sup>155</sup> and the Caucasian region.<sup>156</sup> Comparable examples with the addition of blood channels on the blade were found at Beshtasheni, Caucasia;<sup>157</sup> and Esery, Caucasia.<sup>158</sup>

Similar bronze spearheads with holes and some riveting nails were found at Ghalekuti I and II, Dailaman;<sup>159</sup> and Tepe Giyan Level I.<sup>160</sup> Bronze spearheads or daggers with a short small tang and a riveting hole were found in Sialk Cemetery B.<sup>161</sup>

*TYPE VII: SPEARHEADS WITH LARGE  
BLADES (793–800)*

The Type VII spearheads are all very closely similar in shape and workmanship. They are cast in one piece of bronze, with a rather thick coat of rust now on the surface. The blade is rather large and broad, in a tapering triangular shape, often with a convex crescent-shaped shoulder baseline and angular corners. The edges taper sharply near the point. A well-pronounced midrib has slight concavities on each side. The rectangular-sectioned tang is small and narrow, tapering to a very small sharp or rounded point.

*SUBTYPE A: SPEARHEADS WITH LARGE  
TAPERING TRIANGULAR BLADES (793–799)*

The Type VII A spearheads follow the type description, differing from those in Subtype B in not having riveting nails on the shoulder.

**793 Bronze Spearhead**

1053 M Pl. 124

43.0 cm long, Tomb 47 (Trench XXII E).

**794 Bronze Spearhead**

1054 M not illustrated

38.5 cm long, Tomb 47 (Trench XXII E).

**795 Bronze Spearhead**

1055 M not illustrated

44.0 cm long, Tomb 47 (Trench XXII E).

**796 Bronze Spearhead**

1056 M Pl. 124

40.0 cm long, Tomb 47 (Trench XXII E).

**797 Bronze Spearhead**

1057 M not illustrated

Partly deformed and bent at the tang, 41.5 cm long, Tomb 47 (Trench XXII E).

**798 Bronze Spearhead**

1058 M not illustrated

41.0 cm long, Tomb 47 (Trench XXII E).

**799 Bronze Spearhead**

1059 M not illustrated

43.0 cm long, Tomb 47 (Trench XXII E).

## COMMENTS:

These Type VII spearheads from Tomb 47 (Trench XXII E) had all been laid under the body of the deceased in a rather arranged and organized manner, obviously as part of the funeral ceremony.

*SUBTYPE B: SPEARHEADS WITH LARGE  
TAPERING TRIANGULAR BLADES WITH  
RIVETING NAILS ON THE SHOULDERS (800)*

Only one example of this subtype was found, very similar in general shape to Subtype A except for a smaller tang and the addition of riveting nails on the sides of the shoulder by which it could be fastened to a shaft handle, probably of wood.

**800 Bronze Spearhead**

713 M Pl. 124

40.0 cm long, Tomb 3 (Trench VI A).

## COMMENTS

Examples comparable to Subtype A were found at Tchila Khane, Persian Talish;<sup>162</sup> Beshtasheni, Tombs 20–21, Caucasia;<sup>163</sup> and Esery, Caucasia.<sup>164</sup> Spearheads in a similar shape with riveting holes near the end of the tang were found at Khurvin<sup>165</sup>; and Tepe Giyan, Level I, Luristan.<sup>166</sup> Three similar dirks or daggers, unprovenanced, were possibly from Luristan.<sup>167</sup>

Examples with riveting nails or holes on the shoulder of the blade comparable to Subtype B were found at Chir-Chir, Persian Talish;<sup>168</sup> Mistan, Russian Talish<sup>169</sup>; Beshtasheni, Caucasia;<sup>170</sup> and Kourgane XV, Trialeti, Caucasia.<sup>171</sup> A similar spearhead with parallel projecting lines on the midrib, a small tang, and no riveting nails or holes except on the end of the tang was found at Ghalekuti I, Dailaman.<sup>172</sup>

*TYPE VIII: SPEARHEADS WITH WELL-  
PROJECTING MIDRIBS AND LONG  
FOLDED SOCKETS (801-814)*

These rather large heavy spearheads are cast of bronze in one piece, the surface now covered with

rust often mixed with soil particles. They have ovate, elongated triangular, or leaf-shaped blades with well-projecting midribs continuing to the long folded socket, the distinguishing characteristic of Type VIII.

**SUBTYPE A: SPEARHEADS WITH OVATE BLADES (801–802)**

Two examples of Subtype A, both closely similar and found in the same tomb, are discussed below. Made of cast bronze, they are covered by a heavy coat of rust mixed with soil particles. These spearheads have ovate blades with curved shoulders, a well-projecting rectangular-sectioned midrib tapering toward the point, and a very long folded socket.

**801 Bronze Spearhead**

340 M Pl. 124

46.5 cm long, Tomb 44 (Trench XXI N).

**802 Bronze Spearhead**

346 M not illustrated

51.8 cm long, Tomb 44 (Trench XXI N).

**SUBTYPE B: SPEARHEADS WITH TRIANGULAR BLADES (803–811)**

Subtype B includes rather large heavy bronze spearheads, the metal covered with rust often mixed with soil particles. They have a triangular blade with a convex shoulder line and often angular, but sometimes round or gently curved, corners and a well-projecting midrib with a rectangular section near the shoulder continuing in elongated triangular form and tapering gradually to a narrow line near the sharp point. The edges may be slightly convex, straight, or concave, the last probably caused by frequent sharpening. The heavy long socket is folded for most of its length. Riveting holes can be seen near the base on some examples.

**803 Bronze Spearhead**

714 M Pl. 125

45.0 cm long, Tomb 3 (Trench VI A).

**804 Bronze Spearhead**

741 M not illustrated

60.0 cm long, Tomb 1 (Trench III D<sup>+</sup>).

**805 Bronze Spearhead**

746 M Pl. 125

63.0 cm long, Tomb 1 (Trench III D<sup>+</sup>).

**806 Bronze Spearhead**

747 M not illustrated

65.0 cm long, Tomb 1 (Trench III D<sup>+</sup>).

**807 Bronze Spearhead**

748 M not illustrated

54.5 cm long, Tomb 1 (Trench III D<sup>+</sup>).

**808 Bronze Spearhead**

749 M not illustrated

55.0 cm long, Tomb 1 (Trench III D<sup>+</sup>).

**809 Bronze Spearhead**

754 M not illustrated

43.0 cm, Tomb 1 (Trench III D<sup>+</sup>).

**810 Bronze Spearhead**

665 M not illustrated

53.5 cm long, Tomb 5 (Trench VIII D).

**811 Bronze Spearhead**

669 M Pl. 125

59.0 cm long, Tomb 5 (Trench VIII D).

**COMMENTS**

The close similarity of these nine bronze spearheads found in Tombs 1, 3, and 5 suggests that they were made in the same workshop, possibly by the same craftsman. There was likely, therefore, a close relationship in time between these three tombs.

**SUBTYPE C: LEAF-SHAPED BLADES (812–814)**

Spearheads of Subtype C have a leaf-shaped blade and a short hollow socket.

**812 Bronze Spearhead**

1489 M Fig. 33

Broken, the remaining part about 35.0 cm long, Tomb 44 (Trench XXI N).

**813 Bronze Spearhead**

1545 M not illustrated

32.0 cm long, Tomb 27 (Trench XVII D).

**814 Bronze Spearhead**

467 M Pl. 125

Damaged on the shoulders and on one edge, 46.0 cm long, Tomb 29 (Trench XVI H).

**COMMENTS**

Spearheads comparable to Type VIII A, with an ovate blade, were found at Chagar Bazar, Syria;<sup>173</sup> Alishar Hüyük II, Asia Minor;<sup>174</sup> Esery, Caucasia;<sup>175</sup> Beshtasheni, Caucasia;<sup>176</sup> Tamadjan, Gilan;<sup>177</sup> Khurvin;<sup>178</sup> and Sialk Cemetery B.<sup>179</sup>

Other examples similar in general shape and workmanship with only minor differences, particularly in the proportions of the blade and socket, were found in Caucasia;<sup>180</sup> Tach-Korpu, Persian Talish;<sup>181</sup> Chir-Chir, Persian Talish;<sup>182</sup> Hassan Zamini,

Persian Talish;<sup>183</sup> Djonu, Russian Talish;<sup>184</sup> Beshtasheni, Caucasia<sup>185</sup>; Samtavro<sup>186</sup>; Luristan;<sup>187</sup> and in the Ashmolean Museum.<sup>188</sup> A closely similar spearhead also appears on a relief of Ashurbanipal (669–633 B.C.) Palace, Room C, probably representing a later usage of this type of spearhead.<sup>189</sup>

Examples comparable to Type VIII B, with a tapering triangular blade, were found at Chagar Bazar, Syria;<sup>190</sup> Djonu, Russian Talish;<sup>191</sup> Beshtasheni, Tomb 600, Caucasia<sup>192</sup>; Ghalekuti II, Dailaman;<sup>193</sup> Sialk Cemetery B;<sup>194</sup> and are in the Ashmolean Museum.<sup>195</sup>

Spearheads similar to Type VIII C, with a leaf-shaped blade and short hollow socket, were found at Chagar Bazar, Syria;<sup>196</sup> Razgour, Russian Talish<sup>197</sup>; and Djonu, Russian Talish.<sup>198</sup> Other examples are in the Ashmolean Museum;<sup>199</sup> and one is a Luristan Bronze.<sup>200</sup> A similar spearhead with a short socket and decorative blood channels on the blade was found at Agha Evlar, Persian Talish.<sup>201</sup> Examples similar to 814 are in the Ashmolean Museum.<sup>202</sup>

#### *TYPE IX: SMALL SPEARHEADS (815–818)*

The spearheads of Type IX, although not identical in all details, are grouped together because of their short, small size.

##### **815 Bronze Spearhead**

325 M not illustrated

Small spearhead, about 22.5 cm long, found in Tomb 33 (Trench XVIII F). It has a tapering triangular blade with rounded shoulders and a wide midrib. The rectangular-sectioned tang has a bent end.

##### **816 Bronze Spearhead**

40 M Pl. 125

Small spearhead, very similar to 815, about 21.5 cm long, found in Tomb 26 (Trench XVII B) in association with another, smaller example. The composition and technology of this spearhead have been analyzed by Vatandoost-Haghighi.<sup>203</sup>

##### **817 Bronze Spearhead**

349 M Fig. 33

Small spearhead, about 25.0 cm long, found in Tomb 44 (Trench XXI N). It has an ovate blade with a rounded midrib and a rectangular-sectioned tang. Several other spearheads found together in the same tomb were given the same excavation number. All are similar, with some having a rather small circular-sectioned stem.

##### **818 Bronze Spearhead**

692 M Pl. 125

About 28.5 cm long, found in Tomb 15 (Trench XIII C). It has a willow leaf blade with a rounded

midrib and a small, rather flat rectangular-sectioned tang.

#### COMMENTS

A closely similar bronze spearhead with a willow leaf blade and small narrow tang was found at Khurvin.<sup>204</sup>

### IRON SPEARHEADS (819–823)

Several iron spearheads were found at Marlik, many of them heavily oxidized. Some of these examples are broken into pieces.

##### **819 Iron Spearhead**

696 M Pl. 125

About 19.0 cm long, found in Tomb 16 (Trench XIII F). It is covered by a heavy coat of rust. The tapering, elongated triangular blade has square shoulders and a rounded midrib. The tapering tang is broken.

##### **820 Iron Spearhead**

670 M Pl. 125

Broken, with the length of the two remaining pieces measuring about 43.0 cm, found in Tomb 5 (Trench VIII D). It is badly corroded.

##### **821 Iron Spearhead**

991 M Pl. 125

About 14.0 cm long, found in Tomb 41 (Trench XIX K). Heavily corroded, it has a leaf-shaped blade with a high rounded midrib and a folded socket.

##### **822 Iron Spearhead**

1487 M Pl. 125

Remaining pieces together measuring about 54.0 cm long, found in Tomb 18 (Trench XIV D). It is deteriorated and peeling from corrosion and broken into several pieces. It has a tapering elongated blade with midrib and pointed shoulders. Its tapering rounded-section tang is also broken into pieces and badly corroded. This spearhead is comparable in shape to the bronze spearheads of Type III, Subtype A.

##### **823 Iron Spearhead**

1520 M not illustrated

About 14.0 cm long, found in Tomb 41 (Trench XIX K). It is heavily corroded on the surface. The leaf-shaped blade has a high rounded midrib and a folded socket. This spearhead has been studied by R. F. Tylecote,<sup>205</sup> as was another spearhead.

#### COMMENTS

During the last quarter of the second millennium B.C. iron was used in making some blades to which bronze handles were often attached.<sup>206</sup> As iron gradually became more common, spearheads and





other objects of iron increased in quantity until, by the first millennium B.C., iron played an important role in many types of objects. Maxwell-Hyslop and Hodges discuss the origins of iron working in Luristan.<sup>207</sup>

Iron spearheads similar to 821 were found at Ghalekuti I<sup>208</sup>; and Chagoula-Derre, Persian Talish.<sup>209</sup>

## CONCLUSIONS

Bronze spearheads were apparently among the favorite weapons of the Marlik people, and a large number were found in the tombs. Nearly 119 of these spearheads were reasonably complete, with many broken pieces in addition. The spearheads fall into three main groups: large bronze spearheads in a variety of shapes, classified as Types II to VIII; rather small, short bronze spearheads, classified as Type IX; and iron spearheads (Table 15). Spearheads were found in only twenty of the fifty-three Marlik tombs, with, additionally, one example found near the surface in Grid XXV L, three examples found in Gheshlagh, which is about 1 km distant from Marlik on the opposite side of the Gohar Rud, and one example found in the tomb of Ali Karam Bagh,

located in an olive grove about 0.5 km southwest of Marlik.

The twenty tombs at Marlik that produced the major bulk of this collection did not hold equal numbers of spearheads. Tomb 47 held nineteen examples; Tomb 44 held fifteen examples; Tomb 26 and Tomb 1 each held nine examples; Tomb 5 held eight examples; Tomb 15 held six examples; and Tomb 3 and Tomb 24 each held five examples. Tombs with lesser numbers of spearheads include Tomb 12, Tomb 27, Tomb 33, and Tomb 52, each with three examples; Tomb 2, Tomb 13, Tomb 16, and Tomb 18, Tomb 25, Tomb 29, and Tomb 41, which each held two examples; and Tomb 32 and Tomb 50 each held one example.

Some of these tombs contained only one type of spearhead. Tomb 47 contained only Type VII, Subtype A, spearheads with tapering triangular blades. Type VIII, Subtype A, spearheads with ovate blades were found only in Tomb 44. Possibly these particular group types were made specially for the owner of the tomb by a particular workshop and were not again produced in an identical form. Other tombs contained several types of spearheads together, indicating a close time range for the types (Table 16).

## *Arrowheads (824–864)*

Many arrowheads were found at Marlik, with some tombs holding several hundred in a variety of shapes and sizes. From the large collection of more than one thousand arrowheads found at Marlik, a few examples of each type (only one or two from each tomb) are illustrated (Table 17). All these arrowheads, except for a few of bone and flint, are made of cast bronze, now covered by a coat of rust often mixed with soil particles.

Whenever possible, the descriptions of the arrowheads (see below) have been condensed. For a complete discussion, the reader is referred to Negahban 1992.

### *TYPE I: DECORATIVE ARROWHEADS OR ARROWS (824–825)*

Type I arrowheads are decorative and seem not to have been made for any functional use.

#### **824 Bronze Arrowhead** 56 M Pl. 126

Damaged on the edges of the tang, about 19.0 cm

long, found in Tomb 24 (Trench XV E). Made in cast bronze now covered by a coat of rust, it has an elongated triangular point with slanting shoulders and slightly concave sides. A high rounded midrib gradually narrows and submerges toward the point. The stem is a twisted spiral bar widening toward the tang, which is flat and wide with slanting shoulders, much larger than the point of the arrowhead. The flat oval-shaped tang has a well-rounded high midrib gradually becoming thinner toward the end, where it is completely submerged into the flat surface. The edges of the tang are badly damaged on both sides, with missing pieces.

Although this is shaped like an arrowhead, its functional use is questionable. It seems more likely to have been a decorative model of an arrow, representing not only the arrowhead but also the wooden stem and feathered shaft.

#### **825 Bronze Arrowhead** 1522 M Fig. 33

Broken, with the remaining part about 18.0 cm long, found in Tomb 15 (Trench XIII C). It is very similar to 824 except that the stem is more twisted.

Table 16. Comparative Chronology of Spearheads from Marlik

2500	2400	2300	2200	2100	2000	1900	1800	1700	1600	1500	1400	1300	1200	1100	1000	900	800	700	600	DATE B.C.	
																				731	
																				735	
																				A	II
																				B	
																				B	III/IV
																					V
																				A	VI
																				B	VII
																				A	
																				B	VIII
																				C	
																					IX
GUTI 1 <sup>ST</sup> A W A N										ANSHAN SUSA					NEO-ELAM M E D E					Persians	ELAM
GUTI UR III PROTO-IMPERIAL AKKAD					ISIN-LARSA			II ISIN K A S S I T E M I T A N N I					M E D I A N A R T NEO-ASS.					Persians	MESOPO- TAMIA		
LAGA SH					1 <sup>ST</sup> DYN. BABYLON			M I D - A S S Y R I A N										Persians			
EARLY BRONZE AGE T.II TROY III-IV					H I T T I T E S O L D E M P I R E K I N G D O M															Persians	ANATOLIA
EARLY BRONZE AGE					M I D D L E B R O N Z E A G E F O R E I G N R U L E T O L A T E B R O N Z E A G E I R O N A G E															Persians	EAST MEDITER. SYRIA- PALESTINE

## *TYPE II: ARROWHEADS WITH DOUBLE POINTS (826)*

Type II arrowheads are unique, made in cast bronze with a double point with stems and a tang, located one above the other and positioned at right angles to each other. Many arrowheads of similar shape, in various sizes, were found at Marlik, mainly in Tomb 26 (Trench XVII B). Some are decorated with traced geometric designs. One example is described here.

### **826 Bronze Arrowhead**

41a M Pl. 126

About 15.0 cm long, found in Tomb 26 (Trench XVII B) along with a number of other arrowheads grouped together under the same excavation number (see also 827, 828, 830, 835, 841, 854, and 859 below). It is made in one piece from cast bronze, now covered by a coat of rust. Its shape is rather unusual, having two points at right angles, one behind the other, each with a stem and tang. The end point is triangular with convex sides, a sharp point, downward-slanting shoulders, and a projected angular midrib near the stem that gradually tapers down to vanish near the point. It has a rather angular square-sectioned stem, decorated with a wide band of rectangular panels extending diagonally around the stem, and a short, thick tang immediately connected to the top of the second point, which is similar in shape but much smaller and set at right angles to the first point. This second point is also triangular with convex sides, sharp downward-slanting shoulders, and a highly projected angular midrib that gradually tapers near the point, which is submerged in the thick tang of the first arrowhead. The square-sectioned stem of the second point is decorated by a diagonal band of simple meanders. The tapering tang, which is round near the stem, gradually becomes square-sectioned and narrower toward the sharp pointed end.

This type of arrowhead is almost unique to Marlik and has not been found at other sites. It may be that having two arrowheads at a 90° angle to each other produces a sharp straight flight toward the target.

## *TYPE III: ELONGATED PYRAMIDAL ARROWHEADS (827)*

Type III arrowheads with an elongated tapering pyramidal shape are solidly made in various sizes. Only one example is discussed below.

### **827 Bronze Arrowhead**

41b M Pl. 126

About 7.5 cm long, found in Tomb 26 (Trench

XVII B). Made of cast bronze, it is covered now with a thick coat of rust mixed with soil particles. It has an elongated pyramidal shape with a square base, a shallow elongated triangular groove down each side, and a projecting short stem connected to a square-sectioned tang, which gradually becomes circular with a rounded end.

### COMMENTS

Similar pyramidal arrowheads were found at Bit-Sorkh Spring, near Kermanshah<sup>210</sup>; and some are in the Ashmolean Museum.<sup>211</sup> Similar pyramidal bronze arrowheads without stems are from Khurvin.<sup>212</sup> Pyramidal arrowheads with a tang or socket were found at Ghalekuti I, Area D, Dailaman;<sup>213</sup> and less elongated pyramidal arrowheads at Sialk Cemetery B.<sup>214</sup> This type of elongated pyramidal arrowhead was apparently produced in western and northern Iran during the latter part of the second millennium B.C., continuing into the early first millennium B.C., developing also into some socketed types.

## *TYPE IV: ARROWHEADS WITH JETLIKE WINGS (828–831)*

Bronze arrowheads with a winged or jetlike shape were found in various sizes. Three of these example (828–830) are described as having a stylized flying bird shape. The fourth (831) is similar to the others of this type but is much cruder in its workmanship. Only one example will be described in detail below.

### **828 Bronze Arrowhead**

41c M Pl. 126

About 8.0 cm long, found in Tomb 26 (Trench XVII B). It has a rather unusual shape, like a stylized flying bird such as a swallow. The point is wide, extending to stretched out backward rings that have rounded ends with curved sides. The projecting midrib thickens gradually toward the rounded point. The solid rectangular-sectioned tang tapers to a rounded end.

### **829 Bronze Arrowhead**

328a M Fig. 33

Broken on one wing, about 7.0 cm long, Tomb 24 (Trench XV E). One of a group of arrowheads found in Tomb 24 and given the same excavation number (see also 837, 844, 850, and 857, below).

### **830 Bronze Arrowhead**

41d M Pl. 126

9.0 cm long, Tomb 26 (Trench XVII B).

### **831 Bronze Arrowhead**

1524 M Fig. 33

6.5 cm long, Tomb 15 (Trench XIII C).



## COMMENTS

Winged arrowheads comparable to those of Type IV were found at Agha Evlar, Persian Talish;<sup>215</sup> Veri, Russian Talish<sup>216</sup>; Kalakent, Caucasia;<sup>217</sup> Sialk Cemetery A;<sup>218</sup> and an unprovenanced example from Caucasia.<sup>219</sup> Winged arrowheads, one with a twisted tang, comes from Beshtasheni, Caucasia.<sup>220</sup> A winged arrowhead or javelin head of similar shape, with outstretched curved wings, was found at Bit-Sorkh Spring, near Kermanshah.<sup>221</sup>

Most of the parallel examples seem to have a date in the middle of the second half of the second millennium B.C. Relying on existing knowledge, it seems that this type of arrowhead was little produced in the first millennium B.C. but was more common in the latter part of the second millennium B.C.

**TYPE V: TRIANGULAR ARROWHEADS  
WITH ROUNDED OR ANGULAR MIDRIBS  
(832–847)**

Triangular arrowheads with rounded or angular midribs, stems, and solid tangs make up Type V. Included in Subtypes A and B are smaller arrowheads, A with barbed and B with rounded shoulders. Much larger arrow or javelin heads are found in Subtypes C and D, C with barbed and D with rounded shoulders.

**SUBTYPE A: SMALL TRIANGULAR ARROWHEADS  
WITH BARBED SHOULDERS (832–834)**

The arrowheads in this subtype have a barbed deltoid shape with a rather rounded projecting midrib tapering toward the point, a cylindrical stem, and a rectangular-sectioned tang tapering to a sharp point.

**832 Bronze Arrowhead**

177 M Fig. 33

7.0 cm long, Tomb 44 (Trench XX N). Found in association with five other arrowheads, all grouped together under the same excavation number.

**833 Bronze Arrowhead**

237a M not illustrated

7.5 cm long, Tomb 25 (Trench XVI F). One of a group of nineteen arrowheads found in Tomb 25 and grouped together under the same excavation number (see also 849 below).

**834 Bronze Arrowhead**

112a M not illustrated

8.0 cm long, Tomb 50 (Trench XXII L). One of a group of arrowheads found in Tomb 50 and given the same excavation number (see also 839 below).

**SUBTYPE B: SMALL TRIANGULAR ARROWHEADS  
WITH ROUNDED SHOULDERS (835–839)**

The arrowheads in this subtype are triangular with rounded shoulders and a rounded projecting midrib, a cylindrical stem, and a rectangular-sectioned tang tapering to a rounded end.

**835 Bronze Arrowhead**

41e M not illustrated

7.0 cm long, Tomb 26 (Trench XVII B).

**836 Bronze Arrowhead**

636 M Pl. 126

8.5 cm long, Tomb 6 (Trench X A<sup>+</sup>).

**837 Bronze Arrowhead**

328b M not illustrated

7.0 cm long, Tomb 24 (Trench XV E).

**838 Bronze Arrowhead**

1181a M not illustrated

6.5 cm long, Tomb 26 (Trench XVII B). One of eighty-one arrowheads found in Tomb 26 and given the same excavation number (see also 843 and 847 below).

**839 Bronze Arrowhead**

112b M Fig. 33

7.0 cm long, Tomb 50 (Trench XXII L).

**SUBTYPE C: LARGER TRIANGULAR  
ARROWHEADS WITH BARBED SHOULDERS  
(840–844)**

The examples in this subtype have a triangular shape with barbed shoulders, convex sides, and a raised midrib with a sharp central line gradually disappearing near its point. The stems are lozenge-sectioned with a molded edge, and the tangs are also lozenge-sectioned, tapering toward a sharp end.

**840 Bronze Arrowhead**

769a M Pl. 126

9.5 cm long, Tomb 47 (Trench XXII E). One of a group of 103 arrowheads found in Tomb 47 and given the same excavation number (see also 853 below).

**841 Bronze Arrowhead**

41f M Pl. 126

18.0 cm long, Tomb 26 (Trench XVII B).

**842 Bronze Arrowhead**

951a M not illustrated

9.5 cm long, Tomb 52 (Trench XXIII G). One of a group of arrowheads found in Tomb 52 and given the same excavation number (see also 860 below).

**843 Bronze Arrowhead**

1181b M not illustrated

10.5 cm long, Tomb 26 (Trench XVII B).

**844 Bronze Arrowhead**

328cM not illustrated

10.0 cm long, Tomb 24 (Trench XV E).

## COMMENTS

841, which may be a javelin head, is much larger than the others and the metal is better preserved. 844 has a stem decorated by a chased band of two parallel straight lines forming two lozenges.

*SUBTYPE D: LARGER ARROWHEADS WITH LANCEOLATE HEADS AND ROUNDED SHOULDERS (845–847)*

These arrowheads have a lanceolate blade with rounded shoulders and a raised midrib with a sharp central line gradually disappearing near the point. The stem is lozenge-sectioned, and the tang rectangular-sectioned, tapering to a sharp end. Some of the larger examples may be javelin heads.

**845 Bronze Arrowhead**

328dM not illustrated

10.5 cm long, Tomb 24 (Trench XV E).

**846 Bronze Arrowhead**

326aM Fig. 33

11.0 cm long, Tomb 33 (Trench XVIII F). One of a group of 86 arrowheads found in Tomb 33 and grouped together under the same excavation number (see also 852 below). This arrowhead differs from the others in this subtype in having a wider rounded midrib and a circular-sectioned tang.

**847 Bronze Arrowhead**

1181cM Fig. 33

17.0 cm long, Tomb 26 (Trench XVII B).

## COMMENTS

Small triangular arrowheads with barbed shoulders, stem, and tang, similar to Subtype A, were found at Agha Evlar, Persian Talish;<sup>222</sup> Tak-Kilisi, Caucasia;<sup>223</sup> Central Plateau of Iran;<sup>224</sup> Chapel of the Inshushinak Temple A, Tchogha Zanbil;<sup>225</sup> and Bogazköy III, Anatolia.<sup>226</sup> This type of arrowhead seems to belong to the second half of the second millennium B.C.

Small triangular arrowheads with rounded shoulders, stem, and tang, comparable to Subtype B, were found at Khurvin;<sup>227</sup> Bit Sorkh Spring, near Kermanshah;<sup>228</sup> Tepe Giyan, Level I;<sup>229</sup> and War Kabud, Luristan.<sup>230</sup>

Arrowheads similar to Subtype C, with rather large triangular arrow or javelin heads with barbed shoulders, stem, and tang, were found at Khurvin;<sup>231</sup> and Bit Sorkh Spring, near Kermanshah.<sup>232</sup>

Arrow or javelin heads similar to Subtype D, which are rather large and have rounded shoulders, stem,

and tang, were found at Bogazköy, Level IV, Anatolia;<sup>233</sup> Sialk Cemetery B;<sup>234</sup> Central Persia and Luristan;<sup>235</sup> and the Treasure of Sakkiz, Ziwiye.<sup>236</sup> Another is in the National Museum of Copenhagen.<sup>237</sup>

*TYPE VI: TRILOBE ARROWHEADS (848)*

These simple arrowheads have a trilobe head with convex sides and slanting shoulders, partly convex at the base. Only one of the arrowheads has a stem. On the other two, the base extends to a simple tapering cylindrical tang.

**848 Bronze Arrowheads**

1523M Pl. 126

Three examples, the largest about 6.0 cm long, Tomb 7 (Trench IX B).

## COMMENTS

The trilobed arrowheads found at Marlik, which are not of the socketed type and have a tang made in one piece with the head, represent earlier examples of this type of trilobed arrowhead, which was later developed into the socketed type commonly produced in northern and western Persia and neighboring areas. Sulimirski has demonstrated that this socketed version did not appear before about 750 B.C. and, as he indicates, cannot be attributed exclusively to the Scythians.<sup>238</sup> It seems apparent that the Scythians were under the influence of the Marlik culture, which dominated this area during the late second and early first millennium B.C., and whose achievements continued into subsequent cultural periods.<sup>239</sup>

Socketed trilobed arrowheads were found at Persian Village I, Susa; Ziwiye; Hasanlu III B or later; Zendan, Karmir Blur; Toprake Kale<sup>240</sup>; Zendan Suleiman; Hasanlu; Ziwiye; the area outside the graves of Sialk Cemetery B; Susa (various contexts); Baba Jan in eastern Luristan; and Hamadan.<sup>241</sup> Moorey describes similar arrowheads from Amlash, which are possibly not all of the socketed type, as probably representing the earliest examples from Persia.

*TYPE VII: BARBED DELTOID ARROWHEADS (849–853)*

These few arrowheads are very simple, having a barbed deltoid head with convex sides and a raised rounded midrib. They have a rectangular-sectioned tang but no stem.

**849 Bronze Arrowhead**237*b* M Fig. 33

8.0 cm long, Tomb 25 (Trench XVI F).

**850 Bronze Arrowhead**328*e* M not illustrated

7.5 cm long, Tomb 24 (Trench XV E).

**851 Bronze Arrowhead**

181 M Fig. 33

10.0 cm long, Tomb 27 (Trench XVII D). Found in association with a number of other arrowheads (not illustrated), all grouped together under the same excavation number.

**852 Bronze Arrowhead**326*b* M Fig. 33

9.5 cm long, Tomb 33 (Trench XVIII F).

**853 Bronze Arrowhead**769*b* M not illustrated

Broken, with the sides damaged and part of tang missing, about 7.5 cm long, found in Tomb 47 (Trench XXII E). This arrowhead could possibly have had a stem, with the break occurring at the junction of the tang and stem.

## COMMENTS

Arrowheads similar to Type VII were found at Khurvin;<sup>242</sup> Tomb 74, Sialk Cemetery B;<sup>243</sup> Agha Evlar, Persian Talish;<sup>244</sup> Veri, Russian Talish;<sup>245</sup> Beshtasheni, Tomb 114, Caucasia;<sup>246</sup> Tsalka, Caucasia;<sup>247</sup> and Kizil Wank, Caucasia;<sup>248</sup> others are in the Ashmolean Museum.<sup>249</sup>

**TYPE VIII: SIMPLE OVATE ARROWHEADS**

(854–861)

Included here are very simple arrowheads of conventional shape. These are usually ovate with a rectangular-sectioned tang, but no stem. They vary somewhat in size, shape, and workmanship.

**854 Bronze Arrowhead**41*g* M Fig. 33

9.0 cm long, Tomb 26 (Trench XVII B).

**855 Bronze Arrowhead**

402 M Fig. 33

12.0 cm long, Tomb 36 (Trench XVIII C).

**856 Bronze Arrowhead**

1526 M Fig. 33

9.0 cm long, Tomb 12 (Trench XII E). This arrowhead has a more leaf-shaped head than the other examples in this subtype.

**857 Bronze Arrowhead**328*f* M Fig. 33

9.5 cm long, Tomb 24 (Trench XV E).

**858 Bronze Arrowhead**

1527 M not illustrated

8.0 cm long, Tomb 15 (Trench XIII C).

**859 Bronze Arrowhead**41*h* M not illustrated

7.0 cm long, Tomb 26 (Trench XVII B).

**860 Bronze Arrowhead**951*b* M not illustrated

3.5 cm long, Tomb 52 (Trench XXIII G). This piece has been analyzed by R. F. Tylecote, of the University of Newcastle-upon-Tyne.<sup>250</sup>

**861 Bronze Arrowhead**

1521 M not illustrated

4.0 cm long, Tomb 12 (Trench XII E).

## COMMENTS

Simple ovate arrowheads similar to Type VIII were found at Khurvin;<sup>251</sup> Sialk Cemetery A and B;<sup>252</sup> Talish;<sup>253</sup> Amlash;<sup>254</sup> Giyan Level II;<sup>255</sup> War Kabud, Luristan;<sup>256</sup> Tchogha Zanbil<sup>257</sup>; and Haft Tepe;<sup>258</sup> some are in the Ashmolean Museum.<sup>259</sup>

**TYPE IX: DOUBLE-WINGED ARROWHEAD**

(862)

The arrowheads in this type have an unusual shape, looking rather like two superimposed arrowheads. The end one has a deltoid, slightly barbed, shape that continues to the barbed shoulders of the second arrowhead, together forming a double-barbed deltoid arrowhead, with a high, rounded, rather broad midrib and a thick square-sectioned tang that gradually tapers to a rounded end.

The fairly unusual double-barbed deltoid arrowhead seems to be unique to Marlik. One example of this type is illustrated below.

**862 Bronze Arrowhead**

1525 M not illustrated

7.0 cm long, Tomb 2 (Trench VI B+).

**TYPE X: BONE ARROWHEADS (863)****863 Bone Arrowheads**

179 M Pl. 127

Seven arrowheads, the largest about 5.0 cm long, found in Tomb 27 (Trench XVII D). They are in a good state of preservation, and each has an elongated pyramidal shape with a very sharp point.

## COMMENTS

Similar bone arrowheads were found at Ghalekuti, Area C, Dailaman.<sup>260</sup>

*TYPE XI: STONE AND FLINT  
ARROWHEADS (864)*

Only a few stone and flint arrowheads were found at Marlik, and these not at the mound of Marlik itself but in a tomb in Ali Karam Bagh, an olive grove about 300 m southwest of Marlik. These stone and flint arrowheads were apparently made at a time when the bronze industry was in full development, and they were found in association with bronze daggers and spearheads described in earlier chapters.

**864 Flint Arrowheads**

1217 M Pl. 127

Of slightly different sizes averaging about 4.0 cm long, found in the tomb of Ali Karam Bagh. They are finely made from flint and have an ovate shape with dentated edges and an oval cavity on the base made

to house a possibly wooden shaft. Producing arrowheads of such perfect workmanship probably was a skilled specialty, and it seems to represent the last phase of this long tradition.

COMMENTS

Although bronze was in common use during the second half of the second millennium B.C., some stone arrowheads, maceheads, hammers, and possibly other stone weapons were still being produced. Traces of this still-active stone industry have been found in several excavations, particularly in the Caucasian region.

Similar flint arrowheads were found at Kizil Wank;<sup>261</sup> Trialeti, Kurgane XV, Caucasia;<sup>262</sup> and Kalakent, Caucasia.<sup>263</sup> Stone silex arrowheads, similar in material but not in shape, were found at East Kiririsha Temple, Tchogha Zanbil, Khuzistan;<sup>264</sup> and the Southwest Wall, Tchogha Zanbil.<sup>265</sup>

*Military Equipment (865–891)*

In addition to the weapons, various items of military equipment were found in the tombs of Marlik, including a small model of a bow, shields, helmets, quivers, and protective belts, all made of bronze.<sup>266</sup> Like the bronze weapons, they testify to the high state of development of the bronze industry in the highlands of northern Iran during the late second and early first millennium B.C. (Table 19).

*BRONZE BOW (865)*

**865 Bronze Model of Bow**

157 M Pl. 127

About 31.0 cm long, found in Tomb 27 (Trench XVII D). It is made of cast bronze, now covered by a coat of rust, and has a curved double-crescent in the shape of an eyebrow. Made of a circular-sectioned bronze bar, it is thickest in the middle of the crescent and tapering toward the ends; these are bent outward to hold the fastening of the bowstring in place.

Few examples of bows have been found at other sites, probably because they are normally made of wood, which disintegrated. The bow found at Marlik is a small model and probably did not have a practical use.

*BRONZE SHIELDS (866–867)*

Two cast bronze shields were found at Marlik, each with a large central boss surrounded by decorative bands. They probably originally formed the reinforced center of a larger leather shield. One of these bronze shields is a single large piece, and the other has additional appendages at the edge. Both are damaged and broken on some parts.

**866 Bronze Shield**

337 M Pl. 128

Damaged and broken, diameter 22.5 cm for the central piece, found in Tomb 44 (Trench XXI N). It is made of sheet bronze. A large central disk has four additional small circular extensions, all made in one piece. The large round disk has a prominent wide conoid boss circled by an impressed line and a wide projecting well-distinguished flange, which in turn is surrounded by a rather deep groove hemmed in by a wide flat brim. The flanged band is decorated by a file of embossed knobs. The wide brim has two parallel bands of single embossed small knobs around the edge, which is bordered by a traced zigzag band. The four small round connected disks, broken and damaged with one missing, not quite equally spaced around the larger disk, have a decoration similar to that of the main piece. A wide conoid



boss in the center is surrounded by a groove extending to a flanged wide band decorated by a single file of embossed knobs. The central disk as well as the appendages are pierced at the brim for attachment to the original background of the shield, which was probably leather. This whole bronze unit seems to have served as the central part of a large leather shield.

#### 867 Bronze Shield

647 M Pl. 128

About 37.0 cm in diameter, found in Tomb 5 (Trench VIII D). It is made from sheet bronze, now covered by a coat of rust. The larger circular shield has a highly projected central conoid boss with convex sides surrounded by three interspersed concentric molding rings, which in turn are hemmed in by a wide brim. The molding bands are each decorated on top by a single file of small embossed knobs, with a single file of larger embossed knobs filling the empty spaces between the bands. The wide brim has a single file of large embossed knobs with a vertical row of two smaller embossed knobs between two of the larger knobs. The shield has pierced holes through which it was attached to the center of a larger base, which was probably leather.

### QUIVERS (868–873)

Several bronze quivers were found at Marlik in a tapering, roughly triangular shape; they are for the most part broken and incomplete. One of these examples (869) is plain, but the others all have a simple decoration on the front part of the quiver. 868 is plain except for a single file of repoussé knobs near the upper edge. 870 and 871 are both decorated with parallel files of repoussé circular knobs with dotted lines between the files and may actually be two pieces of the same quiver. 872 has a vertical file of large embossed knobs extending down the center of the piece. 873 is the most highly decorated and will be discussed separately below.

Each of these examples has pierced holes near the top by which the quiver may have been attached to a strap or leather case. In one case (868), remains of the cover were found in association with the quiver itself.

Where possible, the following descriptions have been condensed. For a complete discussion of these objects, the reader is referred to Negahban 1992.

#### 868 Bronze Quiver and Remains of Quiver Cover

1026 M and 1530 M Pl. 128

Quiver (1026 M) in fragmentary state, the remaining part about 38.0 cm long, found in Tomb 52 (Trench XXIII G). Remains of very small pieces of the leather cover (1530 M) were found in association

with the quiver; they were attached to decorative four- and six-rayed shell and bone star-shaped buttons connected to very small bronze pins. In addition, fragments of textile with round knobs and bronze connecting pins were also found in Tomb 52.

#### 869 Bronze Quiver

1514 M Pl. 128

Broken and incomplete, its remaining part about 32.5 cm long, Tomb 27 (Trench XVII D).

#### 870 Bronze Quiver

1515 M Fig. 34

Broken, the remaining part about 34.0 cm long, Tomb 50 (Trench XXII L).

#### 871 Bronze Quiver

1516 M Fig. 34

37.0 cm long, Tomb 50 (Trench XXII L).

#### 872 Bronze Quiver

1517 M Fig. 34

Broken and incomplete, its remaining part about 35.0 cm long, found in Tomb 26 (Trench XVII B). The sides of this example are turned or flanged to provide space for holding arrows or other light weapons.

#### 873 Bronze Quiver

1518 M Fig. 34

Broken, with its remaining part about 39.0 cm long, found in Tomb 47 (Trench XXII E). It is made from sheet bronze, now partly damaged and covered with a coat of rust. It has a tapering, roughly triangular shape with flanged sides. This piece has more decoration than the other quivers of Marlik, with two rather large circular bosses encircled by dotted lines, one above the other, at the lower end and six similar bosses circled by dotted lines forming hanging triangles on the upper end. Above these bosses is a repoussé wavy band outlined by dotted lines, which extends from one side to the other, and at the top are three almost equally spaced short vertical repoussé bands, with the upper edge bordered by a fine dotted line. On either side near the top are pierced holes.

#### COMMENTS

The Marlik quivers, with their roughly triangular rather than rectangular shape and their simple geometric decoration of repoussé bosses, with projecting straight, wavy, and dotted lines, are apparently earlier than those with narrative and stylized panel decoration, a type belonging to the first quarter of the first millennium B.C. Only the quivers reported to be from Amlash and another found in War Kabud in Luristan are similar to the Marlik examples. Because most of the remaining quivers (except for the one from War Kabud) were not found during systematic excavation and documented evidence, even of their

places of discovery, is rare, the Marlik quivers may prove to be key prototypes for the quivers of the late second and early first millennium B.C. in northern Iran.

Examples comparable to the Marlik quivers were found at Amlash;<sup>267</sup> and War Kabud, Luristan.<sup>268</sup> One is also in the Bröckelschen Collection.<sup>269</sup> This example combines the earlier simplified embossed decoration seen on the Marlik quivers with more sophisticated designs such as winged gods.

Decorative quivers from Luristan with several panels, each with a traditional narrative or stylized design, are in the Bröckelschen Collection;<sup>270</sup> Tehran Archaeological Museum;<sup>271</sup> Foroughi Collection;<sup>272</sup> Graeffe Collection;<sup>273</sup> Metropolitan Museum of Art;<sup>274</sup> Jean Paul Barbier Collection;<sup>275</sup> Borowski Collection;<sup>276</sup> and Nasli M. Heermaneck Collection in the Los Angeles County Museum of Art.<sup>277</sup> Other bronze quivers with narrative panel decoration were found at Gilan-i-Gharb;<sup>278</sup> and Harsin, near Kermanshah;<sup>279</sup> and also in the Norbert Schimmel Collection.<sup>280</sup>

### *BRONZE BELTS (874–887)*

In the tombs apparently belonging to warriors at Marlik were a number of bronze belts made from strips of sheet bronze hammered into shape, with such simple decorations as bands of dotted lines, repoussé bosses, and files of projecting knobs. Most of these belts have a double-spiral fastening at each end with holes in the centers of the spirals. Some of the belts are broken, some into many pieces, and many incomplete fragments were found. Warriors wearing protective belts of this type appear on some of the decorative vessels of Marlik, such as Silver Beaker 19 and Silver and Gold Pot 21, and on Cylinder Seals 474 and 475.

Where possible, the following descriptions have been condensed. For a complete discussion of the bronze belts, the reader is referred to Negahban 1992.

#### *SUBTYPE A: SIMPLE BRONZE BELTS WITH DOUBLE-SPIRAL TERMINALS (874–881)*

The belts in this subtype are made from sheet bronze hammered into a curved shape with repoussé knobs decorating the edges and extending into the double-spiral terminals at each end. They could have been fastened by a leather, textile, or wired cord through a large hole in the center of the double spirals.

#### **874 Bronze Belt**

133 M Pl. 129

Broken and incomplete, the remaining part about 31.0 cm long, Tomb 32 (Trench XVII E).

#### **875 Bronze Belt**

200 M Pl. 129

Broken into many pieces, together measuring about 47 cm long, Tomb 26 (Trench XVII B). A margin of small repoussé dots in single file decorates the upper and lower edges.

#### **876 Bronze Belt**

1504 M Fig. 34

46.0 cm long, Tomb 26 (Trench XVII B). Decorated by a single file of simple geometric rosettes down the center and bordered by decorative bands of parallel vertical dotted lines.

#### **877 Bronze Belt**

1505 M not illustrated

48 cm long, Tomb 47 (Trench XXII E).

#### **878 Bronze Belt**

1506 M Fig. 34

Broken with small parts missing, 46.5 cm long, Tomb 47 (Trench XXII E).

#### **879 Bronze Belt**

1509 M not illustrated

Broken with one spiral missing, Tomb 52 (Trench XXIII G).

#### **880 Bronze Belt**

1510 M not illustrated

43.0 cm long, Tomb 52 (Trench XXIII G).

#### **881 Bronze Belt**

1508 M Fig. 34

46.0 cm long, Tomb 52 (Trench XXIII G). At the upper and lower edges are bands formed of short vertical lines of three small repoussé knobs in a row, with horizontal lines of four small knobs at the ends.

#### *SUBTYPE B: BRONZE BELTS WITH SUSPENSIONS (882–883)*

These bronze belts have connected suspensions, made in one piece with the belt itself. Although they are included with the bronze belts, it is also possible that they formed part of a set of horse trappings, as protective bands across the chest, back, or rump. They must have had either leather or textile linings, for pierced holes for attachment are spaced along the borders of the main belt piece.

#### **882 Bronze Belt**

1184 M Pl. 129

About 45.0 cm long, found in Tomb 26 (Trench

XVII B). It is made from a strip of sheet bronze, now covered by a coat of rust. Four equally spaced suspension parts are made in one piece with the main belt. Decorating the main strip are four large conical bosses, one above each suspension part, with vertical files of smaller repoussé knobs filling the empty space and a single file of fine repoussé knobs bordering the strip. Each suspension part consists of a wide connecting band ending in a large conical boss with a wide brim encircled down the center by a single file of medium-size repoussé knobs. The brim and connected band are bordered by a single file of smaller repoussé knobs. At each terminal is a turned-over flanged tang loop by which the belt could be fastened. The belt could be attached or sewn onto a leather or textile lining by pairs of pierced holes near the edge. The belt is damaged, and one suspension part and the tops of some conical bosses are broken and missing.

### 883 Bronze Belt

1507 M Pl. 129

Broken into several pieces, the remaining parts together measuring about 47.0 cm long, found in Tomb 44 (Trench XXI N). It is made of a strip of hammered sheet bronze with suspension parts. The assemblage shown may not be correct, particularly in the drawing, which has two fewer pieces and one more suspension part. The main strip is decorated by a file of larger and smaller shallow conical bosses with pointed tops, each surrounded by a projecting band that is decorated on top by a single file of smaller repoussé knobs. A single file of fine knobs also decorates the borders of this main strip. Bands decorated with knobs connect each suspension part; these have a rather large, shallow conical boss with a pointed top and a wide brim. One of these conical bosses has a projecting band near the base decorated by a single file of fine repoussé knobs, with the brims decorated by a single file of small knobs. Two pierced holes at each end of the belt provide for fastening, and a smaller pair of holes on the upper border probably connected the bronze strip to a leather or fabric lining.

### *SUBTYPE C: BROKEN PIECES OF BRONZE BELTS (884–887)*

#### 884 Bronze Belt

1511 M not illustrated

Broken piece, about 19.0 cm long, found in Tomb 25 (Trench XVI F). It consists of a wide strip of sheet bronze, decorated by a double file of small knobs near the upper and lower borders. At one end are long flanged tangs for fastening.

#### 885 Bronze Belt

1512 M not illustrated

Broken, incomplete part of a bronze belt, about 14.0 cm long, found in Tomb 5 (Trench VIII D). A wide strip of sheet bronze, now badly corroded, it is decorated by a single file of large bosses down the middle, with two single files of smaller repoussé knobs crossing the belt between the large knobs, and a single file of fine knobs bordering the belt. The terminals are missing, so the fastening device is unknown.

#### 886 Bronze Belt

1513 M not illustrated

Broken strip, about 12.0 cm long, found in Tomb 47 (Trench XXII E). It is made from sheet bronze, the metal now badly deteriorated, and is decorated by a single file of interspersed large bosses with a file of smaller repoussé knobs at the top and bottom edges.

#### 887 Bronze Belt

1519 M Fig. 34

Broken piece, badly damaged and deteriorated, about 13.09 cm long, found in Tomb 52 (Trench XXIII G). It is made from a strip of sheet bronze decorated down the middle by a single file of simple geometric rosettes formed of many small knobs. At the bottom edges are triple parallel files of small repoussé knobs.

### COMMENTS

Bronze belts similar to Subtype A, with double-spiral ends were found at Khurvin;<sup>281</sup> Luristan Bronze;<sup>282</sup> and are in Ashmolean Museum.<sup>283</sup>

Decorative rectangular sheet belts with geometric designs were found at Chagoula Derre, Persian Talish;<sup>284</sup> and Ghalekuti Tomb C-1, Dailaman;<sup>285</sup> an unprovenanced example similar to the Marlik and Dailaman examples is in the Bamford Collection.<sup>286</sup>

A plain rectangular sheet belt was found at Beshtashni-Safarharab, Tomb No. 11, Caucasia.<sup>287</sup> Rectangular bronze sheet belts with narrative scenes were found at Tomb 5, Maral Déséri, Caucasia;<sup>288</sup> and Akthala, Armenia;<sup>289</sup> an incomplete example is from Akthala, Armenia;<sup>290</sup> and an incomplete example with a dotted decoration of stylized geometric animals possibly came from Kazbek or Kuban, Caucasia.<sup>291</sup>

Decorative bronze belts with narrative scenes from the Luristan region in western Iran were from Kiklavand;<sup>292</sup> also, a Luristan Bronze example<sup>293</sup> and another Luristan Bronze example<sup>294</sup>

There are later bronze, gold, and silver belts with highly sophisticated designs, belonging mostly to the first half of the first millennium B.C.: a bronze rectangular strip belt with hunting scenes from Luristan;<sup>295</sup> a belt with narrative scenes in the David-Weill Col-

lection;<sup>296</sup> and a gold belt with narrative scenes reported to be from Luristan.<sup>297</sup> Highly decorated belt pieces in sheet gold with stylized designs are in the Tehran Archaeological Museum;<sup>298</sup> The University Museum of The University of Pennsylvania;<sup>299</sup> and a private collection in New York.<sup>300</sup> Decorative bronze belts attributed to the Urartian culture include a fragment found in Karmir Blur;<sup>301</sup> and a complete belt with repoussé hunting scenes in the Norbert Schimmel Collection.<sup>302</sup>

Protective bronze belts with suspension parts similar to Subtype B include two broken and incomplete pieces in the Ashmolean Museum.<sup>303</sup> These two examples are similar not only in shape but also in their decoration of bosses and repoussé knobs to the Marlik examples. Although Moorey originally classified them as objects of unknown function, it is now clear that they are either protective belts or parts of horse trappings (i.e., bands for the chest, back, or rump). The close similarity of the pieces in the Ashmolean to the two examples from Marlik, in the absence of similar examples from other excavations, suggests that the Ashmolean pieces probably came from Marlik. Apparently this type of protective bronze belt was produced only in the workshops of the Marlik people.

### *BRONZE PROTECTIVE WRISTBAND (888)*

A single bronze protective wristband was found at Marlik and it seems to be unique, for no similar item is reported from other excavations. Although only one actual wristband was found, several of the decorative vessels from Marlik show individuals who may be wearing such a wristband, including the warrior subjugating leopards on Silver Beaker 19, the man holding an animal carcass on Bronze Vessel 54, and a torso and hand on a fragment of Bronze Vessel 59. In each of these cases the band is shown simply by two straight lines at the wrist with no indication of the details and fastening of the actual wristband.

#### **888 Bronze Wristband**

93 M Fig. 34; Pl. 129

Damaged at one end, about 13.5 cm long, found in Tomb 26 (Trench XVII B). Made from a thick bronze sheet, now covered by a coat of rust, it is a lengthwise piece curved to allow free movement of the wrist, with two curving side parts to hold the band in place. Engraved lines, spreading slightly in the middle, curve around the wristband and divide it

into two main sections, each section engraved with almost parallel lines with the plain areas filled with dotted lines. A zigzag line bordered on the inner side by a plain line extends around the band and the lengthwise piece, which is decorated by a repoussé boss at one end near a damaged part that is broken off. At each end of the curving side sections are pierced holes by which the wristband could be fastened by leather thongs, cord, or wire.

### *BRONZE HELMETS (889–891)*

Two conical bronze helmets were found at Marlik, each plain and carrying the indentation of a heavy blow. In addition, one example resembling the cymbals discussed in Chapter XI, except for having a rather narrow brim, may have been used as a helmet. This example is described below (891).

#### **889 Bronze Helmet**

92 M Pl. 129

Broken with the lower part including the rim base missing, about 20.0 cm in diameter, Tomb 26 (Trench XVII B).

#### **890 Bronze Helmet**

145 M Fig. 34; Pl. 129

Broken with the upper part mostly missing, about 20.0 cm in diameter, Tomb 26 (Trench XVII B).

#### **891 Bronze Helmet (?)**

826 M Pl. 129

About 24.0 cm in total diameter, found in Tomb 52 (Trench XXIII G). It is made of sheet bronze, now heavily rusted, and may have served as either a helmet or a cymbal (see discussion in Chapter 11). It has a hemispherical boss surrounded by a narrow brim with traces of textile on the surface.

#### COMMENTS

Conical helmets with more elaborate decoration were found at Luristan<sup>304</sup>; and at Luristan and Kermanshah.<sup>305</sup> Conical bronze helmets with very fine decoration belonging to the Urartian King Argistis I were found at Karmir Blur<sup>306</sup>; and a second example is from Karmir Blur<sup>307</sup>; one is also in the Armenian Historical Museum of Erevan.<sup>308</sup> Conical helmets of Marlik type include unprovenanced examples.<sup>309</sup> A hemispherical helmet is in the Ashmolean Museum.<sup>310</sup> A hemispherical bronze helmet with gold and silver foil over bitumen was found in the Sefid Rud area of Gilan.<sup>311</sup>

### Conclusions

Several categories of weapons found in the tombs of Marlik have been described in the preceding pages with comments and comparisons at the end of each type, subtype, and section. These detailed comments will not be repeated here, but some more general remarks can be made.

Weapons form the largest group of objects found in the tombs of Marlik, including such items as maceheads, daggers, swords, spearheads, and arrowheads, along with items of military equipment. The value assigned to weapons at Marlik can be seen in the prominence they were given in the burial ceremony, during which they were placed around and alongside the body when it was put in the tomb.

These weapons are overwhelmingly made of bronze, with a few examples of iron, bone, stone, and flint. The number and variety of bronze weapons, along with the analysis of their composition and technology, point to the excellence of the bronze workshops of Marlik, and the existence of a limited number of stone, flint, and iron weapons supports the dating of the Marlik tombs to a period that began when stone had been almost completely replaced by bronze and ended when iron first appeared on the horizon. This coordinates well with the dating of the Royal Cemetery of Marlik from a careful study of all the objects in the tombs and their relation to comparable material of the ancient world, which yields a date in the late second to early first millennium B.C.

The greatest bulk of material comparable to the Marlik weapons comes from the neighboring areas in the highlands of the Elburz Mountains, which are comparable in time to Marlik and can be considered

to reflect the extensions of the Marlik culture. A second group of comparable objects comes from the southern part of the Caspian Zone including Iranian and Russian Talish, East Azerbaijan, and Caucasia. The close similarity in quality and quantity of the weapons from Marlik and from these regions of the southern part of the Caspian Zone suggests a fairly cohesive culture that covered the whole area of the southern and western part of the Caspian Basin during the late second and early first millennium B.C. (Table 19). Apparently, from the comparable examples of later date, this bronze industry lasted much longer in these more distant regions, after the Marlik people had moved on or disappeared from their homeland.

The third group of comparable examples comes from the Zagros Mountains and are usually described as Luristan Bronzes. The Luristan Bronzes have been studied by Vanden Berghe (1971) who performed systematic excavations in the Luristan area. It is the second group of his classification, which he dates to the second half of the second millennium B.C., that is most comparable to the Marlik bronze weapons. Although these Marlik and Luristan bronze weapons seem closely related, there are regional differences. Because a long background exists for the bronze industry in Luristan, which is lacking at Marlik, the possibility is raised that Marlik received much of its technology from Luristan. At Marlik, with the presence of both metal ore and abundant fuel in the forested mountainous area, this bronze industry took hold and flourished, spreading from Marlik to a wider area of the Caspian Basin.

Table 19. Comparative Chronology of Military Equipment from Marlik

2500	2400	2300	2200	2100	2000	1900	1800	1700	1600	1500	1400	1300	1200	1100	1000	900	800	700	600	DATE B.C.
																			Helmets	
																			Cymbals	
																			Quivers	
																			Belt A	
																			Persians	
GUTI 1 <sup>ST</sup> A W A N                      E B A R T I                      A N S H A N                      S U S A                      M E D E                      N E O - E L A M																			ELAM	
GUTI UR III ISIN-LARSA                      I I ISIN                      M E D I A N A R T P R O T O - I M P E R I A L                      K A S S I T E A K K A D                      M I T A N N I                      N E O - A S S .																			Persians	
L A G A S H                      1 S T D Y N . B A B Y L O N                      M I D - A S S Y R I A N																			MESOPOTAMIA	
H I T T I T E S E A R L Y B R O N Z E A G E                      O L D E M P I R E T . I I                      T R O Y I I I - I V                      K I N G D O M																			Persians	
E A R L Y B R O N Z E A G E                      F O R E I G N R U L E M I D D L E B R O N Z E A G E                      I O L A T E B R O N Z E A G E I R O N A G E																			Persians	
																			EAST MEDITER. SYRIA- PALESTINE	

Table 20. Weapons

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
638	macehead (stylized head)	80 M	25118	26	XVII B	bronze
639	macehead (projecting heads)	164 M	25119	45	XXII H	bronze
640	macehead (reclining rams)	78 M	14652	26	XVII B	bronze
641	macehead (mt. goat heads)	76 M	14649	26	XVII B	bronze
642	macehead (w/ spikes)	77 M	14661	26	XVII B	bronze
643	macehead (w/knobs)	120 M	14659	24	XV E	bronze
644	macehead (w/ knobs)	109 M	14650	44	XX N	bronze
645	macehead (w/ knobs)	771 M	14648	47	XXII E	bronze
646	macehead (w/ knobs)	770 M	14660	47	XXII E	bronze
647	macehead (corncob pattern)	953 M	25428	52	XXIII G	bronze
648	macehead (corncob pattern)	954 M	25429	52	XXIII G	bronze
649	macehead (corncob pattern)	955 M	25430	52	XXIII G	bronze
650	macehead (corncob pattern)	956 M	25431	52	XXIII G	bronze
651	macehead (truncheon shaped)	33 M	25201	26	XVII B	bronze
652	macehead (w/decorative moldings)	79 M	25028	26	XVII B	bronze
653	macehead (globular)	75 M	14657	26	XVII B	bronze
654	macehead (globular)	113 M		50	XXII L	bronze
655	macehead (globular)	114 M	55	50	XXII L	bronze
656	macehead	34 M	25317	26	XVII B	bronze
657	macehead or sledgehammer	82 M	14662	26	XVII B	bronze
658	macehead or sledgehammer	83 M	14646	26	XVII B	bronze
659	halberd	45 M	25268	26	XVII B	bronze
660	macehead	81 M	25316	26	XVII B	limestone
661	macehead	119 M	14653	27	XVII D	limestone
662	macehead	143 M	25287	44	XX N	marble
663	macehead	108 M	14656	44	XX N	limestone
664	macehead	115 M	14651	50	XXII L	limestone
665	macehead	196 M	14654	16	XIII F	hematite
667	dagger (with gold band)	165 M	14815	45	XXII H	bronze, marble
668	dagger-axe (incomplete)	91 M	25366	26	XVII B	bronze
669	sword (broken)	740 M	25313	1	III D+	bronze
670	sword (broken)	1503 M	31	26	XVII B	bronze
671	sword	751 M	64	1	III D+	bronze
672	sword (incomplete)	228 M	72	25	XVI F	bronze, iron
673	sword hilt (with iron blade?)	1490 M	31	7	IX B	bronze
674	handle (to a knife?)	289 M	25031	33	XVIII F	gold, bronze
675	dagger (incomplete)	1492 M	31	47	XXII E	bronze
676	dagger (incomplete)	1493 M	31	47	XXII E	bronze
677	dagger	53a M	46	26	XVII B	bronze
678	dagger (broken)	88 M	25197	26	XVII B	bronze
679	dagger (4/ broken)	39 M	41	26	XVII B	bronze
680	dagger (3/incomplete)	46 M	42	26	XVII B	bronze
681	dagger (8/incomplete)	146 M	39	26	XVII B	bronze
682	dagger	331 M	19	33	XVIII F	bronze
683	dagger	775 M	25221	47	XXII E	bronze
684	dagger (incomplete)	1494 M	31	47	XXII E	bronze
685	dagger (2/incomplete)	1495 M	31	47	XXII E	bronze
686	dagger (incomplete)	1496 M	31	52	XXIII G	bronze
687	dagger (incomplete)	1497 M	31	52	XXIII G	bronze
688	dagger (incomplete)	53b M	46	26	XVII B	bronze
689	dagger	141 M	40	27	XVII D	bronze
690	dagger (damaged)	780 M	25220	47	XXII E	bronze
691	dagger (incomplete)	1060 M	25386	47	XXII E	bronze
692	dagger hilt (incomplete)	1498 M	31	33	XVIII F	bronze
693	dagger	466 M	25231	29	XVI H	bronze

Table 20 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
694	dagger (broken)	58a M	70	26	XVII B	bronze
695	dagger (broken)	58b M	70	26	XVII B	bronze
696	dagger	324 M	25311	33	XVIII F	bronze
697	dagger	160 M	25363	27	XVII D	bronze
698	dagger	161 M	40	27	XVII D	bronze
699	dagger	464 M	14582	29	XVI H	bronze
700	dagger	695 M	25232	16	XIII F	bronze
701	dagger hilt	1499 M	31	16	XIII F	bronze
702	dagger	232 M	25304	45	XXI H	bronze
703	dagger	233 M	25306	25	XVI F	bronze
704	dagger	511 M	19	25	XVI F	bronze
705	dagger	513 M	19	18	XIV D	bronze
706	dagger	514 M	19	18	XIV D	bronze
707	dagger (broken)	727 M	14612	13	XII G	bronze
708	dagger	724 M	38	30	XVI L	bronze
709	sword	86 M	25302	26	XVII B	bronze
710	sword (incomplete)	330 M	19	33	XVIII F	bronze
711	sword (incomplete)	742 M	64	1	III D+	bronze
712	dagger	342 M	25219	44	XXI N	bronze
713	dagger	343 M	14645	44	XXI N	bronze
714	dagger	736 M	25217	2	VI B+	bronze
715	dagger (damaged)	743 M	33	13	XII G	bronze
716	dagger	719 M	14635	3	VI A	bronze
717	dagger	726 M	14618	13	XII G	bronze
718	dagger (incomplete)	1501 M	31	3	VI A	bronze
719	dagger	738 M	25207	1	III D+	bronze
720	dagger (damaged)	750 M	33	1	III D+	bronze
721	dagger (damaged)	752 M	33	1	III D+	bronze
722	dagger hilt	1528 M	31	2	VI B+	bronze
723	dagger hilt	1491 M	31	2	VI B+	bronze
724	dagger	739 M	25208	1	III D+	bronze
725	dagger (incomplete)	1502 M	31	2	VI B+	bronze
726	dagger (incomplete)	1500 M	31	5	VIII D	bronze
727	blade (dagger?)	188 M				iron
728	blade (sword?)	333 M	19	33	XVIII F	bronze
729	spearhead (incomplete)	1482 M	31	2	VI B+	bronze
730	spearhead	90 M	25324	26	XVII B	bronze
731	spearhead (broken)	1484 M	31	47	XXII E	bronze
732	spearhead (broken)	1485 M	31	47	XXII E	bronze
733	spearhead	169 M	25378	24	XV E	bronze
734	spearhead	1481 M	31	26	XVII B	bronze
735	spearhead (incomplete)	1160 M	79	AKB		bronze
736	spearhead	341 M	14630	44	XXI N	bronze
737	spearhead	339 M	25311	44	XXI N	bronze
738	spearhead (incomplete)	1486 M	31	GH. II		bronze
739	spearhead	666 M	14663	5	VIII D	bronze
740	spearhead	667 M	14625	5	VIII D	bronze
741	spearhead	111 M	25350	50	XXII K	bronze
742	spearhead	745 M	14624	13	XII G	bronze
744	spearhead	757 M	14641	1	III D+	bronze
745	spearhead	716 M	25215	3	VI A	bronze
746	spearhead (incomplete)	717 M	34	3	VI A	bronze
747	spearhead	718 M	14634	3	VI A	bronze
748	spearhead	737 M	14616	2	VI B+	bronze
749	spearhead	697 M	14628	15	XIII C	bronze

Table 20 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
750	spearhead	512 M	19	18	XIV D	bronze
751	spearhead	701 M	14632	15	XIII C	bronze
752	spearhead	504 M	27		XVII D	bronze
753	spearhead (broken)	235 M	16	25	XVI F	bronze
754	spearhead (incomplete)	234 M	16	25	XVI F	bronze
755	spearhead	694 M	25232	16	XIII F	bronze
756	spearhead	744 M	14621	13	XII G	bronze
757	spearhead	158 M	25369	27	XVII D	bronze
758	spearhead	664 M	25408	5	VIII D	bronze
759	spearhead	663 M	34	5	VIII D	bronze
760	spearhead	171 M	25358	24	XV E	bronze
761	spearhead	668 M	25196	5	VIII D	bronze
762	spearhead	755 M	25308	1	III D+	bronze
763	spearhead (4)	54 M	25402	26	XVII B	bronze
764	spearhead	170 M	25372	24	XV E	bronze
765	spearhead	290 M	25272	33	XVIII F	bronze
766	spearhead	332 M	25409	33	XVIII F	bronze
767	spearhead	463 M	14584	29	XVI H	bronze
768	spearhead	698 M	25301	15	XIII C	bronze
769	spearhead	89 M	35	26	XVII B	bronze
770	spearhead	1488 M	31	24	XV E	bronze
771	spearhead	134 M	25353	32	XVII E	bronze
772	spearhead	772 M	14644	47	XXII E	bronze
773	spearhead	773 M	25206	47	XXII E	bronze
774	spearhead	774 M	25300	47	XXII E	bronze
775	spearhead	776 M	25205	47	XXII E	bronze
776	spearhead	777 M	14631	47	XXII E	bronze
777	spearhead	778 M	14640	47	XXII E	bronze
778	spearhead	779 M	25299	47	XXII E	bronze
779	spearhead	781 M	14642	47	XXII E	bronze
780	spearhead	782 M	14636	47	XXII E	bronze
781	spearhead	783 M	25425	47	XXII E	bronze
782	spearhead	823 M	25426	52	XXIII G	bronze
783	spearhead	824 M	25414	52	XXIII G	bronze
784	spearhead	825 M	25424	52	XXIII G	bronze
785	spearhead	168 M	47	24	XV E	bronze
786	spearhead	683 M	25312	12	XII E	bronze
787	spearhead	684 M	25322	12	XII E	bronze
788	spearhead	685 M	62	12	XII E	bronze
789	spearhead	699 M	25327	15	XIII C	bronze
790	spearhead	693 M	25323	15	XIII C	bronze
791	spearhead	1052 M	25384	GH		bronze
792	spearhead	1051 M	25383	GH		bronze
793	spearhead	1053 M	25382	47	XXII E	bronze
794	spearhead	1054 M	25382	47	XXII E	bronze
795	spearhead	1055 M	25382	47	XXII E	bronze
796	spearhead	1056 M	25382	47	XXII	bronze
797	spearhead	1057 M	25382	47	XXII E	bronze
798	spearhead	1058 M	25382	47	XXII E	bronze
799	spearhead	1059 M	25382	47	XXII E	bronze
800	spearhead	713 M	25356	3	VI A	bronze
801	spearhead	340 M	14643	44	XXI N	bronze
802	spearhead	346 M	14637	44	XXI N	bronze
803	spearhead	714 M	25307	3	VI A	bronze
804	spearhead	741 M	14639	1	III D+	bronze



Table 20 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
805	spearhead	746 M	25229	1	III D+	bronze
806	spearhead	747 M	14637	1	III D+	bronze
807	spearhead	748 M	25228	1	III D+	bronze
808	spearhead	749 M	25230	1	III D+	bronze
809	spearhead	754 M	14611	1	III D+	bronze
810	spearhead	665 M	25227	5	VIII D	bronze
811	spearhead	669 M	14631	5	VIII D	bronze
812	spearhead (incomplete)	1489 M	31	44	XXI N	bronze
813	spearhead	1545 M	31	27	XVII D	bronze
814	spearhead	467 M	14583	29	XVI H	bronze
815	spearhead (small)	325 M	19	33	XVIII F	bronze
816	spearhead (2/small)	40 M	25370	26	XVII B	bronze
817	spearhead (small/10)	349 M	20	44	XXI N	bronze
818	spearhead (small)	692 M	62	15	XIII C	bronze
819	spearhead (incomplete)	696 M	25396	16	XIII F	iron
820	spearhead (broken)	670 M	69	5	VIII D	iron
821	spearhead	991 M	3130	41	XIX K	iron
822	spearhead (broken)	1487 M	31	18	XIV D	iron
823	spearhead (steel)	1520 M	31	41	XIX K	iron
824	arrowhead (decorative/damaged)	56 M	55	24	XV E	bronze
825	arrowhead (decorative/incomplete)	1522 M	31	15	XIII C	bronze
826	arrowhead (double point)	41a M	44	26	XVII B	bronze
827	arrowhead (pyramidal)	41b M	44	26	XVII B	bronze
828	arrowhead (winged)	41c M	44	26	XVII B	bronze
829	arrowhead (winged)	328a M	20	24	XV E	bronze
830	arrowhead (winged)	41d M	44	26	XVII B	bronze
831	arrowhead (winged)	1524 M	31	15	XIII C	bronze
832	arrowhead (triangular/6)	177 M	54	44	XX N	bronze
833	arrowhead (20/triangular)	237a M	18	25	XVI F	bronze
834	arrowhead (triangular)	112a M	50		XXII L	bronze
835	arrowhead (triangular)	41e M	44	26	XVII B	bronze
836	arrowhead (triangular)	636 M	14986	6	X A+	bronze
837	arrowhead (triangular)	328b M	20	24	XV E	bronze
838	arrowhead (triangular)	1181a M	25436	26	XVII B	bronze
839	arrowhead (triangular)	112b M	49	50	XXII L	bronze
840	arrowhead (triangular)	769a M	25335	47	XXII E	bronze
841	arrowhead (triangular)	41f M	44	26	XVII B	bronze
842	arrowhead (triangular)	951a M	25337	52	XXIII G	bronze
843	arrowhead (triangular)	1181b M	25436	26	XVII B	bronze
844	arrowhead (triangular)	328c M	20	24	XV E	bronze
845	arrowhead (triangular)	328d M	20	24	XV E	bronze
846	arrowhead (triangular)	326a M	25162	33	XVIII F	bronze
847	arrowhead (triangular)	1181c M	25436	26	XVII B	bronze
848	arrowhead (trilobal/3)	1523 M	31	7	IX B	bronze
849	arrowhead (barbed deltoid)	237b M	18	25	XVI F	bronze
850	arrowhead (barbed deltoid)	328e M	20	24	XV E	bronze
851	arrowhead (barbed deltoid/1 bag)	181 M	45	27	XVII D	bronze
852	arrowhead (barbed deltoid)	326b M	25162	33	XVIII F	bronze
853	arrowhead (barbed deltoid)	769b M	25335	47	XXII E	bronze
854	arrowhead (simple ovate)	41g M	44	26	XVII B	bronze
855	arrowhead (simple ovate)	402 M	20	36	XVIII C	bronze
856	arrowhead (simple ovate)	1526 M	31	12	XII E	bronze
857	arrowhead (simple ovate)	328f M	20	24	XV E	bronze
858	arrowhead (simple ovate)	1527 M	31	15	XIII C	bronze
859	arrowhead (simple ovate)	41h	44	26	XVII B	bronze

Table 20 continued

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	Material
860	arrowhead (simple ovate)	951b M	25357	52	XXIII G	bronze
861	arrowhead (simple ovate)	1521 M	31	12	XII E	bronze
862	arrowhead (double winged)	1525 M	31	2	VI B+	bronze
863	arrowhead (7)	179 M	14953	27	XVII D	bone
864	arrowhead (19)	1217 M	25472	AKB		flint
865	bow (model)	157 M	25375	27	XVII D	bronze
866	shield	337 M	14604	44	XXI N	bronze
867	shield	647 M	14655	5	VIII D	bronze
868	decorative attachments	1530a M		52	XXIII G	shell, bone
	quiver (incomplete)	1026 M	25422	52	XXIII G	bronze
	connecting pins	1530b M	31	52	XXIII G	bronze
869	quiver (incomplete)	1514 M	31	27	XVII D	bronze
870	quiver (incomplete)	1515 M	31	50	XXII L	bronze
871	quiver (incomplete)	1516 M	31	50	XXII L	bronze
872	quiver (incomplete)	1517 M	31	26	XVII B	bronze
873	quiver (incomplete)	1518 M	31	47	XXII E	bronze
874	belt (simple/incomplete)	133 M	25007	32	XVII E	bronze
875	belt (simple/incomplete)	200 M	2	26	XVII B	bronze
876	belt (simple/broken)	1504 M	31	26	XVII B	bronze
877	belt (simple/broken)	1505 M	31	47	XXII E	bronze
878	belt (simple/broken)	1506 M	31	47	XXII E	bronze
879	belt (simple/incomplete)	1509 M	31	52	XXIII G	bronze
880	belt (simple/incomplete)	1510 M	31	52	XXIII G	bronze
881	belt (simple/incomplete)	1508 M	31	52	XXIII G	bronze
882	belt w/suspensions (broken)	1184 M	25440	26	XVII B	bronze
883	belt w/suspensions (broken)	1507 M	31	44	XXI N	bronze
884	belt (broken)	1511 M	31	25	XVI F	bronze
885	belt (broken)	1512 M	31	5	VIII D	bronze
886	belt (broken)	1513 M	31	47	XXII E	bronze
887	belt (broken)	1519 M	31	52	XXIII G	bronze
888	wristband (broken)	93 M	25198	26	XVII B	bronze
889	helmet (incomplete)	92 M	25200	26	XVII B	bronze
890	helmet (incomplete)	145 M	25199	26	XVII B	bronze
891	helmet (or cymbal/2)	826 M	25477	52	XXIII G	bronze

## Chapter X Notes

1. This example (659) is cataloged as a bronze macehead or halberd in Negahban 1992.
2. This macehead has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:90.27; Sn:8.50; Pb:0.13; As:0.50; Sb:0.067; Ni:0.041; Co:0.051; Fe:0.087; Bi:0.03; Zn:n.d.; Ag:0.012; Au:n.d. He says: "The mace-head is a one-piece hollow casting with the composition of average tin bronzes, 7–8% tin which makes it quite hard appropriate to its use" (p. 114).
3. Calmeyer 1964: Pl. 6, Nos. 12–13, pp. 11–12; Calmeyer 1969: pp. 55–57, 187. See also Wetzel (1957: Pl. 42 i, p. 38) regarding a similar macehead in green stone with an inscription of Ulamburiash, a member of the Kassite royal family who may have remained in the Zagros Mountains.
4. Moorey 1971: Pl. 9, No. 90, p. 90. This example is comparable to a diorite or serpentine example with an inscription of Ulamburiash, to another serpentine macehead that is possibly Kassite, and to maceheads from Luristan, Tchogha Zanbil, and Marlik.
5. David-Weill Collection 1972: Fig. 122.
6. Ghirshman 1966: Pl. LVIII, No. 8 b, p. 128.
7. Herzfeld 1941: Fig. 241 [right], Pl. XXVI [top register, middle], p. 124.
8. Moorey 1974a: Fig. 14, p. 47.
9. Terrace 1965: Fig. 2, pp. 6–7.
10. See Negahban 1977c: Figs. 112, 114, 139, Pls. V, VII.
11. Herzfeld 1941: Fig. 241 [left], p. 124.
12. Moorey 1966: Fig. 30, p. 14; Moorey 1971: Pl. 10, No. 92; Pl. 38, No. 190 a, pp. 148–150, 165.
13. Pope 1938: Vol. 4, p. 23 c.
14. This macehead is now in the Foroughi Collection in Tehran.
15. Schaeffer 1948b: Fig. 279, No. 22, §214, pp. 502–503.
16. David-Weill Collection 1972: Fig. 118.
17. Nagel 1963: Pl. LXXII, Nos. 6, 7–8, 10.
18. Nagel 1963: p. 41.
19. De Mequenem 1943: p. 92, Fig. 75, Nos. 1, 3.
20. Potratz 1955: Fig. 7, p. 219.
21. Potratz 1955: Fig. 7, p. 219. This macehead is now in the Hamburg Museum.
22. Nagel 1963: Pl. LXXIII, No. 5.
23. Calmeyer 1969: Fig. 22 a-c, pp. 23–25.
24. Legrain 1934: Pl. XV, No. 48, p. 17; Pope 1938: Vol. 4, p. 43A.
25. Nagel 1963: Pl. LXXIII, No. 4; De Mequenem 1943: Fig. 75, No. 4, p. 92.
26. Hancar 1935: Fig. 9 a, pp. 49, 64–65. This macehead is attributed to the Gandsa-Karabagh culture.
27. Hancar 1935: Fig. 9 c, pp. 49, 64–65. This macehead is also assigned to the Gandsa-Karabagh cultural period.
28. Calmeyer 1964: Pl. 45, No. 96, pp. 37, 40.
29. Ghirshman 1939: Pl. XXVI, No. 10, pp. 95–97.
30. Calmeyer 1969: Fig. 111, p. 108; chart at end of book.
31. This macehead has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:84.72; Sn:13.50; Pb:0.76; As:0.70; Sb:0.16; Ni:<0.01; Co:n.d.; Fe:0.068; Bi:<0.01; Zn:n.d.; Ag:0.07; Au:n.d. He says: "This is an unusual or possibly unique object found in Marlik. The proportion of tin as high as 13.50% makes it very hard and suitable for use as a hammer. The alloy of copper and 14% tin if annealed and work hardened will have a hardness of 300 BHN, while if cast and work hardened it will be about 260 BHN (Allen, Britton and Coghlan, 1970, 248) which in either case is extremely hard. This shows the skill of the Marlik metalworker in controlling the amount of tin required for each object according to its use" (p. 109).
32. Although this has been tentatively identified as a halberd, it resembles an object with a similar blade and comb handle shaft, called a "shoonemeh," used in the area today. This object, which is often made of copper, is used by women in the region to comb sheep wool, separating the fibers to make yarn for knitting or weaving.
33. This halberd has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:90.00; Sn:6.92; Pb:0.023; As:2.64; Sb:0.24; Ni:0.021; Co:n.d.; Fe:0.047; Bi:0.026; Zn:n.d.; Ag:0.038; Au:n.d. He says: "This is another example of a copper-tin alloy with a considerable amount of arsenic (2.64%)" (p. 107).
34. Vanden Berghe 1964: Pl. XXXVI, No. 247, pp. 39–45, 66.
35. Vanden Berghe 1959: Pl. 118 b, pp. 91, 275.
36. Moorey 1971: Fig. 9, No. 25, Fig. 10, No. 26, p. 58. Two examples, one with five and the other with eight butt spikes. These are currently housed in the Ashmolean Museum.
37. David-Weill Collection 1972: Fig. 138. This example has an additional decoration of a lion figure at one end.
38. Calmeyer 1964: Pl. 19, No. 45, pp. 21–22.
39. Loudmer and Poulain 1976: Fig. 11. This example has a ram figure on the back.
40. Moorey 1966: Fig. 24, p. 12.
41. Goldman 1938: Fig. 12, pp. 35, 54.
42. Unger 1927: p. 139; Fig. 98, p. 81. This macehead, housed in the Torphae Museum in Istanbul, is assigned to the Assyrian period.
43. Ghirshman 1966: Pl. LVII-LXI, pp. 127–130.
44. Herzfeld 1941: Pl. XXVI [bottom register, middle].
45. Unger 1927: p. 139; Fig. 98, p. 81.
46. Herzfeld 1941: Pl. XXVI [bottom register, right].
47. Ghirshman 1966: Pl. LVIII, No. 4, p. 127.
48. Moorey 1971: Pl. 9, No. 91, pp. 90–92. Although this macehead has a common shape in use since prehistoric times, Moorey compares it to similar examples found at Tchogha Zanbil in the area east of the Kiririsha Temple. Many of these examples bear inscriptions from the reign of Untashgal (ca. 1250 B.C.), suggesting that the Marlik example may date to the late second millennium B.C.
49. Negahban 1977c: Figs. 49, 50, 53, 114–115.
50. See Negahban 1992.
51. Oppenheim 1970: pp. 9–14. The possible source of lapis lazuli is discussed.
52. Bossert 1951: Fig. 800, p. 53.
53. Moorey 1971: Fig. 57, Pl. 7, No. 57, p. 78. This sword is housed in the Bamford Collection.
54. Schaeffer 1948b: Fig. 217, No. 2, §165, p. 406.
55. Dyson 1964b: Text Fig. 2, No. 8, pp. 35, 42.
56. Schaeffer 1948b: Fig. 232, Nos. 1, 3, 4, §186, p. 434.
57. Moorey 1971: Fig. 16, No. 63, pp. 80, 83.
58. Ghirshman 1939: Vol. 2, Pl. L, No. S.545 C, p. 228; Pl. LXXV, No. S.921, p. 244.
59. Schaeffer 1948b: Fig. 282, Nos. 1–3, 6, pp. 437–438.
60. Schaeffer 1948b: Fig. 217, Nos. 1, 3, p. 327.
61. Schaeffer 1948b: Fig. 232, Nos. 3–4, 12, p. 434.
62. Ghirshman 1939: Vol. 2, Pl. L, No. S.545 C, p. 228.
63. Moorey 1971: Figs. 15–16, Nos. 61–63, pp. 80, 83.
64. Maxwell-Hyslop 1962: Pls. XXXVII, No. 2, XXXVIII, Nos. 1–2, pp. 128–129, 131–132. One of the swords from Tsalka has an iron blade. The examples from Chagoula Derre have bronze hilts and iron blades, as do the examples from Sialk Cemetery B. The unprovenanced example discussed by Maxwell-Hyslop has a bronze hilt and traces of a steel blade in the guard.
65. A small remaining fragment of another dagger of this type from Marlik was studied by R. F. Tylecote of the University of Newcastle upon Tyne. He reports (personal communication, Nov. 22, 1968): "Dagger hilt. XVIII C. This consisted of the hilt end of a tanged iron or steel blade

- embedded in bronze. A section was cut from the broken end . . . and it was seen that the ferrous part was lozenge shaped. . . . The blade had been made out of a carbon steel, containing between 0.1 and 0.2% carbon. It has been forged in such a way that the few slag inclusions had been elongated in the direction of the section of the blade. . . . This indicates that the blade had been widened in the forging operation and no doubt lengthened at the same time. The structure and a very fine grain and consisted mainly of globular carbides in a matrix of ferrite. This indicates that the steel had had a long time in the medium temperature range 650–750° C, there is little doubt that a good deal of the final shaping had been done at this temperature. Hardnesses of 160, 206, and 240 HV5 were obtained across the section. The bronze hilt showed the typical structure of a cast tin bronze containing about 10–12% tin with about 5% or less of lead. There were signs of destannification due to corrosion. The casting had been slowly cooled and the hardness was 100, HV5."
66. Moorey 1971: Fig. 14, No. 55, pp. 77–78.
  67. Hodges 1962: pp. 132–133.
  68. Maxwell-Hyslop and Hodges 1964: pp. 50–53.
  69. This dagger has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:94.49; Sn:4.16; Pb:1.056; As:0.046; Sb:0.018; Ni:0.015; Cu:n.d.; Fe:0.15; Bi:n.d.; Zn:n.d.; Ag:0.059; Au:n.d. He says: "As a result of a metallurgical examination of a dirk of the same type in Sydney (Birmingham, Kennon, and Malin, 1964), its method of manufacture was described. . . . The blade and tang were first cast and forged to the desired hardness and then the hilt was cast onto the tang. This fabrication technique may be attributed to all dirks and swords in this class. Especially in the case of artifacts having a complex hilt, the process of lost wax casting is proposed for the forming of the hilt" (p. 134).
  70. The repair of the bronze weapons was carried out by Mr. Sameti, Technical Specialist of the Iran Bastan Museum.
  71. This sword has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:92.20; Sn:7.41; Pb:0.055; As:0.068; Sb:n.d.; Ni:0.019; Co:n.d.; Fe:0.17; Bi:n.d.; Zn:n.d.; Ag:0.042; Au:n.d. He says: "It is another example of the casting-on technique applied to this kind of weapon" (p. 136).
  72. Birmingham 1964: Fig. 1, Pl. X, No. 1, p. 49.
  73. Schaeffer 1948b: Fig. 217, No. 14, §165, pp. 406–407.
  74. Schaeffer 1948b: Fig. 227, No. 10, §178, pp. 422–423.
  75. Schaeffer 1948b: Fig. 233, No. 3, §186, p. 432.
  76. Calmeyer 1964: Pl. 22, No. 52, pp. 21–22, 26–27; Nagel 1963: Pl. V, No. 10, p. 40.
  77. Moorey 1971: Fig. 55, pp. 77–78.
  78. Parrot 1963: Pl. XVIII, pp. 245–247.
  79. Schaeffer 1948b: Fig. 236, No. 3, §179, p. 424.
  80. Maxwell-Hyslop 1962: Pl. XXXVII, No. 1, p. 126; Maxwell-Hyslop and Hodges 1964: Fig. 1, No. 9, p. 51. This example is assigned to northwest Persian daggers. It is now in the collection of the Institute of Archaeology of the University of London.
  81. Calmeyer 1964: Pl. 22, No. 51, p. 26.
  82. Moorey 1971: Fig. 14, No. 54, pp. 76–77.
  83. Calmeyer 1962: Pl. 8, pp. 217, 222–223. This is now in the Museum für Vor-und Frühgeschichte in Berlin.
  84. Maxwell-Hyslop and Hodges 1964: Fig. 1, p. 51.
  85. Calmeyer 1964: Pl. 22, No. 49, pp. 25–26.
  86. Moorey 1974a: Fig. 26, p. 57. This dagger is housed in the Adam Collection.
  87. Calmeyer 1962: Pl. 8, No. 2, pp. 218, 222–223.
  88. See Ghirshman 1964c: Fig. 129, p. 97.
  89. Vanden Berghe 1964: Pl. XXXIV, No. 226, pp. 39–45, 65.
  90. Maxwell-Hyslop and Hodges 1964: Pl. XII, No. 3, Fig. 1, No. 10, p. 52.
  91. Schaeffer 1948b: Fig. 217, No. 3, §§165, 168, pp. 407, 413. This dagger is characterized by the addition of parallel blood channels on each side of the blade midrib.
  92. Schaeffer 1948b: Pl. LX, Fig. 219, No. 1, §179, p. 415.
  93. Schaeffer 1948b: Pl. LVIII [second from right].
  94. Schaeffer 1948b: Fig. 227, No. 8, §178, pp. 422–423.
  95. Hutchinson 1934: Pl. XXII a, p. 168.
  96. Schaeffer 1948b: Fig. 231, No. 1, §185, pp. 429–430.
  97. Maxwell-Hyslop and Hodges 1964: Pl. XII, No. 3, and Fig. 1, No. 10, p. 52.
  98. Nagel 1963: Pl. V, No. 11, p. 40.
  99. Fukai and Ikeda 1971: Figs. 10, 18; Vanden Berghe 1959: Pl. 1, p. 5; Ghirshman 1964c: Fig. 129, pp. 97, 424.
  100. Samadi 1955–1956: p. 5. Two daggers of this type were found at Kalardasht, one made of bronze and the other of gold. They were found in the vicinity of the famous gold bowl of Kalardasht, which is dated by Porada (1964–65: Fig. 61, p. 94) to the twelfth to eleventh centuries B.C.
  101. Vanden Berghe 1964: Pl. XXXIV, No. 227, pp. 39–45, 65.
  102. Moorey 1971: Fig. 13, No. 49, pp. 72–73.
  103. Dyson 1964b: Pl. IX, No. 5, pp. 40–41.
  104. Porada 1962: Fig. 60 [middle], p. 86; Mellink 1966: Text Fig. I b, p. 74.
  105. Moorey 1974a: Fig. 29, pp. 20, 59.
  106. Schaeffer 1948b: Fig. 236, §188, p. 438.
  107. A. Godard 1938: Fig. 170 [right], pp. 248, 252.
  108. See Negahban 1992.
  109. An analysis by R. F. Tylecote of the fragment of an iron blade embedded in a bronze hilt is given in endnote 65.
  110. Schaeffer 1948b: Fig. 283, Nos. 1, 2, §214, pp. 504, 512–513.
  111. Schaeffer 1948b: Fig. 291, No. 1 §216, p. 513.
  112. Schaeffer 1948b: Fig. 299, No. 4, §215, p. 504 and footnote. The example from Kvemo-Sasireth may be a dagger with a broken hilt rather than a spearhead.
  113. Akademia Nauk SSSR 1960: Fig. 7, p. 55.
  114. Schaeffer 1948b: Pl. LIX [top right], Fig. 224 C, pp. 420–421.
  115. Moorey 1971: Fig. 18, No. 84, p. 88.
  116. Contenau 1935: Pl. 32, Tomb 112, p. 36.
  117. Schaeffer 1948b: Fig. 89, No. 23, §47, pp. 92–93.
  118. Schaeffer 1948b: Fig. 80 B, §46, p. 81.
  119. Schaeffer 1948b: Fig. 172, No. 2, §124, pp. 267–269, 274.
  120. H. Goldman 1938: Fig. 14, pp. 35, 54; Bossert 1942: Fig. 672, p. 63.
  121. Schaeffer 1948b: Fig. 174, Nos. 7–8, §127, pp. 276–277.
  122. Schaeffer 1948b: Fig. 55 [second from right], §25, p. 38.
  123. Schaeffer 1948b: Figs. 217, 293, p. 516.
  124. Moorey 1971: Fig. 18, No. 84, p. 88. This spearhead is currently in the Ashmolean Museum.
  125. Wulsin 1932: Pl. XX [second right], p. 12.
  126. Pope 1938: Vol. 4, p. 24 F.
  127. Schaeffer 1948b: Fig. 80 C, §46, p. 81.
  128. Vanden Berghe 1959: Pl. 117 b [first right], pp. 91, 275; Schaeffer 1948b: Fig. 264, No. 5; A. Godard 1938: Fig. 175 [right]). This spearhead is currently housed in the Tehran Archaeological Museum.
  129. Schaeffer 1948b: Fig. 55 [first right], §25, p. 38.
  130. Wulsin 1932: Pl. XX [second right], p. 12.
  131. Calmeyer 1962: Pl. 8, No. 1, pp. 219, 222–223.
  132. Schmidt 1931–1933: Pl. LI H3230, p. 173.
  133. This spearhead has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:93.74; Sn:5.86; Pb:0.14; As:n.d.; Sb:0.077; Ni:0.037; Co:n.d.; Fe:0.082; Bi:n.d.; Ag:0.061; Au:n.d. (p. 129).
  134. This spearhead was originally grouped with the Type III spearheads. It has been reassigned to Type II on the basis of its shape
  135. Schaeffer 1948b: Fig. 199, No. 1 A, §149, pp. 331–332; Pl. LI [middle].
  136. Fukai and Ikeda 1971: Pl. XXXI, No. 1, pp. 3, 25.

137. Schmidt 1931–33: Pl. L.H.2024, H.3582, p. 201.
138. This spearhead has been analyzed by Vatandoost-Haghighi (1977). His analysis is Cu:89.41; Sn:10.21; Pb:0.16; As:n.d.; Sb:0.042; Ni:0.013; Co:n.d.; Fe:0.049; Bi:0.02; Zn:0.015; Ag:0.081; Au:n.d. (p. 126).
139. This spearhead has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:87.66; Sn:11.68; Pb:0.31; As:n.d.; Sb:0.045; Ni:<0.01; Co:n.d.; Fe:0.076; Bi:0.018; Zn:0.041; Ag:0.21; Au:n.d. (p. 126).
140. Vatandoost-Haghighi (1977) has analyzed the composition of this spearhead: Cu:89.33; Sn:10.31; Pb:0.081; As:n.d.; Sb:0.028; Ni:n.d.; Co:n.d.; Fe:0.108; Bi:0.036; Zn:n.d.; Ag:0.13; Au:n.d. (p. 125).
141. Vatandoost-Haghighi (1977) has analyzed the composition of this spearhead: Cu:89.42; Sn:10.23; Pb:0.063; As:n.d.; Sb:0.058; Ni:n.d.; Co:n.d.; Fe:0.062; Bi:0.025; Zn:0.014; Ag:0.11; Au:n.d. (p. 125).
142. Schaeffer 1948b: Fig. 145 C, No. 172-12, §93, p. 173.
143. Samadi 1959a: Fig. 32.
144. A. Godard 1938: Fig. 175 [second left], p. 256. This spearhead is housed in the Tehran Archaeological Museum.
145. Vatandoost-Haghighi (1977) has analyzed 772, using two samples to test its homogeneity. It has the following composition: Cu:95.72; Sn:3.50; Pb:0.25; As:0.27; Sb:n.d.; Ni:0.038; Co:0.052; Fe:0.12; Bi:<0.01; Zn:n.d.; Ag:0.045; Au:n.d., and Cu:95.76; Sn:3.37; Pb:0.24; As:0.36; Sb:0.019; Ni:0.034; Co:0.05; Fe:0.11; Bi:<0.01; Zn:n.d.; Ag:0.044; Au:n.d. (p. 119).
146. This spearhead has been studied by Vatandoost-Haghighi (1977). His analysis, based on two samples to test homogeneity, is Cu:96.00; Sn:3.49; Pb:0.18; As:0.13; Sb:n.d.; Ni:0.015; Co:n.d.; Fe:0.11; Bi:<0.01; Zn:n.d.; Ag:0.13; Au:n.d. and Cu:95.93; Sn:3.46; Pb:0.16; As:0.24; Sb:n.d.; Ni:0.016; Co:n.d.; Fe:0.11; Bi:<0.01; Zn:n.d.; Ag:0.13; Au:n.d. (pp. 119, 121).
147. This spearhead has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:87.42; Sn:9.98; Pb:2.23; As:0.095; Sb:0.035; Ni:n.d.; Co:n.d.; Fe:0.045; Bi:0.019; Zn:0.01; Ag:0.108; Au:n.d. (p. 122).
148. This spearhead has been studied by Vatandoost-Haghighi (1977). His analysis is Cu:90.80; Sn:7.70; Pb:0.82; As:0.06; Sb:0.17; Ni:0.029; Co:n.d.; Fe:0.12; Bi:<0.01; Zn:0.027; Ag:0.29; Au:n.d. (p. 122).
149. Wulsin 1932: Pl. XX [right], p. 12.
150. Pope 1938: Vol. 4, p. 24 H.
151. Schaeffer 1948b: Fig. 61 T, §34, pp. 57–60.
152. Przeworski 1931: Fig. 5 b, d, pp. 41–42; Schaeffer 1948b: Tableau Synoptique VIII.
153. Schaeffer 1948b: Fig. 227, Nos. 4–5, §178, pp. 422–423. The examples found at Veri may be long swords rather than spearheads.
154. Schaeffer 1948b: Fig. 219, No. 3, pp. 415–417.
155. Schaeffer 1948b: Fig. 226, No. 3, §176, pp. 421–422.
156. Akademia Nauk SSSR 1960: Fig. 7, p. 55.
157. Schaeffer 1948b: Fig. 283, No. 1 [Tombs 20–21], p. 503.
158. Schaeffer 1948b: Fig. 294, No. 9, pp. 513–514.
159. Fukai and Ikeda 1971: Pl. XXVIII, No. 1; Pl. XXXIII, Nos. 1–3, pp. 3, 21, 27.
160. Contenau 1935: Pl. 12, Tomb 22, p. 21.
161. Ghirshman 1939: Vol. 2, Pl. XCII, Nos. 27–28, p. 248.
162. Schaeffer 1948b: Fig. 219, Nos. 2–3, §179, p. 415.
163. Schaeffer 1948b: Fig. 283, No. 1, §214, pp. 502–503.
164. Schaeffer 1948b: Fig. 294, No. 9, §216, pp. 513–514.
165. Vanden Berghe 1964: Pl. XXXIV, No. 228, pp. 39–45, 65.
166. Contenau 1935: Pl. 12, Tomb 22, No. 5; Pl. 13, Tomb 26, No. 8.
167. Moorey 1971: Fig. 12, Nos. 38–40, pp. 66–68. These examples are currently housed in the Ashmolean Museum.
168. Schaeffer 1948b: Fig. 224 E, §175, p. 420.
169. Schaeffer 1948b: Fig. 226, No. 1 [lower], §176, pp. 421–422.
170. Schaeffer 1948b: Fig. 283 [Tombs 20, 21], No. 3, §214, pp. 502–503, 513.
171. Schaeffer 1948b: Fig. 291, No. 12, §216, pp. 510–515.
172. Fukai and Ikeda 1971: Pl. XXXII, No. 4, pp. 3, 26.
173. Schaeffer 1948b: Fig. 83 T.154, No. 2, §48, pp. 84–86.
174. Schaeffer 1948b: Fig. 195, No. 11, §146, pp. 323–324.
175. Schaeffer 1948b: Fig. 294, No. 10, §216, pp. 513–514.
176. Schaeffer 1948b: Fig. 277, No. 1, Tomb 600, §214, 502–503.
177. Samadi 1959a: Fig. 43.
178. Vanden Berghe 1964: Pl. XXXV, No. 246, pp. 39–45, 66.
179. Ghirshman 1939: Vol. 2, Pl. LVII, S.829.
180. Akademia Nauk SSSR 1960: p. 56, No. 3.
181. Schaeffer 1948b: Fig. 228, §183, p. 429.
182. Schaeffer 1948b: Fig. 224 F, §175, pp. 420, 439.
183. Schaeffer 1948b: Pl. LVIII [first left].
184. Schaeffer 1948b: Fig. 233, Nos. 2, 4–6, 11, §§182, 185, pp. 428, 430–431.
185. Schaeffer 1948b: Fig. 278, Nos. 7–8, §214, p. 503.
186. Schaeffer 1948b: Fig. 296, No. 19, §215, p. 504.
187. A. Godard 1938: Fig. 175. These examples are currently housed in the Ashmolean Museum.
188. Moorey 1971: Fig. 18, Nos. 85–87, pp. 88, 90.
189. Barnett 1960: Pls. 58, 77, pp. 28–29.
190. Schaeffer 1948b: Fig. 83, T.143, No. 2, §48, pp. 84–86.
191. Schaeffer 1948b: Fig. 233, §186, p. 431.
192. Schaeffer 1948b: Fig. 277, No. 1, §214, p. 504.
193. Fukai and Ikeda 1971: Pl. XXVII, No. 5b, p. 13.
194. Ghirshman 1939: Vol. 2, Pl. XCII 25, p. 248.
195. Moorey 1971: Fig. 19, No. 89, p. 90. This spearhead is comparable to examples from Agha Evlar found in association with iron axes and horse bits.
196. Schaeffer 1948b: Fig. 83, T.154, No. 1, §48, pp. 84–86.
197. Schaeffer 1948b: Fig. 226, No. 2, §176, p. 422.
198. Schaeffer 1948b: Fig. 235, No. 44, §186, pp. 431–432.
199. Moorey 1971: Fig. 18, No. 85, pp. 88, 90.
200. Y. and A. Godard 1954: Fig. 176 [left], p. 256. This example is housed in the Tehran Archaeological Museum.
201. Schaeffer 1948b: Fig. 237, No. 15, §188, pp. 439–440.
202. Moorey 1971: Fig. 12, No. 41, p. 68; Fig. 18, No. 87, p. 88.
203. This spearhead was studied by Vatandoost-Haghighi (1977). His analysis is Cu:92.42; Sn:7.00; Pb:0.029; As:0.029; Sb:n.d.; Ni:n.d.; Co:n.d.; Fe:0.39; Bi:0.03; Zn:n.d.; Ag:0.12; Au:n.d. (p. 124).
204. Vanden Berghe 1964: Pl. XXXIV, No. 229, pp. 39–45, 65.
205. Tylecote 1968: Spearhead, XIX K. "A small piece was removed from the blade near the tip. . . This was a steel containing 0.1–0.2% carbon. It contained some slag stringers but was on the whole a good deal cleaner than the dagger blade. The grain size was very fine and again the carbide was spheroidised. The hardness was 182 HV5."
206. See endnote 65.
207. Maxwell-Hyslop and Hodges 1966: p. 175.
208. Fukai and Ikeda 1971: Pl. XXXI, No. 3, pp. 3, 25.
209. Schaeffer 1948b: Fig. 232, Nos. 15–16, 20, pp. 433–434, 437–438, 478.
210. Dyson 1964b: Text Fig. 1, No. S, pp. 42–43.
211. Moorey 1971: Fig. 17, Nos. 78–80, p. 86.
212. Vanden Berghe 1964: Pl. XXXV, Nos. 240, 242–243.
213. Fukai and Ikeda 1971: Pl. XLIX, Nos. 22–23, 25.
214. Ghirshman 1939: Vol. 2, Pl. XCII, pp. 7–10.
215. Schaeffer 1948b: Fig. 217, No. 10, §165, pp. 406–407.
216. Schaeffer 1948b: Fig. 227, No. 16, §178, pp. 422–423.
217. Hancar 1935: Fig. 3 d, pp. 49, 64–65. This arrowhead is classified to the Gandsor-Karabegh culture.
218. Akademia Nauk SSSR 1960: No. 6, p. 56.
219. Ghirshman 1939: Vol. 2, Pl. V, No. 2, p. 125.

220. Schaeffer 1948b: Fig. 273, Nos. 1–3; Fig. 283, No. 5 [Safarharab Tomb 4], §214, pp. 502–504.
221. Dyson 1964b: Text Fig. 1, No. 6, pp. 42–43.
222. Schaeffer 1948b: Fig. 217, No. 5, §165, pp. 406–407.
223. Schaeffer 1948b: Fig. 274, No. 11, §214, p. 502.
224. Nagel 1963: Pl. LI, No. 104, p. 502.
225. Ghirshman 1966: Pl. XLVIII, No. 3 f, p. 124.
226. Schaeffer 1948b: Fig. 183, No. 27, §140, pp. 306–308 [Level III].
227. Vanden Berghe 1964: Pl. XXXV, No. 237, pp. 39–45, 65.
228. Dyson 1964b: Text Fig. 1, Nos. 1–2, pp. 42–43.
229. Contenau 1935: Pl. 8, Tomb 3, No. 15 [left], p. 18.
230. Vanden Berghe 1968.
231. Vanden Berghe 1964: Pl. XXXV, No. 237, pp. 39–45, 65.
232. Dyson 1964b: Text Fig. 1, No. 3, pp. 42–43.
233. Schaeffer 1948b: Fig. 184, No. 3 [Level IV], pp. 306–308.
234. Nagel 1963: Pl. LI, No. 103, p. 46.
235. Moorey 1971: Fig. 17, Nos. 74–76, p. 86. These examples are housed in the Ashmolean Museum.
236. Ghirshman 1964: Vol. XXXVI, Pl. XXIV, No. 4 [left].
237. Buhl 1950: Fig. 61, Mus. No. 70.
238. Sulimirski 1954: p. 299.
239. Negahban 1983: p. 21.
240. Dyson 1965: pp. 207–208.
241. Moorey 1971: Fig. 17, Nos. 81–83, p. 87.
242. Vanden Berghe 1964: Pl. XXXV, Nos. 232–233, pp. 39–45, 65.
243. Ghirshman 1939: Vol. 2, Pl. LXXV S.923, Nos. 1–2, p. 244.
244. Schaeffer 1948b: Fig. 217, Nos. 6, 9, §165, pp. 406–407.
245. Schaeffer 1948b: Fig. 227, Nos. 17, 21, §178, pp. 422–423.
246. Schaeffer 1948b: Fig. 280, No. 16, §214, pp. 527–528.
247. Schaeffer 1948b: Fig. 282, No. 7, §187, pp. 527–528.
248. Przeworski 1931: Fig. 5 g, pp. 41–42; Schaeffer 1948b: Tableau Synoptique VIII. This arrowhead is now in the Historical Museum of Moscow.
249. Moorey 1971: Fig. 17, Nos. 64–68, pp. 83–84.
250. Tylecote 1968: "Bilobate arrow-head XXIII G. The specimen was sectioned at the position shown in Fig. 4. This object has been made from a casting, but the flights have been widened by cold working after casting. It is a very nicely made artifact and would have been superior to the later arrowheads cast in bronze moulds. The centre, which shows the original cast structure of a bronze, has some degree of shrinking porosity. The hardness in this region was 70, HV5. Just beyond, at the edge of the flight, the metal is denser and the hardness increases to 145. The tip of the flights themselves shows a highly worked structure with twins and deformation markings and have a hardness of 168. It would seem that the object had been heated and hot worked, followed by localized cold working at the edges of the flights. The tin content would be about 6% and neither lead nor zinc are present."
251. Vanden Berghe 1964: Pl. XXXV, Nos. 237, 239, pp. 39–45, 65.
252. Ghirshman 1939: Pl. V, No. 1; Pl. XCII, Nos. 5–6.
253. De Morgan 1905: Fig. 613.
254. Samadi 1959b: Fig. 26 d.
255. Contenau 1935: Pl. 8, Tomb 3, No. 15 [middle right]; Pl. 21, Tomb 65, No. 5.
256. Vanden Berghe 1968: Fig. 1, No. 11; Fig. 25, No. 7.
257. Ghirshman 1966: Pl. LV, No. 5, p. 126.
258. Negahban 1977a: Fig. 17, p. 27.
259. Moorey 1971: Fig. 17, Nos. 69–73, pp. 84–86.
260. Fukai and Ikeda 1971: Pl. XXVII, 7 a-c, p. 14.
261. Przeworski 1931: Fig. 5 c, pp. 41–42; Schaeffer 1948b: Tableau Synoptique VIII; Akademia Nauk SSSR 1960: Fig. 5, pp. 45, 56.
262. Schaeffer 1948b: Fig. 291, No. 6, §216, p. 513.
263. Hancar 1935: Fig. 3 a-c, pp. 49, 64–65. These arrowheads are classified to the Gandsa-Karabagh culture.
264. Ghirshman 1966: Pl. LV, No. 5 a, p. 126.
265. Ghirshman 1966: Pl. XLVIII h, p. 124.
266. Bronze cymbals were also grouped with the items of military equipment in the original version of the manuscript (see Negahban 1992). In the present volume, however, they have been moved to Chapter 11, which encompasses tools and equipment.
267. Moorey 1971: Pl. 77, No. 490, pp. 255–256.
268. Vanden Berghe 1968: Pl. 29 C, pp. 128–129.
269. Calmeyer 1964: Pl. 50, p. 48; Calmeyer 1969: Pl. 6, 1, pp. 81, 83.
270. Calmeyer 1964: Pls. 50–51, Figs. 4–6, Cat. Nos. 104–105, pp. 43–48; Calmeyer 1969: Pl. 1, 1, Fig. 87, pp. 81, 86.
271. Ghirshman 1964c: Fig. 423, pp. 337, 435; Kleiss 1962: Pl. 21 a, Cat. No. 102, p. 55; Ghirshman 1961–62: Pl. XXX, Cat. No. 226, p. 41; Hakemi 1968: Fig. 132, pp. 103–110, 114. In Kleiss 1962 and Ghirshman 1961 it is listed as being in the Tehran Archaeological Museum (Musée Iran Bastan), but in Ghirshman 1964c it is listed as being in a private collection in Paris.
272. Calmeyer 1969: Fig. 83, pp. 84–87.
273. Y. Godard and A. Godard 1954: Pl. 19, Cat. No. 311; Vanden Berghe 1968: Fig. 2, No. 2; A. Godard 1962: Fig. 25, p. 37.
274. Ghirshman 1964c: Fig. 91, pp. 70, 422.
275. Kleiss 1962: Pl. 21 B, Cat. No. 731, p. 166.
276. Calmeyer 1969: Fig. 86, pp. 84–87; Kleiss 1962: Pl. 30, No. 732, p. 166.
277. Moorey 1981: Fig. 444, pp. 90–91; Bussagli 1956: Pl. XIII, Cat. No. 48, p. 67.
278. Moorey 1974a: pp. 53–54.
279. Calmeyer 1969: Pl. 6, 2, pp. 84, 179. This quiver is housed in the Museum für Vor- und Frühgeschichte in Berlin.
280. Muscarella 1974: No. 138. This example is attributed to Iran with no exact provenance.
281. Vanden Berghe 1964: Pl. XXXIX, No. 277, pp. 39–45, 67; Ghirshman 1964c: Fig. 22, p. 22.
282. A. Godard 1931: Pl. XXVII, No. 81, pp. 65, 110. This example is housed in the Louvre.
283. Moorey 1971: Pl. 70, Nos. 460–462; Pl. 71, No. 463, pp. 241–245.
284. Schaeffer 1948b: Fig. 232, No. 2, §§186–187, pp. 432–433.
285. Egami, Fukai, and Masuda 1965: Pl. LXXV, No. 36, p. 71.
286. Moorey 1971: Pl. 69, No. 459, pp. 241, 243.
287. Schaeffer 1948b: Fig. 280, No. 14, §§214, 219, pp. 502, 533.
288. Schaeffer 1948b: Fig. 275, No. 1, §§214, 219, pp. 502, 527.
289. De Morgan 1929: Fig. 296, pp. 296–297.
290. Hancar 1935: Fig. 22 a, pp. 71–74. This example is attributed to the Lelvar culture.
291. Tallgren 1930: Figs. 58–61, pp. 140–142. This example is now in the Moscow Museum and Kamarov Collection.
292. Nagel 1963: Pls. XXIX–XXXI, Fig. 57 [drawing at end of book], pp. 20–21. This example is now in the Museum für Vor- und Frühgeschichte in Berlin.
293. Potratz 1952: Pl. XVII, No. 64, pp. 33–34.
294. A. Godard 1931: Pl. XXXIX, No. 161, pp. 76, 111. The first Luristan Bronze example is in the Lahijani Collection and the second in the Louvre.
295. Parrot 1961: Fig. 159, p. 133.
296. 1972: Fig. 252.
297. Ghirshman 1964c: Figs. 92–93, pp. 71–72.
298. Ghirshman 1964c: Fig. 143, p. 110; Ghirshman 1961–62: Cat. No. 511, p. 86.
299. Dyson 1957: Fig. 26; Ghirshman 1961–62: Pl. XL, 2, Cat. No. 513, p. 86.
300. Ghirshman 1964c: p. 425, Fig. 147 a. These examples are all dated by Ghirshman (1964c: pp. 111–112, 424–425) to the seventh century B.C.
301. Piotrovsky 1969: Fig. 81, pp. 159, 213.
302. Muscarella 1974: No. 133.
303. Moorey 1971: Pl. 77, Nos. 493–494, p. 257.

304. Ghirshman 1964c: Fig. 418, p. 336.  
305. Calmeyer 1969: Figs. 89, 91–93, pp. 88–91.  
306. Talbot Rice 1965: Figs. 51–52.  
307. Piotrovsky 1969: Figs. 94–95, p. 214. This is now in the Hermitage.
308. Piotrovsky 1969: Fig. 96, p. 214.  
309. Hrouda 1965: Pl. 23, Nos. 1–3, p. 89.  
310. Moorey 1971: Pl. 77, No. 492, p. 257.  
311. Wilkinson 1965: Fig. 9, p. 107.





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# Tools and Equipment

Included in this chapter are stone and metal implements that may be classified as tools, horse

trappings, personal equipment, and miscellaneous equipment.

## *Stone Implements* (892–915)

A few roughly made vessels and implements of stone were found at Marlik, including mortars and pestles, pounders, and small grinders. In addition, whetstones and several miscellaneous stone objects were also recovered from the site. By the time of Marlik, however, there was little need for many stone vessels and tools because the production of bronze had already reached a high standard of quality and quantity.

### WHETSTONES (892–899)

Several whetstones were found at Marlik. Most are simple, but a few are decorated by the shaping of one end into an animal form.

#### **892 Whetstone** 620 M Pl. 130

About 25.5 cm long, Tomb 2 (Trench VI B<sup>+</sup>). It is made from rather dark brick red stone. It has gently curved sides and ends.

#### **893 Whetstones** 648 M, 649 M, 657 M, and 630 M Pl. 130

The following whetstones, all made from gray stone, are long with rounded ends: 648 M, about 16.5 cm long, found in Tomb 24 (Trench XV E); 649 M, about 19.5 cm long, found in Tomb 40 (Trench XVIII N); 657 M, about 15.5 cm long, found in Tomb 6 (Trench X A<sup>+</sup>); and 630 M, about 13.5 cm long, found in Tomb 4 (Trench VIII A<sup>+</sup>). 630 M is a flat, almost rectangular plaque pierced near one corner.

#### **894 Whetstone** 655 M not illustrated

About 9.0 cm long, Tomb 40 (Trench XVIII N). It is made from a well-polished greenish stone in a rectangular shape.

#### **895 Whetstone** 656 M Pl. 130

About 16.5 cm long, found in Tomb 40 (Trench XVIII N). It is made of gray stone. It is a flat oval plaque with rounded edges.

#### **896 Whetstone** 621 M Pl. 130

About 22.5 cm long and 5.0 cm wide, found in Tomb 2 (Trench VI B<sup>+</sup>). It is made of light cream-colored stone and is rectangular in shape. One end has been formed into a ram's head, with round horns encircling the eyes and a rather round pointed muzzle.

#### **897 Whetstone** 43 M Pl. 130

About 16.5 cm long, found in Tomb 26 (Trench XVII B). It is made of cream-colored stone and is rectangular in shape, gently narrowing to one flat end. The opposite end, which is pointed toward one side, possibly represents the muzzle of an animal.

#### **898 Whetstones** 622 M, 503 M, 174 M, and 711 M Pl. 130

The following whetstones, all made from well-polished gray stone, are rectangular in shape with flattened ends: 622 M, about 26.0 cm long, found in Tomb 5 (Trench VIII D); 503 M, about 17.5 cm long,

found in Tomb 18 (Trench XIV D); 174 M, about 18.5 cm long, found in Tomb 42 (Trench XX F); and 711 M, about 21.5 cm long, found in Tomb 3 (Trench VI A).

#### 899 Whetstone

350 M Pl. 130

About 15.0 cm long, found in Tomb 44 (Trench XXI N). It is made from yellowish stone and has a long rectangular shape tapering from a wider to a narrower end. One end is curved and has a suspension hole, but the opposite end is flatter.

### MORTARS AND PESTLES (890–907)

Several stone mortars with accompanying pestles, as well as several individual pestles, were found at Marlik, usually made from coarse stone in rather crude workmanship. These mortars consist of an almost solid container with a long spout connected through a hole or openly to the body. They might have been used not only for grinding but also for squeezing juice or oil from such produce as pomegranates or olives, both of which are still widely grown in the area today.

#### 900 Stone Mortar and Pestle

575 M Pl. 131; Color Plate XXXII D

Mortar, about 11.5 cm high and 13.5 cm in diameter at the rim, found in Tomb 27 (Trench XVII D), made of rather coarse stone. The cylindrical mortar has a flat base and slightly convex sides with a thick flat rim. At one side is an open spout connected through a hole to the container. A rather large heavy pestle with a rounded knob at the end accompanies the mortar.

#### 901 Stone Mortar and Pestle

710 M Pl. 131

Mortar, about 21.0 cm and 19.0 cm in length of body at rim and spout together, was found in Tomb 1 (Trench III D<sup>+</sup>). It is similar to 900 except that the spout is open all the way to the container and the pestle has a much more rounded and thicker end.

#### 902 Stone Mortar and Pestle

604 M Pl. 131

Rough stone mortar, broken and with the spout missing, about 18.0 cm high and 16.5 cm in diameter at the rim. It was found in Tomb 19 (Trench XIV F) and is similar in general shape to 900. It is accompanied by an ovoid pestle.

#### 903 Stone Mortar

708 M Pl. 131

About 12.0 cm high and 18.5 cm in diameter at the rim, found in Tomb 3 (Trench VI A). It is cylindrical with a flat base and is similar in general shape to 900 except that the spout is open all the way to the top of

the container.

#### 904 Stone Mortar

709 M Pl. 131

About 17.5 cm high and 18.5 cm in diameter at the rim, found in Tomb 2 (Trench VI B<sup>+</sup>). It is made from rough stone and is very similar in shape to 903.

#### 905 Stone Pestle

614 M Pl. 131

About 21.0 cm long and 9.5 cm wide, found in Tomb 3 (Trench VI A). It is made from rough stone with a rounded flat end.

#### 906 Stone Pestle

651 M Pl. 131

About 15.0 cm long and 8.0 cm wide, found in Tomb 40 (Trench XVIII N). It is made in a roughly cylindrical shape.

#### 907 Stone Pestle

652 M Pl. 131

About 22.0 cm long and 9.0 cm wide at its larger end, found in Tomb 40 (Trench XVIII N). It is almost conical with rounded ends.

### GRINDING SETS (908–910)

These grinding sets consist of a rather small rectangular stone platter with a round pounder. They could have been used for grinding fairly small quantities of medicines or spices.

#### 908 Stone-Grinding Set

706 M Pl. 131

Base about 13.5 cm long and 11.0 cm wide, set found in Tomb 3 (Trench VI A). It is rectangular with raised edges and is accompanied by a round pounder.

#### 909 Stone-Grinding Set

185 M Pl. 131

Found in Test Trench 1 located near the surface in grid XX E. It contains a stone bowl measuring 5.6 cm in diameter at the rim and a spherical pounder.

#### 910 Stone-Grinding Set

473 M Pl. 132

About 8.0 cm square, found in Tomb 19 (Trench XIV F). It has raised projecting edges.

### POUNDERS (911–913)

#### 911 Stone Pounder

650 M Pl. 132

About 7.0 cm long and 7.0 cm high, found in Tomb 40 (Trench XVIII N). It is narrow in the middle.

**912 Stone Pounder**

653 M Pl. 132

About 8.8 cm long and 2.5 cm thick at the heavier end, found in Tomb 40 (Trench XVIII N). It is conical with rounded ends.

**913 Stone Pounder**

654 M Pl. 132

About 7.3 cm long and 3.2 cm thick, found in Tomb 40 (Trench XVIII N). It is narrow in the middle with rounded ends.

## MISCELLANEOUS STONE IMPLEMENTS (914–915)

**914 Stone Pipe Stick with Gold Bands**

323 M Pl. 132

Tube of purplish blue stone, about 15.0 cm long,

found in Tomb 47 (Trench XXI E). It has a gold cover band at each end. The cylindrical hollow stone pipe has a round head with a wide, rather thick, pierced gold band below, a file of perforations along the side, and a solid gold band at the end. Similar implements made of bronze are discussed below (see 923 and 924).

**915 Flint Saw**

1531 M Pl. 132

About 6.0 cm long, found in the olive grove of Ali Karam Bagh. It is well made with a file of saw teeth along the straight edge and a curved back.

## *Metal Implements (916–939)*

A number of bronze implements were found at Marlik, including blades, hooks, skewers, ladles, spindles, gears, etc. While the purpose of some of these objects is easily determined, the function of others remains unknown.

### BRONZE BLADES (916)

**916 Bronze Blade**

1011 M Pl. 132

This blade, broken and partly missing, the remaining part measuring about 13.5 cm long, was found in Tomb 8 (Trench IX D). It is made of cast bronze, now covered by a heavy coat of granulated rust. It is very similar in shape to a straight-edge razor, with a sharp blade on one side and a thick flat edge on the back. At one side is a flat, narrow, backward-bent tang.

A blade with a handle, similar to this example, was found at Veri in Russian Talish. It is classified by Schaeffer to Talyche Recent 2–3, around 1450–1200 B.C.<sup>1</sup>

### BRONZE HOOKS (917–920)

Several bronze hooks were found at Marlik, each rather different in shape.

**917 Bronze Hook**

469 M Pl. 132

About 6.5 cm long, found in Tomb 19 (Trench XIV F). It is made of hammered bronze, now covered by a coat of rust, and has a sharp point and a large folded socket with holes on either side for riveting it to a wooden handle.

**918 Bronze Hook**

600 M Pl. 132

About 40.2 cm in length, found in Tomb 19 (Trench XIV F). It is made from hammered bronze, now covered by a heavy coat of rust partly mixed with soil particles. Near the top the metal is turned back, then bent and extended forward to a rather emphasized hook with a sharp point. The long shank of rolled and turned-over metal gradually enlarges toward the end to form a socket for the handle, which was probably originally made of wood. The end is reinforced by rolling, and a riveting hole is located near the edge of the socket.

**919 Bronze Hook**

632 M Pl. 132

About 9.0 cm high, found in Tomb 6 (Trench X A<sup>+</sup>). Rather elaborate, it is made from bronze wire hammered into shape. The crescent-shaped hook has a sharp point extending from a coil handle formed by twisting the wire. On the back of the handle near the beginning of the hook is a suspension loop.

**920 Bronze Hook**

633 M Pl. 132

About 5.2 cm long, found in Tomb 4 (Trench VIII A<sup>+</sup>). It is made from rather heavy bronze wire hammered into the shape of a question mark and has a projecting conical thick point. An almost rectangular sectioned bar at the end is shaped into a large rectangular hole through which it could have been fastened to a leather or textile strip. This small hook was probably part of a buckle for a belt or a leather strip for fastening a horse or mule load.

## COMMENTS

Bronze hooks comparable to 917 were found at Agha Evlar in Persian Talish, dated by Schaeffer to Talyche Recent 2, around 1450–1350 B.C.<sup>2</sup> Another similar example was found at Esery, Dolman 4, in Caucasia, dated by Schaeffer to the fifteenth to fourteenth centuries B.C.<sup>3</sup> A hook similar to 918, with a narrow long handle, was found at Khurvin. It is dated by Vanden Berghé to the late second and early first millennium B.C.<sup>4</sup>

**BRONZE SPINDLE (921)****921 Bronze Spindle**

735 M Pl. 132

About 26.0 cm long, found in Tomb 41 (Trench XIX K). It is made from cast bronze, now covered by a coat of rust, and is rather simple in shape, with a long cylindrical shaft tapering gradually to a narrow round bar. This ends in a rather rounded small point, which is attached through a central hole to a convex circular disk.

Although circular disks of frit and shell with a central shaft hole were found at Marlik, no other bronze spindles similar to this appeared.

**BRONZE SPATULA (922)****922 Bronze Spatula**

965 M Pl. 132

About 19.5 cm long, found in Tomb 52 (Trench XXIII G). It is made from cast bronze, now covered by a coat of rust, and has a flat, almost triangular blade with convex sides, an almost straight working edge, and a circular-sectioned bar handle. Damage has caused dentation at the sides and on the edge of the spatula.

A similar bronze spatula from Sialk Cemetery A (Sialk V) is dated by Ghirshman to the end of the Bronze period.<sup>5</sup> Another rather similar example, made of copper, was found at Tepe Hissar, Hissar III. Schmidt suggests that this may have been used as a spoon or "stirrer."<sup>6</sup>

**PIPE STICKS (923–924)**

Several examples of an object called here a "pipe stick," whose exact function is not very clear, were found at Marlik (see also 914, above). These are hollow pipes with punched holes through which particles could have been strained, perhaps from some liquid beverage such as pomegranate juice.

**923 Bronze Pipe Stick**

329 M Pl. 133

This pipe stick, about 16.5 cm long, found in Tomb 33 (Trench XVIII F). Made of bronze, now covered by a coat of rust mixed with soil sediment, it is a plain cylinder tapering slightly toward one end. At the larger end, covering about one-sixth of the total length, are rows of fine punched holes.

**924 Bronze Pipe Stick(?)**

35 M Pl. 133

About 22.5 cm long, found in Tomb 26 (Trench XVII B). Made from bronze, now covered by a coat of rust, it is a hollow pipe stick, bent near one end with two parallel moldings at the bend and one near the opposite end, and a lengthwise opening slot along the body of the stick. The function of this object is not clear.

**BRONZE LADLES (925–926)**

Several bronze ladles with long handles and bowl-shaped containers were found at Marlik.

**925 Bronze Ladle**

397 M Pl. 133

About 82.0 cm long, found in Tomb 36 (Trench XVIII C). It is made from bronze, now covered by a coat of rust, and consists of a long bar handle, twisted for added strength, fastened by riveting nails to a bowl-shaped container of sheet bronze.

**926 Bronze Ladles**

949 M, 166 M, and 584 M Pl. 133

The following bronze ladles all have long handles riveted to bowl-shaped containers, similar to 397 M: 949 M, about 90.0 cm long, found in Tomb 52 (Trench XXIII G); 166 M, about 68.0 cm long, found in Tomb 24 (Trench XV E); and 584 M, about 79.0 cm long, found in Tomb 26 (Trench XVII B). The hook at the end of the handle of 166 M has a slightly different shape.

## COMMENTS

A similar ladle made of copper with a plain handle, probably earlier in date, was found in Level III of Tepe Hissar.<sup>7</sup> Other similar bronze ladles were found in the Central Plateau of Iran, including a ladle with a long twisted handle and a hook-shaped end from

Sialk Cemetery B (Sialk VI), dated by Ghirshman to the tenth to ninth centuries B.C.<sup>8</sup>; a bronze ladle with a different style handle, from Khurvin, dated by Vanden Berghe to the late second and early first millennium B.C.<sup>9</sup>; and a ladle with a straight handle found at Hasanlu.<sup>10</sup>

## BRONZE SKEWERS (927–930)

Several double bronze barbecue sticks were found at Marlik, some plain and simple, and others more convoluted and decorated.

### PLAIN BRONZE SKEWERS (927–928)

#### 927 Bronze Skewers

50 M not illustrated

Two skewers, one broken and the other complete, about 72.5 cm long, found in Tomb 26 (Trench XVII B). They are made from hammered cast bronze and have two long straight prongs curved to join a long socket handle reinforced by rolling at the end.

#### 928 Bronze Skewers

55 M, 97 M, 334 M, 335 M, 434 M, 753 M, and 950 M Pl. 133

The following bronze skewers are all closely similar to 927: 55 M, about 61.0 cm long, found in Tomb 24 (Trench XV E); 97 M, two skewers, the larger about 60.0 cm long, found in Tomb 50 (Trench XXII L); 334 M, about 67.0 cm long and 335 M, about 66.0 cm long, both found in Tomb 33 (Trench XVIII F); 434 M, about 55.0 cm long, found in Tomb 36 (Trench XVIII C); 753 M, about 59.0 cm long, found in Tomb 1 (Trench III D<sup>+</sup>); and 950 M, about 72.0 cm long, found in Tomb 52 (Trench XXIII G).

### DECORATIVE BRONZE SKEWERS (929–930)

#### 929 Bronze Skewer

351 M Pl. 133

Broken and incomplete, with its remaining part measuring about 22.0 cm long, found in Tomb 44 (Trench XXI N). It is made from cast bronze worked into shape by hammering. The prongs, which are partly broken and missing, still reveal the complete, highly decorative shape, curving down, upward, and sideways, and then toward the points. The socket handle has two parallel fine projecting bands around the lower part and a reinforced rolled edge.

#### 930 Bronze Skewer

598 M Fig. 35

Broken into several pieces, with a total length of about 74.0 cm, found in Tomb 45 (Trench XXII H). It is made from cast bronze hammered into shape and has prongs curved in a decorative form similar to 929. The socket handle is reinforced by rolling at the end.

#### COMMENTS

Similar examples of simple bident skewers have been found fairly frequently in various regions. On the Central Plateau, an example from Khurvin with a similar shape and handle is dated by Vanden Berghe to the late second and early first millennium B.C.,<sup>11</sup> and many closely similar examples were found in various tombs of Sialk Cemetery B, dated by Ghirshman to the tenth to ninth centuries B.C.<sup>12</sup> Examples were also found in the Hissar III level of Tepe Hissar.<sup>13</sup> A closely similar skewer is mentioned by Herzfeld as having been found in Luristan in western Iran.<sup>14</sup> In the Caucasian region a closely similar skewer was found at Kalakent, classified by Hancar to the Gandasa-Karabagh culture, around the late second and early first millennium B.C.,<sup>15</sup> and another at Tak-Kilisi, dated by Schaeffer to 1250–1100 B.C.<sup>16</sup> Similar examples from further distances include a bident skewer with a solid handle found at Megiddo in Palestine, dated by Schaeffer to 1365–1200 B.C.<sup>17</sup> Another similar example, in the Ashmolean Museum, is dated by Moorey to the early part of the first millennium B.C.<sup>18</sup>

Examples comparable to the more elaborate skewers of Type II are rarer, with one reported by Herzfeld to be from Luristan.<sup>19</sup>

## BRONZE GEARS (931–932)

#### 931 Bronze Gears(?)

1079 M Pl. 134

Circular objects, with an average inside diameter of 2.5 cm, found in Tomb 5 (Trench VIII D). They are made from cast bronze, now covered by a coat of rust, and have the appearance of gears. Their exact function is obscure.

#### 932 Bronze Gear(?)

944 M Fig. 59; Pl. 134

Outside diameter about 6.5 cm, found in Tomb 52 (Trench XXIII G). Made from cast bronze, now covered by a coat of rust, it has the shape of a round gear with unequal dentations. Like 931, its function is obscure.

## BRONZE CHISELS (933–937)

Several chisels of different shapes and sizes were found at Marlik, made of cast bronze.

### 933 Bronze Chisel

189 M Pl. 134

About 6.5 cm long and 2.3 cm wide, found in Tomb 26 (Trench XVII B). Made from cast bronze, it is triangular in shape, with a widened section in the middle. The blade, which has a slightly curved cutting edge, tapers at the back to a rounded point that may have been set into a wooden handle.

### 934 Bronze Chisel

640 M Pl. 134

About 16.0 cm long, found in Tomb 2 (Trench VI B<sup>+</sup>). It is made from cast bronze, now covered by a thick coat of rust mixed with soil sediment, and is flat, with a wide cutting edge and a narrow flat tang.

### 935 Bronze Chisel

638 M Pl. 134

About 15.5 cm long, found in Tomb 45 (Trench XXI G). Made from cast bronze, now covered by a coat of rust mixed with soil sediment, it is long and narrow with a curved cutting edge and an open-sided shaft hole at the end.

### 936 Bronze Chisel

1163 M Pl. 134

About 16.0 cm long, found in the tomb of Ali Karam Bagh. Made from cast bronze, now covered by a heavy coat of rust mixed with soil particles, it has a curved cutting edge and an open-sided shaft hole at the end.

### 937 Bronze Chisel

1028 M Pl. 134

About 19.5 cm long, found in Tomb 10 (Trench XI B). It is made from cast bronze, now covered by a thick coat of rust mixed with soil particles, and has a tapering triangular shape with a slightly curving wide cutting edge and a narrow tang that may have been set in a wooden handle.

## COMMENTS

Comparable bronze chisels have been found in other parts of Iran and elsewhere. One, similar to 933, found at Khodja-Daoud-Kopru in Persian Talish, is dated by Schaeffer to Talyche Recent 1, around 1550–1450 B.C.<sup>20</sup> Maxwell-Hyslop, in discussing some of these long bronze-lugged adzes found in the Talish area, suggests that varieties of this type have been found in many excavations from the beginning to the end of the second millennium B.C.<sup>21</sup> Another similar example, found at Amarat in Russian Talish, is classified by Schaeffer to Talyche Recent 1–2, around 1500–1400 B.C.<sup>22</sup> A bronze chisel similar to 933 was found at Tarsus, dated by Schaeffer to Mid-

Bronze of Tarsus II, around the seventeenth to sixteenth centuries B.C.,<sup>23</sup> while another, found at Bogazköy in Asia Minor, is dated by him to the middle of the second millennium B.C.<sup>24</sup> A similar chisel was also found in the Kiririsha Temple of Tchogha Zanbil, dated by Ghirshman to 1250 B.C.,<sup>25</sup> and another rather similar example is in The University Museum of Philadelphia.<sup>26</sup>

Bronze chisels rather similar to 936 and 935 have also been found. One, from Zekari in Caucasia, is dated by Schaeffer to 1600–1500 B.C.,<sup>27</sup> while he assigns another found at Byblos Building II to the Mid-Empire period, with a suggested date around the early second millennium B.C.<sup>28</sup> A somewhat similar chisel, found at Alishar Hüyük in Alishar Level II, is dated by Schaeffer to the early second millennium B.C.<sup>29</sup> A similar chisel from Amarat in neighboring Russian Talish is classified by Schaeffer to Talyche Recent 1–2, around 1500–1400 B.C.<sup>30</sup> A similar hafted chisel of copper, found at Yortan Tepe in Nuzi, is dated by Starr to around the middle of the second millennium B.C.<sup>31</sup>

Several chisels similar to 937 have also been found. A bronze chisel from Hissarlik in Troy is dated by Schaeffer to the late third millennium B.C.<sup>32</sup>; a comparable example from Tarsus is classified by Schaeffer to the level of Mid-Bronze of Tarsus II, around the seventeenth to sixteenth centuries B.C.<sup>33</sup>; and a third chisel, from Soli in Asia Minor, is dated by Schaeffer to the early second millennium B.C.<sup>34</sup>

## BRONZE SLEDGEHAMMERS

Two possible bronze sledgehammers (657 and 658) are described in Chapter X under the macehead category.

## BRONZE DOUBLE-HEADED AXES (938–939)

A rather large number of double-headed or adze-axes of cast bronze were found in several of the Marlik tombs, similar in shape but varying in size. These usually have a shaft hole sufficiently long to provide a good grip to the probably wooden handle.

### 938 Bronze Adze-Axe

102 M Pl. 134

Double-axe head, about 16.0 cm long, found in the surface layer of the second Test Trench located in the area of Tomb 50 (Trench XXII L). It is made of cast bronze and has a curved convex cutting edge at each end of the head, one edge at right angles to the other, and a rather short shaft hole.

**939 Bronze Adze-Axes**

106 M, 110 M, 121 M, 184 M, 485 M, 596 M, 641 M, and 700 M Fig. 35; Pl. 134

The following bronze double-axe heads are similar to 938: 106 M, about 15.5 cm long, and 596 M, and 21.5 cm long, both found in Tomb 44 (Trench XX N); 110 M, about 21.5 cm long, found in Tomb 50 (Trench XXII K); 121 M, about 16.5 cm long, found in Tomb 24 (Trench XV E); 184 M, about 6.5 cm long, found near the surface in the area of Tomb 26 (Trench XVII B); 485 M, about 16.0 cm long, found in Tomb 19 (Trench XIV F); 641 M, about 10.3 cm long, found in Tomb 2 (Trench VI B<sup>†</sup>); and 700 M, about 11.0 cm long, found in Tomb 15 (Trench XIII C). On 184 M, the smallest of the axe heads, one of

the cutting edges is much smaller than the other.

## COMMENTS

The origins and development of the adze-axe have been discussed by Jean Deshayes.<sup>35</sup> An early example of an adze-axe of copper was found at Tepe Hissar, Level III,<sup>36</sup> dated by Schaeffer to the late third and early second millennium B.C.<sup>37</sup> Similar bronze adze-axes were found at Ghalekuti I in the Dailaman region of Gilan, assigned by Fukai to the end of the Bronze and beginning of the Iron Age,<sup>38</sup> and similar but more decorative adze-axes in the Ashmolean Museum are dated by Moorey to the late second and early first millennium B.C.<sup>39</sup>

*Horse Trappings (940–960)*

Horses played a significant role in the life of the Marlik people. In the Royal Cemetery of Marlik, among the tombs of important and prominent people, were three horse burials (Tombs 49, 51, and 53), each connected to a nearby tomb. In each of these small tombs were found a horse neckbone, horse teeth, and a few items of horse trappings including cheekpieces and bits. Additional horse trappings found at Marlik include cage bells with a suspension loop on top, and spools, which may have been used on horse and chariot straps.

**BRONZE HORSE BITS (940–941)**

Two bronze horse bits, one highly decorated with horse-shaped cheekpieces and the other simple and functional, were found at Marlik in tombs whose contents consisted of a set of horse teeth and bronze loops in addition to the horse bits.

**940 Bronze Horse Cheekpieces**

538 M Pl. 135

The two bronze horses of this pair, each about 7.0 cm long and 5.5 cm high, found in Tomb 53 (Trench XXIV H), consist of flat plaques with a loop welded on the back of the bodies so they can be fastened together to form the cheekpieces of a horse bit. The two horses are very similar, and only one will be described. A long head ends in a rounded muzzle that droops downward. Projecting hemispheres form the eyes, and the upright ears are leaf shaped. The raised neck has a projecting thick band at the throat just under the muzzle, apparently forming part of a halter. The naturally proportioned body is outlined at the shoulder and haunch. Because the animal is

walking, all four legs appear, with detailed joints, hocks, and hooves. Each horse is attached to a thick band of metal that represents the ground and serves to strengthen the bit. The horses are well modeled, displaying a natural walking movement.

## COMMENTS

Similar bronze cheekpieces can be seen in many museums and collections. Horse bits with cheekpieces adorned with natural, stylized, or imaginary figures were common in various parts of the Iranian Plateau, particularly the Zagros and Elburz regions, during the second half of the second millennium B.C., when the bronze industry flourished and horses and horsemanship were an important concern. In classifying horse harnesses, Moorey suggests a date of 1500–1200 B.C. for the earliest horse burials, found at Godin Tepe near Hamadan in western Persia. Subsequently these burials became more common, occurring at Marlik in the late second and early first millennium B.C., in Gilan during Iron Age I, at Hasanlu in Azerbaijan during Iron Age II, at Baba Jan in Luristan during Iron Age III, and at Tepe Giyan in Luristan and Tepe Sialk on the plateau from about the ninth to eighth centuries B.C.<sup>40</sup>

Anderson discusses a bronze bit found in Luristan dated to the early first millennium B.C. that is similar to the Marlik example in having two horses on the cheekpieces. He suggests that the change in Greek art that took place about 700 B.C. is the result of contact with the Orient. There the great empires, such as the Assyrian Empire, had strong military forces based on a cavalry with extensive use of coaches for transport, which, he suggests, may have been stimulated by influence from mounted nomads from the north penetrating Iran.<sup>41</sup> However, it should be noted that the people of the Iranian

Plateau were already well acquainted with horses and horsemanship long before 1000 B.C. Representations of horses appear on the pottery of Qabrestan in the Qazvin plain by the early fourth millennium B.C.,<sup>42</sup> so horses could not have been introduced to Iran as late as the early first millennium B.C. with the influx of nomads from the north.

A number of parallel examples contain naturalistic representations of horses, sometimes with more detailed workmanship. From this group are several bronze cheekpieces, some with suspension loops on the back of the animal as well as holes in the middle of the body for the insertion of the bit, four of which are dated by Calmeyer to the latter part of the second millennium B.C.<sup>43</sup> Another example with two suspension loops on the back of each horse is classified by A. Godard as Luristan Bronze, dating to 1200 B.C.<sup>44</sup> A bronze horse cheekpiece with two suspension loops on the nape, one on the seat, and a large hole in the middle was found at Tepe Giyan.<sup>45</sup> Another cheekpiece from Luristan with two suspension holes on the back and another on the shoulder is dated by Y. Godard to around 1000 B.C.,<sup>46</sup> and an example with two suspension loops on the back and a large hole in the middle is dated to the eighth to seventh centuries B.C.<sup>47</sup> This is similar to cheekpieces on reliefs of Sennacherib (704–681 B.C.) and Ashurbanipal (669–627 B.C.).

Parallel examples with more detailed workmanship and decoration include one with suspension loops on the nape and rump, a large hole in the middle, and an engraved geometric rosette on the leg<sup>48</sup>; another with suspension holes on the head and rump and a large hole on the shoulder<sup>49</sup>; and a third with suspension holes and a large harness, all dated by Legrain to around the twelfth century B.C.<sup>50</sup> An example with more detailed workmanship, a hole in the middle of the body, and suspension loops on the shoulder and rump has been classified by Godard to Luristan Bronze, dated to 1500–1200 B.C.,<sup>51</sup> and a final example with more detailed workmanship, suspension holes on the back, and a large hole in the body has been dated to the eighth to seventh centuries B.C.<sup>52</sup>

Another group of bronze horse cheekpieces is more geometricized in style. The body of the horse is made of two triangles connected at the points to form a butterfly shape, with a large hole in the middle of the body at the connecting points. One example of this type is classified as Group 38 by Calmeyer, dating to around the end of the second millennium B.C.<sup>53</sup>; two more have been classified by A. Godard as Luristan Bronzes<sup>54</sup>; and another has been dated to the ninth to eighth centuries B.C.<sup>55</sup>

A third group of bronze cheekpieces is adorned with winged animals. A winged horse of very decorative and detailed workmanship with suspension holes in the nape and rump and a large hole in

the middle of the body is classified by Y. Godard as Luristan Bronze, dated to the eighth to seventh centuries B.C.<sup>56</sup> Two cheekpieces from Luristan with winged mountain goats are assigned by Schaeffer to Luristan Recent Period with an approximate date of 1500–1200 B.C.<sup>57</sup> A rather interesting example consisting of the front half of a two-headed horse with a human rider holding the horse necks is dated by Parrot to the early first millennium B.C.<sup>58</sup> A bronze cheekpiece in the form of a winged ram with a curving horn, a suspension loop on the back, and a hole in the middle of the body is dated by Porada to the Transitional to Achaemenian period, around the seventh to sixth centuries B.C.,<sup>59</sup> and a cheekpiece in the shape of a winged antelope with a suckling kid is dated by Ghirshman to the eighth to seventh centuries B.C.<sup>60</sup>

Another group of bronze cheekpieces with various compound and imaginary animals, although not closely similar to the bronze cheekpieces of Marlik, still served the same function of decorating the horse bit. Examples of this type include a cheekpiece with a human-headed winged bull, classified by Talbot Rice as pre-Scythian Luristan Bronze with the suggestion of possible Cimmerian influence<sup>61</sup>; another in the form of a winged human-headed animal classified by Moorey as Luristan Bronze with a suggested date of the eighth to seventh centuries B.C.<sup>62</sup>; one containing a horned winged animal with the head of a woman, in rather detailed workmanship, classified by Y. Godard as Luristan Bronze, dated to about 1000 B.C.<sup>63</sup>; and a cheekpiece in the form of a winged human-headed animal with a crescent horn classified by Bussagli as Luristan Bronze with a suggested date of the fourteenth to ninth centuries B.C.<sup>64</sup>

Potratz discussed a number of horse bits adorned with various animals, both natural and imaginary, including narrative scenes, imaginary figures, and mountain goats with and without wings.<sup>65</sup> Bronze horse bits with various types of cheekpieces in the collection of David-Weill in Paris are dated to the ninth to eighth centuries B.C.<sup>66</sup> An especially decorative example with a chariot rider is dated by A. Godard to about 1200 B.C.<sup>67</sup> and by Ghirshman to the eighth to seventh centuries B.C.<sup>68</sup> Other examples are in the collection of Sir Frank Savery in the Ashmolean,<sup>69</sup> in Kunsthandel, Frankfurt, Besitz Prof. Sarre, dated by Potratz to the ninth to eighth centuries B.C.,<sup>70</sup> and in the British Museum, dated by Moorey to the late second to early first millennium B.C.<sup>71</sup>

#### 941 Bronze Horse Bit

327 M Fig. 34; Pl. 135

Some small parts missing, found in Tomb 49 (Trench XXII K). It is made from cast bronze, now covered by a coat of rust. Cylindrical bars are joined together by open loops, with the ends hammered together so that the bit would not open in use. Each mouthpiece, with a closed loop at its outer end



through which the rein passed, goes through a hole in the middle of the cheekpiece bar so that all parts of the bit are connected.

#### COMMENTS

The simple type of horse bit exemplified in 941 was rather common and has been found in several neighboring excavations as well as at more distant sites. Caucasia has produced a number of examples including one very similar horse bit with large side loops for rein straps, from Kalakent in the Transcaucasian region, classified by Hancar to the Gandsa-Karabagh culture, dated to around the late second and early first millennium B.C.,<sup>72</sup> and by Bossert to around 1375–1200 B.C.<sup>73</sup> Apparently this type of simple bronze horse bit belongs to the earlier part of the Gandsa-Karabagh culture, making it contemporary with the Marlik example. A similar horse bit was also found at Tak-Kilisi<sup>74</sup> and another at Beshtasheni Safarharab Tomb 4, both dated by Schaeffer to 1250–1100 B.C.<sup>75</sup>

A similar horse bit found at Luristan is classified by Schaeffer to Luristan Recent Period, around 1500–1200 B.C.,<sup>76</sup> and a similar example from Tepe Giyan is dated to the second half of the second millennium B.C.<sup>77</sup> On the central plateau similar examples of more advanced shape were found in many tombs of Sialk Cemetery B, dated by Ghirshman to the early part of the first millennium B.C.,<sup>78</sup> with the abundance of this type of horse bit there reflecting its common use. A similar horse bit with smaller side loops, reported to be from Assur, is dated by Hancar to the ninth century B.C.,<sup>79</sup> and he dates a very simple bronze horse bit with no side loops, belonging to the early nomads of the Altai tribes, to 700–600 B.C.<sup>80</sup> This latter horse bit, although not as close to the Marlik example as the others, may represent a continuation of these simple bronze horse bits in the region.

Other horse bits of this type of less certain origin can be seen in various museums and collections. A horse bit with a complete mouthpiece consisting of a circular section and a cannon terminal through which a circular rein ring passes, which is modeled as a human hand with a slightly arched plain bar cheekpiece with an upright loop toward each end for cheekstrips, is dated by Moorey to the ninth to eighth centuries B.C.,<sup>81</sup> and he dates three similar but more decorative examples to the eighth to seventh centuries B.C.<sup>82</sup> Similar simple bronze horse bits are classified by Nagel to Sialk Cemetery B type, dated by him to 1250–1100 B.C.<sup>83</sup> and by Ghirshman to the tenth to ninth centuries B.C. Another similar example is in the Louvre<sup>84</sup>; a plain bronze horse bit with simple cheekpieces and side loops for rein straps is dated to the ninth to eighth centuries B.C.<sup>85</sup> Many more examples can be seen in other collections,<sup>86</sup> and it seems clear that this simple type of horse bit

was very common in Iran and neighboring areas during the later part of the second millennium B.C. and continued in use into the first half of the next.

## BRONZE BELLS (942–957)

A number of bronze bells in the shape of a cage were found at Marlik; these are usually spherical, although flat and double-conoid cage bells were also found. Some of these cage bells still have their solid jingling ball inside.

### SPHERICAL CAGE BELLS (942–950)

#### PLAIN SPHERICAL CAGE BELL (942)

A single plain spherical cage bell was found at Marlik.

#### 942 Bronze Bell

338 M Pl. 136

About 7.0 cm high, found in Tomb 44 (Trench XXI N). Made from cast bronze, now covered by a heavy coat of rust, it has a spherical cage shape surrounded by two rows of pierced triangles, the lower row reversed. Smaller pierced triangles surround the bottom of the bell, and a simple suspension loop is located at the top.

### POMEGRANATE CAGE BELLS (943–946)

The most common type of bell found at Marlik is the pomegranate-shaped spherical cage bell, repeating the pomegranate motif much favored by the Marlik people.

#### 943 Bronze Pomegranate Bells

239 M Pl. 136

Three pomegranate-shaped bells, respectively measuring 7.0, 7.0, and 8.0 cm high, were found in Tomb 47 (Trench XXI E). They are made from cast bronze, now covered by a thick coat of rust that is in part granulated and mixed with soil sediment. All are very similar in shape, and only one will be described. The bell has a globular cage shape with a parallel row of elongated pierced oval holes around the sphere, joining at the neck, which is encircled by a row of pierced triangles and topped by a pomegranate crown pierced by suspension holes opposite each other. These bells are gracefully proportioned and beautifully made.

#### 944 Bronze Pomegranate Bell

729 M Pl. 136

About 6.8 cm high, found in Tomb 44 (Trench XX

N). It is made from cast bronze that is heavily oxidized on the surface and is covered on some parts by soil sediment. It has a spherical cage body with parallel narrow pierced vertical slots topped by a pomegranate crown neck.

#### 945 Bronze Pomegranate Bell

498 M Pl. 136

About 6.5 cm high, found in Tomb 18 (Trench XIV D). It is made from cast bronze, now covered by rust on the surface, and has a globular cage body surrounded by parallel almond-shaped vertical pierced slots and a long cylindrical neck with large suspension holes on either side, ending in a serrated pomegranate crown. Inside the bell is a bronze ball.

#### 946 Bronze Pomegranate Bells

499 M, 933 M, 686 M, and 937 M Pl. 136

The following bronze bells, all made from cast bronze with heavy rust now covering the surface, are similar to 945: 499 M, about 5.0 cm high, found in Tomb 18 (Trench XIV D); 933 M, about 5.0 cm high, found in Tomb 13 (Trench XII G); 686 M, about 6.5 cm long, found in Tomb 30 (Trench XVI L), and 937 M, about 5.0 cm long, found in Trench 1 of Gheslugh. 937 M has a U-shaped rather than dentated crown; the dentation on 686 M is bent somewhat inward; and 933 M has less dentation than the other examples, with that present bent slightly outward.

### *SPHERICAL CAGE BELLS TOPPED BY AN ANIMAL FIGURE (947–950)*

Several of the spherical cage bells are topped by animal figures, one by a mountain goat and three by birds.

#### 947 Bronze Bell with Mountain Goat

938 M Pl. 136

About 9.5 cm high, found in the Gheslugh wheat field. It is made from cast bronze, now covered by a thick coat of rust, and has a spherical cage body surrounded by two rows of triangular openings, the lower ones reversed. The bell has a cylindrical handle with a conical base and crown topped by a small figure of a mountain goat with a large stylized hump. The goat's triangular head has a round pointed muzzle and short conical vertical horns. Projecting from the middle of the nape is a tall hump with a backward-bent tip. A short body rises to a rounded hump with a short tail. The cylindrical legs attach to the bell handle.

A similar cage-shaped bronze bell topped by a mountain goat with a large suspension loop on its back is classified by Moorey as a Luristan Bronze object, dated to the early first millennium B.C.,<sup>87</sup> as is

another bronze bell with an animal on the handle.<sup>88</sup> Similar figurines of mountain goats were found at Byblos Level II.<sup>89</sup> A mountain goat at the end of a bronze pin, from Megiddo, is dated by Schaeffer to the early second millennium B.C.<sup>90</sup>

#### 948 Bronze Bell with Bird

403 M Pl. 136

About 7.0 cm high, found in Tomb 36 (Trench XVIII C). It is made from cast bronze, now covered by a coat of rust, and has a spherical cage body formed of parallel bronze bands curving from top to bottom. Its flat handle is crowned by a small bird, possibly a pigeon.

A similar bronze cage-shaped bell topped with a bird figure is classified by Moorey as Luristan Bronze, dated to around the early first millennium B.C.<sup>91</sup> Another similar bronze bell topped with four ducks, found in the Pir Kouh region of Gilan, is dated by Porada to the twelfth century B.C.<sup>92</sup> A bell with a bird figure on the back and a suspension loop is dated to the eighth to seventh centuries B.C.<sup>93</sup>

#### 949 Bronze Bell with Bird

382 M Pl. 136

About 6.0 cm high, found in Tomb 36 (Trench XVIII C). It is made from cast bronze, now covered by a thick coat of rust that is granulated in part and mixed with soil particles. Fairly similar to 948, it has a spherical cage body formed of parallel bronze bars curving from top to bottom and a flat vertical handle with a suspension hole in the middle crowned by the figure of a bird, possibly a duck. Inside the cage is a solid bronze ball.

#### 950 Bronze Bell with Bird

1127 M Pl. 136

About 7.5 cm high, found in Gheslugh. It is made from cast bronze, now covered by a thick coat of rust, and has the figure of a bird on top.

### *FLAT CAGE BELLS*

Two bronze bells or possibly pendants in a flat cage shape were found in Tomb 6. They seem to have been primarily decorative in purpose and are discussed in full in Chapter VII (see 269 and 270).

### *DOUBLE-CONOID CAGE BELLS*

Several bronze bells in the shape of a double conoid connected at the bases were found at Marlik—two simple ones in Tomb 5 and five more decorative ones in Tomb 6.

*SIMPLE DOUBLE-CONOID CAGE BELLS*  
(951–952)

**951 Bronze Bell**

1080 M Pl. 136

About 4.0 cm high, found in Tomb 5 (Trench VIII D). Made from cast bronze, now covered by a coat of rust mixed with soil sediment, it has a truncated double-conoid shape with very simple narrow bronze bars extending from top to bottom, separating toward the middle, which is surrounded by a narrow band.

**952 Bronze Bell**

1081 M Pl. 136

About 3.2 cm high, found in Tomb 5 (Trench VIII D). It is made of cast bronze and is very similar to 951.

*DECORATIVE DOUBLE-CONOID CAGE BELLS*  
(953–957)

**953 Bronze Bell**

1016 M Pl. 137

About 7.5 cm high, found in Tomb 6 (Trench X A<sup>+</sup>). It is made from cast bronze, now covered by a coat of rust, in a double-conoid cage shape. It consists of rather narrow, equally spaced bronze bars extending from the upper to the lower end, gradually expanding toward the middle of the cage, which has the largest diameter. Decorative connected circular bands are soldered at the middle of the bell in between each two bars. The upper end of the bell turns into a suspension loop, while the lower end is a globular pendant knob.

**954 Bronze Bell**

1032 M Pl. 137

About 7.5 cm high, found in Tomb 6 (Trench X A<sup>+</sup>). Shaped rather like a double pyramid, it is made from cast bronze, now covered by a thick coat of rust that hides some decorative elements. The main body of the cage consists of equally spaced twisted bronze bars, which extend from top to bottom and gradually open outward toward the middle of the cage. A reinforcing bronze band connects these twisted bars at the middle. The top of the bell is formed into a rather large suspension loop, and the bottom is a globular knob.

**955 Bronze Bell**

1017 M Pl. 137

About 7.5 cm high, found in Tomb 6 (Trench X A<sup>+</sup>). It is made from cast bronze, now covered by a coat of rust, in a double-conoid or oval cage shape. The body of the bell consists of rows of pierced triangles alternating upward and downward, separated by a band around the middle. Additional

attached knobs are spaced on the surface of the bell. The top is formed into a suspension loop, and the bottom is decorated by a molding band above a suspended globular knob.

**956 Bronze Bell**

1019 M Pl. 137

About 7.5 cm high, found in Tomb 6 (Trench X A<sup>+</sup>). It is made from cast bronze, now covered by a thick coat of rust, in a double-conoid shape. The body is formed of interspersed bronze bands extending from top to bottom, gradually separating toward the middle, which is surrounded by a horizontal band. The top of the cage bell turns to a suspension loop, and the bottom is decorated by a projecting reel band extending to a small knob.

**957 Bronze Bell**

1020 M Pl. 137

About 7.5 cm high, found in Tomb 6 (Trench X A<sup>+</sup>). It is made from cast bronze, the metal now covered by a thick coat of rust, and has a double-conoid cage shape very similar to 955.

COMMENTS

The bronze bells found at Marlik are grouped in certain tombs, with each individual tomb containing bells similar to each other but different from those found in other tombs, possibly indicating that they were produced especially for the owner of the tomb in a particular workshop and at different times, which may have been a generation or two apart. The many bells found in Tomb 6 may indicate that its owner was a herdsman or dealt with horses or mules in some other connection.

Bronze pomegranate cage bells, which are the most common type at Marlik, have also been found at several other sites. From the Caspian Zone comes a similar bronze bell with triangular pierced holes, found at Redkin-Lager in the Caucasus, dated by Schaeffer to 1300–1100 B.C.<sup>94</sup> The Central Plateau of Iran has also produced bells of this type. A bronze cage-shaped pomegranate bell with simple handle knobs at the base, found at Khurvin, is dated by Vanden Berghe to the late second to early first millennium B.C.<sup>95</sup> Another similar pomegranate cage bell, found at Sialk Cemetery B, is classified by Ghirshman to the beginning of the Iron Age,<sup>96</sup> and a cage-shaped bell with a suspension loop, said to be from Luristan, is dated by Ghirshman to the eighth to seventh centuries B.C.<sup>97</sup> Additional examples from Luristan are reported by Herzfeld.<sup>98</sup> A bell that is similar in shape but not in detail, with a suspension loop in the base, is dated by Moorey to the early first millennium B.C.<sup>99</sup> A similar spherical cage bell with parallel bands, a solid jingling ball, and a vertical pierced handle, modeled as an open flower with four petals, is attributed by Moorey to Iron Age I-II, around 1200–800 B.C.<sup>100</sup>

Examples comparable to the cage-shaped spherical bells with animal decoration at the end of the suspension handle are not so frequent. Three bells of this type, one with a horned animal and the others with a bird at the top of the handle, are dated by Moorey to the early first millennium B.C.<sup>101</sup>

Double-conoid bells are less common. A somewhat similar bell with a loop at each end and a striped band body, made of copper, was found at Nuzi, Nuzi City, Temple E. It is dated by Starr to around the middle of the second millennium B.C.<sup>102</sup>

## MISCELLANEOUS HORSE TRAPPINGS (958–960)

### 958 Frit Chariot Knob

628 M Pl. 137

About 7.0 cm high and 5.3 cm in diameter at the base, found in Tomb 4 (Trench VIII A<sup>+</sup>). It is made of frit with a surface glaze that is somewhat deteriorated. The conical knob has a concave body and a flat base encircled by two shallow parallel grooves. A central hole extends from top to base.

A similar type of frit knob was found at Haft Tepe, dated by the author to the second half of the second millennium B.C.<sup>103</sup>

### 959 Bronze Spool

430 M Pl. 137

About 2.0 cm long, found in Tomb 36 (Trench XVIII C). It is made from cast bronze, now covered by a coat of rust, and is cylindrical, with three parallel, equally spaced projecting reels. It was probably used for the same purpose as 960.

Rather similar spools are identified by Herzfeld as toggles for fastening the headstall of a bridle. Examples have been found at Tepe Giyan in Luristan, at Persepolis, and in the Inshushinak deposit at Susa.<sup>104</sup>

### 960 Bronze Spool

429 M Pl. 137

About 3.9 cm long, found in Tomb 36 (Trench XVIII C). It is made of cast bronze, now heavily rusted on the surface, and has six parallel, almost equally spaced projecting reels. Although its purpose is not certain, it may have been a roller for a horse or chariot strap.

## *Personal Equipment (961–973)*

A number of small tools for use in personal care and hygiene were found at Marlik. These are made of gold and bronze and include fingernail cleaners, ear cleaners, needles, a mirror, a comb, and tweezers.

### FINGERNAIL CLEANERS (961)

Both gold and bronze fingernail cleaners were found in the form of small pins with a decorated top and a tapering or flattened blade point.

#### 961 Bronze Fingernail Cleaners

404 M, 140 M, 72*b* M, and 345 M Fig. 34; Pl. 137

All have cage-shaped bells on top: 404 M, about 4.0 cm long, found in Tomb 36 (Trench XVIII C); 140 M, about 4.0 cm long, found in Tomb 27 (Trench XVII D); 72*b* M, about 5.5 cm long, found in Tomb 26 (Trench XVII B); and 345 M, about 6.5 cm long, found in Tomb 44 (Trench XXI N). 404 M has a pear-shaped cage bell and a wide point; 140 M a round cage-shaped bell and a sharp point; 72*b* M a pear-shaped cage bell and a sharp point; and 345 M an oval cage-shaped bell with a sharp point.

### EAR CLEANERS (962–967)

One gold and six bronze ear cleaners were found at Marlik. All are made in a simple shape, with one end in the form of a very small spoon for cleaning the ear and the other end rolled for suspension, tapered to a sharp point, or also formed as a small spoon.

#### 962 Gold Ear Cleaner

294 M Pl. 137

About 7.8 cm long, found in Tomb 47 (Trench XXI E). It is made from rather thick gold wire slightly bent in the middle, with one end formed in the shape of a small spoon and the other end turned to a flat band, which is rolled into a loop for suspension.

#### 963 Bronze Ear Cleaner

42 M Pl. 137

Two ear cleaners, the metal covered with rust, found in Tomb 26 (Trench XVII B); the larger one measures about 18.5 cm long. They are made of four-sided bronze bars tapering at one end to a round bar ending in a very small spoon. The other end tapers

to a short flat bladepoint on one ear cleaner but is broken and missing from the other.

#### 964 Bronze Ear Cleaner

187M Pl. 137

About 8.0 cm long and covered with rust, found in Tomb 26 (Trench XVII B). It is made of thick wire with a small spoon at one end; the other end is broken and missing.

#### 965 Bronze Ear Cleaner

431 M not illustrated

About 15.0 cm long and covered with rust, found in Tomb 36 (Trench XVIII C). It is made of a thick round bar, with one end formed into a small spoon and the other pierced for suspension.

#### 966 Bronze Ear Cleaner

1006 M not illustrated

About 21.0 cm long and covered with rust. It was found in Tomb 47 (Trench XXII E) and consists of a round bar, with one end formed into a small spoon and the other turned to a four-sided bar that tapers to a sharp point.

#### 967 Bronze Ear Cleaner

1024 M Pl. 137

About 26.6 cm long and covered with rust. It was found in Tomb 12 (Trench XII E) and is made of a thick round bar, with each end formed into a small spoon.

### NEEDLES (968–970)

Many needles were found at Marlik, made of both gold and bronze. Some are intact and in a good state of preservation, but others are rusted and broken.

#### 968 Gold Needle

413 M Pl. 138

About 5.0 cm long, found in Tomb 36 (Trench XVIII C). It is simple in shape, with the head end flattened and rolled to a hollow cylinder and then extended to a narrow wire. This is turned back in an oval loop for the eye, with the point of the wire turned and inserted into the hollow cylindrical shank. The opposite end tapers to a sharp point.

#### 969 Gold Needles

372a M Pl. 138

Four needles, the largest about 8.5 cm long, found in Tomb 36 (Trench XVIII C). They are closely similar to 968.

#### 970 Bronze Needles

87 M, 129 M, and 372b M Pl. 138

These bronze needles all follow the same pattern

as the gold needles, with a hole in the head and the end tapering to a point: 87 M, three needles covered with rust and broken, with the largest incomplete one about 8.5 cm long, found in Tomb 26 (Trench XVII B); 129 M, nine needles, covered with rust with some partly broken, the largest about 11.0 cm long, found in Tomb 32 (Trench XVII E); and 372b M, ten needles, covered with rust and some broken, with the largest one about 7.0 cm long, found in Tomb 36 (Trench XVIII C) along with the gold needles.

#### COMMENTS

An earlier example of a bronze needle, somewhat different in workmanship, with the eye composed of two sides overlapping at the end, was found in Tomb 93, Level III, of Tepe Giyan,<sup>105</sup> while more closely similar bronze needles were found in Level I, Tomb 54.<sup>106</sup> Two sets of chatelaines from Giyan also included bronze needles.<sup>107</sup> Similar bronze needles from Beshtasheni in Caucasia are dated by Schaeffer to 1250–1100 B.C.,<sup>108</sup> whereas other similar bronze needles from Khurvin are dated by Vanden Berghe to the late second to early first millennium B.C.<sup>109</sup> A group of bronze needles made in a twisted technique, found at Tchoga Zanbil, are dated by Ghirshman to 1250 B.C.<sup>110</sup>

### BRONZE MIRROR (971)

#### 971 Bronze Mirror

1029 M Pl. 139

About 17.0 cm in diameter, found in Tomb 10 (Trench XI B). It is made from sheet bronze, now covered by a heavy coat of rust, in part granulated and mixed with soil particles. The round flat mirror has a rather small, narrow band tang with a flat rounded end pierced by a hole with a riveting nail in situ, by which it was originally fastened to a decorative handle, possibly of wood.

#### COMMENTS

A similar mirror of copper was found at Nuzi, Nuzi City, Zigi 34, dated by Starr to around the middle of the second millennium B.C.<sup>111</sup> Another mirror of similar shape with a short tang was found in an Assyrian tomb of Mari, dated to the time of Rameses II (about 1292–1225 B.C.) by an inscribed scarab.<sup>112</sup> Similar mirrors have also been found in areas closer to Marlik. One example with a riveting hole at the tang, from Khurvin, is dated by Vanden Berghe to the late second and early first millennium B.C.,<sup>113</sup> and another, similar bronze mirror with a stick handle was found in Sialk Cemetery B (Sialk VI), assigned by Ghirshman to the beginning of the Iron Age.<sup>114</sup>

## BRONZE COMB (972)

**972 Bronze Comb(?)**

660 M Pl. 139

About 5.5 cm long and 4.2 cm wide, found in Tomb 40 (Trench XVIII N). It is made from sheet bronze, the metal covered by a heavy coat of rust mixed with soil sediment. It is almost rectangular in shape, with one end, slightly wider, separated into spikes, now filled with rust. In the narrower handle end is a suspension hole. Although this object resembles a wooden comb in shape, its exact use is not known.

A somewhat similar object from Samthavro, T 583, in Caucasia, is classified by Schaeffer to the beginning of the Iron Age, around 1200–1100 B.C.<sup>115</sup>

## BRONZE TWEEZERS (973)

**973 Bronze Tweezers**

61 M Fig. 35; Pl. 139

These bronze tweezers, about 14.2 cm long, were found in Tomb 36 (Trench XVIII C). They are made of two rather flat bars tapering toward a sharp point at each end, pressed together from one end to the middle, with the separated ends forming the tweezers. At the middle are three globular moldings next to one another.

Similar tweezers were found at Tepe Giyan, dated to 1500–1200 B.C. by Herzfeld, who also makes reference to the examples found at the Royal Cemetery of Ur.<sup>116</sup>

*Miscellaneous Items (974–988)*

## BRONZE INGOTS (974–976)

A number of bronze ingots were found in the tombs of Marlik, possibly placed there because they were considered a sign of wealth and a useful resource in the hereafter. These ingots have a common crescent or open circular shape, thicker in the middle and narrowing toward the ends, which may be decorated by engraved chevrons, zigzags, or triangles (Color Plate XXXII E).

**974 Bronze Ingots**

230 M Pl. 139

Two ingots, each about 8.3 cm in outer diameter, found in Tomb 25 (Trench XVI F). They are made from solid cast bronze, now covered by a very heavy coat of rust mixed with soil sediment. Both have a very similar open loop shape with the middle much thicker, gradually narrowing toward the ends, which are decorated by parallel engraved zigzag bands.

**975 Bronze Ingot**

416 M Pl. 139

About 14.0 cm in outer diameter, found in Tomb 36 (Trench XVIII C). It is very similar to 974 except that it is proportionately thicker in the middle and is decorated with parallel engraved chevrons at the ends.

**976 Bronze Ingots**

417 M, 418 M, 419 M, 420 M, 421 M, 422 M, 423 M, 730 M, and 732 M Pl. 139

The following bronze ingots are all similar to 975: 417 M, about 14.4 cm in outer diameter, 418 M, about 15.5 cm in outer diameter, 419 M, about 16.5 cm in outer diameter, 420 M, about 14.0 cm in outer

diameter, 421 M, about 15.5 cm in outer diameter, 422 M, about 13.5 cm in outer diameter, and 423 M, about 14.5 cm in outer diameter, all found in Tomb 36 (Trench XVIII C); and 730 M, about 13.2 cm in outer diameter, and 732 M, about 12.5 cm in outer diameter, both found in Tomb 40 (Trench XVIII N). 418 M, 419 M, and 421 M have engraved triangular decoration at each end, and 730 M and 732 M have ends that are narrower and closer to each other than the rest of the ingots.

## COMMENTS

Bronze ingots were found at Marlik in only three tombs, Tombs 25 and 40, each with two examples, and Tomb 36, with eight examples. These ingots may have been placed in the tombs for a specific reason. Tomb 36, in particular, which is a very small tomb, was packed with valuable objects of gold, bronze, and pottery including toys and gaming pieces, indicating that it may have belonged to a young prince. Possibly the eight large bronze ingots were placed in this tomb to be used for making more objects, including weapons, in the future.

## BRONZE PLAQUES (977–978)

**977 Bronze Plaques**

1214 M not illustrated

Four plaques, each about 7.0 cm long, found in Tomb 36 (Trench XVIII C). They are made from sheet bronze, now covered by a coat of rust and granulated in some parts. They are very similar in shape and apparently served a similar function. Each

plaque is rectangular with convex curved sides and a slightly concave body, resembling a small saucer, and possibly was intended to hold some substance.

#### 978 Bronze Plaques

1012 M Pl. 139

Two plaques, each about 8.5 cm long, found in Tomb 44 (Trench XX N), along with some pieces of textile. They are made from sheet bronze, now covered by a thick coat of rust mixed with soil sediment, and are very similar in shape.

### BRONZE CYMBALS (979–986)

A number of bronze cymbals were found at Marlik (Chart 39). Many are now covered by a coat of rust, with some examples more deeply corroded. They are made from a circular sheet of hammered bronze with a hemispherical embossed center and, most often, a wide flat brim. The umbo is pierced in the center, and pieces of textile thong may remain in the hole. On the brim of some cymbals, such as 981 (400 M), an additional piece of metal shaped like an arrowhead is soldered. Pieces of textile and textile bands are often extant on the brim, as in 980 (167 M). A few of these cymbals have very narrow brims and look very much like round helmets. One example of this type, 891, is included among the helmets.

#### 979 Bronze Cymbals

36 M Pl. 140

Three cymbals, corroded and broken with parts of the brim missing, an overall diameter 18.0 cm, found in Tomb 26. They are made from sheet bronze from which the central umbo is hammered out. In the center of the umbo is a pierced hole, and pieces of textile are extant on the brim.

#### 980 Bronze Cymbals

167 M and 662 M Pl. 140

Pair of cymbals, 167 M, overall diameter 23.0 cm at the rim, and 662 M, about 18.5 cm at the rim, both found in Tomb 24 (Trench XV E). They are very similar in shape and workmanship to 36 M except that they are better preserved. Pieces of textile are extant on the brims of these cymbals.

#### 981 Bronze Cymbals

398 M, 399 M, 400 M, and 401 M Pl. 140

The following bronze cymbals are all very similar in shape and workmanship to 979: 398 M and 399 M, about 23.0 cm in diameter; 400 M, a pair about 28.5 cm in diameter; and 401 M, about 27.5 cm in diameter, all found in Tomb 36 (Trench XVIII C). 399 M is decorated at the brim by equally spaced small embossed knobs; 398 M, in addition to similar embossed knobs, has bands of beads and extant pieces of textile; and 400 M has additional soldered

pieces of metal shaped like arrowheads on the brim, possibly to provide for a better grip.

#### 982 Bronze Cymbals

409 M not illustrated

Pair of small cymbals, the larger one about 11.0 cm in diameter, found in Tomb 36 (Trench XVIII C). These cymbals are similar in general shape to the other examples except that the central umbo is not sharply distinguished from the brim, to which it joins in a smooth rounded curve. The brim is decorated near the edge by a single file of small embossed knobs. The larger cymbal is pierced in the center of the umbo, whereas the smaller one has holes at the brim, possibly for attachment to cloth or leather, indicating that it may not have been intended for use as a cymbal but for some other decorative or protective purpose.

#### 983 Bronze Cymbals

524 M, 525 M, and 605 M Pl. 140

524 M and 525 M, each about 10.4 cm in diameter, and 605 M, a pair about 20.0 cm in diameter, all found in Tomb 50 (Trenches XXI L and XXII L). They are similar in shape and workmanship to the other cymbals found at Marlik except for having a rather gentler curve from central umbo to brim. Pieces of textile are extant on the brim of 525 M.

#### 984 Bronze Cymbals

612 M and 613 M not illustrated

Two cymbals, 612 M, about 17.0 cm in diameter, and 613 M, about 16.5 cm in diameter, both found in Tomb 13 (Trench XII G). They are very similar in shape and workmanship to 979. Each is decorated by bunches of five embossed knobs spaced around the brim.

#### 985 Bronze Cymbal

734 M Pl. 140

About 18.0 cm in diameter, found in Tomb 41 (Trench XIX K). Similar in shape and workmanship to 979, it is decorated by a single file of small embossed knobs bordering the rim. Pieces of textile band are extant in the central hole.

#### 986 Bronze Cymbals

768 M not illustrated

Pair of cymbals, each about 27.5 cm in diameter, found in Tomb 47 (Trench XXII E). They are very similar in shape and workmanship to 979. Pieces of textile are extant on the brims. The composition and technology of one of these cymbals have been studied by Vatandoost-Haghighi.<sup>117</sup>

#### COMMENTS

Cymbals of various kinds have been found in Iran and neighboring regions, but not many are similar to the Marlik cymbals. Several smaller examples with more geometric decoration, in the Ashmolean Museum, are discussed by Moorey, who describes one as

similar to the Marlik type and suggests a date of the late second to early first millennium B.C.<sup>118</sup> He refers to other cymbals reported to be from Amlash.<sup>119</sup> Similar cymbals, but smaller and more decorative, are attributed to Luristan in western Persia, dated around the late second to early first millennium B.C.<sup>120</sup>

## TEXTILE FRAGMENTS (987–988)

### 987 Textile Fragments

57 M Pl. 140

Fragments of textile including textile bands and

different types of knots in cord were found in some tombs along with the skeleton, indicating that the body had been clothed at the time of burial. Most of this original clothing has perished except for some fragments of textile placed in more compact soil on top of the stone slab in such a way that they were somewhat protected and were preserved (although in a fragile condition). The variety of weaving seems to point to a fairly developed textile industry.

### 988 Textile Fragments

1529 M Pl. 140

These fragments of textile were discovered with the body of a warrior in Tomb 52 (Trench XXIII G), along with some frit and bronze buttons.



Table 21. Tools

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
892	whetstone	620 M	25155	2	VI B+	25.5				stone
893	whetstone	630 M	36 STO	4	VIII A+	13.5				stone
	whetstone	649 M	36 STO	40	XVIII N	19.5				stone
	whetstone	657 M	36 STO	6	X A+	15.5				stone
	whetstone	648 M	37 STO	24	XV E	16.5				stone
894	whetstone	655 M	36 STO	40	XVIII N	9.0				stone
895	whetstone	656 M	36 STO	40	XVIII N	16.5				stone
896	whetstone	621 M	25154	2	VI B+	22.5				stone
897	whetstone	43 M	43 STO	26	XVII B	16.5				stone
898	whetstone	711 M	25159	3	VI A	21.5				stone
	whetstone	174 M	25160	42	XX F	18.5				stone
	whetstone	503 M	25158	18	XIV D	17.5				stone
	whetstone	622 M	25156	5	VIII D	26.0				stone
899	whetstone	350 M	26 STO	44	XXI N	15.0				stone
900	mortar & pestle	575 M	14598	27	XVII D			13.5	11.5	stone
901	mortar & pestle	710 M	25328	1	III D+					stone
902	mortar & pestle	604 I	25332	19	XIV F			16.5	18.0	stone
903	mortar	708 M	25330	3	VI A			18.5	12.0	stone
904	mortar	709 M	25331	2	VI B+			18.5	17.5	stone
905	pestle	614 M	25329	3	VI A	21.0	9.5			stone
906	pestle	651 M	36 STO	40	XVIII N	15.0	8.0			stone
907	pestle	652 M	36 STO	40	XVIII N	22.0	9.0			stone
908	grinder (small)	706 M	25151	3	VI A	13.5	11.0			stone
909	grinder (small)	185 M	25152	sur	XX E			5.6		stone
910	grinder (small)	473 M	25153	19	XIV F	8.0	8.0			stone
911	pounder	650 M	36 STO	40	XVIII N		7.0		7.0	stone
912	pounder	653 M	36 STO	40	XVIII N	8.8	2.5			stone
913	pounder	654 M	37 STO	40	XVIII N	7.3	3.2			stone
914	pipe stick	323 M	14858	47	XXI E	15.0				gold,
	stone									
915	saw blade	1531 M	31 STO	AKB		6.0				flint
917	hook	469 M	25343	19	XIV F	6.5				bronze
918	hook (long)	600 M	25214	19	XIV F	40.2				bronze
919	hook	632 M	14984	6	X A+				9.0	bronze
920	hook	633 M	14985	4	VIII A+				5.2	bronze
921	spindle whorl	735 M	25148	41	XIX K	26.0				bronze
922	spatula	965 M	14992	52	XXIII G	19.5				bronze
923	pipe stick	329 M	25004	33	XVIII F	16.5				bronze
924	pipe stick?	35 M	25368	26	XVII B	22.5				bronze
925	ladle	397 M	25296	36	XVIII C	82.0				bronze
926	ladle	166 M	25218	24	XV E	68.0				bronze
	ladle	584 M	25223	26	XVII B	79.0				bronze
	ladle	949 M	25415	52	XXIII G	90.0				bronze
927	skewer (2)	50 M	25381	26	XVII B	72.5				bronze
928	skewer (2)	97 M	25381	50	XXII L	60.0				bronze
	skewer	334 M	25381	33	XVIII F	67.0				bronze
	skewer	55 M	25216	24	XV E	61.0				bronze
	skewer	950 M	25413	52	XXIII G	72.0				bronze
	skewer	753 M	14620	1	III D+	59.5				bronze
	skewer	335 M	25298	33	XVIII F	66.0				bronze
	skewer	434 M	25297	36	XVIII C	55.0				bronze
929	skewer (incomplete)	351 M	17 STO	44	XXI N	22.0				bronze
930	skewer (broken)	598 M	25318	45	XXII H	74.0				bronze
931	gears? (3)	1079 M	25347	5	VIII D			2.5		bronze
932	gear?	944 M	25341	52	XXIII G			6.5		bronze

Table 21. Tools

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	Material
933	chisel	189 M	14960	26	XVII B	6.5	2.3			bronze
934	chisel	640 M	25397	2	VI B+	16.0	3.1			bronze
935	chisel	638 M	68 STO	45	XXI G	15.5	3.0			bronze
936	chisel	1163 M	25412	AKB		16.0	3.2			bronze
937	chisel	1028 M	25346	10	XI B	19.5	4.0			bronze
938	adze-axe	102 M	25349	50	XXII L	16.0				bronze
939	adze-axe	110 M	25202	50	XXII K	21.0				bronze
	adze-axe	641 M	67 STO	2	VI B+	10.3				bronze
	adze-axe	596 M	25273	44	XX N	21.5				bronze
	adze-axe	106 M	25270	44	XX N	15.5				bronze
	adze-axe	121 M	25269	24	XV E	16.5				bronze
	adze-axe	184 M	25315	sur	XVII B	6.5				bronze
	adze-axe	485 M	25314	19	XIV F	16.0				bronze
	adze-axe	700 M	25344	15	XIII C	11.0				bronze
940	horse bit (2 horse-shaped plaques)	538 M	25036	53	XXIV H	7.0		5.5		bronze
941	horse bit	327 M	14 STO	49	XXII K					bronze
942	bell	338 M	25357	44	XXI N			7.0		bronze
943	bell (3)	239 M	25256	47	XXI E			8.0		bronze
944	bell	729 M	25260	44	XX N			6.8		bronze
945	bell	498 M	25258	18	XIV D			6.5		bronze
946	bell	937 M	14976	GH I				5.0		bronze
	bell	686 M	14974	30	XVI L			6.5		bronze
	bell	933 M	14977	13	XII G			5.0		bronze
	bell	499 M	25259	18	XIV D			5.0		bronze
947	bell (w/ mt. goat)	938 M	25261	GH				9.5		bronze
948	bell (w/ bird)	403 M	14590	36	XVIII C			7.0		bronze
949	bell (w/ bird)	382 M	25255	36	XVIII C			6.0		bronze
950	bell (w/ bird)	1127 M	25387	GH				7.5		bronze
951	bell	1080 M	25266	5	VIII D			4.0		bronze
952	bell	1081 M	25266	5	VIII D			3.2		bronze
953	bell	1016 M	25264	6	X A+			7.5		bronze
954	bell	1032 M	25265	6	X A+			7.5		bronze
955	bell	1017 M	25262	6	X A+			7.5		bronze
956	bell	1019 M	31 STO	6	X A+			7.5		bronze
957	bell	1020 M	25263	6	X A+			7.5		bronze
958	knob (chariot rad)	628 M	25354	4	VIII A+			5.3	7.0	frit
959	spool	430 M	25342	36	XVIII C	2.0				bronze
960	spool	429 M	25342	36	XVIII C	3.8				bronze
961	finger nail cleaner	404 M	25131	36	XVIII C	4.0				bronze
	finger nail cleaner	72b M	25352	26	XVII B	5.5				bronze
	finger nail cleaner	345 M	25008	44	XXI N	6.5				bronze
	finger nail cleaner	140 M	25129	27	XVII D	4.0				bronze
962	ear cleaner	294 M	14873	47	XXI E	7.8				gold
963	ear cleaner (2)	42 M	25365	26	XVII B	18.5				bronze
964	ear cleaner	187 M	14887	26	XVII B	8.0				bronze
965	ear cleaner	431 M	14972	36	XVIII C	15.0				bronze
966	ear cleaner	1006 M	14988	47	XXII E	21.0				bronze
967	ear cleaner	1024 M	25018	12	XII E	26.6				bronze
968	needle	413 M	14874	36	XVIII C	5.0				gold
969	needle (4)	372a M	14880	36	XVIII C	8.5				gold
970	needle (3)	87 M	25025	26	XVII B	8.5				bronze
	needle (9)	129 M	14932	32	XVII E	11.0				bronze
	needle (10)	372b M	14880	36	XVIII C	7.0				bronze
971	mirror	1029 M	25385	10	XI B			17.0		bronze

Table 21. Tools

Cat. No.	Description	Exc. No.	Mus. No.	Tomb No.	Trench No.	L. cm.	W. cm.	Diam. cm.	H. cm.	H. Material
972	comb?	660 M	14948	40	XVIII N	5.5	4.2			bronze
973	tweezers	61 M	25407	36	XVIII C	14.2				bronze
974	ingot (2)	230 M	25005	25	XVI F			8.3		bronze
975	ingot	416 M	25235	36	XVIII C			14.0		bronze
976	ingot	422 M	25236	36	XVIII C			13.5		bronze
	ingot	421 M	25241	36	XVIII C			15.5		bronze
	ingot	730 M	25234	40	XVIII N			13.2		bronze
	ingot	732 M	60 STO	40	XVIII N			12.5		bronze
	ingot	423 M	25239	36	XVIII C			14.5		bronze
	ingot	419 M	25240	36	XVIII C			16.5		bronze
	ingot	418 M	25242	36	XVIII C			15.5		bronze
	ingot	417 M	25238	36	XVIII C			15.5		bronze
	ingot	420 M	25237	36	XVIII C			14.0		bronze
977	plaques (4)	1214 M	25469	36	XVIII C	7.0				bronze
978	plaques (2)	1012 M	78 STO	44	XX N	8.5				bronze
979	cymbal (3)	36 M	38 STO	26	XVII B			18.0		bronze
980	cymbal	662 M	25319	24	XV E			18.5		bronze
	cymbal (2)	167 M	25367	24	XV E			23.0		bronze
981	cymbal	399 M	14595	36	XVIII C			23.0		bronze
	cymbal	401 M	25267	36	XVIII C			27.5		bronze
	cymbal	400 M	25222	36	XVIII C			28.5		bronze
	cymbal or helmet	398 M	14594	36	XVIII C			23.0		bronze
982	cymbal (2)	409 M	14591	36	XVIII C			11.0		bronze
983	cymbal	524 M	25026	50	XXI L			10.7		bronze
	cymbal	525 M	25027	50	XXI L			10.7		bronze
	cymbal (2)	605 M	1 STO	50	XXI/XXII L				20.0	bronze
984	cymbal	613 M	25320	13	XII G			16.5		bronze
	cymbal	612 M	25320	13	XII G			17.0		bronze
985	cymbal	734 M	25225	41	XIX K			18.0		bronze
986	cymbal (2)	768 M	25203	47	XXII E			27.5		bronze
987	clothing (pieces)	57 M	74 STO	26	XVII B					textile
988	clothing? (pieces)	1529 M	31 STO	52	XXIII G					textile

## Chapter XI Notes

1. Schaeffer 1948b: Fig. 226, No. 20, §178, pp. 422–423.
2. Schaeffer 1948b: Fig. 217, No. 23, §165, pp. 406–407.
3. Schaeffer 1948b: Fig. 294, No. 4, §216, pp. 513–514.
4. Vanden Berghe 1964: Pl. XXXIX, No. 274, pp. 39–45, 67.
5. Ghirshman 1939: Vol. 2, Pl. V, No. 1 (center), p. 125.
6. Schmidt 1933: Pl. CXXI A, H 867, p. 401.
7. Schmidt 1933: Pl. CXX H 773.
8. Ghirshman 1939: Vol. 2, Pl. XXIV, No. 8, p. 114.
9. Vanden Berghe 1964: Pl. XXXIX, No. 275, pp. 39–45, 67.
10. Hakemi and Rad 1950: Fig. 35, No. 3.
11. Vanden Berghe 1964: Pl. XXXIX, No. 272, pp. 29–45, 67.
12. Ghirshman 1939: Vol. 2, Pl. XXIV, No. 10; Pl. LVII, No. S.843 a, b, Pl. LIX, S.622; Pl. LXII, S.768; Pl. LXV, S.867; Pl. LXVIII, S.711 a, b; Pl. LXXII, S.932; Pl. LXXVII, S.968; Pl. LXXVIII, S.965, p. 114.
13. Schmidt 1933: Pl. CXX A (H.166), p. 407.
14. Hancar 1941: Fig. 260 (right), p. 144. Hancar 1935: Fig. 14, p. 64.
15. Hancar 1935: Fig. 8a, p. 49.
16. Schaeffer 1948b: Fig. 274, No. 16, §214, p. 502.
17. Schaeffer 1948b: Fig. 145 C, No. 125–11, §93, p. 173.
18. Moorey 1971: Fig. 19, No. 101, pp. 91, 97–98.
19. Herzfeld 1941: Fig. 260 (middle), p. 144.
20. Schaeffer 1948b: Fig. 22 b, §147, pp. 418–419.
21. Maxwell-Hyslop 1953: Fig. 6, Nos. 7–9, pp. 69–87.
22. Schaeffer 1948b: Fig. 226, No. 1, §176, pp. 421–422.
23. Schaeffer 1948b: Fig. 172, Nos. 5–6, §124, pp. 267–269.
24. Schaeffer 1948b: Fig. 183, No. 40, §140, pp. 306–308.
25. Ghirshman 1966: Pl. LIII, No. 6, p. 125.
26. Pope 1938: Vol. 4, p. 24 J.
27. Schaeffer 1948b: Fig. 293, No. 3, §217, pp. 516–519.
28. Schaeffer 1948b: Fig. 61, No. Y (third from right), §34, pp. 59, 68.
29. Schaeffer 1948b: Fig. 195, Nos. 6, 12, §146, pp. 323–324.
30. Schaeffer 1948b: Fig. 226, No. 5, §176, pp. 421–422.
31. Starr 1937: Pl. 124 H, p. 34, Nuzi City S 133, Strata II.
32. Schaeffer 1948b: Fig. 168, No. 12, §109, p. 224.
33. Schaeffer 1948b: Fig. 172, Nos. 2–4, §124, pp. 267–269.
34. Schaeffer 1948b: Fig. 174, Nos. 13, 19, §127, pp. 276–277.
35. Deshayes 1963: pp. 273–276.
36. Schmidt 1933: Pl. XCVIII H 168, p. 400.
37. Schaeffer 1948b: Fig. 239, No. 15, §193, pp. 445–451.
38. Fukai and Ikeda 1971: Pl. XXXIII, No. 5, pp. 3, 27.
39. Moorey 1971: Fig. 11, Nos. 35–36, p. 64.
40. Moorey 1974a: p. 64; Fig. 35, p. 68; Fig. 39, p. 74.
41. Anderson 1961: p. 17; Fig. 8, p. 13.
42. Majidzadeh 1977: Pl. 88, No. 4.
43. Calmeyer 1964: Pl. 39, Nos. 85–87, 90, pp. 31, 36–37. This is now in the Bröckelschen Collection.
44. Godard, A., 1962: Pl. 24, p. 48.
45. Herzfeld 1941: Pl. XXIX (middle one).
46. Godard, Y. and A., 1954: Pl. 31, Cat. No. 289.
47. Porada 1964a: Pl. VII, No. 2, pp. 27–28. This is now in the Walters Art Gallery.
48. Legrain 1934: Pl. XVIII, Fig. 52, p. 10. This is now in the University Museum of Philadelphia.
49. Legrain 1934: Pl. XX, No. 55, p. 10. This is now in the University Museum of Philadelphia.
50. Legrain 1934: Pl. XIX, No. 53, p. 10. This is now in the University Museum of Philadelphia.
51. Godard, A., 1950: Fig. 33, pp. 49, 55. This is now in the Tehran Archaeological Museum.
52. Loudmer and Poulain 1976: Fig. 77. This is now in the Dr. Audouin Collection in Paris.
53. Calmeyer 1969: Fig. 77, pp. 76–78. This is now in the Bröckelschen Collection.
54. Godard, A., 1938: Fig. 153, pp. 238–239. These are now in the Tehran Archaeological Museum.
55. Loudmer and Poulain 1976: Fig. 76. This is now in the Dr. Audouin Collection in Paris.
56. Godard, Y. and A., 1954: Pl. 33, Cat. No. 292.
57. Schaeffer 1948b: Fig. 266, Nos. 8, 9, §207, pp. 488–490.
58. Parrot 1961: Fig. 148, pp. 128, 368.
59. Porada 1964a: Pl. VII, Fig. 1, p. 28.
60. Ghirshman 1961–62: Pl. XXVIII, Cat. No. 160, p. 31. Ghirshman 1964c: Fig. 75, p. 422. Kleiss 1962: Fig. 116, Cat. No. 84, p. 53. This is now in the Foroughi Collection in Tehran.
61. Talbot Rice 1965: Fig. 18, pp. 28, 270. This is now in the Graeffe Collection in Brussels.
62. Moorey 1966: Pl. IV, Fig. 34, pp. 14–15.
63. Godard, Y. and A., 1954: Pl. 26, Cat. No. 290.
64. Bussagli 1956: Pl. X, Fig. 112, p. 83.
65. Potratz 1952: Figs. 3–12, 14–19, 21–22, 68, 70, 75.
66. Potratz 1952: Figs. 290–306.
67. Godard, A., 1962: Fig. 111, pp. 76–77.
68. Ghirshman 1964c: Fig. 73, p. 422.
69. Moorey 1971: Pl. 13, No. 108 a-b, p. 109; Pl. 16, No. 118; Pl. 17, No. 120; Pls. 18–23.
70. Potratz 1968: Figs. 72 a-b, 73–76, 78–79, pp. 19, 86.
71. Moorey 1974b: Pl. VI A, p. 26.
72. Hancar 1955: Fig. 6, pp. 182, 576. Hancar 1935: Fig. 10, pp. 49, 64–65.
73. Bossert 1942: Fig. 600, p. 60.
74. Schaeffer 1948b: Fig. 274, No. 6, §214, p. 502.
75. Schaeffer 1948b: Fig. 283, No. 4, §214, pp. 502–503.
76. Schaeffer 1948b: Fig. 266, No. 11, §207, pp. 488–489.
77. Contenau 1935: Pl. 8, Tomb 3, No. 11, p. 18.
78. Ghirshman 1939: Vol. 2, Pl. XXV, No. 1; Pl. LVI, Nos. S.835, S.841, S.588; Pl. LXXV, S.924.
79. Hancar 1955: Fig. 18, pp. 494–495, 577.
80. Hancar 1955: Fig. 5, No. 9, pp. 140–141, 577.
81. Moorey 1974a: Fig. 37, pp. 70–71. This is now in the Adam Collection.
82. Moorey 1971: Pls. 14–15, Nos. 112–114, pp. 111–112. This is now in the Ashmolean Museum.
83. Nagel 1963: Pl. LII, No. 112, p. 46.
84. Pope 1938: Vol. 4, p. 39 A, B.
85. David-Weill Collection 1972: Figs. 287–288.
86. Moorey 1971: pp. 111–112.
87. Moorey 1974a: Fig. 73, p. 101. This is now in the Adam Collection in London.
88. Moorey 1971: Pl. 28, Nos. 157–158. This is now in the Ashmolean Museum.
89. Schaeffer 1948b: Fig. 61 F, §34, pp. 59–60; Fig. 67, No. 23, §35, 125, pp. 64–65, 273. Byblos level II has been variously dated, by Hubert to 2000–1700 B.C., by Dussand to 2000 B.C., by Vincent to 2000–1900 B.C., by Contenau to 2300?–1800 B.C., by Albright to 1900–1850 B.C., and by Dunant to 1900–1800 B.C.
90. Schaeffer 1948b: Fig. 135, No. 1, §93, p. 170.
91. Moorey 1974a: Fig. 72, p. 101. This is now in the Adam Collection in London.
92. Porada 1964–65: Fig. 422, p. 84. This is now in the Tehran Archaeological Museum.
93. David-Weill Collection 1972: Fig. 266. This is now in the David-Weill Collection in Paris.
94. Schaeffer 1948b: Fig. 298, Nos. 15–18, §215, pp. 504–506.
95. Vanden Berghe 1964: Pl. XXXVII, Nos. 254, 256, pp. 39–45, 66.
96. Ghirshman 1939: Vol. 2, Pl. XXV, No. 6, Pl. LVI S.833, p. 125.
97. Ghirshman 1964c: Fig. 501, pp. 376, 438. This is now in the Louvre.
98. Herzfeld 1941: Fig. 289, pp. 170–171.
99. Moorey 1971: Pl. 28, No. 155, pp. 137–138. This is now in

- the Ashmolean Museum.
100. Moorey 1974a: Fig. 67, pp. 20, 98–99. This is now in the Adam Collection.
  101. Two of the bells are discussed in Moorey 1971: Pl. 29, Nos. 157–158, pp. 137–138. These are now in the Ashmolean Museum. The third example, discussed in Moorey 1974a: Fig. 72, pp. 100–101, is now in the Adam Collection.
  102. Starr 1937: Pl. 126 Y1, Y2, p. 35.
  103. Negahban 1977a: Fig. 42, p. 33.
  104. Herzfeld 1941: Fig. 258, p. 142.
  105. Contenau 1935: Pl. 28, Tomb 93, No. 3, p. 33.
  106. Contenau 1935: Pl. 18, Tomb 54, No. 4, p. 26.
  107. Herzfeld 1941: Fig. 276, p. 156.
  108. Schaeffer 1948b: Fig. 281, Nos. 3–10, §214, pp. 502–503.
  109. Vanden Berghe 1964: Pl. XLIII, Nos. 309–310, pp. 39–45, 68.
  110. Ghirshman 1966: Pl. XCV G.T.Z. 24.
  111. Starr 1937: Pl. 127 F, p. 35.
  112. Parrot 1937: Pl. XV E, pp. 83–84.
  113. Vanden Berghe 1964: Pl. XLVII, No. 350, pp. 39–45, 70.
  114. Ghirshman 1939: Vol. 2, Pl. XXIX, No. 8; Pl. LII S.580; Pl. LXVIII S.712, 727; Pl. LXIX S.953c; Pl. LXXIII S.935; Pl. LXXIX S.988b, p. 125.
  115. Schaeffer 1948b: Fig. 296, No. 3, §215, p. 504.
  116. Herzfeld 1941: Fig. 276, p. 156.
  117. Vatandoost-Haghighi 1977. His analysis of one of the cymbals of 768 M is Cu:95.15; Sn:4.24; Pb:0.052; As:0.18; Sb:0.016; Ni:0.01; Co:n.d.; Fe:0.21; Bi:0.12; Zn:n.d.; Ag:0.13; Au:n.d., p.116.
  118. Moorey 1971: Pl. 72, No. 467, pp. 247–248.
  119. Moorey 1971: p. 247 and fn. 2.
  120. Moorey 1971: p. 249.



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# Conclusion

## *Derivation of the Site Name*

The mound we excavated was called both Cheragh-Ali and Marlik Tepe by the inhabitants of the Gohar Rud Valley. The name Cheragh-Ali (Ali of the Lamp) refers to the last owner of the mound, who died four years before our excavation began. Marlik is a more complicated and more thought-provoking name. The natives consider it a name compounded from *mar*, meaning “snake” in Persian, and *lik*, meaning “place for” in the local Gilaki dialect. Thus Marlik would mean “Snake Place” or “Place of Snakes,” a meaning that the villagers connect to the circumstance that, with the change of seasons from cold winter to hot summer, many large snakes emerge from cracks in the rock of the mound with consequent danger to passersby. Our expedition team witnessed this proliferation of snakes on the mound with the coming of warm weather, but fortunately we had experienced snake catchers among our workers, for there were days when half a dozen snakes were caught and killed, the largest more than 2 m long.

When a more historical meaning for the origin of the name *Marlik* is sought, other possibilities can be found. It seems certain that, as the villagers say, the suffix *lik* or *lak* comes from the local Gilaki dialect and means “place for.” This construction can be found in present-day geographic names such as *Gi-lik* for the inhabitants of Gilan province and *Gi-lak-i* for their local dialect. The Persian historian Jahangir Sartippour suggests that *Ska-lik*, the name of another district in this region, is derived from *Sakkaha* (Scythians) joined with *lik*, the complete name probably originating from the time of Scythian settlement.<sup>1</sup> Sartippour also suggests that the name

*Mar-lik* means “Place for Marda or Amarda,” and he finds this same root in the name of the *Amar-lou* district, which covers the highlands of Rahmatabad of Gilan where Marlik is located, with *Amar* representing *Amard* or *Mard*, the same people represented at Marlik.<sup>2</sup>

Other Persian historians support the hypothesis that the first part of *Mar-lik* refers to the *Marda* or *Amarda*. Moshir-ed-Douleh Pirnia writes that in ancient times the inhabitants of Gilan Province were the Kaducians and those of Mazandaran Province the Petrucians, and that living among them was the tribe of *Mard* or *Amard*, with the Sefid Rud being called *Amarda* at this time.<sup>3</sup> The Greek historian Strabo mentions the name *Mardi* several times in connection with the southern shores of the Caspian Sea. Referring to the peoples living on the northern slopes of the mountain range south of the Caspian, he says, “In the northerly part of the range dwell first the Gelae and Cadusii and Amardi, as I have said, and certain of the Hyrcanians, after them the tribes of the Parthians.”<sup>4</sup> This seems to indicate that the *Mardi* or *Marda* were living east of the Cadusians (in Gilan) and west of the Hyrcanians (in Mazandaran), a location in accord with the site of Marlik. On his map Strabo specifically assigns the region of the Sefid Rud to the “Amardi.”<sup>5</sup> Ali Hakemi, who excavated Kaluraz near the river of the same name in the Sefid Rud Valley, a site not very far from Marlik Tepe, also assigns that part of the country to the “Mardi,” based on the ancient records of Herodotus Ctesias.<sup>6</sup>

## *The Origin and Cultural Background of Marlik*

The northern part of Iran, covering the southern shores of the Caspian Sea and extending to the highlands of the northern slopes of the Elburz Mountains, including the provinces of Gilan and Mazanderan, has its own particular environmental character resulting from its abundant precipitation. The area is well forested, and when properly managed and developed is agriculturally productive. Man has been attracted to this region from very early times. In the Belt and Hotu caves at the southeastern end of the Caspian, about 2 km west of Behshahr, remains of cave dwellers who were living here by the late Paleolithic period have been found.<sup>7</sup>

The eastern and western ends of this geographic band along the southern shores of the Caspian were influenced by the prehistoric cultures that developed on the adjacent plains of Turkmenia to the east and eastern Azerbaijan to the west, but the central part of this zone, particularly the highlands of the Elburz Mountains, was quite isolated for a long period. Apparently the rugged and inaccessible highlands prevented cultural contact from the plateau into this region, a contact that in any case the cave-dwelling inhabitants did not welcome.

Because this part of the highlands has been subjected to little systematic archaeological excavation in contrast to the amount of clandestine digging that has taken place over the last three decades, information about the identity and activities of its inhabitants has been limited, particularly since there are few records from ancient times of this always rather remote area. As a result of the lack of material on the region, it is very difficult to document in any detail hypotheses about the development of the pre- and protohistoric periods there. Nevertheless, the results of several systematic excavations, a study of the material produced by clandestine digging (much of which has found its way into museums and collections), and the findings of a few archaeological surveys in the area, when combined with certain clues left in the ancient literature of the early inhabitants of the Iranian Plateau, may provide at least a very sketchy picture of the early history of this region.

A little light has been thrown on this problem by a survey sponsored by the Institute of Archaeology of the University of Tehran, directed by the author and carried out in the summer months of 1975 and 1976. This survey covered one of the mountainous areas of the Caspian Zone, which is bordered by the small town of Marzanabad (located about 25 km south of Chalus), and included the valleys of Kalardasht and Sarbad Rud (Cold Water River) as well as the summits of Takht-i Suleiman and Alam Kuh. This valley, from Marzanabad to the mountain of Alam Kuh, with the small plain of Hissar-Chal at its base, is

about 60 km long and varies in width from 2 to 10 km. In our two seasons of work there more than 200 archaeological sites, including caves, mounds, burial grounds, and both deserted and still-used monuments, were surveyed and identified according to the surface archaeological debris and the architectural remains. These 200 sites can be divided into several groups.

### *CAVES*

Evidence of ancient cave-dwelling sites was recovered from several valleys where natural caves were abundant. Our survey located a group of 12 caves near a riverbank in the plain of Kalardasht, behind the village of Moka. Each contained considerable debris at the mouth consisting of stone blades and crude implements, all made from the local stone, which was not of good quality. Stone blades of better quality, as long as 16.5 cm, with well-prepared edges, were found at the mountain foot of Alam Kuh in the plain of Hissar-Chal. Fine stone blades of flint and obsidian made with good workmanship were not found anywhere in the region, however, indicating that the natives were dependent upon the use of local stone and had little contact with other parts of the ancient world. Apparently the cave-dwelling inhabitants in the valley of Sardab Rud lived in isolation and continued their cave-dwelling style of life into the later stages of prehistory, when the inhabitants of other parts of the ancient world had already passed through the Neolithic and settled village farming stages into the Chalcolithic period.

### *MOUNDS*

Several groups of mounds belonging to the prehistoric and historic periods were also identified.

1. The oldest group of mounds produced on their surface dark gray and reddish brown pottery, often burnished, with geometric designs. The shape of these wares, as seen in the body, spout, handle, and base, suggests a relationship to the pottery found in northern Iran belonging to the second half of the second millennium B.C. or the beginning of the first millennium B.C. There were many more of these mounds than of the following two groups, indicating that the period of the late second and early first millennium B.C. was very active in this area.
2. A second group of mounds, limited in number, produced a type of brick red pottery comparable to



pottery of the first millennium B.C. On some mounds only one particular type of this brick red pottery, belonging to the first half of the first millennium B.C., was found, and on others there were several different types of the same group, representing different periods of the second half of the first millennium B.C.

3. A third group of mounds, fairly large in number, produced surface pottery belonging to the fifth- to eighth-century Hejira (11th–14th cent. A.D.). This apparently was also a period of particularly active development in this region.

### MONUMENTS

The monuments found in this region include the ruins of fortified castles or strongholds that are mainly contemporary with the third group of mounds, dated to the fifth- to eighth-century Hejira (11th–14th cent. A.D.) according to surface pottery finds. There were also shrines and mosques built in later Islamic times that are still in use.

The earliest village farming sites in this area contain surface material dating to the second millennium B.C. Our survey did not recover a single pottery sherd comparable to the early prehistoric pottery of village farming communities on the Iranian Plateau dating prior to the second millennium B.C. This absence has also been noted in other systematic but limited excavations in this zone, including the Japanese excavations at Dailaman and the Iranian excavations at Kalardasht, Garmabak, Kaluraz, and so on. The many clandestine excavations in the Elburz highlands during the last three decades also have not, as far as is known, produced any pottery comparable to the painted pottery of the prehistoric period on the Iranian Plateau.

Thus, as far as is known, the inhabitants of the Elburz highlands remained divorced from the cultural and technological developments on the Iranian Plateau for a long time, possibly from the sixth to the second millennium B.C. For a much longer time than on the plateau they continued to live in isolated conditions that perpetuated the way of life of their Stone Age cave-dwelling ancestors. It was not until the second millennium B.C. that a strong culture characterized by gray and reddish-brown burnished pottery penetrated the region and changed the life of its inhabitants. Although our survey covered only one of the major valleys of this region, similar conditions have been found in excavations elsewhere, and the vast bulk of material uncovered by clandestine digging also suggests a similar picture throughout the highlands.

It seems likely that the people who introduced gray and reddish-brown pottery into the area in the

second millennium B.C. were Indo-Iranians, the first outside group able forcibly to penetrate the region. The possibility that Indo-Iranians were the first successful invaders of this region is supported by the ancient Indo-Iranian literature describing their early developments and movements. In the *Shahnameh* of Ferdowsi, which relates the history of the early Iranian kings, verses concerned with this invasion appear. Ferdowsi, in composing his epic, based his work on older manuscripts in the Pahlavi language of the Sassanian period, between the second and sixth centuries A.D., and in all likelihood the Pahlavi manuscripts were in turn based on earlier Indo-Iranian traditions.

In the *Shahnameh* King Keu-Marth (or Geo-Marth) tries for the first time to invade this mountainous area in the province of Mazanderan; his son Siamak is killed in the wars with the inhabitants of this region, who live in caves and forests and are termed "Demons" (*Dieve*). Later King Keykavous decides to invade again and carry out the task that his ancestor Keu-Marth was unable to accomplish. The elderly Sagas and other wise persons try to convince the king not to undertake this campaign into the land of the "Demons," reminding him that it has never been successfully invaded by any ruler. The headstrong King Keykavous does not follow this advice. He carries out his attack, is defeated by the "Demons," and is taken captive. Then the hero of the *Shahnameh*, Rostam, penetrates the region to rescue the king. He kills the "White Demon," frees King Keykavous, and annexes the area.

It is certainly interesting that this story related by Ferdowsi conforms very closely to the archaeological evidence from the region, which indicates that it was not influenced by the surrounding prehistoric cultures of the plateau. This may have resulted from the vigorous defense of this rugged mountainous area by the inhabitants termed "demons," whose cave-dwelling way of life continued until the area was invaded by a group of people, possibly Indo-Iranians, whose remains (a series of mounds belonging to the second millennium B.C.) dot the region. Although the *Shahnameh* cannot be absolutely documented, it incorporates traditions from earlier sources and tells a story that conforms in this case to the archaeological evidence. The same pattern seen in the valleys of Kalardasht and Sardab Rud may well apply to the valley of the Gohar Rud where Marlik is located, since it seems that the people who settled there during the second millennium B.C. with their well-developed art and technology were not descended from the already existing, apparently Stone Age, culture of the area.

Typologically, the Marlik objects seem to belong to the late second and early first millennium B.C. A carbon 14 analysis of samples collected from the excavation produced a date of 3425 ±55 years ago,<sup>8</sup> a

date that supports the typological evidence. Because there is no evidence of continuity with the original culture of the region, I would suggest that an invading force, probably the Marda or Mardi, a group of Indo-Iranians already partly exposed to a developed technology, entered the area at the beginning of this period. Once established, their culture developed and expanded, inspired by the rich natural resources and varied flora and fauna of the region.

Records left by the Assyrians and the Greeks identify the inhabitants of the Elburz highlands during the second half of the second millennium B.C. with the Indo-Iranians. At this time the region of the Sefid Rud was known as the home of the Marda, and the river itself was called Amarda. Huarts suggests that the Medes, who were Indo-Iranians, were not well established in Iran by the end of the second millennium B.C., but that by the dawn of the first millennium B.C. they had gradually penetrated northern Iran.<sup>9</sup> Mention of the Medes, their towns, and their wealth during the reign of Samshi Adad IV (824–812 B.C.) indicates that by this time they were already well established and prosperous.<sup>10</sup> Later Assyrian kings, such as Adad-Niruri III (810 B.C.), carried out military campaigns into Median lands, as did Tiglathpileser III, who took more than 60,000 captives along with many thousand cattle, mules, and sheep as one of his generals moved toward Mount Bikni (thought to be Mount Demavand, northeast of Tehran), where he held an audience with the chieftain of the region.<sup>11</sup>

Frankfort reports that around 1000 B.C. some Indo-European speakers from Central Asia moved into the Iranian Plateau, with Indo-Iranian names being mentioned for the first time by Shalmaneser III, in the year 836 B.C.<sup>12</sup> The migration of these tribes and evidence of their battles can be seen, according to Ghirshman, in Sialk Cemetery dating to the tenth to ninth centuries B.C.<sup>13</sup> Dyson suggests that Indo-European invaders with their well-known art and technology entered the Iranian Plateau around the early first millennium B.C.; that is, this movement gradually took place between 1200 and 900 B.C., with the tribes being unified around the ninth century B.C. under the guidance of the Medes.<sup>14</sup> Cameron feels that the earliest wave of Indo-Europeans may have occurred around the beginning of the second millennium B.C.,<sup>15</sup> adding that, although the invaders may not have been very influential politically in Iran at first, traces of their existence can be seen in the appearance of the names of their gods, such as Surya the Sun God, Marut the Plague God, and Burya the Storm God, in Kassite records. These Indo-Europeans were described as experienced horsemen, a trait soon adopted by the Kassites. Cameron notes that, in their early migrations, the Indo-Iranians gradually passed through the northern part of the

Iranian Plateau without settling and turned westward. There, some settled in the Khabur Valley at the headwaters of the Euphrates and formed the Mitannian Empire (which, after a century, was finally defeated by the Hittites), while the eastern branch entered the Indus Valley by the middle of the second millennium B.C.<sup>16</sup> The existence of Iranian names in the records left by Shalmaneser III of his campaign to Mannean country in 839 B.C. shows that by the ninth century B.C. Indo-Iranians had already penetrated well into the region and settled as a ruling class in northwestern Iran.<sup>17</sup> Streck suggests that the Medes left their homeland around the middle of the second millennium B.C. and after a long period of wandering finally settled south and southwest of the Caspian Sea, gradually extending their control southwest as well. He argues that undoubtedly the Indo-Iranians (Medes) must have lived together with the original ruling class, generally considered to be of Caucasian stock, and that this coexistence possibly resulted in the use of Indo-Iranian personal names by the rulers of the region.<sup>18</sup>

Reacting to the common danger confronting them from the west, where they faced numerous military campaigns from the more established powers (particularly the Assyrians), as well as for other reasons, the Indo-Iranians of the region south of the Caspian Sea and of other regions of the Iranian Plateau began to coalesce in order to form a fairly unified power under the direction of the Medes. Shalmaneser III, around 835 B.C., recorded that twenty-three leaders of Parsua presented him with gifts on defeating the Medean city of Missi, the first time that the Medes were specifically mentioned. It seems likely that if the Medes and other Indo-Iranian tribes merged in Parsua in western Iran during the ninth century B.C., they must have been established much earlier on the Iranian Plateau, gradually becoming organized and extending their domination westward until they were recognized as a considerable power by the Assyrians. Assyrian records of the next two centuries mention many conflicts with the Indo-Iranians, mostly under the leadership of the Medes. At first the Assyrians were the dominant power, but gradually the Medes began to obtain the upper hand until finally they were able to defeat the Assyrians and end their empire.

Although the first specific mention of the Medes occurred in 835 B.C., similar or related names were recorded much earlier. Tukulti-Ninurta (1250 B.C.) relates that he defeated forty-three rulers, including those in the area of the Madani, in one of his military campaigns to the Nairi region. If Madani refers to the Medes, this would be the first time they were mentioned.<sup>19</sup> Tiglathpileser I (ca. 1100 B.C.) describes the defeat of twenty-three rulers in his third military campaign to Nairi in the mountainous region of Elama and Amadan.<sup>20</sup> In referring to the

land of Nairi, east of the land of the Mannans, he mentions the Upper Sea (which Luckenbill suggests may be the Caspian or Mazanderan Sea), stating that he had captured about 120 chariots from the people of this area.<sup>21</sup> Adad-Niruri II (911–891 B.C.) says that in the region of Nairi there are stags, mountain goats, leopards, and bears, some of which he had hunted,<sup>22</sup> and all of these animals are still native to the Elburz highlands.

Unquestionably, the land of Nairi, which was repeatedly mentioned, was very important to the Assyrians. The land of Gilzanu was often mentioned in association with Nairi, and they may have been neighboring regions. Tukulti-Ninurta II recorded that he captured 2,720 horses from these two lands,<sup>23</sup> while Ashurnasirpal wrote that he obtained there many chariots, horses, mules, sheep, and goats together with a large quantity of silver, gold, copper vessels, and wine.<sup>24</sup> Both in ancient and modern times these may all be found in Azerbaijan, Gilan, and the Western Plateau. Luckenbill suggests that the sites of Madara, located east of Nairi and mentioned in a stele of Ashurnasirpal, and Matiate may also possibly be related to the Medes.<sup>25</sup> Samshi-Adad V (823–811 B.C.) says that after defeating the Mannans he entered Gizil-Bunda and the region of the Matai, which may be the land of the Medes.<sup>26</sup>

The many references to the Medes in records of Assyrian military campaigns seem to indicate that they controlled a very large region east of the land of the Mannans. However, since the Assyrians were attacking the Medes from the west, how far Median land extended toward the east was unknown to them. Tiglathpileser III (745–727 B.C.), in a record of a campaign to the east against the Medes, refers to the mountains Abiruz (possibly Elburz) and Mount Bikni (possibly Mt. Demavand), with the city of Zakruti, belonging to the “Mighty Medes,” as in the area east of Mount Bikni.<sup>27</sup> Records related to the geographic location of the Medes have been left by Sargon II (ca. 714 B.C.)<sup>28</sup> and by Sennacherib (704–681 B.C.), who refers to the “Far Distant Medes.”<sup>29</sup> It is certain that the Medes, the leaders of a large group of Indo-Iranian tribes, were in control of not only western Iran but also of northern and northeastern Iran. Diakanov suggests that the Medes gradually moved toward the west, occupying the eastern slopes of the Zagros Mountains,<sup>30</sup> and Barnett refers to their influence on the Luristan Bronzes of the tenth to eighth centuries B.C.<sup>31</sup>

Several points can be mentioned in connection with the Medes, their appearance in Iran, the lands they controlled, and their ultimate power and strength. In almost all the Assyrian records, including those of Sargon II's eighth campaign of 714 B.C., which is the most detailed geographically, the area east of the Mannans, including Gizil-Bunda, Andia farther north, and Zirkirtu, with all the area east, is

described as belonging to the Medes, who were also referred to as Madai, Matai, and Amadai (a point mentioned by Dyson<sup>32</sup>). According to the Assyrian records, the Medes controlled a large part of the Iranian Plateau as early as the ninth century B.C. Their land probably extended to Tabriz on the north, to the Solduz Plain (the land of the Mannans) on the west, and to Elam on the south, with their eastern border uncertain because the Assyrians never penetrated far enough to ascertain it, although a few hints can be found.

Tiglathpileser III (745–727 B.C.) refers to the mountains of Abiruz and Bikni in the country of the Medes. Esarhaddon describes his military campaign to the edge of the Salt Desert near the Lapis Lazuli, or Blue Mountain, of Demavand with snow-capped summit, where he received gifts from Iranian rulers, indicating that this region is the center of the territory of the “Far Distant Medes.”<sup>33</sup> Sennacherib also mentions the “Far Distant Medes.”<sup>34</sup> If the area near Demavand was the center of the land of the “Far Distant Medes” (bearing in mind that the Assyrian concept of “Far Distant” would be affected by the distance they had already traveled from Assyria to Demavand), one can suggest that the eastern extension of the Medes' territory probably covered the whole region of northeastern Iran, if not a larger area. Olmstead, in his map of Achaemenian satrapies or provinces, assigned the northern and southern slopes of the Elburz Mountains, Azerbaijan, Kurdistan, Gilan, Mazanderan, and the central part of the Iranian Plateau as far as Kashan to Median territory.<sup>35</sup> This rather large region represents only a part of their territory in earlier times when they ruled almost the whole northern part of the Iranian Plateau, before the Indo-Iranian tribes were unified into the confederation of the Median Empire.

According to records left by Greek, Roman, and later historians, the region of the Sefid Rud Valley, where Marlik is located, was home to the Mardi and Marda tribe, a group of Indo-Iranians who had settled there and established a kingdom covering a large part of the Southern Zone of the Caspian Sea or, at the very least, brought this large area under their cultural and technological influence. Remains of this unified culture are scattered from Russian Talish, circling east to the southeastern corner of the Caspian Sea and covering the northern slopes of the Elburz Mountains from the highlands to the shoreline. These archaeological remains, mostly tombs and graves, belong to the second half of the second millennium B.C. and especially to the last quarter of the second millennium, which represents the zenith of this culture, a culture that some scholars have suggested should be called the Marlik Culture.

The influence or possibly the extension of this culture can be seen in the north-central, northeast central, and northwest central areas of the Iranian

Plateau and their peripheral regions. Comparable objects found from the eastern Mediterranean shores to the Indus Valley indicate that there was considerable cultural and technological contact between this Marlik Culture and other areas of the ancient world. There is a special similarity between some items found at Marlik and some at Haft Tepe in Khuzistan, and it seems possible that Elamite influences, based on the prehistoric cultures of the Susa Plain (which flourished for several millennia in

the southern alluvial plain of Khuzistan), reached as far north as the kingdom of Marlik. The Marlik artists and craftsmen who made these beautiful artifacts were fully aware of the cultural patterns, traditional forms, and technological development of the Elamites and of other cultures of the ancient world, and with their talent and vigorous creativity made use of these in producing a most vital and outstanding school of art.

## Chapter XII Notes

1. Sartippour 1963.
2. Sartippour 1963.
3. Pirinia 1962: p. 157.
4. Strabo 1969: Vol. 5, p. 245.
5. Strabo 1969: Vol. 5, p. 259, Map XI.
6. Hakemi 1968: pp. 63–65.
7. Coon 1951.
8. Modderman 1968.
9. Huart 1927: pp. 27–28.
10. Huart 1927: p. 28.
11. Huart 1927: pp. 27–28.
12. Frankfort 1956: pp. 204–205.
13. Ghirshman 1964a: pp. 3–4.
14. Dyson 1964a: pp. 8–9.
15. Cameron 1936: p. 139.
16. Cameron 1936: p. 140.
17. Cameron 1936: p. 142.
18. ZA 1886: Vol. 15, p. 374.
19. Luckenbill 1926–1927: Vol. 1, pp. 50–52, 57, 60.
20. Luckenbill 1926–1927: Vol. 1, pp. 81–82.
21. Luckenbill 1926–1927: Vol. 1, pp. 81, 92.
22. Luckenbill 1926–1927: Vol. 1, p. 122.
23. Luckenbill 1926–1927: Vol. 1, p. 122.
24. Luckenbill 1926–1927: Vol. 1, p. 132.
25. Luckenbill 1926–1927: Vol. 1, p. 148.
26. Luckenbill 1926–1927: Vol. 1, pp. 206–207, 581, 637.
27. Luckenbill 1926–1927: Vol. 1, pp. 281, 285–286, 291.
28. Luckenbill 1926–1927: Vol. 1, pp. 49–50, 73, 99.
29. Barnett 1965: p. 30001.
30. Diakanov 1956.
31. Barnett 1965: p. 2997.
32. Dyson 1960b: p. 119.
33. Dyson 1960b: p. 119.
34. Olmstead 1960: p. 362.
35. Olmstead 1959: Map of Achaemenian Satrapies.



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# Concordance of Marlik Numbers

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
1 <i>a</i> M	174	Gold Pendant	34 M	656	Bronze Macehead
1 <i>b</i> M	198	Gold Pendant	35 M	924	Bronze Pipe Stick(?)
2 M	154	Gold Tiger Head	36 M	979	Bronze Cymbals
3 M	169	Gold Necklace	37 M	461	Bronze Pin
4 M	353	Gold Bracelet	38 M		Bronze Cymbal
5 M	354	Silver Bracelet	39 M	679	Bronze Dagger
6 M	419	Gold Button	40 M	816	Bronze Spearhead
7 M	419	Gold Button	41 <i>a</i> M	826	Bronze Arrowhead
8 M	428	Gold Buttons	41 <i>b</i> M	827	Bronze Arrowhead
9 M	193	Gold Pendants	41 <i>c</i> M	828	Bronze Arrowhead
10 M	200	Gold Pendants	41 <i>d</i> M	830	Bronze Arrowhead
11 M	378	Gold Earring	41 <i>e</i> M	835	Bronze Arrowhead
12 M	158	Gold Necklace	41 <i>f</i> M	841	Bronze Arrowhead
13 M	4	Gold Bowl	41 <i>g</i> M	854	Bronze Arrowhead
14 M	18	Silver Cup	41 <i>h</i> M	859	Bronze Arrowhead
15 M	118	Bronze Humped Bull Figurine	42 M	963	Bronze Ear Cleaner
16 M	444	Shell Buttons	43 M	897	Whetstone
17 M	178	Gold Pendant	44 M	39	Bronze Jar
18 M	419	Gold Buttons	45 M	659	Bronze Halberd
19 M	202	Gold Pendant	46 M	680	Bronze Dagger
20 M	153	Gold Tiger Heads	47 M		Whetstone
21 M	429	Gold Buttons	48 M		Bronze Ladle
22 M	310	Gold and Black Centerpiece	49 M		Bronze Vessel
23 M	411	Gold Button	50 M	927	Bronze Skewers
24 M	338	Red Carnelian Beads	51 M	517	Jar
25 M	284	Glass Necklace	52 M		Pottery Vessel
26 M	419	Gold Buttons	53 <i>a</i> M	677	Bronze Dagger
27 M	333	Gold Globular Beads	53 <i>b</i> M	688	Bronze Dagger
28 M	201	Gold Pendants	54 M	763	Bronze Spearhead
29 M	8	Gold Beaker	55 M	928	Bronze Skewer
30 M	65	Frit Jar	56 M	824	Bronze Arrowhead
31 M	1	Gold Pot	57 M	987	Textile Fragments
32 M	146	Bronze Mountain Goat (?) Figurine	58 <i>a</i> M	694	Bronze Dagger
			58 <i>b</i> M	695	Bronze Dagger
33 M	651	Bronze Macehead	59 M	129	Bronze Model of Oxen

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
60 M	511	Jar	118 M	504	Jar
61 M	973	Bronze Tweezers	119 M	661	Limestone Macehead
62 M	183	Gold Pendant	120 M	643	Bronze Macehead
63 M	184	Gold Pendant	121 M	939	Bronze Adze-Ax
64 M	410	Gold Button	122 M	363	Gold Earrings
65 M	430	Gold Buttons	123 M	405	Gold Hair Binder
66 M	177	Gold Pendant	124 M	327	Gold Pomegranate Beads
67 M	318	Gold Center Bead	125 M	192	Gold Pendants
68 M	201	Gold Pendants	126 M	179	Gold Pendant
69 M	333	Gold Globular Beads	127 M	325	Gold Lion Head Beads
70 M	283	Glass Necklace	128 <sub>a</sub> M	333	Gold Globular Bead
71 M	451	Bronze Pin	128 <sub>b</sub> M	335	Gold Olive-Shaped Beads
72 <sub>a</sub> M	461	Bronze Pins	129 M	970	Bronze Needles
72 <sub>b</sub> M	961	Bronze Fingernail Cleaner	130 <sub>a</sub> M	288	Frit Necklace
73 M		Bronze Cymbal	130 <sub>b</sub> M	482	Cylinder Seal
74 M		Bronze Arrowheads	131 M		Frit Beads
75 M	653	Bronze Macehead	132 M	290	Frit Necklace
76 M	641	Bronze Macehead	133 M	874	Bronze Belt
77 M	642	Bronze Macehead	134 M	771	Bronze Spearhead
78 M	640	Bronze Macehead	135 M	341	Frit Beads
79 M	652	Bronze Macehead	136 M	443	Frit Button
80 M	638	Bronze Macehead	137 M	336	Gold Truncated Conical Beads
81 M	660	Limestone Macehead	138 M	424	Gold Button
82 M	657	Bronze Macehead	139 M	433	Bronze Button
83 M	658	Bronze Macehead	140 M	961	Bronze Fingernail Cleaner
84 M		Whetstone	141 M	689	Bronze Dagger
85 M	123	Bronze Humped Bull Figurines	142 M	512	Jar
86 M	709	Bronze Sword	143 M	662	Marble Macehead
87 M	970	Bronze Needles	144 M	607	Spouted Bowl
88 M	678	Bronze Dagger	145 M	890	Bronze Helmet
89 M	769	Bronze Spearhead	146 M	681	Bronze Dagger
90 M	730	Bronze Spearhead	147 M	509	Jar
91 M	668	Bronze Dagger	148 M	508	Jar
92 M	889	Bronze Helmet	149 M	556	Cup
93 M	888	Bronze Wristband	150 M	2	Gold Cup
94 M	66	Frit Jar	151 M	34	Bronze Cup
95 M		Pottery Vessel	152 M	507	Jar
96 <sub>a</sub> M	519	Jar	153 M	529	Jar
97 M	928	Bronze Skewers	154 M	43	Bronze Pot with Spout
98 M	54	Bronze Vase	155 M	111	Pottery Bear Figurine
99 M	357	Bronze Circllet	156 M	83	Pottery Humped Bull Figurine
102 M	938	Bronze Adze-Ax	157 M	865	Bronze Model of Bow
103 M	67	Frit Jar	158 M	757	Bronze Spearhead
106 M	939	Bronze Adze-Ax	159 M		Bronze Spearhead
107 M		Bronze Adze-Ax	160 M	697	Bronze Dagger
108 M	663	Limestone Macehead	161 M	698	Bronze Dagger
109 M	644	Bronze Macehead	162 M	16	Silver Spouted Pot
110 M	939	Bronze Adze-Ax	163 M	17	Silver Spouted Pot
111 M	741	Bronze Spearhead	164 M	639	Bronze Macehead
112 <sub>a</sub> M	834	Bronze Arrowhead	165 M	667	Decorative Dagger
112 <sub>b</sub> M	839	Bronze Arrowhead	166 M	926	Bronze Ladle
113 M	654	Bronze Macehead	167 M	980	Bronze Cymbal
114 M	655	Bronze Macehead	168 M	785	Bronze Spearhead
115 M	664	Limestone Macehead	169 M	733	Bronze Spearhead
116 M	208	Gold and Carnelian Necklace	170 M	764	Bronze Spearhead
117 M	293	Frit Necklace	171 M	760	Bronze Spearhead

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
172 M	22	Bronze Cooking Pot	229 M	35	Bronze Cup
173 M	600	Plain Bowl	230 M	974	Bronze Ingot
174 M	898	Whetstone	231 M	355	Bronze Bracelet
175 M	30	Bronze Tumbler	232 M	702	Bronze Dagger
176 M	23	Bronze Cooking Pot	233 M	703	Bronze Dagger
177 M	832	Bronze Arrowhead	234 M	754	Bronze Spearhead
178 M	55	Bronze Pot	235 M	753	Bronze Spearhead
179 M	863	Bone Arrowheads	236 M		Bronze Spearhead
180 M	434	Bronze Button	237 <sub>a</sub> M	833	Bronze Arrowhead
181 M	851	Bronze Arrowhead	237 <sub>b</sub> M	849	Bronze Arrowhead
182 M	84	Pottery Humped Bull Figurine	238 M	619	Basin
183 M	442	Frit Buttons	239 M	943	Bronze Pomegranate Bells
184 M	939	Bronze Adze-Ax	240 M	119	Bronze Humped Bull Figurine
185 M	909	Stone-Grinding Set	241 M	120	Bronze Humped Bull Figurine
186 M	32	Bronze Plate	242 M	139	Bronze Stag Figurine
187 M	964	Bronze Ear Cleaner	243 M	138	Bronze Stag Figurine
188 M	727	Iron Blade	244 M	413	Gold Button
189 M	933	Bronze Chisel	245 M	413	Gold Button
190 M	464	Bronze Pin	246 M		Gold Button
191 M	245	Red Carnelian Necklace	247 M	413	Gold Button
192 M	212	Gold and Carnelian Necklace	248 M	413	Gold Button
193 M	222	Red Carnelian Necklace	249 M	413	Gold Button
195 M	206	Gold and Frit Necklace	250 M	413	Gold Button
196 M	665	Hematite Macehead	251 M		Gold Button
197 M	384	Gold Earrings	252 M	413	Gold Button
198 M	539	Pitcher	253 M	413	Gold Button
199 M	231	Red Carnelian Necklace	254 M	422	Gold Button
200 M	875	Bronze Belt	255 M	422	Gold Button
201 M	9	Gold Beaker	256 M	422	Gold Button
202 M	19	Silver Beaker	257 M	422	Gold Button
203 M	353	Gold Bracelet	258 M	422	Gold Button
204 M		Silver Bracelet	259 M	413	Gold Button
205 M	417	Gold Button	260 M		Gold Button
206 M		Gold Button	261 M	165	Gold Necklace
207 M	414	Gold Button	262 M	97	Pottery Humped Bull Figurine
208 M	416	Gold Button	263 M	98	Pottery Humped Bull Figurine
209 M	423	Gold Button	264 M	168	Gold Necklace
210 M	423	Gold Button	265 M	182	Gold Pendant
211 M	423	Gold Button	266 M	209	Gold and Carnelian Necklace
212 M	423	Gold Button	267 M	353	Gold Bracelet
213 M	417	Gold Button	268 M	170	Gold Pendant
214 M	412	Gold Button	269 M	360	Gold Earring
215 M	412	Gold Button	270 M	420	Gold Button
216 M	412	Gold Button	271 M	420	Gold Button
217 M	409	Gold Button	272 M	420	Gold Button
218 M	384	Gold Earrings	273 M	420	Gold Button
219 M	221	Red Carnelian Necklace	274 M	349	Gold Bracelet
220 M	227	Red Carnelian Necklace	275 M	349	Gold Bracelet
221 M	243	Red Carnelian Necklace	276 M	352	Gold Bracelet
222 M	249	Red Carnelian Necklace	277 M	21	Silver Pot with Gold Spout
223 M	229	Red Carnelian Necklace	278 M	420	Gold Button
224 M	159	Gold Necklace	279 M	420	Gold Button
225 M	226	Red Carnelian Necklace	280 M	420	Gold Button
226 M	218	Gold and Clay Bead Necklace	281 M	420	Gold Button
227 M	132	Bronze Model of Oxen	282 M	420	Gold Button
228 M	672	Bronze Sword with Iron Blade	283 M	513	Jar

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
284 M	530	Jar	332 M	766	Bronze Spearhead
285 M	530	Jar	333 M	728	Bronze Blade
286 M	518	Jar	334 M	928	Bronze Skewer
287 M	557	Cup	335 M	928	Bronze Skewer
288 M	510	Jar	336 M	628	Plate
289 M	674	Gold and Bronze Handle	337 M	866	Bronze Shield
290 M	765	Bronze Spearhead	338 M	942	Bronze Bell
291 M	163	Gold Necklace	339 M	737	Bronze Spearhead
292 M	353	Gold Bracelet	340 M	801	Bronze Spearhead
293 M		Gold Bracelet	341 M	736	Bronze Spearhead
294 M	962	Gold Ear Cleaner	342 M	712	Bronze Dagger
295 M	361	Gold Earring	343 M	713	Bronze Dagger
296 M	311	Gold Centerpiece	344 M	452	Bronze Pin
297 M	425	Gold Button	345 M	961	Bronze Fingernail Cleaner
298 M	210	Gold and Carnelian Necklace	346 M	802	Bronze Spearhead
299 M	205	Gold and Carnelian Necklace	347 M		Bronze Vessel
300 M	321	Black Gold-Capped Center Bead	348 M	367	Gold Earring
301 M	321	Black Gold-Capped Center Bead	349 M	817	Bronze Spearhead
302 M	326	Gold Pomegranate Beads	350 M	899	Whetstone
303 M	326	Gold Pomegranate Beads	351 M	929	Bronze Skewer
304 M	404	Gold Hair Binder	352 M	10	Gold Cup
305 M		Gold Hair Binder	353 M	11	Gold Bowl
306 M	377	Gold Earrings	354 M	6	Gold Cup
307 M	377	Gold Earrings	355 M	12	Gold Beaker
308 M	190	Gold Pendant	356 M	82	Gold Bust
309 M	405	Gold Hair Binder	357 M	344	Gold Lion Head Bracelet
310 M	199	Gold Pendants	358 M	164	Gold Necklace
311 M	418	Gold Button	359 M	175	Gold Pendant
312 M	219	Red Carnelian Necklace	360 M	388	Gold Ring
313 M	418	Gold Button	361 M	390	Gold Ring
314 M	195	Gold Pendant	362 M	390	Gold Ring
315 M	418	Gold Button	363 M	391	Gold Ring
316 M	402	Gold Diadem	364 M	364	Gold Earring
317 M	373	Gold Earring	365 M	362	Gold Earring
318 M	254	Gold-Capped Carnelian Necklace	366 M	173	Gold Pendant
319 <sub>a</sub> M	329	Gold Vertical-Ribbed Bead	367 M	142	Bronze Antlers
319 <sub>b</sub> M	330	Gold Four-Sided Bead	368 M	142	Bronze Antlers
319 <sub>c</sub> M	333	Gold Globular Beads	369 M	142	Bronze Antlers
320 M	392	Gold Rings	370 M	142	Bronze Antlers
321 M	5	Gold Cup	371 M	142	Bronze Antlers
322 M	450	Gold and Bronze Pins	372 <sub>a</sub> M	969	Gold Needles
323 M	914	Stone Pipe Stick	372 <sub>b</sub> M	970	Bronze Needles
324 M	696	Bronze Dagger	373 M	265	Silver Chain
325 M	815	Bronze Spearhead	374 M	279	Black Stone Pendant
326 <sub>a</sub> M	846	Bronze Arrowhead	375 M	322	Gold Lion Head Bead
326 <sub>b</sub> M	852	Bronze Arrowhead	376 M	156	Ram Figurine
327 M	941	Bronze Horse Bit	377 M	103	Pottery Stag Figurine
328 <sub>a</sub> M	829	Bronze Arrowhead	378 M	73	Pottery Male Figurine
328 <sub>b</sub> M	837	Bronze Arrowhead	379 M	72	Pottery Female Figurine
328 <sub>c</sub> M	844	Bronze Arrowhead	380 M	79	Bronze Female Figurine
328 <sub>d</sub> M	845	Bronze Arrowhead	381 M	78	Bronze Female Figurine
328 <sub>e</sub> M	850	Bronze Arrowhead	382 M	949	Bronze Bell
328 <sub>f</sub> M	857	Bronze Arrowhead	383 M	230	Red Carnelian Necklace
329 M	923	Bronze Pipe Stick	384 M	459	Bronze Pin
330 M	710	Bronze Sword	385 M	455	Bronze Pins with Gold Covers
331 M	682	Bronze Dagger	386 M	115	Bronze Humped Bull Figurine

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
387 M	116	Bronze Humped Bull Figurine	441 M	328	Gold Spiral Bead
388 M	117	Bronze Humped Bull Figurine	442 M	384	Gold Earrings
389 M	143	Bronze Mountain Goat Figurine	443 M	194	Gold Pendant
390 M	134	Bronze Stag Figurine	444 M	263	Red Carnelian Necklace
391 M	144	Bronze Mountain Goat Figurine	445 M	327	Gold Pomegranate Beads
392 M	145	Bronze Mountain Goat Figurine	446 M	162	Gold Necklace
393 M	149	Bronze Ram Figurine	447 M	255	Gold and Carnelian Necklace
394 M		Bronze Animal Figurine	448 M	185	Gold Pendant
395 M		Bronze Models of Oxen	449 M	376	Gold Earring
396 M		Bronze Model of Oxen	450a M	316	Gold Center Bead
397 M	925	Bronze Ladle	450b M	332	Gold Spiral Bead
398 M	981	Bronze Cymbal	451 M	380	Gold Earrings
399 M	981	Bronze Cymbal	452 M	381	Gold Earring
400 M	981	Bronze Cymbals	453 M	398	Gold Diadem
401 M	981	Bronze Cymbal	454 M	535	Cubic Jar
402 M	855	Bronze Arrowhead	455 M	540	Elongated Pitcher
403 M	948	Bronze Bell	456 M	532	Jar
404 M	961	Bronze Fingernail Cleaner	457 M	207	Gold and Red Carnelian Necklace
405 M	486	Stamp Seal	458 M	346	Silver Animal Head Bracelet
406 M	302	Gypsum Pendant	459 M	246	Red Carnelian Necklace
407a M	281	Black Material Pendant	460 M	353	Gold Bracelet
407b M	294	Frit Pendant	461 M	370	Gold Earring
408a M	273	Bronze Pendants	462 M	167	Gold Necklace
408b M		Bronze Beads	463 M	767	Bronze Spearhead
409 M	982	Bronze Cymbals	464 M	699	Bronze Dagger
410 M	459	Bronze Pin	465 M		Bronze Spearhead
411 M	464	Bronze Pin	466 M	693	Bronze Dagger
412 M	27	Bronze Bowl	467 M	814	Bronze Spearhead
413 M	968	Gold Needle	468 M	394	Bronze Rings
414 M	356	Bronze Bracelet	469 M	917	Bronze Hook
415 M	274	Bronze Pendant	472 M	247	Red Carnelian Necklace
416 M	975	Bronze Ingot	473 M	910	Stone-Grinding Set
417 M	976	Bronze Ingot	474 M	166	Gold Necklace
418 M	976	Bronze Ingot	475 M	464	Bronze Pin
419 M	976	Bronze Ingot	476 M	464	Bronze Pin
420 M	976	Bronze Ingot	477 M	260	Carnelian and Stone Necklace
421 M	976	Bronze Ingot	478 M	204	Gold and Carnelian Necklace
422 M	976	Bronze Ingot	479 M	211	Gold, Agate and Red Carnelian Necklace
423 M	976	Bronze Ingot			
424 M	555	Cup	480 M	304	Lime Necklace
425 M	356	Bronze Bracelet	481 M	278	Hematite Necklace
426 M	280	Black Stone Pendant	482 M	374	Gold Earring
427 M		Bronze Ring	483 M	384	Gold Earrings
428 M	408	Bronze Hair Binder	484 M	343	Agate Bead
429 M	960	Bronze Spool	485 M	939	Bronze Adze-Ax
430 M	959	Bronze Spool	486 M	213	Gold and Carnelian Necklace
431 M	965	Bronze Ear Cleaner	487 M	133	Bronze Model of Oxen
432 M	441	Frit Button	488 M	259	Carnelian and Stone Necklace
433 M	271	Bronze Pendant	490 M	431	Gold Button
434 M	928	Bronze Skewer	491 M	85	Pottery Humped Bull Figurine
435 M	194	Gold Pendant	492 M	356	Bronze Bracelet
436 M	194	Gold Pendant	493 M	86	Pottery Humped Bull Figurine
437 M	194	Gold Pendant	494 M	87	Pottery Humped Bull Figurine
438 M	432	Gold Object	495 M	88	Pottery Humped Bull Figurine
439 M	432	Gold Object	496 M	89	Pottery Humped Bull Figurine
440 M	432	Gold Object			

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
498 M	945	Bronze Pomegranate Bell	555 M	314	Gold Spacer Bead
499 M	946	Bronze Pomegranate Bell	556a M	317	Gold Center Bead
500 M	506	Jar	556b M	329	Gold Vertical-Ribbed Bead
501 M	90	Pottery Humped Bull Figurine	557 M	379	Gold Earring
502 M	96	Pottery Humped Bull Figurine	558 M	379	Gold Earring
503 M	898	Whetstone	559 M	400	Gold Diadem
504 M	752	Bronze Spearhead	560 M	397	Gold Diadem
505 M	101	Pottery Stag Figurine	561 M	405	Gold Hair Binder
506 M	106	Pottery Ram Figurine	562 M	445	Gold Leaves
508 M	26	Bronze Pot Handle	563 M	401	Gold Diadem
509 M		Bronze Lids	564 M	191	Gold Pendant
510 M		Bronze Loops	565 M	389	Gold Rings
511 M	704	Bronze Dagger	566 M	445	Gold Leaves
512 M	750	Bronze Spearhead	567 M	160	Gold Necklace
513 M	705	Bronze Dagger	568 M	248	Red Carnelian Necklace
514 M	706	Bronze Dagger	569 M	457	Gold Pin
515 M	13	Gold Bowl	570 M	453	Gold Pin
516 M	99	Pottery Humped Bull Figurine	571 M	228	Red Carnelian Necklace
517 M	91	Pottery Humped Bull Figurine	572 M	232	Red Carnelian Necklace
518 M	74	Pottery Male Figurine	573 M	308	Shell Necklaces
519 M	77	Pottery Charioteer Figurine	574 M	298	Gypsum Necklace
520 M		Whetstone	575 M	900	Stone Mortar and Pestle
521 M	571	Dizies	576 M	631	Vase
522 M	568	Round Pot	577 M	616	Spouted Bowl
523 M	355	Bronze Bracelet	578 M	633	Vase
524 M	983	Bronze Cymbal	579 M	542	Pitcher
525 M	983	Bronze Cymbal	580 M	607	Spouted Bowl
526 M	369	Gold Earrings	582 M	543	Pitcher
527 M	370	Gold Earring	583 M	620	Basin
528 M	370	Gold Earring	584 M	926	Bronze Ladle
529 M	188	Gold Pendants	593 M		Bronze Needles
530 M	464	Bronze Pin	594 M		Whetstone
531 M	399	Gold Diadem	595 M		Bronze Pins
532 M	350	Gold Bracelet	596 M	939	Bronze Adze-Ax
533 M	351	Gold Bracelet	597 M	536	Cubic Jar
534 M	370	Gold Earrings	598 M	930	Bronze Skewer
535 M	368	Gold Earring	600 M	918	Bronze Hook
536 M	370	Gold Earring	601 M	488	Stamp Seal
537 M	220	Red Carnelian Necklace	603 M		Stone Macehead
538 M	940	Bronze Horse Cheekpieces	604 M	902	Stone Mortar and Pestle
539 M	135	Bronze Stag Figurine	605 M	983	Bronze Cymbals
540 M	136	Bronze Stag Figurine	606 M		Gold Button
541 M	137	Bronze Stag Figurine	607 M	666	Basalt Macehead
542 M	225	Red Carnelian Necklace	608 M	345	Gold Horse Head Bracelet
543 M		Fossil	609 M	447	Gold Inlaid Belt Buckle
544 M	292	Frit Necklace	610 M	14	Gold Beaker
545 M	233	Red Carnelian Necklace	611 M	534	Double Jar
546 M	20	Silver Cup	612 M	984	Bronze Cymbal
547 M	313	Gold Centerpiece Beads	613 M	984	Bronze Cymbal
548 M	189	Gold Pendant	614 M	905	Stone Pestle
549 M	331	Gold Flat Discoid Beads	616 M	537	Cubic Jar
550 M	382	Gold Earrings	617 M	92	Pottery Humped Bull Figurine
551 M	379	Gold Earring	618 M	505	Jar
552 M	467	Gold Sheet	619 M	37	Bronze Jar
553 M	197	Gold and Lapis Lazuli Pendant	620 M	892	Whetstone
554 M	187	Gold Pendant	621 M	896	Whetstone



Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
622 M	898	Whetstone	682 M	224	Red Carnelian Necklace
623 M	530	Jar	683 M	786	Bronze Spearhead
626 M	612	Spouted Bowl	684 M	787	Bronze Spearhead
627 M	541	Elongated Pitcher	685 M	788	Bronze Spearhead
628 M	958	Frit Chariot Knob	686 M	946	Bronze Pomegranate Bell
629 M	554	Cup	688 M	357	Bronze Circlet
630 M	893	Whetstone	689 M	356	Bronze Bracelets
631 M	29	Bronze Bowl	690 M	356	Bronze Bracelet
632 M	919	Bronze Hook	691 M	356	Bronze Bracelets
633 M	920	Bronze Hook	692 M	818	Bronze Spearhead
634 M	269	Bronze Pendant	693 M	790	Bronze Spearhead
635 M		Bronze Arrowheads	694 M	755	Bronze Spearhead
636 M	836	Bronze Arrowhead	695 M	700	Bronze Dagger
637 M		Bronze Arrowheads	696 M	819	Iron Spearhead
638 M	935	Bronze Chisel	697 M	749	Bronze Spearhead
640 M	934	Bronze Chisel	698 M	768	Bronze Spearhead
641 M	939	Bronze Adze-Ax	699 M	789	Bronze Spearhead
642 M	356	Bronze Bracelet	700 M	939	Bronze Adze-Ax
643 M		Bronze Beads	701 M	751	Bronze Spearhead
644 M	196	Gold Pendants	702 M	465	Bronze Pin
646 M	347	Gold and Bronze Animal Head Bracelet	703 M	462	Bronze Pin
647 M	867	Bronze Shield	704 M		Silver Pin
648 M	893	Whetstone	706 M	908	Stone-Grinding Set
649 M	893	Whetstone	707 M	630	Plate
650 M	911	Stone Pounder	708 M	903	Stone Mortar
651 M	906	Stone Pestle	709 M	904	Stone Mortar
652 M	907	Stone Pestler	710 M	901	Stone Mortar and Pestle
653 M	912	Stone Pounder	711 M	898	Whetstone
654 M	913	Stone Pounder	712 M	47	Bronze Vase Fragment
655 M	894	Whetstone	713 M	800	Bronze Spearhead
656 M	895	Whetstone	714 M	803	Bronze Spearhead
657 M	893	Whetstone	715 M	358	Bronze Bracelet
658 M	28	Bronze Bowl	716 M	745	Bronze Spearhead
660 M	972	Bronze Comb(?)	717 M	746	Bronze Spearhead
661 M	31	Bronze Plate	718 M	747	Bronze Spearhead
662 M	980	Bronze Cymbal	719 M	716	Bronze Dagger
663 M	759	Bronze Spearhead	720 M	356	Bronze Bracelet
664 M	758	Bronze Spearhead	721 M	356	Bronze Bracelet
665 M	810	Bronze Spearhead	722 M	632	Vase
666 M	739	Bronze Spearhead	723 M	33	Bronze Plate
667 M	740	Bronze Spearhead	724 M	708	Bronze Dagger
668 M	761	Bronze Spearhead	726 M	717	Bronze Dagger
669 M	811	Bronze Spearhead	727 M	707	Bronze Dagger
670 M	820	Iron Spearhead	728 M	31	Bronze Tumbler
671 M		Pottery Vessel	729 M	944	Bronze Pomegranate Bell
672 M	526	Jar	730 M	976	Bronze Ingot
673 M	501	Jar	731 M	356	Bronze Bracelets
674 M		Pottery Vessel	732 M	976	Bronze Ingot
675 M	539	Pitcher	734 M	985	Bronze Cymbal
676 M	618	Basin	735 M	921	Bronze Spindle
677 M	539	Pitcher	736 M	714	Bronze Dagger
678 M	528	Jar	737 M	748	Bronze Spearhead
679 M	487	Stamp Seal	738 M	719	Bronze Dagger
680 M	435	Bronze Button	739 M	724	Bronze Dagger
681 M	597	Shallow Bowl	740 M	669	Bronze Sword
			741 M	804	Bronze Spearhead

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
742 M	711	Bronze Sword	797 M	150	Bronze Leopard Figurine
743 M	715	Bronze Dagger	798 M	148	Bronze Horse Figurine
744 M	756	Bronze Spearhead	799 M	140	Bronze Stag Figurine
745 M	742	Bronze Spearhead	800 M	140	Bronze Stag Figurine
746 M	805	Bronze Spearhead	801 M		Gold Hair Binder
747 M	806	Bronze Spearhead	802 M	157	Gold Necklace
748 M	807	Bronze Spearhead	803 M	372	Gold Earring
749 M	808	Bronze Spearhead	804 M	372	Gold Earring
750 M	720	Bronze Dagger	805 M	372	Gold Earring
751 M	671	Bronze Sword	806 M	124	Bronze Humped Bull Figurine
752 M	721	Bronze Dagger	807 M	124	Bronze Humped Bull Figurine
753 M	928	Bronze Skewer	808 M	124	Bronze Humped Bull Figurine
754 M	809	Bronze Spearhead	809 M	124	Bronze Humped Bull Figurine
755 M	762	Bronze Spearhead	810 M	148	Bronze Horse Figurine
756 M	743	Bronze Spearhead	811 M	150	Bronze Leopard Figurine
757 M	744	Bronze Spearhead	812 M	152	Bronze Boar Figurine
758 M	356	Bronze Bracelet	813 M	152	Bronze Boar Figurine
759 M	110	Pottery Ram Figurine	814 M	140	Bronze Stag Figurine
760 M	601	Plain Bowl	815 M	114	Pottery Dog Figurine
761 M	3	Gold Beaker	816 M	574	Spouted Pot
762 M	15	Gold Bowl	817 M	131	Bronze Model of Oxen
763 M	520	Jar	818 M	93	Pottery Humped Bull Figurine
764 M	607	Spouted Bowl	819 M	102	Pottery Stag Figurine
765 M	538	Pitcher	820 M	100	Pottery Stag Figurine
766 M	514	Jar	821 M	76	Pottery Male Figurine of Archer
767 M	130	Bronze Model of Oxen	822 M	45	Bronze Pot with Spout
768 M	986	Bronze Cymbals	823 M	782	Bronze Spearhead
769 <sub>a</sub> M	840	Bronze Arrowhead	824 M	783	Bronze Spearhead
769 <sub>b</sub> M	853	Bronze Arrowhead	825 M	784	Bronze Spearhead
770 M	646	Bronze Macehead	826 M	891	Bronze Helmet (?)
771 M	645	Bronze Macehead	829 M	569	Round Pot
772 M	772	Bronze Spearhead	830 M		Gold Tiger Heads
773 M	773	Bronze Spearhead	831 M		Gold Tiger Heads
774 M	774	Bronze Spearhead	832 M	404	Gold Hair Binder
775 M	683	Bronze Dagger	833 M	171	Gold Pendant
776 M	775	Bronze Spearhead	835 M		Gold Ram's Head Bead
777 M	776	Bronze Spearhead	836 M	383	Gold Earrings
778 M	777	Bronze Spearhead	837 M		Bronze Bracelet
779 M	778	Bronze Spearhead	838 M	426	Gold Button
780 M	690	Bronze Dagger	839 M	426	Gold Button
781 M	779	Bronze Spearhead	840 M	426	Gold Button
782 M	780	Bronze Spearhead	841 M	426	Gold Button
783 M	781	Bronze Spearhead	842 M	426	Gold Button
784 M	285	Glass Necklace	843 M	426	Gold Button
785 M	286	Glass Necklace	844 M	426	Gold Button
786 M	148	Bronze Horse Figurine	845 M	426	Gold Button
787 M	148	Bronze Horse Figurine	846 M	426	Gold Button
788 M	151	Bronze Dog Figurine	847 M	426	Gold Button
789 M	151	Bronze Dog Figurine	848 M	426	Gold Button
790 M	151	Bronze Dog Figurine	849 M	426	Gold Button
791 M	151	Bronze Dog Figurine	850 M	426	Gold Button
792 M	152	Bronze Boar Figurine	851 M	426	Gold Button
793 M	152	Bronze Boar Figurine	852 M	426	Gold Button
794 M	140	Bronze Stag Figurine	853 M	426	Gold Button
795 M	150	Bronze Leopard Figurine	854 M	426	Gold Button
796 M	150	Bronze Leopard Figurine	855 M	426	Gold Button

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
856 M	426	Gold Button	912 M	427	Gold Button
857 M	426	Gold Button	913 M	427	Gold Button
858 M	426	Gold Button	914 M	427	Gold Button
859 M	426	Gold Button	915 M	427	Gold Button
860 M	426	Gold Button	916 M	427	Gold Button
861 M	426	Gold Button	917 M	427	Gold Button
862 M	427	Gold Button	918 M	427	Gold Button
863 M	427	Gold Button	919 M	427	Gold Button
864 M	427	Gold Button	920 M	427	Gold Button
865 M	427	Gold Button	921 M	427	Gold Button
866 M	427	Gold Button	922 M	427	Gold Button
867 M	427	Gold Button	923 M	427	Gold Button
868 M	427	Gold Button	924 M	427	Gold Button
869 M	427	Gold Button	925 M		Gold Button
870 M	427	Gold Button	926 M	427	Gold Button
871 M	427	Gold Button	927 M	427	Gold Button
872 M	427	Gold Button	928 M	427	Gold Button
873 M	427	Gold Button	929 M		Gold Button
874 M	427	Gold Button	930 M	583	Spouted Pot
875 M	427	Gold Button	931 M	80	Bronze Figurine of Mule and Rider
876 M	427	Gold Button			
877 M	427	Gold Button	932 M	81	Bronze Male Figurine
878 M	427	Gold Button	933 M	946	Bronze Pomegranate Bell
879 M	427	Gold Button	934 M	445	Gold Leaves
880 M	427	Gold Button	936 M	356	Bronze Bracelets
881 M	427	Gold Button	937 M	946	Bronze Pomegranate Bell
882 M	427	Gold Button	938 M	947	Bronze Bell
883 M	427	Gold Button	939 M	275	Bronze Pendant
884 M	427	Gold Button	940 M	141	Bronze Stag Figurine
885 M	427	Gold Button	941 M	126	Bronze Humped Bull Figurine
886 M	427	Gold Button	942 M	125	Bronze Humped Bull Figurine
887 M	427	Gold Button	943 M	465	Bronze Pin
888 M	427	Gold Button	944 M	932	Bronze Gear(?)
889 M	427	Gold Button	945 M	465	Bronze Pin
890 M	427	Gold Button	946 M	465	Bronze Pin
891 M	427	Gold Button	947 M	465	Bronze Pin
892 M	427	Gold Button	948 M	436	Bronze Buttons
893 M	427	Gold Button	949 M	926	Bronze Ladle
894 M	427	Gold Button	950 M	928	Bronze Skewer
895 M	427	Gold Button	951 <sup>a</sup> M	842	Bronze Arrowhead
896 M	427	Gold Button	951 <sup>b</sup> M	860	Bronze Arrowhead
897 M	427	Gold Button	952 M		Gold Buttons
898 M	427	Gold Button	953 M	647	Bronze Macehead
899 M	427	Gold Button	954 M	648	Bronze Macehead
900 M	427	Gold Button	955 M	649	Bronze Macehead
901 M	427	Gold Button	956 M	650	Bronze Macehead
902 M	427	Gold Button	957 M	458	Gold Pin
903 M	427	Gold Button	958 M	458	Gold Pin
904 M	427	Gold Button	959 M	415	Gold Button
905 M	427	Gold Button	960 M	365	Gold and Lapis Lazuli Earrings
906 M	427	Gold Button	961 M	375	Gold Earring
907 M	427	Gold Button	962 M	384	Gold Earrings
908 M	427	Gold Button	964 M	366	Gold Earring
909 M	427	Gold Button	965 M	922	Bronze Spatula
910 M	427	Gold Button	966 M		Bronze Beads
911 M	427	Gold Button	969 M	606	Spouted Bowl

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
970 M		Pottery Vessel	1052 M	<b>791</b>	Bronze Spearhead
971 M		Pottery Vessel	1053 M	<b>793</b>	Bronze Spearhead
975 M	<b>587</b>	Bowl with Tripod Base	1054 M	<b>794</b>	Bronze Spearhead
976 M	<b>544</b>	Pitcher	1055 M	<b>795</b>	Bronze Spearhead
977 M	<b>545</b>	Pitcher	1056 M	<b>796</b>	Bronze Spearhead
980 M	<b>626</b>	Plate	1057 M	<b>797</b>	Bronze Spearhead
982 M		Pottery Vessel	1058 M	<b>798</b>	Bronze Spearhead
984 M	<b>594</b>	Shallow Bowl	1059 M	<b>799</b>	Bronze Spearhead
985 M		Pottery Vessel	1060 M	<b>691</b>	Bronze Dagger
986 M		Pottery Vessel	1061 M	<b>24</b>	Bronze Cooking Pot
987 M		Pottery Vessel	1062 M	<b>25</b>	Bronze Cooking Pot
991 M	<b>821</b>	Iron Spearhead	1063 M	<b>25</b>	Bronze Cooking Pot
992 M	<b>46</b>	Bronze Situla	1064 M	<b>186</b>	Gold Pendant
993 M	<b>565</b>	Round Pot	1065 M	<b>371</b>	Gold Earring
994 M	<b>491</b>	Bottle	1066 M	<b>371</b>	Gold Earrings
995 M	<b>437</b>	Bronze Buttons	1067 M	<b>371</b>	Gold Earrings
1003 M		Pottery Vessel	1068 M	<b>371</b>	Gold Earrings
1004 M	<b>460</b>	Bronze Pin	1069 M	<b>320</b>	Gold-Capped Agate Center Bead
1005 M	<b>460</b>	Bronze Pin	1070 M	<b>319</b>	Gold-Capped Agate Center Bead
1006 M	<b>966</b>	Bronze Ear Cleaner	1071 M		Gold Forehead Band
1007 M	<b>396</b>	Bronze Rings	1072 M	<b>404</b>	Gold Hair Binder
1008 M	<b>356</b>	Bronze Bracelets	1073 M	<b>262</b>	Carnelian and Agate Necklace
1009 M	<b>356</b>	Bronze Bracelets	1075 M	<b>121</b>	Bronze Humped Bull Figurine
1010 M	<b>356</b>	Bronze Bracelet	1076 M	<b>122</b>	Bronze Humped Bull Figurine
1011 M	<b>916</b>	Bronze Blade	1077 M	<b>306</b>	Fired Clay Necklace
1012 M	<b>978</b>	Bronze Plaques	1078 M		Gold Necklace
1014 M	<b>624</b>	Plate	1079 M	<b>931</b>	Bronze Gears(?)
1015 M	<b>499</b>	Jar	1080 M	<b>951</b>	Bronze Bell
1016 M	<b>953</b>	Bronze Bell	1081 M	<b>952</b>	Bronze Bell
1017 M	<b>955</b>	Bronze Bell	1082a M	<b>387</b>	Bronze Earrings
1018 M	<b>270</b>	Bronze Pendant	1082b M	<b>407</b>	Bronze Hair Binder
1019 M	<b>956</b>	Bronze Bell	1083 M	<b>306</b>	Fired Clay Necklace
1020 M	<b>957</b>	Bronze Bell	1084 M		Gold Forehead Band
1021 M	<b>356</b>	Bronze Bracelets	1085 M		Gold Forehead Band
1023 M	<b>613</b>	Spouted Bowl	1086 M	<b>68</b>	Frit Jar
1024 M	<b>967</b>	Bronze Ear Cleaner	1087 M	<b>69</b>	Frit Jar
1025 M	<b>571</b>	Dizie	1088 M	<b>614</b>	Spouted Bowl
1026 M	<b>868</b>	Bronze Quiver	1089 M	<b>470</b>	Cylinder Seal
1027 M	<b>463</b>	Bronze Pins	1090 M	<b>474</b>	Cylinder Seal
1028 M	<b>937</b>	Bronze Chisel	1091 M	<b>473</b>	Cylinder Seal
1029 M	<b>971</b>	Bronze Mirror	1092 M	<b>472</b>	Cylinder Seal
1030 M	<b>585</b>	Decorated Bowl	1093 M	<b>471</b>	Cylinder Seal
1031 M	<b>586</b>	Decorated Bowl	1094 M	<b>469</b>	Cylinder Seal
1032 M	<b>954</b>	Bronze Bell	1095 M	<b>475</b>	Cylinder Seal
1033 M		Gold Bracelet	1096 M	<b>476</b>	Cylinder Seal
1034 M		Gold Button	1097 M	<b>483</b>	Cylinder Seal
1035 M	<b>418</b>	Gold Button	1098 M	<b>484</b>	Cylinder Seal
1036 M		Gold Buttons	1099 M	<b>485</b>	Cylinder Seal
1038 M	<b>568</b>	Round Pot	1100 M	<b>526</b>	Jar
1039 M	<b>571</b>	Dizie	1101 M	<b>526</b>	Jar
1041 M	<b>553</b>	Mug	1102 M	<b>576</b>	Spouted Pot
1042 M	<b>550</b>	Mug	1105 M	<b>523</b>	Jar
1043 M	<b>582</b>	Spouted Pot	1106 M	<b>498</b>	Jar
1048 M	<b>359</b>	Bronze Bracelets	1108 M	<b>605</b>	Shallow Bowl
1049 M	<b>356</b>	Bronze Bracelets	1110 M	<b>494</b>	Bottle
1051 M	<b>792</b>	Bronze Spearhead	1111 M	<b>104</b>	Pottery Mule Figurine

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
1112 M	112	Pottery Bear Figurine	1192c M	334	Gold Wide Ring-Shaped Bead
1113 M	75	Pottery Male Figurine	1193 M	454	Gold Pin
1114 M	62	Mosaic Vase	1194 M	257	Red Carnelian and Transparent Stone Necklace
1115 M	63	Mosaic Beaker			
1116 M	64	Mosaic Chalice	1195 M	324	Gold Lion and Mountain Goat Head Beads
1117 M	71	Pottery Female Figurine			
1118 M	107	Pottery Ram Figurine	1196 M	312	Gold Centerpiece
1119 M	113	Pottery Leopard Figurine	1197a M	393	Gold Ring
1120 M	70	Pottery Female Figurine	1197b M	402	Gold Diadem
1121 M	622	Basin	1197c M	468	Gold Piece
1122 M	621	Basin	1198 M	181	Gold Pendants
1123 M	108	Pottery Ram Figurine	1199a M	176	Gold Pendant
1124 M	105	Pottery Mule Figurine	1199b M	328	Gold Spiral Bead
1125 M	109	Pottery Ram Figurine	1199c M	336	Gold Truncated Conical Beads
1127 M	950	Bronze Bell	1200a M	323	Gold Lion Head Beads
1128 M	127	Bronze Humped Bull Figurine	1200b M	449	Gold Pins
1129 M	147	Bronze Horse Figurine	1201a M	327	Gold Pomegranate Beads
1130 M	128	Bronze Humped Bull Figurine	1201b M	330	Gold Four-Sided Beads
1131 M		Pottery Animal Figurine	1201c M	335	Gold Olive-Shaped Beads
1132 M	7	Gold Cup	1201d M	440	Gold and Bone Buttons
1133 M	522	Jar	1202 M	217	Gold and Black Bead Necklace
1137 M		Red Carnelian and Agate Beads	1203a M	370	Gold Earrings
1160 M	735	Bronze Spearhead	1203b M	468	Gold Piece
1161 M	36	Bronze Cup	1204a M	384	Gold Earring
1162 M	558	Cup	1204b M	403	Gold Diadem
1163 M	936	Bronze Chisel	1204c M	468	Gold Piece
1165 M	479	Cylinder Seal	1205 M	161	Gold Necklace
1166 M	480	Cylinder Seal	1206a M	333	Gold Globular Beads
1167 M	477	Cylinder Seal	1206b M	337	Gold Three-Ring Reel Beads
1168 M	478	Cylinder Seal	1206c M	468	Gold Piece
1169 M	481	Cylinder Seal	1207a M	402	Gold Diadem
1170 M	490	Stamp Seal	1207b M	468	Gold Piece
1175a M	402	Gold Diadem	1208a M	402	Gold Diadem
1175b M	446	Gold Leaves	1208b M	468	Gold Piece
1177 M	214	Gold, Agate and Carnelian Necklace	1210a M	172	Gold Pendant
			1210b M	180	Gold Pendant
1178 M	244	Red Carnelian Necklace	1211a M	315	Gold Spacer Bead
1179 M	305	Lime Necklace	1211b M	331	Gold Flat Discoid Beads
1180 M	256	Carnelian, Agate and Stone Necklace	1211c M	334	Gold Wide Ring-Shaped Bead
			1211d M	335	Gold Olive-Shaped Beads
1181a M	838	Bronze Arrowhead	1211e M	402	Gold Diadem
1181b M	843	Bronze Arrowhead	1211f M	468	Gold Piece
1181c M	847	Bronze Arrowhead	1212 M	466	Gold Sheet
1183 M		Carnelian, Agate, and Glass Necklace	1213 M	49	Bronze Vase
			1213a M	50	Bronze Vessel Fragment
1184 M	882	Bronze Belt	1214 M	977	Bronze Plaques
1185 M	48	Bronze Cup	1215 M	621	Basin
1186 M	155	Bronze Bird Figurine	1216 M	468	Gold Piece
1187a M	384	Gold Earrings	1217 M	864	Flint Arrowheads
1187b M	385	Silver Earring	1218 M	533	Double Jar
1188a M	348	Silver Animal Head Bracelet	1219 M	566	Round Pot
1188b M	406	Silver Hair Binder	1220 M		Pottery Vessel
1189 M		Bronze Pendant	1221 M	549	Chalice
1190 M	421	Gold Button	1222 M	601	Plain Bowl
1192a M	331	Gold Flat Discoid Bead	1223 M	592	Plain Bowl
1192b M	332	Gold Spiral Beads	1224 M	604	Shallow Bowl

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
1226 M		Pottery Vessel	1285 M	591	Plain Bowl
1227 M		Pottery Vessel	1286 M	591	Plain Bowl
1228 M		Pottery Vessel	1287 M	497	Jar
1229 M		Pottery Vessel	1288 M	579	Spouted Pot
1230 M		Pottery Vessel	1289 M		Jar
1231 M	609	Spouted Bowl	1290 M		Pottery Vessel
1232 M		Pottery Vessel	1291 M	564	Cooking Pot
1233 M		Pottery Vessel	1292 M		Pottery Vessel
1234 M		Pottery Vessel	1293 M		Pottery Vessel
1235 M		Pottery Vessel	1294 M		Pottery Vessel
1236 M		Pottery Vessel	1295 M		Pottery Vessel
1237 M	581	Spouted Pot Fragment	1296 M	615	Spouted Bowl
1238 M		Pottery Vessel	1297 M	575	Spouted Pot
1239 M		Pottery Vessel	1298 M	578	Spouted Pot
1240 M	563	Cooking Pot	1299 M	531	Jar
1241 M	635	Vase	1300 M	493	Bottle
1242 M	586	Decorated Bowl	1301 M		Pottery Vessel
1243 M		Pottery Vessel	1302 M	607	Spouted Bowl
1244 M		Pottery Vessel	1303 M	629	Plate
1245 M		Pottery Vessel	1304 M	636	Sieve
1246 M	607	Spouted Bowl	1305 M	526	Jar
1247 M	621	Basin	1306 M	608	Spouted Bowl
1248 M	590	Plain Bowl	1307 M	595	Shallow Bowl
1249 M	525	Jar	1308 M	562	Cooking Pot
1251 M		Pottery Vessel	1309 M	563	Cooking Pot
1252 M	94	Pottery Humped Bull Figurine	1311 M	607	Spouted Bowl
1253 M		Pottery Vessel	1312 M	572	Spouted Pot
1254 M		Pottery Vessel	1313 M	547	Beaker
1255 M		Pottery Vessel	1314 M	607	Spouted Bowl
1256 M		Pottery Vessel	1315 M	515	Jar
1257 M		Pottery Vessel	1316 M		Pottery Vessel
1258 M		Pottery Vessel	1317 M		Pottery Vessel
1259 M		Pottery Vessel	1318 M		Pottery Vessel
1260 M		Pottery Vessel	1319 M	524	Jar
1261 M	495	Jar	1320 M		Pottery Vessel
1262 M		Jar Fragments	1321 M	571	Dizie
1263 M		Jar Fragments	1322 M		Pottery Vessel
1264 M		Jar Fragments	1323 M	573	Spouted Pot
1265 M	559	Pot	1324 M	530	Jar
1266 M	560	Pot	1325 M	56	Bronze Chalice
1267 M	561	Pot	1327 M	563	Cooking Pot
1269 M	557	Cup	1328 M	502	Jar
1270 M		Pottery Vessel	1329 M	603	Shallow Bowl
1271 M		Pottery Vessel	1331 M	610	Spouted Bowl
1272 M		Pottery Vessel	1332 M	551	Mug
1273 M		Pottery Vessel	1333 M	588	Plain Bowl
1274 M	563	Cooking Pot	1334 M		Pottery Vessel
1275 M		Pottery Vessel	1336 M	602	Shallow Bowl
1276 M		Pottery Vessel	1337 M	595	Shallow Bowl
1277 M		Pottery Vessel	1338 M	503	Jar
1278 M	95	Pottery Humped Bull Figurine	1339 M	589	Plain Bowl
1279 M	580	Spouted Pot	1340 M	591	Plain Bowl
1280 M		Pottery Vessel	1341 M	584	Spouted Pot
1282 M	496	Jar	1342 M	521	Jar
1283 M		Pottery Vessel	1344 M	552	Mug
1284 M		Pottery Vessel	1346 M	528	Jar

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
1347 M		Pottery Vessel	1420 M		Shell and Bone Necklace
1348 M	591	Plain Bowl	1421 M	239	Red Carnelian Necklace
1349 M	521	Jar	1422 M	240	Red Carnelian Necklace
1350 M	591	Plain Bowl	1423 M	258	Carnelian and Stone Necklace
1351 M	527	Jar	1424 M	309	Shell and Bone Necklace
1352 M	567	Round Pot	1425 M		Red Carnelian Necklace
1354 M	539	Pitcher	1426 M	252	Red Carnelian Necklace
1355 M	570	Dizie	1427 M		Frit Beads
1356 M	611	Spouted Bowl	1428 M		Stone Beads
1358 M	539	Pitcher	1429 M	241	Red Carnelian Necklace
1360 M		Pottery Vessel	1430 M	253	Red Carnelian Necklace
1361 M		Pottery Vessel	1431 M	287	Glass Necklace
1362 M		Pottery Vessel	1432 M	287	Glass Necklace
1363 M		Pottery Vessel	1433 M		Bone Button
1364 M	566	Round Pot	1434 M	242	Red Carnelian Necklace
1369 M	599	Shallow Bowl	1435 M	277	Transparent Stone Necklace
1373 M		Pottery Vessel	1436 M	216	Gold, Agate and Carnelian Necklace
1374 M		Pottery Vessel	1437 M	289	Frit Necklace
1375 M	516	Jar	1438 M	303	Lime Necklace
1376 M		Pottery Vessel	1439 M	307	Fired Clay and Gypsum Necklace
1377 M	577	Spouted Pot	1440 M	296	Frit, Lime, and Clay Necklace
1378 M	526	Jar	1441 M	295	Frit and Lime Necklace
1380 M		Pottery Vessel	1442 M	297	Gypsum Necklace
1381 M	598	Shallow Bowl	1443 M	264	Carnelian and Glass Necklace
1382 M	601	Plain Bowl	1444 M	291	Frit Necklace
1385 M	591	Plain Bowl	1445 M	299	Gypsum Necklace
1389 M		Bronze Vessel	1446 M	300	Gypsum Necklace
1390 M	489	Stamp Seal	1447 M		Red Carnelian Necklace
1391 M	57	Bronze Vessel	1448 M	268	Bronze Necklace
1392 M	51	Bronze Vessel Base	1449 M	267	Bronze Necklace
1393 M	52	Bronze Vessel Base	1450 M	266	Bronze Necklace
1394 M	58	Bronze Vessel	1451 M	309	Shell and Bone Necklace
1395 M	59	Bronze Vessel Fragments	1454 M	444	Shell Button
1396 M	60	Bronze Vessel Fragments	1455 M	309	Shell and Bone Necklace
1397 M	53	Bronze Vessel Fragments	1456 M	309	Shell and Bone Necklace
1398 M	61	Bronze Vessel	1457 M	276	Bronze Pendants
1399 M	38	Bronze Jar	1458 M	301	Gypsum Pendant
1400 M	40	Bronze Jar	1459 M	282	Black Material Pendant
1401 M	41	Bronze Pot with Spout	1460 M	272	Bronze Pendant
1402 M	42	Bronze Pot with Spout	1461 M	396	Bronze Rings
1403 M	44	Bronze Pot with Spout	1462a M	396	Bronze Rings
1404 M	215	Gold, Agate and Red Carnelian Necklace	1462b M		Bronze Buttons
1405 M	223	Red Carnelian Necklace	1463 M	395	Bronze Ring
1406 M	234	Red Carnelian Necklace	1464 M	396	Bronze Rings
1407 M	235	Red Carnelian Necklace	1465 M	395	Bronze Ring
1408 M	261	Carnelian and Stone Necklace	1466 M	408	Bronze Hair Binder
1409 M		Frit Necklace	1467 M	438	Bronze Button
1410 M	236	Red Carnelian Necklace	1468 M	439	Bronze Buttons
1411 M	309	Shell and Bone Necklace	1469 M	408	Bronze Hair Binder
1412 M	237	Red Carnelian Necklace	1470 M	386	Bronze Earrings
1415 M	250	Red Carnelian Necklace	1471 M	387	Bronze Earrings
1416 M	309	Shell and Bone Necklace	1472 M	448	Bronze Fibula
1417 M	251	Red Carnelian Necklace	1473 M	463	Bronze Pins
1418 M	238	Red Carnelian Necklace	1474 M	465	Bronze Pin
1419 M	309	Shell and Bone Necklace	1475 M	456	Bronze Pin

Marlik #	Cat. #	Description	Marlik #	Cat. #	Description
1475 M	456	Bronze Pin	1510 M	880	Bronze Belt
1476 M	339	Red Carnelian Beads	1511 M	884	Bronze Belt
1477 M	340	Glass Frit Bead	1512 M	885	Bronze Belt
1478 M	342	Fired Clay Beads	1513 M	886	Bronze Belt
1479 M	327	Gold Pomegranate Bead	1514 M	869	Bronze Quiver
1480 M	203	Gold Pendant	1515 M	870	Bronze Quiver
1481 M	734	Bronze Spearhead	1516 M	871	Bronze Quiver
1482 M	729	Bronze Spearhead	1517 M	872	Bronze Quiver
1483 M		Bronze Spearhead	1518 M	873	Bronze Quiver
1484 M	731	Bronze Spearhead	1519 M	887	Bronze Belt
1485 M	732	Bronze Spearhead	1520 M	823	Iron Spearhead
1486 M	738	Bronze Spearhead	1521 M	861	Bronze Arrowhead
1487 M	822	Iron Spearhead	1522 M	825	Bronze Arrowhead
1488 M	770	Bronze Spearhead	1523 M	848	Bronze Arrowhead
1489 M	812	Bronze Spearhead	1524 M	831	Bronze Arrowhead
1490 M	673	Bronze Sword Hilt	1525 M	862	Bronze Arrowhead
1491 M	723	Bronze Dagger Hilt	1526 M	856	Bronze Arrowhead
1492 M	675	Bronze Dagger	1527 M	858	Bronze Arrowhead
1493 M	676	Bronze Dagger	1528 M	722	Bronze Dagger Hilt
1494 M	684	Bronze Dagger	1529 M	988	Textile Fragments
1495 M	685	Bronze Dagger	1530 M	868	Remains of Quiver Cover
1496 M	686	Bronze Dagger	1531 M	915	Flint Saw
1497 M	687	Bronze Dagger	1532 M	492	Bottle
1498 M	692	Bronze Dagger Hilt	1533 M	637	Lamp
1499 M	701	Bronze Dagger Hilt	1534 M	500	Jar
1500 M	726	Bronze Dagger	1535 M	593	Shallow Bowl
1501 M	718	Bronze Dagger	1536 M	634	Vase
1502 M	725	Bronze Dagger	1537 M	623	Plate
1503 M	670	Bronze Sword	1538 M	548	Chalice
1504 M	876	Bronze Belt	1539 M	617	Spouted Bowl
1505 M	877	Bronze Belt	1541 M	546	Pitcher
1506 M	878	Bronze Belt	1542 M	566	Round Pot
1507 M	883	Bronze Belt	1543 M	625	Plate
1508 M	881	Bronze Belt	1544 M	627	Plate
1509 M	879	Bronze Belt	1545 M	813	Bronze Spearhead



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# Concordance of Museum Numbers (1–79 Storage Numbers)

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
1	<b>595</b>	1307 M	28	<b>568</b>	522 M
1	<b>983</b>	605 M	29	<b>614</b>	1088 M
2	<b>875</b>	200 M	29	<b>628</b>	336 M
4	<b>441</b>	432 M	30	<b>69</b>	1087 M
5	<b>408</b>	428 M	31	<b>38</b>	1399 M
7	<b>280</b>	426 M	31	<b>40</b>	1400 M
8	<b>356</b>	425 M	31	<b>42</b>	1402 M
9	<b>356</b>	414 M	31	<b>44</b>	1403 M
11	<b>543</b>	582 M	31	<b>203</b>	1480 M
14	<b>941</b>	327 M	31	<b>215</b>	1404 M
15	<b>35</b>	229 M	31	<b>216</b>	1436 M
16	<b>753</b>	235 M	31	<b>223</b>	1405 M
16	<b>754</b>	234 M	31	<b>234</b>	1406 M
17	<b>929</b>	351 M	31	<b>235</b>	1407 M
18	<b>833</b>	237a M	31	<b>236</b>	1410 M
18	<b>849</b>	237b M	31	<b>237</b>	1412 M
19	<b>682</b>	331 M	31	<b>238</b>	1418 M
19	<b>704</b>	511 M	31	<b>239</b>	1421 M
19	<b>705</b>	513 M	31	<b>240</b>	1422 M
19	<b>706</b>	514 M	31	<b>241</b>	1429 M
19	<b>710</b>	330 M	31	<b>242</b>	1434 M
19	<b>728</b>	333 M	31	<b>250</b>	1415 M
19	<b>750</b>	512 M	31	<b>251</b>	1417 M
19	<b>815</b>	325 M	31	<b>252</b>	1426 M
20	<b>817</b>	349 M	31	<b>253</b>	1430 M
20	<b>829</b>	328a M	31	<b>261</b>	1408 M
20	<b>837</b>	328b M	31	<b>264</b>	1443 M
20	<b>844</b>	328c M	31	<b>266</b>	1450 M
20	<b>845</b>	328d M	31	<b>267</b>	1449 M
20	<b>850</b>	328e M	31	<b>268</b>	1448 M
20	<b>855</b>	402 M	31	<b>269</b>	634 M
20	<b>857</b>	328f M	31	<b>272</b>	1460 M
22	<b>281</b>	407a M	31	<b>276</b>	1457 M
22	<b>294</b>	407b M	31	<b>277</b>	1435 M
26	<b>899</b>	350 M	31	<b>282</b>	1459 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
31	287	1432 M	31	531	1299 M
31	289	1437 M	31	533	1218 M
31	291	1444 M	31	539	1354 M
31	295	1441 M	31	539	1358 M
31	296	1440 M	31	546	1541 M
31	297	1442 M	31	547	1313 M
31	299	1445 M	31	548	1538 M
31	300	1446 M	31	549	1221 M
31	301	1458 M	31	551	1332 M
31	303	1438 M	31	552	1344 M
31	307	1439 M	31	557	1269 M
31	309	1411 M	31	559	1265 M
31	309	1416 M	31	560	1266 M
31	309	1419 M	31	561	1267 M
31	309	1424 M	31	562	1308 M
31	309	1451 M	31	563	1240 M
31	309	1455 M	31	563	1274 M
31	309	1456 M	31	563	1309 M
31	327	1479 M	31	563	1327 M
31	339	1476 M	31	564	1291 M
31	340	1477 M	31	566	1219 M
31	342	1478 M	31	566	1364 M
31	387	1471 M	31	566	1542 M
31	395	1463 M	31	567	1352 M
31	395	1465 M	31	570	1355 M
31	396	1461 M	31	571	1321 M
31	396	1462a M	31	572	1312 M
31	396	1464 M	31	573	1323 M
31	408	1466 M	31	575	1297 M
31	408	1469 M	31	577	1377 M
31	438	1467 M	31	578	1298 M
31	439	1468 M	31	579	1288 M
31	444	1454 M	31	580	1279 M
31	448	1472 M	31	581	1237 M
31	463	1473 M	31	584	1341 M
31	465	1474 M	31	586	1031 M
31	489	1390 M	31	588	1333 M
31	492	1532 M	31	589	1339 M
31	493	1300 M	31	590	1248 M
31	495	1261 M	31	591	1285 M
31	496	1282 M	31	591	1286 M
31	497	1287 M	31	591	1340 M
31	500	1534 M	31	591	1348 M
31	502	1328 M	31	591	1350 M
31	503	1338 M	31	591	1385 M
31	515	1315 M	31	592	1223 M
31	516	1375 M	31	593	1535 M
31	521	1342 M	31	594	984 M
31	521	1349 M	31	595	1337 M
31	524	1319 M	31	596	1225 M
31	525	1249 M	31	598	1381 M
31	526	1305 M	31	599	1369 M
31	526	1378 M	31	601	1222 M
31	527	1351 M	31	601	1382 M
31	528	1346 M	31	602	1336 M
31	530	1324 M	31	603	1329 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
31	<b>604</b>	1224 M	31	<b>873</b>	1518 M
31	<b>607</b>	1246 M	31	<b>876</b>	1504 M
31	<b>607</b>	1302 M	31	<b>877</b>	1505 M
31	<b>607</b>	1311 M	31	<b>878</b>	1506 M
31	<b>607</b>	1314 M	31	<b>879</b>	1509 M
31	<b>608</b>	1306 M	31	<b>880</b>	1510 M
31	<b>609</b>	1231 M	31	<b>881</b>	1508 M
31	<b>610</b>	1331 M	31	<b>883</b>	1507 M
31	<b>611</b>	1356 M	31	<b>884</b>	1511 M
31	<b>615</b>	1296 M	31	<b>885</b>	1512 M
31	<b>617</b>	1539 M	31	<b>886</b>	1513 M
31	<b>621</b>	1247 M	31	<b>887</b>	1519 M
31	<b>623</b>	1537 M	31	<b>915</b>	1531 M
31	<b>625</b>	1543 M	31	<b>956</b>	1019 M
31	<b>627</b>	1544 M	33	<b>715</b>	743 M
31	<b>629</b>	1303 M	33	<b>720</b>	750 M
31	<b>635</b>	1241 M	33	<b>721</b>	752 M
31	<b>636</b>	1304 M	34	<b>746</b>	717 M
31	<b>637</b>	1533 M	34	<b>759</b>	663 M
31	<b>670</b>	1503 M	35	<b>769</b>	89 M
31	<b>673</b>	1490 M	36	<b>893</b>	630 M
31	<b>675</b>	1492 M	36	<b>893</b>	649 M
31	<b>676</b>	1493 M	36	<b>893</b>	657 M
31	<b>684</b>	1494 M	36	<b>894</b>	655 M
31	<b>685</b>	1495 M	36	<b>895</b>	656 M
31	<b>686</b>	1496 M	36	<b>906</b>	651 M
31	<b>687</b>	1497 M	36	<b>907</b>	652 M
31	<b>692</b>	1498 M	36	<b>911</b>	650 M
31	<b>701</b>	1499 M	36	<b>912</b>	653 M
31	<b>718</b>	1501 M	37	<b>893</b>	648 M
31	<b>722</b>	1528 M	37	<b>913</b>	654 M
31	<b>723</b>	1491 M	38	<b>23</b>	176 M
31	<b>725</b>	1502 M	38	<b>33</b>	723 M
31	<b>726</b>	1500 M	38	<b>41</b>	1401 M
31	<b>729</b>	1482 M	38	<b>43</b>	154 M
31	<b>731</b>	1484 M	38	<b>708</b>	724 M
31	<b>732</b>	1485 M	38	<b>979</b>	36 M
31	<b>734</b>	1481 M	39	<b>681</b>	146 M
31	<b>738</b>	1486 M	40	<b>689</b>	141 M
31	<b>770</b>	1488 M	40	<b>698</b>	161 M
31	<b>812</b>	1489 M	41	<b>679</b>	39 M
31	<b>813</b>	1545 M	42	<b>680</b>	46 M
31	<b>822</b>	1487 M	43	<b>897</b>	43 M
31	<b>823</b>	1520 M	44	<b>826</b>	41a M
31	<b>825</b>	1522 M	44	<b>827</b>	41b M
31	<b>831</b>	1524 M	44	<b>828</b>	41c M
31	<b>848</b>	1523 M	44	<b>830</b>	41d M
31	<b>856</b>	1526 M	44	<b>835</b>	41e M
31	<b>858</b>	1527 M	44	<b>841</b>	41f M
31	<b>861</b>	1521 M	44	<b>854</b>	41g M
31	<b>862</b>	1525 M	44	<b>859</b>	41h M
31	<b>868</b>	1530 M	45	<b>851</b>	181 M
31	<b>869</b>	1514 M	46	<b>677</b>	53a M
31	<b>870</b>	1515 M	46	<b>688</b>	53b M
31	<b>871</b>	1516 M	47	<b>785</b>	168 M
31	<b>872</b>	1517 M	49	<b>839</b>	112b M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
53	54	98 M	2390	477	1167 M
54	832	177 M	2391	478	1168 M
55	356	720 M	2393	488	601 M
55	655	114 M	2394	490	1170 M
55	824	56 M	2395	486	405 M
56	565	993 M	2396	288	130a M
56	571	1025 M	2396	482	130b M
56	571	1039 M	2892	481	1169 M
56	582	1043 M	3101	383	836 M
56	583	930 M	3105	544	976 M
57	499	1015 M	3107	545	977 M
57	520	763 M	3122	587	975 M
57	528	678 M	3123	626	980 M
57	530	623 M	3130	821	991 M
58	539	675 M	14579	620	583 M
58	550	1042 M	14580	535	454 M
59	553	1041 M	14581	532	456 M
59	554	629 M	14582	699	464 M
59	568	1038 M	14583	814	467 M
59	612	626 M	14584	767	463 M
59	613	1023 M	14585	346	458 M
59	624	1014 M	14586	302	406 M
59	630	707 M	14587	540	455 M
60	976	732 M	14588	271	433 M
61	356	642 M	14589	34	151 M
61	356	721 M	14590	948	403 M
61	356	758 M	14591	982	409 M
62	788	685 M	14592	274	415 M
62	818	692 M	14593	464	411 M
64	671	751 M	14594	981	398 M
64	711	742 M	14595	981	399 M
67	939	641 M	14596	536	597 M
68	935	638 M	14597	542	579 M
69	820	670 M	14598	900	575 M
70	694	58a M	14599	619	238 M
70	695	58b M	14601	513	283 M
71	29	631 M	14602	510	288 M
72	672	228 M	14603	571	521 M
74	987	57 M	14604	866	337 M
77	25	1062 M	14605	452	344 M
77	25	1063 M	14606	555	424 M
78	978	1012 M	14607	27	412 M
79	735	1160 M	14608	47	712 M
2377	479	1165 M	14611	809	754 M
2378	480	1166 M	14612	707	727 M
2379	485	1099 M	14613	601	760 M
2380	473	1091 M	14614	46	992 M
2381	475	1095 M	14616	748	737 M
2382	470	1089 M	14617	597	681 M
2383	474	1090 M	14618	401	563 M
2384	483	1097 M	14618	717	726 M
2385	471	1093 M	14619	37	619 M
2386	472	1092 M	14619	534	611 M
2387	484	1098 M	14620	928	753 M
2388	476	1096 M	14621	756	744 M
2389	469	1094 M	14622	618	676 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
14623	539	677 M	14697	447	609 M
14624	742	745 M	14698	9	201 M
14625	740	667 M	14699	14	610 M
14628	749	697 M	14700	4	13 M
14630	736	341 M	14701	11	353 M
14631	776	777 M	14702	13	515 M
14631	811	669 M	14703	21	277 M
14632	751	701 M	14704	6	354 M
14634	747	718 M	14705	163	291 M
14635	716	719 M	14706	209	266 M
14636	780	782 M	14707	206	195 M
14637	802	346 M	14708	8	29 M
14637	806	747 M	14709	182	265 M
14639	804	741 M	14710	184	63 M
14640	777	778 M	14711	197	553 M
14641	744	757 M	14712	190	308 M
14642	779	781 M	14713	189	548 M
14643	801	340 M	14714	191	564 M
14644	772	772 M	14715	187	554 M
14645	713	343 M	14716	186	1064 M
14646	658	83 M	14717	164	358 M
14648	645	771 M	14718	183	62 M
14649	641	76 M	14719	63	1115 M
14650	644	109 M	14720	64	1116 M
14651	664	115 M	14721	404	304 M
14652	640	78 M	14722	353	460 M
14653	661	119 M	14723	371	1066 M
14654	665	196 M	14724	377	307 M
14655	867	647 M	14725	389	565 M
14656	663	108 M	14726	360	269 M
14657	653	75 M	14727	390	361 M
14659	643	120 M	14728	391	363 M
14660	646	770 M	14729	326	303 M
14661	642	77 M	14730	405	309 M
14662	657	82 M	14732	371	1067 M
14663	739	666 M	14733	405	123 M
14666	73	378 M	14734	370	534 M
14670	77	519 M	14735	365	960 M
14671	76	821 M	14736	374	482 M
14675	491	994 M	14737	379	557 M
14677	72	379 M	14738	363	122 M
14682	118	15 M	14739	326	302 M
14683	140	814 M	14740	366	964 M
14684	148	810 M	14741	376	449 M
14685	150	811 M	14742	364	364 M
14686	150	796 M	14743	382	550 M
14687	148	786 M	14744	379	551 M
14688	151	788 M	14745	369	526 M
14689	202	19 M	14746	373	317 M
14690	175	359 M	14748	349	274 M
14691	154	2 M	14749	353	267 M
14692	82	356 M	14750	353	203 M
14692	178	17 M	14752	353	4 M
14693	153	20 M	14753	353	292 M
14695	431	490 M	14754	349	275 M
14696	62	1114 M	14756	352	276 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
14757	351	533 M	14822	168	264 M
14758	413	248 M	14824	159	224 M
14760	424	138 M	14825	361	295 M
14761	413	245 M	14826	160	567 M
14762	413	244 M	14827	169	3 M
14763	417	205 M	14828	320	1069 M
14764	416	208 M	14829	319	1070 M
14766	414	207 M	14831	210	298 M
14767	409	217 M	14832	388	360 M
14768	412	216 M	14834	19	202 M
14769	412	214 M	14835	404	832 M
14770	423	209 M	14837	205	299 M
14771	419	6 M	14838	173	366 M
14772	423	211 M	14838	311	296 M
14773	417	213 M	14843	174	1a M
14774	422	254 M	14843	198	1b M
14775	422	255 M	14844	199	310 M
14776	422	257 M	14845	415	959 M
14777	413	259 M	14846	185	448 M
14778	419	7 M	14847	170	268 M
14779	422	256 M	14848	362	365 M
14782	419	18 M	14849	211	479 M
14784	425	297 M	14850	207	457 M
14786	418	311 M	14851	166	474 M
14787	420	270 M	14852	167	462 M
14788	412	215 M	14853	218	226 M
14789	422	258 M	14854	20	546 M
14790	410	64 M	14855	445	566 M
14791	411	23 M	14856	445	562 M
14792	413	247 M	14857	345	608 M
14793	413	250 M	14858	914	323 M
14794	413	252 M	14859	397	560 M
14795	413	249 M	14859	400	559 M
14797	413	253 M	14862	398	453 M
14798	420	279 M	14863	399	531 M
14799	420	278 M	14864	354	5 M
14800	420	280 M	14866	432	438 M
14801	420	281 M	14867	432	439 M
14802	420	282 M	14868	432	440 M
14803	420	271 M	14869	313	547 M
14804	420	272 M	14870	404	1072 M
14805	420	273 M	14871	321	300 M
14806	423	210 M	14872	321	301 M
14807	423	212 M	14873	962	294 M
14808	418	313 M	14874	968	413 M
14809	418	315 M	14875	426	854 M
14810	10	352 M	14876	426	858 M
14811	12	355 M	14877	426	861 M
14812	15	762 M	14878	427	892 M
14813	3	761 M	14880	969	372a M
14815	667	165 M	14880	970	372b M
14816	344	357 M	14881	171	833 M
14818	458	958 M	14882	157	802 M
14819	457	569 M	14883	372	803 M
14820	165	261 M	14884	372	804 M
14821	162	446 M	14885	384	962 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
14887	964	187 M	14918	427	909 M
14888	375	961 M	14918	427	910 M
14889	427	897 M	14918	427	911 M
14890	427	884 M	14919	427	914 M
14891	426	857 M	14919	427	915 M
14892	426	838 M	14919	427	916 M
14892	426	839 M	14919	427	918 M
14892	426	840 M	14919	427	919 M
14892	426	841 M	14919	427	920 M
14892	426	842 M	14920	427	921 M
14893	427	900 M	14920	427	923 M
14893	427	901 M	14920	427	924 M
14893	427	902 M	14920	427	926 M
14894	426	849 M	14921	427	927 M
14894	426	850 M	14921	427	928 M
14894	426	851 M	14922	427	890 M
14894	426	852 M	14922	427	891 M
14894	426	853 M	14922	427	893 M
14895	426	855 M	14922	427	894 M
14895	426	856 M	14922	427	896 M
14896	426	859 M	14922	427	899 M
14896	426	860 M	14923	427	885 M
14897	427	912 M	14923	427	886 M
14897	427	913 M	14923	427	887 M
14898	427	881 M	14923	427	888 M
14898	427	882 M	14923	427	889 M
14899	426	844 M	14924	427	872 M
14899	426	846 M	14924	427	873 M
14899	426	848 M	14924	427	874 M
14899	427	866 M	14924	427	875 M
14900	368	535 M	14924	427	876 M
14900	427	871 M	14925	427	867 M
14900	427	877 M	14925	427	868 M
14900	427	879 M	14925	427	869 M
14900	427	895 M	14925	427	870 M
14900	427	898 M	14925	427	883 M
14901	427	917 M	14926	427	862 M
14901	427	922 M	14926	427	863 M
14902	18	14 M	14926	427	864 M
14903	371	1068 M	14926	427	865 M
14904	371	1065 M	14927	427	878 M
14905	377	306 M	14927	427	880 M
14906	450	322 M	14928	426	843 M
14907	384	197 M	14928	426	845 M
14908	380	451 M	14928	426	847 M
14909	381	452 M	14931	1	31 M
14911	370	536 M	14932	970	129 M
14912	370	527 M	14933	390	362 M
14913	370	528 M	14934	392	320 M
14916	372	805 M	14935	453	570 M
14917	427	903 M	14936	279	374 M
14917	427	904 M	14937	356	1049 M
14917	427	905 M	14938	387	1082a M
14917	427	906 M	14938	407	1082b M
14917	427	907 M	14940	194	435 M
14918	427	908 M	14940	194	436 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
14940	194	437 M	22447	332	1192b M
14941	194	443 M	24680	146	32 M
14943	195	314 M	25001	356	691 M
14944	418	1035 M	25002	142	367 M
14946	445	934 M	25002	142	371 M
14947	224	682 M	25004	923	329 M
14948	972	660 M	25005	974	230 M
14949	275	939 M	25006	355	231 M
14949	347	646 M	25007	874	133 M
14950	196	644 M	25008	961	345 M
14953	863	179 M	25009	370	461 M
14954	265	373 M	25010	356	492 M
14957	455	385 M	25011	394	468 M
14958	213	486 M	25012	304	480 M
14959	384	483 M	25013	204	478 M
14960	933	189 M	25014	32	186 M
14961	384	218 M	25016	150	797 M
14963	327	445 M	25017	26	508 M
14964	384	442 M	25018	967	1024 M
14965	328	441 M	25019	402	316 M
14966	229	223 M	25020	30	175 M
14967	298	574 M	25021	539	198 M
14968	243	221 M	25022	5	321 M
14969	316	450a M	25023	208	116 M
14969	332	450b M	25025	970	87 M
14970	428	8 M	25026	983	524 M
14972	192	125 M	25027	983	525 M
14972	965	431 M	25028	652	79 M
14973	355	523 M	25029	467	552 M
14974	946	686 M	25030	350	532 M
14975	487	679 M	25031	674	289 M
14976	946	937 M	25032	314	555 M
14977	946	933 M	25033	379	558 M
14978	356	689 M	25034	188	529 M
14981	357	688 M	25035	331	549 M
14984	919	632 M	25036	940	538 M
14986	836	636 M	25037	232	572 M
14987	460	1004 M	25039	317	556a M
14987	460	1005 M	25039	329	556b M
14988	966	1006 M	25040	405	561 M
14989	270	1018 M	25043	193	9 M
14990	435	680 M	25044	200	10 M
14991	436	948 M	25045	378	11 M
14992	922	965 M	25046	158	12 M
14993	356	1021 M	25047	429	21 M
14994	356	1008 M	25048	310	22 M
14994	356	1009 M	25049	338	24 M
14994	356	1010 M	25050	141	940 M
14994	396	1007 M	25050	284	25 M
14995	356	936 M	25051	419	26 M
14996	465	946 M	25052	333	27 M
14996	465	947 M	25053	201	28 M
14997	465	943 M	25054	430	65 M
14998	463	1027 M	25055	177	66 M
15000	462	703 M	25056	318	67 M
15000	465	702 M	25057	201	68 M



Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
25058	<b>333</b>	69 M	25116	<b>68</b>	1086 M
25059	<b>327</b>	124 M	25117	<b>631</b>	576 M
25060	<b>179</b>	126 M	25118	<b>638</b>	80 M
25061	<b>325</b>	127 M	25119	<b>639</b>	164 M
25062	<b>333</b>	128a M	25120	<b>130</b>	767 M
25062	<b>335</b>	128b M	25121	<b>131</b>	817 M
25063	<b>341</b>	135 M	25121	<b>283</b>	70 M
25064	<b>336</b>	137 M	25122	<b>451</b>	71 M
25065	<b>329</b>	319a M	25123	<b>464</b>	190 M
25065	<b>330</b>	319b M	25124	<b>461</b>	37 M
25065	<b>333</b>	319c M	25125	<b>465</b>	945 M
25066	<b>322</b>	375 M	25126	<b>464</b>	476 M
25068	<b>2</b>	150 M	25127	<b>464</b>	475 M
25069	<b>79</b>	380 M	25128	<b>464</b>	530 M
25070	<b>78</b>	381 M	25129	<b>961</b>	140 M
25071	<b>129</b>	59 M	25130	<b>459</b>	384 M
25072	<b>138</b>	243 M	25131	<b>961</b>	404 M
25073	<b>119</b>	240 M	25132	<b>459</b>	410 M
25074	<b>139</b>	242 M	25136	<b>505</b>	618 M
25075	<b>81</b>	932 M	25137	<b>507</b>	152 M
25075	<b>120</b>	241 M	25138	<b>74</b>	518 M
25076	<b>80</b>	931 M	25139	<b>526</b>	1101 M
25079	<b>125</b>	942 M	25140	<b>71</b>	1117 M
25081	<b>140</b>	800 M	25142	<b>506</b>	500 M
25082	<b>124</b>	806 M	25145	<b>508</b>	148 M
25083	<b>150</b>	795 M	25146	<b>22</b>	172 M
25084	<b>140</b>	799 M	25147	<b>526</b>	1100 M
25085	<b>124</b>	807 M	25148	<b>921</b>	735 M
25086	<b>124</b>	808 M	25149	<b>70</b>	1120 M
25087	<b>124</b>	809 M	25150	<b>356</b>	731 M
25088	<b>152</b>	812 M	25151	<b>908</b>	706 M
25089	<b>152</b>	813 M	25152	<b>909</b>	185 M
25090	<b>151</b>	789 M	25153	<b>910</b>	473 M
25091	<b>151</b>	790 M	25154	<b>896</b>	621 M
25092	<b>151</b>	791 M	25155	<b>892</b>	620 M
25093	<b>152</b>	792 M	25156	<b>898</b>	622 M
25094	<b>152</b>	793 M	25158	<b>149</b>	393 M
25095	<b>140</b>	794 M	25158	<b>898</b>	503 M
25096	<b>148</b>	787 M	25159	<b>898</b>	711 M
25097	<b>402</b>	1175a M	25160	<b>898</b>	174 M
25097	<b>446</b>	1175b M	25162	<b>846</b>	326a M
25098	<b>137</b>	541 M	25162	<b>852</b>	326b M
25099	<b>135</b>	539 M	25163	<b>254</b>	318 M
25100	<b>136</b>	540 M	25164	<b>230</b>	383 M
25101	<b>115</b>	386 M	25165	<b>219</b>	312 M
25102	<b>116</b>	387 M	25166	<b>228</b>	571 M
25103	<b>117</b>	388 M	25167	<b>225</b>	542 M
25104	<b>143</b>	389 M	25168	<b>220</b>	537 M
25105	<b>134</b>	390 M	25169	<b>248</b>	568 M
25106	<b>144</b>	391 M	25170	<b>233</b>	545 M
25107	<b>145</b>	392 M	25171	<b>259</b>	488 M
25110	<b>123</b>	85 M	25173	<b>263</b>	444 M
25111	<b>121</b>	1075 M	25174	<b>247</b>	472 M
25111	<b>122</b>	1076 M	25175	<b>255</b>	447 M
25112	<b>133</b>	487 M	25176	<b>260</b>	477 M
25115	<b>359</b>	1048 M	25177	<b>246</b>	459 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
25178	227	220 M	25241	976	421 M
25179	226	225 M	25242	976	418 M
25180	221	219 M	25243	292	544 M
25181	245	191 M	25245	286	785 M
25182	222	193 M	25246	285	784 M
25183	231	199 M	25247	306	1083 M
25184	249	222 M	25248	293	117 M
25185	212	192 M	25250	290	132 M
25186	262	1073 M	25251	308	573 M
25190	498	1106 M	25252	306	1077 M
25192	622	1121 M	25253	278	481 M
25193	621	1122 M	25254	343	484 M
25194	519	96a M	25255	949	382 M
25195	605	1108 M	25256	943	239 M
25196	761	668 M	25258	945	498 M
25197	678	88 M	25259	946	499 M
25198	888	93 M	25260	944	729 M
25199	890	145 M	25261	947	938 M
25200	889	92 M	25262	955	1017 M
25201	651	33 M	25263	957	1020 M
25202	939	110 M	25264	953	1016 M
25203	986	768 M	25265	954	1032 M
25205	775	776 M	25266	951	1080 M
25206	773	773 M	25266	952	1081 M
25207	719	738 M	25267	981	401 M
25208	724	739 M	25268	659	45 M
25210	65	30 M	25269	939	121 M
25211	66	94 M	25270	939	106 M
25212	586	1242 M	25272	765	290 M
25214	918	600 M	25273	939	596 M
25215	745	716 M	25275	523	1105 M
25216	928	55 M	25276	511	60 M
25217	714	736 M	25277	518	286 M
25218	926	166 M	25278	530	284 M
25219	712	342 M	25279	530	285 M
25220	690	780 M	25281	607	580 M
25221	683	775 M	25282	556	149 M
25222	981	400 M	25283	557	287 M
25223	926	584 M	25284	538	765 M
25224	31	728 M	25285	514	766 M
25225	985	734 M	25286	517	51 M
25227	810	665 M	25287	512	142 M
25228	807	748 M	25287	662	143 M
25229	805	746 M	25289	600	173 M
25230	808	749 M	25290	576	1102 M
25231	693	466 M	25291	632	722 M
25232	700	695 M	25292	607	764 M
25232	755	694 M	25293	607	144 M
25234	976	730 M	25294	616	577 M
25235	975	416 M	25296	925	397 M
25236	976	422 M	25297	928	434 M
25237	976	420 M	25298	928	335 M
25238	976	417 M	25299	778	779 M
25239	976	423 M	25300	774	774 M
25240	585	1030 M	25301	768	698 M
25240	976	419 M	25302	709	86 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
25304	702	232 M	25358	760	171 M
25306	703	233 M	25360	443	136 M
25307	803	714 M	25361	67	103 M
25308	762	755 M	25362	504	118 M
25311	696	324 M	25363	509	147 M
25311	737	339 M	25363	697	160 M
25312	786	683 M	25365	963	42 M
25313	669	740 M	25366	668	91 M
25314	939	485 M	25367	980	167 M
25315	939	184 M	25368	924	35 M
25316	660	81 M	25369	757	158 M
25317	656	34 M	25370	816	40 M
25318	930	598 M	25372	764	170 M
25319	31	661 M	25375	865	157 M
25319	980	662 M	25376	437	995 M
25320	984	612 M	25377	433	139 M
25320	984	613 M	25377	434	180 M
25321	358	715 M	25378	733	169 M
25322	787	684 M	25381	927	50 M
25323	790	693 M	25381	928	334 M
25324	730	90 M	25381	928	97 M
25325	356	690 M	25382	793	1053 M
25326	541	627 M	25382	794	1054 M
25327	789	699 M	25382	795	1055 M
25328	901	710 M	25382	796	1056 M
25330	903	708 M	25382	797	1057 M
25331	904	709 M	25382	798	1058 M
25332	902	604 M	25382	799	1059 M
25333	569	829 M	25383	792	1051 M
25335	840	769a M	25384	791	1052 M
25335	853	769b M	25385	971	1029 M
25336	16	162 M	25386	691	1060 M
25337	17	163 M	25387	950	1127 M
25337	442	183 M	25388	127	1128 M
25337	842	951a M	25389	147	1129 M
25340	273	408a M	25390	128	1130 M
25341	932	944 M	25391	132	227 M
25342	959	430 M	25392	537	616 M
25342	960	429 M	25394	494	1110 M
25343	917	469 M	25395	501	673 M
25344	526	672 M	25396	819	696 M
25344	939	700 M	25397	934	640 M
25346	937	1028 M	25399	7	1132 M
25347	931	1079 M	25400	522	1133 M
25348	444	16 M	25402	763	54 M
25349	938	102 M	25407	973	61 M
25350	741	111 M	25408	758	664 M
25351	357	99 M	25409	766	332 M
25352	461	72a M	25410	36	1161 M
25352	961	72b M	25411	558	1162 M
25353	771	134 M	25412	936	1163 M
25354	958	628 M	25413	928	950 M
25355	28	658 M	25414	783	824 M
25356	800	713 M	25415	926	949 M
25357	860	951b M	25416	606	969 M
25357	942	338 M	25417	574	816 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
25421	45	822 M	25463	402	1208a M
25422	868	1026 M	25465	172	1210a M
25423	24	1061 M	25465	180	1210b M
25424	784	825 M	25466	315	1211a M
25425	781	783 M	25466	331	1211b M
25426	782	823 M	25466	335	1211d M
25428	647	953 M	25466	402	1211e M
25429	648	954 M	25466	468	1211f M
25430	649	955 M	25467	466	1212 M
25431	650	956 M	25468	49	1213 M
25432	214	1177 M	25468	50	1912 M
25433	244	1178 M	questions		
25434	305	1179 M	25469	977	1214 M
25435	256	1180 M	25470	621	1215 M
25436	838	1181a M	25471	468	1216 M
25436	843	1181b M	25472	864	1217 M
25436	847	1181c M	25477	891	826 M
25440	882	1184 M	-	39	44 M
25441	48	1185 M	-	51	1392 M
25442	155	1186 M	-	52	1393 M
25443	384	1187a M	-	53	1397 M
25443	385	1187b M	-	55	178 M
25444	348	1188a M	-	56	1325 M
25444	406	1188b M	-	57	1391 M
25446	334	1211c M	-	58	1394 M
25446	421	1190 M	-	59	1395 M
25447	331	1192a M	-	60	1396 M
25447	334	1192c M	-	61	1398 M
25448	454	1193 M	-	75	1113 M
25449	257	1194 M	-	83	156 M
25451	312	1196 M	-	84	182 M
25452	393	1197a M	-	85	491 M
25452	402	1197b M	-	86	493 M
25452	468	1197c M	-	87	494 M
25453	181	1198 M	-	88	495 M
25454	176	1199a M	-	89	496 M
25454	328	1199b M	-	90	501 M
25454	336	1199c M	-	91	517 M
25455	323	1200a M	-	92	617 M
25455	449	1200b M	-	93	818 M
25456	327	1201a M	-	94	1252 M
25456	330	1201b M	-	95	1278 M
25456	335	1201c M	-	96	502 M
25456	440	1201d M	-	97	262 M
25457	217	1202 M	-	98	263 M
25458	370	1203a M	-	99	516 M
25458	468	1203b M	-	100	820 M
25459	384	1204a M	-	101	505 M
25459	403	1204b M	-	102	819 M
25459	468	1204c M	-	103	377 M
25460	161	1205 M	-	104	1111 M
25461	333	1206a M	-	105	1124 M
25461	337	1206b M	-	106	506 M
25461	468	1206c M	-	107	1118 M
25462	402	1207a M	-	108	1123 M
25462	468	1207b M	-	109	1125 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
-	<b>110</b>	759 M	-	-	1284 M
-	<b>111</b>	155 M	-	-	1084 M
-	<b>112</b>	1112 M	-	-	1085 M
-	<b>113</b>	1119 M	-	-	1290 M
-	<b>114</b>	815 M	-	-	1292 M
-	<b>126</b>	941 M	-	-	1293 M
-	<b>142</b>	368 M	-	-	1294 M
-	<b>142</b>	369 M	-	-	1295 M
-	<b>142</b>	370 M	-	-	1301 M
-	<b>148</b>	798 M	-	-	1334 M
-	<b>156</b>	376 M	-	-	674 M
-	<b>258</b>	1423 M	-	-	1289 M
-	<b>287</b>	1431 M	-	-	1226 M
-	<b>324</b>	1195 M	-	-	1227 M
-	<b>367</b>	348 M	-	-	1228 M
-	<b>386</b>	1470 M	-	-	1229 M
-	<b>456</b>	1475 M	-	-	1230 M
-	<b>458</b>	957 M	-	-	603 M
-	<b>468</b>	1208b M	-	-	1251 M
-	<b>529</b>	153 M	-	-	1262 M
-	<b>633</b>	578 M	-	-	1263 M
-	<b>634</b>	1536 M	-	-	1264 M
-	<b>654</b>	113 M	-	-	509 M
-	<b>666</b>	607 M	-	-	510 M
-	<b>727</b>	188 M	-	-	1253 M
-	<b>743</b>	756 M	-	-	1254 M
-	<b>752</b>	504 M	-	-	1255 M
-	<b>834</b>	112a M	-	-	1256 M
-	<b>905</b>	614 M	-	-	1257 M
-	<b>916</b>	1011 M	-	-	1258 M
-	<b>920</b>	633 M	-	-	1259 M
-	<b>988</b>	1529 M	-	-	1260 M
-	-	131 M	-	-	236 M
-	-	1071 M	-	-	38 M
-	-	1425 M	-	-	47 M
-	-	1427 M	-	-	48 M
-	-	1428 M	-	-	49 M
-	-	643 M	-	-	52 M
-	-	1033 M	-	-	73 M
-	-	1034 M	-	-	74 M
-	-	671 M	-	-	84 M
-	-	1270 M	-	-	159 M
-	-	1271 M	-	-	465 M
-	-	1272 M	-	-	394 M
-	-	1273 M	-	-	395 M
-	-	1275 M	-	-	396 M
-	-	1276 M	-	-	427 M
-	-	1277 M	-	-	520 M
-	-	1389 M	-	-	704 M
-	-	1420 M	-	-	1036 M
-	-	1447 M	-	-	1131 M
-	-	635 M	-	-	1137 M
-	-	637 M	-	-	1220 M
-	-	1183 M	-	-	1232 M
-	-	1280 M	-	-	1233 M
-	-	1283 M	-	-	1234 M

Museum #	Cat. #	Marlik #	Museum #	Cat. #	Marlik #
-	-	1235 M	-	-	1361 M
-	-	1236 M	-	-	1362 M
-	-	1238 M	-	-	1363 M
-	-	1239 M			
-	-	1243 M			
-	-	1244 M			
-	-	1245 M			
-	-	1462b M			
-	-	1078 M			
-	-	107 M			
-	-	347 M			
-	-	595 M			
-	-	594 M			
-	-	593 M			
-	-	1322 M			
-	-	1409 M			
-	-	204 M			
-	-	206 M			
-	-	246 M			
-	-	251 M			
-	-	260 M			
-	-	293 M			
-	-	408b M			
-	-	830 M			
-	-	831 M			
-	-	835 M			
-	-	837 M			
-	-	1003 M			
-	-	1373 M			
-	-	1374 M			
-	-	1376 M			
-	-	1380 M			
-	-	1433 M			
-	-	1483 M			
-	-	95 M			
-	-	305 M			
-	-	543 M			
-	-	606 M			
-	-	801 M			
-	-	925 M			
-	-	929 M			
-	-	952 M			
-	-	966 M			
-	-	970 M			
-	-	971 M			
-	-	982 M			
-	-	985 M			
-	-	986 M			
-	-	987 M			
-	-	1189 M			
-	-	1316 M			
-	-	1317 M			
-	-	1318 M			
-	-	1320 M			
-	-	1347 M			
-	-	1360 M			

به وسیله آشوریها و اورارتوئیها بدان وارد می‌گردید بتدریج قدرت اولیه خود را از دست داده و احتمالاً در اواخر دوران حکومت بسرعت و دفعتاً به دلایل نامعلومی این منطقه را ترک نموده و در جهت جنوب شرقی بطرف فلات ایران مهاجرت نموده و آثار آخرین استقرارهای آن در قبرستان "ب" سیلک کاشان در قسمت فلات مرکزی به یادگار باقی گذاشته شده است. امکان و احتمال دیگری که برای اضمحلال و پایان یافتن این حکومت و اقوام ماردی وجود دارد این است که در آن هنگام که گروهها و طوایف هند و ایرانی متحد می‌گردیده و به تدریج تشکیل امپراطوری مقتدر مادها را می‌دادند این اقوام نیز با مادها متحد شده و یکی از ایالات این امپراطوری را تشکیل و در موطن و ماوای خود در دره سفید رود که بعدها به وسیله مورخین یونانی ماردی و محل ماردها خوانده شده باقی ماندند. با توجه به وضعیت درهم و برهم و نابسامان اشیاء در بعضی از آرامگاهها، احتمال تخریب یک پارچه و دامنه‌داری بوسیله وقوع یک زلزله شدید غیرممکن نمی‌باشد.

عزت‌الله نگهبان

مارلیک کلمه ایست مرکب شامل واژه مار و پسوند لیک که در محل زارعین تصور می نمودند این وجه تسمیه بعلت مارهای زیادی است که در این تپه وجود دارند. ولی در حقیقت این نام به معنی محل ماردها یا امردها که گروهی از اقوام هند و ایرانی هستند بوده است. سپس راجع به اصل و سرچشمه تمدن مارلیک و سابقه تاریخی آن توضیحات مفصلی داده شده است. پس از آن سابقه باستانی و تاریخی مناطق گیلان و مازندران از قدیمترین دورانهای پیش از تاریخ، تاریخی و اسلامی مورد بررسی قرار گرفته است. در ضمن بررسی سابقه تاریخی منطقه گیلان و مازندران به اطلاعات و روایات تاریخی و اشعار حماسی شاهنامه فردوسی و داستانهای تاریخی آن نیز استناد گردیده است. سپس این اطلاعات با شواهد و مدارک باستانشناسی کشورهای همجوار ایران مانند بین‌النهرین و آسیای صغیر و بطور کلی دنیای باستان در منطقه خاور نزدیک و خاورمیانه مقایسه شده است. بخصوص در این مورد نسبت به قدمت تمدن مادها و وسعت حوزه حکمرانی آنها نظراتی پیشنهاد گردیده است. از حاصل جمع مقایسه و بررسی آثار مکشوفه در قبرستان سلاطین مارلیک با آثار مکشوفه در مناطق همجوار آن در حوزه بحر خزر و ارتفاعات دامنه‌های شمال رشته جبال البرز در اواخر هزاره دوم تا اوائل هزاره اول پیش از میلاد مسیح چنین استنباط می‌گردد که تمدن و فرهنگ یکپارچه و یکسان مارلیک در تمام مناطق حوزه جنوبی بحر خزر از حدود طالش روسیه در مغرب تا گوشه جنوب شرقی بحر خزر و از خط کرانه دریا تا ارتفاعات این رشته جبال گسترش داشته است.

مدارک باستانشناسی و هم‌چنین مدارک موجود تاریخی همگی دلالت بر آن دارند که این تپه به گروهی از اقوام هند و ایرانی تعلق داشته و بنا بر مدارک تاریخی و جغرافیائی به احتمال قوی این گروه ماردها یا اماردها بوده که رودخانه سفیدرود نیز در دنیای باستان بهمین نام ماردی خوانده می‌شده است. این گروه هند و ایرانی چنانکه از آثار مکشوفه در قبرستان سلاطین مارلیک استنباط می‌گردد اشیاء صنعتی و هنری بسیار زیبا، موزون و ظریفی را که بعضی جزء شاهکارهای هنری و صنعتی محسوب می‌گردند تولید نموده‌اند. هنرمندان و صنعتگران ماهر و با تجربه این تمدن با استفاده از بافت‌های سنتی هنری و صنعتی موجود، آگاهی از تمدنهای مجاور و تحت تأثیر طبیعت زیبای این منطقه و بکاربردن شکل زیبا و موزون گیاهان، حیوانات و پرندگان این سرزمین، توأم با استعداد خلاقه و کم‌نظیر خود مکتب هنری والا و ارزنده‌ای را بوجود آوردند که شاهکارهای آن در آرامگاههای مارلیک پس از هزاران سال آشکار گردید. نفوذ و تأثیر این مکتب پیشرفته هنری و صنعتی بزودی در نواحی مجاور توسعه نموده و شواهد آن به روشنی در پهنه دنیای باستان از کرانه‌های شرقی دریای مدیترانه تا دره رود سند و هم‌چنین در هنر و صنایع تمدنهای بعدی مانند آشور، اورارتو، کیمری و سکائی و بخصوص امپراطوری ماد و هخامنشی مشاهده می‌گردد.

چنین بنظر می‌رسد که این تمدن بعلت حملات و فشارهای نیرومند و سختی که از جهت مغرب و احتمالاً



## فصل یازدهم

### ادوات و ابزارهای مارلیک

در ضمن حفاری آرامگاههای تپه قبرستان مارلیک تعداد کثیری ابزار و ادوات و وسایل زندگانی آشکار گردید. این طبقه از اشیاء براساس نوع مصرف و کاربرد در این فصل در گروه‌های مختلف تقسیم‌بندی شده و ذیلاً به شرح آنها می‌پردازیم.

نمونه‌های ادوات و ابزارهای مشروحه در متن کتاب شامل دهانه‌های مفرغی اسب دو نمونه، زنگوله‌های مفرغی ۲۱ نمونه، تزئینات بدل‌چینی محورگردونه ۳ نمونه، قلاب و چنگک مفرغی ۳ نمونه، دوک پشم‌ریسی مفرغی یک نمونه، کفگیرک مفرغی یک نمونه، لوله سنگی و طلائی یک نمونه، لوله مفرغی یک نمونه، ملاقه‌های مفرغی ۴ نمونه، سیخ کباب مفرغی ۱۰ نمونه، شمش‌های مفرغی ۱۱ نمونه، پلاک مفرغی دو نمونه، چرخ دنداندار مفرغی ۲ نمونه، آویز مفرغی یک نمونه، سنگ چاقوتیزکن ۴ نمونه، تبر دو سر مفرغی یا تبر و تیشه ۹ نمونه، مغار مفرغی ۵ نمونه، پتک مفرغی ۲ نمونه، چکش سنگی ۲ نمونه، قطعات پارچه و نوار چند نمونه می‌باشند.

### نتیجه‌گیری کلی

در این فصل کتاب ابتدا نام مارلیک و چراغعلی تپه و سابقه محلی و تاریخی آن شرح داده شده است. کلمه

## سرپیکانها

تعداد بسیار زیادی سرپیکان در حفاری مارلیک آشکار گردید تا بدان حد که در بعضی از آرامگاهها چند صد عدد پیکان به اندازه‌های مختلف و با اشکال مختلف بهمراه سایر اشیاء قرار داده بودند. از این مجموعه عظیم که بیش از یک هزار سرپیکانهای مختلف بودند از هر نوع چند عدد و از هر آرامگاه یکی دو نمونه انتخاب و بشرح آنها در این فصل می‌پردازیم. همه این سرپیکانها باستثنای چند عدد که از استخوان و یا سنگ چخماق می‌باشند بقیه از مفرغ ساخته شده و بعلت قرار داشتن در زیر خاک سطح آنها عموماً با لایه‌ای از زنگ مخلوط با رسوبات خاک پوشیده شده است. نمونه‌های انتخاب شده براساس شکل و اندازه به چند گروه و دسته‌های فرعی در هر گروه طبقه‌بندی شده‌اند.

نمونه‌های سرپیکانهای مکشوفه در حفاری مارلیک را براساس شکل آنها می‌توان به یازده گروه اصلی طبقه‌بندی نمود. گروه اول سرپیکانهای تزئینی، گروه دوم سرپیکانهای مضاعف، گروه سوم سرپیکانهای هرمی شکل طویل، گروه چهارم سرپیکانهای جت شکل، گروه پنجم سرپیکانها با نوار برجسته در وسط تیغه، گروه ششم سرپیکانها با تیغه سه پره، گروه هفتم سرپیکانهای دلتا شکل، گروه هشتم سرپیکانهای به شکل برگ درخت، گروه نهم سرپیکانها با تیغه مضاعف، گروه دهم سرپیکانهای استخوانی، گروه یازدهم سرپیکانهای سنگ چخماق.

## ادوات رزمی

علاوه بر سلاح‌های جنگی که شرح نمونه‌های آن قبلاً داده شده ادوات رزمی دیگر که بمنظور حفاظت سلحشوران بکار می‌رفته در حفاری مارلیک بدست آمده است. این ادوات رزمی عبارتند از سپرها، کلاه خودها، سنج‌ها، تیردان‌ها، کمربندها و دستبندهای حفاظتی و سایر ادوات مربوط به نبرد. این ادوات رزمی به روشنی حکایت از آن دارند که صنایع مربوط به نبرد و جنگاوری در این مناطق مرتفع کوهستانی شمال ایران در اواخر هزاره دوم و اوایل هزاره اول پیش از میلاد مسیح از اهمیت خاصی برخوردار بوده و ادوات و سلاح‌های گوناگونی برای تجهیز دلاوران تولید می‌گردیده است. در اینجا به شرح بعضی از این نمونه‌ها و ابزار و ادوات رزمی می‌پردازیم.

تعداد ادوات رزمی که در متن کامل کتاب شرح داده شده شامل نمونه کمان یک عدد، سپرهای مفرغی دو عدد، کلاه خود مفرغی سه عدد، سنج‌های مفرغی پانزده عدد، تیرکش یا تیردان شش عدد، کمربندهای رزمی چهارده عدد، مچ‌بند مفرغی یک عدد و تیغه ارسنگ چخماق یک عدد.

برای افراد عادی به‌سبب سهولت امکان‌پذیر نیست و دلالت بر آن دارد که صاحب آرامگاه از قدرت و نیروی خارق‌العاده جسمانی برخوردار بوده است. بعضی از انواع این سلاح‌ها و بخصوص سرپیکانهای مفرغی به انواع و اندازه‌های مختلف و متنوع ساخته شده و علاوه بر مصارف جنگی احتمالاً برای شکار حیوانات و پرندگان گوناگون و مختلف‌الجثه بکار می‌رفته‌اند. قراردادن مجسمه‌های سفالی و مفرغی حیوانات مختلف در آرامگاهها شاید تا اندازه‌ای مؤید این نظریه بوده و ضمناً بیانگر این مطلب باشد که صاحب آرامگاه شکارچی ماهری نیز بوده است (تابلو رنگی XIA).

این مجموعه سلاحها که در آرامگاههای مارلیک قرار داده شده بودند از نظر کیفیت و طرز ساخت در حد بسیار بالائی بوده و حاکی از آن است که کارگاههای صنعتی این منطقه شمالی ایران در اواخر هزاره دوم و اوایل هزاره اول پیش از میلاد مسیح و بعبارت دیگر در حدود ۳ هزارسال پیش از نظر صنعتی بسیار پیشرفته بوده و فرآورده‌های فلزی بسیار قابل توجهی را تولید نموده‌اند.

از چند هزار سلاح‌های تقریباً سالم و کاملی که در آرامگاههای مارلیک کشف گردیدند فقط تعداد بسیار معدودی در حدود چهل عدد از مواد دیگری بجز مفرغ ساخته شده بودند. این تعداد معدود شامل ۲۵ عدد سرپیکان سنگ چخماق و چند عدد تیغه فولادی و ادوات استخوانی بود. این وضعیت بخوبی نشان می‌دهد که در آن دوران استفاده از سنگ برای ساختن سلاح‌های جنگی تقریباً متروک گردیده و جای خود را به فلز و بخصوص به مفرغ که به وفور رواج داشته و اگذار نموده است.

مجموعه سلاح‌های بدست آمده در حفاری مارلیک براساس نوع آنها به چند دسته طبقه‌بندی گردیده و نمونه‌هایی از هر طبقه در این فصل بنظر خوانندگان محترم خواهد رسید.

سرگرزهای بدست آمده در حفاری مارلیک به دو گروه سرگرزهای مفرغی و سرگرزهای سنگی تقسیم می‌گردد که ۲۲ نمونه آن سرگرزهای مفرغی و ۷ نمونه آن سرگرزهای سنگی می‌باشند.

تعداد زیادی سلاح‌های تیغه‌دار شامل شمشیرها، خنجرها و قمه‌ها در آرامگاهها آشکار گردیدند که از این مجموعه حدود ۵۳ عدد آنها کامل و سالم باقی مانده‌اند. این سلاح‌های تیغه‌دار به سه گروه اصلی شامل گروه نمونه‌های تزئینی، گروه قمه‌ها با دسته قالب گرفته با تیغه، گروه خنجرهای مفرغی با دسته‌های استوانه‌ای باز یا بسته طبقه‌بندی گردیده‌اند.

در حدود ۱۱۹ عدد سرنیزه‌های کامل و مقدار کثیری نمونه‌های شکسته و ناقص در آرامگاهها کشف گردید که تعدادی از آنها براساس شکل تیغه یا دسته به ده گروه اصلی طبقه‌بندی شده‌اند. در بین گروه سرنیزه‌ها تعداد معدودی سرنیزه‌های آهنی شامل چهار نمونه نیز وجود داشت.

## فصل دهم

### سلاح‌های مارلیک

در آرامگاه‌های قبرستان مارلیک مجموعه کثیری اسلحه و ادوات رزمی که از انواع گوناگون بودند قرار داده شده بود. این سلاح‌ها عموماً از مفرغ ساخته شده بودند و فقط تعداد بسیار معدودی وسایل رزمی که از آهن، سنگ، استخوان، مس و طلا ساخته شده بودند نیز آشکار گردید. تعداد وسایل و سلاح‌های رزمی که در بعضی از این آرامگاه‌ها به‌مراه صاحب آرامگاه قرار داده شده بودند بقدری زیاد بود که باعث تعجب می‌گردید. در آرامگاه شماره ۲۶ علاوه بر تعداد زیادی ظروف تشریفاتی مذهبی، مجسمه‌های حیوانات، جواهرات و وسایل آشپزخانه و وسایل شخصی، تعداد بسیار کثیری سلاح‌های رزمی شامل در حدود حداقل یازده عدد سرگرز، سه عدد شمشیر، چهارده عدد سرنیزه، بیست و پنج عدد خنجر و قمه، دو عدد تبر یا تبرزین، چند صد عدد سرپیکان و هم‌چنین ادوات رزمی دیگری مانند دو عدد کلاه‌خود، سه عدد کمر بند رزمی حفاظتی و یک عدد مچ‌بند رزمی حفاظتی به‌مراه مرده در آرامگاه دفن گردیده بودند. ناگفته نماند که علاوه بر این سلاح‌های سالم و کامل که در بالا اشاره گردید در این آرامگاه تعداد کثیری نیز سلاح‌ها و ادوات رزمی که شکسته شده بودند وجود داشتند.

مجموعه بزرگی از سلاح‌های جنگی که در بعضی از این آرامگاه‌ها به‌مراه صاحب آرامگاه دفن گردیده احتمالاً حکایت از این دارد که صاحبان آنها از سرداران و سلحشوران بزرگ بوده‌اند. در بعضی آرامگاه‌ها سلاح‌های بسیار بزرگ و سنگینی مانند شمشیرها، سرگرزها و سرنیزه‌های بزرگ قرار داده شده که استفاده از آنها

## ظروف سنگی

تعداد معدودی ظروف سنگی که تا اندازه‌ای خشن ساخته شده بودند مشتمل بر هاونهای سنگی و دسته آنها، سنگ کوب‌ها، سنگ ساوها در حفاری مارلیک آشکار گردیدند. البته لازم به تذکر است که در این دوران که صنایع فلزی و بخصوص مفرغی در کارگاههای صنعتی مارلیک به آسانی تهیه می‌گردید احتیاج زیادی به آثار و ادوات سنگی وجود نداشته و تنها اشیاء سنگی که مورد نیاز بوده بنظر می‌رسد هاون‌های سنگی و سنگ‌سای‌ها بوده‌اند.

### الف - هاونهای سنگی:

چند نمونه هاون سنگی که عموماً خشن ساخته شده بودند در حفاری مارلیک آشکار گردیدند. این هاونهای سنگی شامل محفظه مستحکم و لوله بلندی است که به وسیله سوراخی به داخل محفظه مرتبط می‌گردد. در بعضی از نمونه‌ها لوله روباز هاون از لبه گذشته و تا داخل محفظه امتداد دارد. غالباً دسته هاون مجزا ساخته شده و به‌مراه آن در حفاری بدست آمده است. جمعاً تعداد ۹ عدد هاون و دسته آنها، و تعداد ۸ عدد سنگ‌سایش و کوبه‌های سنگی در حفاری آشکار گردید.

رنگ قرمز، قهوه‌ای و خاکستری تولید گردیده‌اند و انواع روشن و یا تیره این رنگها در مجموعه سفال‌ها مشاهده می‌گردد ولی باید اشاره نمود که بطور کلی در هر ظرفی فقط یک رنگ بطور یکنواخت و یکسان در تمام سطح ظرف وجود دارد که در نتیجه کنترل دقیق درجه حرارت کوره و تهویه آن تولید گردیده است.

## کیفیت سطح سفال

طریقه پرداخت و صیقل نمودن سطح سفال در نهایت خوبی و با کیفیت بسیار اعلائی انجام گردیده است. عموماً یک پوشش یا لایه بسیار هموار و نازکی سطح ظروف را فرا پوشانیده است. علاوه بر این پوشش عموماً سطح سفال کاملاً صیقل داده شده و در بیشتر نمونه‌ها داغدار گردیده و درخشش خاصی پیدا نموده است. اثرات و بقایای داغدار نمودن بر روی سطح سفال بخصوص در بعضی قسمتها بخوبی نمایان است. عموماً تمام سطح سفال بطرز یکنواخت و ساده داغدار گردیده ولی در تعداد معدودی از ظروف نقوش هندسی داغدار سطح آنها را مزین نموده است. بعضی از ظروف نیز با نقوش هندسی ساده بطریق کنده و یا فشرده تزئین گردیده‌اند. یک گروه از سفالها که شامل تعداد معدودی می‌باشد با نوار نقوش هندسی که بر روی ظرف خراش داده شده و یا تراشیده شده است تزئین گردیده‌اند.

مجموعه ظروف سفالی مکشوفه در حفاری مارلیک براساس شکل و نوع به ۱۹ گروه مختلف تقسیم‌بندی گردیده‌اند و در این فصل فقط به نمایش و شرح چند نمونه از هر گروه می‌پردازیم. اطلاعات و مشخصات دقیق از نظر اندازه، ابعاد، رنگ، محل پیدایش در حفاری و سایر موارد مربوط به سفالهایی که در این فصل شرح داده شده‌اند در جدول مشخصات که در انتهای فصل می‌باشد قید گردیده است (جدول فهرست مشخصات سفال).

این ۱۹ گروه شامل گروه اول سفالهای تزئینی تعداد ۱۱ نمونه، گروه دوم ظروف سفالی با لوله روباز طویل تعداد ۱۴ نمونه، گروه سوم ساغرهای سفالی تعداد ۵ نمونه، گروه چهارم کاسه‌های سفالی با لوله روباز ۱۱ نمونه، گروه پنجم فنجانهای سفالی ۱۰ نمونه، گروه ششم تنگهای سفالی ۱۶ نمونه، گروه هفتم تنگهای سفالی دوقلو ۲ نمونه، گروه هشتم تنگهای سفالی بزرگ ۱۹ نمونه، گروه نهم کوزه‌های سفالی ۶ نمونه، گروه دهم آبخوریهای کوچک ۱۳ نمونه، گروه یازدهم دیگها و دیزی‌های سفالی ۲۰ نمونه، گروه دوازدهم کاسه‌های سفالی ۱۸ نمونه، گروه سیزدهم کاسه‌های کم عمق ۱۲ نمونه، گروه چهاردهم بشقابهای سفالی ۶ نمونه، گروه پانزدهم ظروف با مصرف خاص ۸ نمونه، گروه شانزدهم آبخوریهای سفالی با لبه سه طرفه ۵ نمونه، گروه هفدهم ظروف سفالی سه پایه ۴ نمونه، گروه هیجدهم ظروف سفالی مکعب شکل ۳ نمونه، گروه نوزدهم ظروف سفالی با نقوش داغدار و نقوش کنده ۶ نمونه می‌باشند.

## فصل نهم

### ظروف سفالی و سنگی

در مجموعه ظروف سفالی مارلیک ظروف منقوش با رنگ مشاهده نمی‌گردد چون در این دوران یعنی نیمه دوم هزاره دوم پیش از میلاد مسیح این هنر بکلی منسوخ گردیده بوده است. البته باید تذکر داد که بعدها یعنی در نیمه اول هزاره اول پیش از میلاد در بعضی از نواحی ایران مانند قبرستان سیلک در نزدیک کاشان این هنر دوباره تجدید حیات یافته و تعداد معدودی سفالهای منقوش با نقش رنگی مشاهده می‌گردند. سفالگران تمدن مارلیک ذوق و دقت و استعداد خویش را در شکلهای زیبا، نوع خمیر، حرارت در کوره و داغدار و صیقل نمودن سطح سفال و هم چنین نقوش داغدار بر روی سفالها بکار برده‌اند.

### خمیره و گل ظروف سفالی مارلیک

سفالگران تمدن مارلیک ترقی و پیشرفت زیادی در زمینه ساختن ظروف سفالی حاصل نموده بودند. خمیره سفال در نهایت ظرافت در حالیکه کاملاً "ورز داده شده ساخته شده و با شن و یا ماسه بسیار ریز و ظریفی برای شکل‌پذیری مخلوط گردیده است. حرارت دادن سفال در کوره بخوبی و دقت در اختیار سفالگران انجام گردیده و بهمین علت رنگ یک نواختی برای سفال و خمیره آن بوجود آمده و رنگ یکنواخت مقطع سفال دلیل بر آن است که حرارت مداوم و هوای کافی در کوره جریان داشته است. رویهمرفته بطور کلی ظروف سفالی به سه

است مهره گردن بند باشند. مجموعه مهرهای استوانه‌ای مکشوفه در قبرستان سلاطین مارلیک را می‌توان براساس روش و سبک ساخت، نکات فنی، مناظر و صحنه‌ها به شش گروه تقسیم نمود که شرح دقیق آنها در متن کامل کتاب آمده است.

تعداد مهرهای مسطح پنج عدد و تعداد مهرهای استوانه‌ای هفده عدد می‌باشند و از مواد طلا، مفرغ، بدل چینی، سنگ حدید، سنگهای مختلف الوان، سنگ گچی، گل پخته و قیر طبیعی ساخته شده‌اند.



## فصل هشتم

### مهرهای مارلیک

مهرهای مکشوفه در قبرستان سلاطین مارلیک عبارتند از پنج عدد مهر مسطح و شانزده عدد مهر استوانه‌ای شکسته و سالم. مهرهای مسطح از مفرغ ساخته شده و عموماً دسته‌ای برای آویزان نمودن، در پشت آنها تعبیه گردیده است. دسته مهرهای مسطح در انتها به شکل حیوانات یا پرندگان ساخته شده‌اند. مهرهای استوانه‌ای از مواد مختلف از قبیل سنگ، بدل چینی و طلا ساخته شده‌اند و عموماً وسط مهر در جهت طول استوانه سوراخی برای آویزان نمودن مهر وجود دارد. بیشتر مهرهای استوانه‌ای بدست آمده از بدل چینی ساخته شده‌اند که بر اثر گذشت زمان در لایه لعاب سطح بدل چینی که حاوی نقش مهر می‌باشد متأسفانه اضطرابات و نقصانهائی بوجود آمده است. بعضی از این مهرها دارای حاشیه‌ای از طلا بوده و با سایر اشیائی که در مکتب هنری مارلیک تولید گردیده مانند مهره‌گردن‌بندها که بعضی آنها با حاشیه تزئینی طلا عموماً زینت داده شده‌اند وجه مشترک و شباهت و رابطه خاصی دارند. یکی از این مهرهای استوانه‌ای از طلا ساخته شده است. مهرهای بدل چینی و گچی عموماً نقشهای ساده‌تری در برداشته ولی مهرهایی که از مواد سخت‌تر ساخته شده‌اند دارای نقوش ظریف و دقیقتری هستند. دو مهر استوانه‌ای منقور با خط میخی که قسمتی از آنها شکسته و ناقص است در بین این مجموعه یافت می‌گردد. سه عدد از این مهرها به مهره‌های بدل چینی گردن‌بندها که مقدار متنابهی از آنها در حفاری مارلیک بدست آمده است شباهت زیادی دارند و بعلاوه نقوش ساده هندسی که بر روی آنها تصویر گردیده احتمالاً ممکن

نقره، عقیق، بدل چینی، سنگ سلیمانی، سنگ لاجورد، شبق، قیرطبیعی، گل پخته، سنگهای الوان، مفرغ، سنگ  
حدید، سنگ شیشه، سنگ آهکی، سنگ گچ، استخوان، صدف و سنگ فسیل ساخته شده‌اند.

در متن کامل کتاب شرح جزئیات تعداد ۱۶۴ عدد گردن‌بند و آویز، تعداد ۵۱ عدد تک مهره مخصوص،  
تعداد ۳۷ عدد دستبند، تعداد ۴۶ عدد گوشواره، تعداد ۱۳ عدد انگشتر، تعداد ۱۱ عدد پیشانی‌بند، تعداد ۱۰ عدد  
موی‌بند، تعداد ۱۵۵ عدد دگمه، تعداد ۶ عدد برگ طلائی، یک قلاب کمربند، تعداد یک عدد سنجاق قفلی، تعداد  
۲۹ عدد سنجاق لباس، تعداد ۳ عدد مهره بازی، تعداد ۹ عدد ورقه طلا، یک عدد سنگ شبیه چشم، یک عدد فسیل  
حلزون، تعداد ۵ عدد ناخن پاک‌کن، تعداد ۶ عدد گوش پاک‌کن، تعداد ۵ عدد سوزن، یک عدد آئینه مفرغی، یک  
عدد شانه مفرغی و یک عدد موجین مفرغی آمده است.

## فصل هفتم

### جواهرات

در حدود هزاره دوم پیش از میلاد مسیح مراکز صنعتی جواهرسازی متعددی در منطقه خاور نزدیک و خاورمیانه سرگرم تولید جواهرات متنوع بوده و شاهکارهای هنری زیبایی را در زمینه روش ساخت، شکل و ظرافت جواهرات و زیورآلات تولید نمودند. بنظر می‌رسید یکی از این مراکز در منطقه مارلیک وجود داشته و ساخته‌ها و تولیدات این کارگاه که شاهکارهای صنعتی این مکتب را معرفی می‌نمایند همراه با صاحبان آنها در آرامگاههای مارلیک دفن گردیده‌اند. در این قبرستان براساس عقاید مذهبی مردگان با انواع مختلف متعلقات خود که عموماً از بهترین آنها گلچین می‌گردید بخاک سپرده می‌شدند. در ضمن حفاری قبرستان مارلیک مجموعه بسیار ارزنده و متنوعی از زیورآلات و جواهرات شخصی صاحبان این آرامگاهها که شامل انواع گردن‌بندها، آویزها، دستبندها، انگشترها، گوشواره‌ها، دگمه‌های تزئینی، سنجاقهای تزئینی و اشیاء دیگری می‌باشد آشکار گردیدند. اشیاء این مجموعه به اشکال مختلف و با روش‌های متنوع صنعتی از موادی مانند طلا، نقره، مفرغ ساخته شده و با سنگهای نیمه قیمتی متنوع و مواد دیگری مانند عقیق، سنگ سلیمانی، بدل چینی و شیشه ترصیع و تزئین گردیده‌اند. بیشتر این جواهرات در آرامگاههایی که احتمالاً متعلق به زنان بوده بدست آمده ولی نمونه‌هایی نیز در آرامگاه مردان که بیشتر محتویات آنها سلاح‌های جنگی و رزمی و یا وسائل شکار بوده جای داده شده بودند.

مجموعه جواهرات مارلیک که تعداد ۵۶۶ نمونه آن در این کتاب شرح داده شده است از موادی مانند طلا،

سوراخی می‌باشند که احتمالاً برای آویزان کردن بکار می‌رفته است. مجسمه‌هاییکه در قسمت قشلاق آنطرف رودخانه گوهر رود بدست آمده‌اند حلقه‌ای در پشت مجسمه برای آویزان نمودن دارند و خیلی خشن‌تر از مجسمه‌های مارلیک ساخته شده‌اند.

مجسمه‌های فلزی که در تپه مارلیک بدست آمده‌اند بسیار موزون و متناسب با دقت خاصی ساخته شده و نمونه‌ای از صنعت پیشرفته این مکتب هنری می‌باشند. مجسمه گاو شماره ۱۱۲۸م که در قشلاق بدست آمده بوسیله آقای دکتر وطن‌دوست آزمایش گردیده است. ایشان اظهار می‌دارند که فلز آن از مفرغ بسیار سخت و محکمی بوده و بوسیله موم قالب‌گیری شده و حلقه پشت بوسیله قالب مومی حلقه‌ای جداگانه‌ای ملحق گردیده است.

تعداد هشتاد و هفت مجسمه فلزی حیوانات که شرح آنها در فصل مربوط بدانها در متن کامل کتاب آمده جمعاً در شانزده آرامگاه مارلیک و نه عدد دیگر در محوطه قشلاق که آنطرف دره گوهررود در مقابل تپه مارلیک می‌باشد بدست آمده‌اند. هفت عدد از این آرامگاهها شامل آرامگاههای ۲، ۱۸، ۲۵، ۴۰، ۴۱، ۴۴ و ۴۵ در هر کدام فقط یک مجسمه فلزی قرار داشت. در هفت آرامگاه دیگر مجسمه‌های بیشتری وجود داشت که شامل آرامگاه شماره ۱۳ تعداد چهار نمونه، آرامگاه شماره ۲۴ تعداد چهار نمونه، آرامگاه شماره ۲۶ تعداد شش نمونه، آرامگاه ۲۷ تعداد سه نمونه، آرامگاه شماره ۳۲ تعداد چهار نمونه، آرامگاه شماره ۴۷ تعداد پنج نمونه و آرامگاه شماره ۵۰ تعداد چهار نمونه می‌باشند. بیشترین تعداد مجسمه‌های فلزی حیوانات در دو آرامگاه دیگر که عبارت از آرامگاه شماره ۳۶ تعداد بیست نمونه و آرامگاه شماره ۵۲ تعداد بیست و هفت نمونه می‌باشند آشکار گردیده است. شرح کامل این مجسمه‌ها در متن کامل کتاب آمده است.

نقش و بافت کننده کار تزئین گردیده‌اند.

خصوصیات اصلی مجسمه‌های سفالی مارلیک عموماً سادگی و استیلیزه بودن آنها می‌باشد. حیوانات شاخ‌دار که تعداد بیشتر مجسمه‌های مارلیک را در بر دارند عموماً دارای سر کوچک و ساده بوده و شاخهای بلند و بزرگ آنها در بالای سر و بر روی لوله روباز و یا پوزه مخروطی قرار داده شده است. چشمان در صورتیکه در مجسمه نشان داده شده باشند غالباً بصورت دایره‌های کوچک نمایش داده شده‌اند. اکثر مجسمه‌ها دارای گوشهای کوچک و برجسته بوده و غالباً گوش آنها سوراخ شده و در بعضی موارد گوشواره که بصورت حلقه کوچکی از طلا می‌باشد هنوز در گوش وجود دارد.

تعداد کلیه مجسمه‌های سفالی حیوانات که در قبرستان سلاطین مارلیک بدست آمد به سی و سه عدد می‌رسد که شرح کامل جزئیات ساختمان و تزئینات آنها در متن کامل کتاب آمده است.

## مجسمه‌های فلزی حیوانات

تعداد ۹۶ مجسمه طلائی و مفرغی حیوانات که در قبرستان مارلیک و یا اطراف آن در دره گوهر رود آشکار گردید و در این فصل به شرح آنها می‌پردازیم شامل مجسمه حیواناتی مانند گاوکوهاندار، گوزن، بز کوهی، قوچ، اسب، پلنگ، گراز و سگ می‌باشد. علاوه بر این مجسمه‌هایی که بطور کامل تمام بدن حیوان را نمایش می‌دهند نمونه‌های دیگری که فقط قسمتی از بدن حیوان بعنوان عامل تزئینی در ظروف فلزی یا ادوات و ابزارهای مختلف بکار رفته نیز در این آرامگاهها کشف گردیده‌اند.

بعضی از این مجسمه با وجودیکه بسیار ساده ساخته شده‌اند ولی خصوصیات طبیعی جسمانی حیوانات را به بهترین وجهی نمایش داده و در برخی دیگر از مجسمه‌ها تا اندازه‌ای بطریق استیلیزه و مسبک طرح‌ریزی گردیده و در بعضی از قسمتهای بدن حیوان که بیشتر شاخص طبیعت خاص حیوان بوده مانند کوهان و یا شاخ تأکید و تشدید بیشتری گردیده و بطرز کاملاً محسوسی بزرگ‌تر نشان داده شده‌اند. این مجسمه‌های فلزی اغلب سالم باقی مانده و فقط سطح آنها در اثر مرور زمان و رطوبت زنگ‌زده و گاهی لایه قطوری از زنگ سطح مجسمه را فرا پوشانیده و در بعضی موارد که این لایه زنگ زده بیشتر در فلز رسوخ نموده در سطح دانه دانه و خشن و ناهموار گردیده است. در ظروف فلزی و بخصوص مفرغی که فلز چندان ضخامت نداشته در بعضی قسمتها بکلی در اثر زنگ پوسیده و از بین رفته و این ظروف شکسته و گاهی فقط قطعاتی از آنها باقی مانده است.

مجسمه‌های فلزی عموماً کوچک ساخته شده‌اند. این مجسمه‌ها بیشتر بحالت ایستاده نمایش داده شده و باستثنای چهار عدد که بزرگترین نمونه‌ها می‌باشند یکی از آنها بر روی چهار چرخ و سه تای دیگر بر روی میله‌های فلزی نصب گردیده‌اند. بیشتر مجسمه‌های فلزی که در تپه مارلیک حفاری شده‌اند در بدن مجسمه یا گردن دارای

حیوانات ساخته شده و یا بعبارت دیگر مجسمه سفالی حیوانات که مجوف ساخته شده و عموماً برای نگاهداری مایعات مقدس در ضمن تدفین در آرامگاه جای داده می‌شدند آشکار گردید که انواع حیوانات مختلفی را مانند گاو کوهاندار، بز کوهی، گوزن، قوچ، قاطر، اسب، خرس، پلنگ و سگ معرفی می‌نمودند. در این مجموعه مجسمه‌های حیوانات سفالی که در حفاری مارلیک بدست آمدند تعداد زیادی در حدود هفده عدد از آنها بشکل گاو کوهاندار که از حیوانات بومی و محلی در این منطقه می‌باشد ساخته شده‌اند. مجسمه حیوانات دیگر به زیادی گاو کوهاندار نبوده و شامل در حدود پنج مجسمه قوچ، چهار مجسمه گوزن یا بزکوهی، دو مجسمه قاطر، دو مجسمه خرس و یک مجسمه از هریک از حیواناتی مانند پلنگ، سگ، گردونه با اسبها می‌باشد. علاوه بر اینکه تعداد مجسمه‌های گاو بسیار بیشتر از سایر حیوانات ساخته شده، علاوه بر آن خصوصیات این حیوان مانند کوهان بسیار بزرگ و استیلزه یا مسبکی که در پشت آن ساخته شده در بعضی از حیوانات دیگر مانند گوزن و قوچ نمایش داده شده در صورتیکه این حیوانات در حقیقت در شکل طبیعی خود دارای چنین خصوصیات ظاهری نمی‌باشند.

این مجسمه‌های سفالی مارلیک بسبب کاملاً استیلزه یا مسبک ساخته شده و در عین حال جاننداری و قدرت و نیروی زندگی خاصی در آنها دیده می‌شود. این مجسمه‌ها بسیار موزون ساخته شده و حیوانات در کمال نیرومندی و سلامت نشان داده شده‌اند. بعضی از آنها بخصوص گاوهای کوهاندار در نوع خود اعلاترین نمونه‌های هنر استیلزه را نمایش می‌دهند. بعضی از حیوانات دیگر مانند پلنگ، خرس و سگ بیشتر جنبه‌های خاص حیوانات را معرفی نموده و نمونه‌های ساده‌تری را نمایش می‌دهند.

از سی و سه مجسمه سفالی که در حفاری مارلیک بدست آمد در حدود سی و دو عدد از آنها مجوف و توخالی ساخته شده و از این گروه مجسمه‌های مجوف در حدود بیست و هفت عدد دارای پوزه‌ای بشکل لوله‌ای روباز و طویل می‌باشند که مایعات محتوی در بدن این مجسمه‌ها از طریق پوزه ناودانی شکلی به آسانی فرو ریخته می‌شده است. یکی از مجسمه‌ها که بشکل پلنگ ساخته شده دارای لوله‌ای در میان گردن می‌باشد که به بدن مجوف حیوان ارتباط دارد. چهار مجسمه دارای پوزه‌ای بشکل مخروط سر بریده می‌باشند که دهان باز حیوان در جلوی پوزه قرار گرفته و به بدن مجوف مجسمه ارتباط دارد. فقط دو عدد مجسمه توپر ساخته شده که یکی از آنها سگی را در حال بازی و حرکت و یک قوچ کوچک را نمایش می‌دهند.

بیشتر مجسمه‌های سفالی به رنگ قرمز آجری ساخته شده و رنگ آنها از نظر روشنی و تیرگی تنوع زیادی داشته و نمونه‌هایی از قرمز آجری روشن تا قرمز تیره‌ای قهوه‌ای را معرفی می‌نمایند. هفت عدد از این مجسمه‌ها به رنگ خاکستری یا خاکستری مایل به قهوه‌ای ساخته شده‌اند. سطح مجسمه عموماً کاملاً هموار و صاف و داغدار گردیده و بهمین مناسبت جلا و صیقل خاصی دارد. سطح چند عدد از این مجسمه‌ها به سبک نقش داغدار و یا

مجسمه‌های سفالی مارلیک شامل انسان و انواع حیوانات مانند گاوکوهاندار، گوزن، قوچ، قاطر، اسب، خرس، پلنگ و سگ می‌باشند و تعدادی از آنها در این فصل شرح داده شده‌اند. علاوه بر این مدل و نمونه بعضی از اشیاء بصورت مجسمه ساخته شده‌اند که از آنجمله در مجسمه‌های سفالی می‌توان نمونه و مدل گردونه را نام برد. در مجسمه‌های فلزی مجسمه‌های انسان کمتر نمایش داده شده و مانند مجسمه‌های سفالی عموماً مجسمه انسان بخوبی مجسمه حیوانات ساخته نشده است. در مجسمه‌های فلزی انسان نیز مانند مجسمه‌های سفالی در قسمتهای باروری بدن انسان تأکید و تشدید گردیده و بزرگ ساخته شده‌اند. هم‌چنین هنرمند در نمایش خصوصیات و صفات مشخصه حیوانات بنحوی که در مجسمه‌های سفالی حیوانات عمل شده بود در مجسمه‌های فلزی حیوانات نیز از همان بافت پیروی کرده و بعضی از قسمتهای بدن که مظهر این صفات مشخصه می‌باشند بزرگ‌تر از حد عادی ساخته شده است. مدل و نمونه اشیاء نیز در مجسمه‌های فلزی تعبیه گردیده و نمونه گاو آهن و خیش و یوغ و گادار و هم‌چنین نمونه‌های اسباب بازی دیگری را می‌توان نام برد. مجسمه‌های مفرغی مارلیک شامل انسان و انواع حیوانات و پرندگان مانند، پرندگان، گاو کوهاندار، گوزن، بز گوهی، قوچ، اسب، سگ، گراز، پلنگ، ببر و شیر می‌باشند.

مجسمه‌های سفالی انسان شامل سه عدد مجسمه سفالی زن به شماره‌های حفاری م ۱۱۲۰، م ۱۱۷، م ۳۷۹ و پنج عدد مجسمه سفالی مرد به شماره‌های حفاری م ۳۷۸، م ۵۱۸، م ۱۱۱۳، م ۸۲۱ و م ۵۱۹ می‌باشند. مجسمه‌های فلزی انسان شامل چهار مجسمه مفرغی به شماره‌های حفاری م ۳۸۱، م ۳۸۰، م ۹۳۱، م ۹۳۲ و یک مجسمه طلا به شماره حفاری م ۳۵۶ می‌باشد.

اگرچه در قبرستان سلاطین مارلیک در حدود پنجاه و سه آرامگاه حفاری گردید ولی مجسمه‌های انسان فقط در سه عدد از این آرامگاهها آشکار گردید. از این سه آرامگاه یکی آرامگاه شماره ۳۶ بود که شش عدد از هشت عدد مجموعه مجسمه‌های سفالی بدست آمده را در بر داشت که به‌مراه دو مجسمه مفرغی انسان و یک نیم تنه انسان در همین آرامگاه بودند. دو آرامگاه دیگری که در آنها مجسمه سفالی انسان بدست آمد یکی آرامگاه شماره ۵۲ بود که در آن مجسمه سفالی توپر کمان‌دار، تیرانداز و دیگری آرامگاه شماره ۱۳ که در آن دو مجسمه کوچک مفرغی انسان بحالت نشسته آشکار گردید.

## مجسمه‌های سفالی حیوانات

ساختن ظروف سفالی به شکل مجسمه حیوانات از دیرباز در دنیای باستان معمول بود و در بعضی از حفاریهای باستانشناسی نمونه‌هایی از آنها آشکار گردیده است.

در آرامگاههای قبرستان سلاطین مارلیک در حدود سی و نه عدد از این نوع ظروف تزئینی که به شکل

سفالی و چه در نمونه‌های فلزی ساخته شده‌اند. حتی بیشتر اوقات کیفیت کلیه اشیاء مختلفی که در یک آرامگاه قرار دارند بطور کلی با کیفیت مجموعه‌اشیائی که در آرامگاه دیگری بدست آمده تفاوت و اختلاف دارند، در صورتیکه بطور کلی یک بافت واحد و هم‌آهنگ هنری را پیروی می‌نمایند و از نظر کلی مشابه یکدیگر هستند. این وضعیت و چگونگی بیانگر این نکته است که احتمالاً اشیاء ساخته شده در هر آرامگاه بوسیله یک استاد و هنرمند خاص ساخته شده و تولیدات یک کارگاه بخصوص و یا یک استادکار خاص را که در دوران زندگانی این پادشاه می‌زیسته معرفی می‌نمایند. آنچه مسلم است اینکه چون این تپه و قبرستان مدت دو یا سه قرن برای محل آرامگاه سلاطین این سلسله مورد استفاده قرار گرفته بدون شک و تردید بهترین هنرمندان و استادکاران هر کدام بنوبه خود در دوران سلطنت هر پادشاه احتمالاً اشیاء و آثاری را که به‌مراه او در هنگام مرگش دفن گردیده تولید نموده و کاملاً منطقی است که از نظر دقایق و جزئیات با گروه‌اشیائی که بوسیله هنرمند دیگری ساخته شده تفاوت و اختلافاتی داشته باشند در حالیکه بطور کلی بافت و الگوی یک تمدن و مکتب هنری را پیروی می‌نمایند.

ظاهراً همانطور که قبلاً نیز اشاره گردید این تپه و یا این دره از نظر مذهبی ارزش و اهمیت خاصی برای این اقوام داشته و به‌همین مناسبت بعنوان قبرستان سلاطین مورد استفاده قرار گرفته است. احتمالاً در ابتدا فرد مهمی مانند سرسلسله و یا رأس خانواده و یا فرد مهم مذهبی در این تپه دفن گردیده و به‌همین لحاظ بقیه افراد خانواده در نسل‌های بعد نیز از این وضعیت پیروی نموده و در آنجا دفن گردیده‌اند. نمونه‌ای این وضعیت که در دنیای باستان معمول بوده است در آرامگاه و یا اهرام سلاطین هر سلسله به پیروی از سرسلسله خود در یک محل خاص مشاهده می‌گردد. بخصوص این وضعیت در مورد اقوام هند و ایرانی نیز تا حدودی صادق بوده و همانطور که اطلاع داریم صخره‌عظیم و یا کوه سنگی نقش رستم بعنوان محل آرامگاه‌های تعداد زیادی از سلاطین هخامنشی مورد استفاده قرار گرفته است.

همانطور که اشاره گردید مجموعه مجسمه‌های مارلیک عموماً به شکل حیوان و یا انسان ساخته شده و رویهمرفته مجسمه حیوانات خیلی متناسب‌تر و موزون‌تر و زیباتر از مجسمه‌های انسان ساخته شده‌اند. مجسمه‌های انسان عموماً عربان و برهنه نمایش داده شده و غالباً تأکید و تشدید زیادی در نمایش قسمت باروری بدن انسان گردیده است. این مجسمه‌های انسان عموماً مجوف ساخته شده و دهان آنها باز می‌باشد و بنظر می‌رسد با فریاد چیزی را فرا می‌خوانند. مجسمه‌های حیوانات عموماً موزون‌تر و متناسب‌تر ساخته شده و عموماً هنرمند صفت و حالت برازنده و مشخص حیوان را بخوبی در وضع ساختمان بدن و تأکید و تشدید در محل خاصی آن را تجلی و نمایش داده است. مثلاً در مورد مجسمه‌های گاو قسمت کوهان حیوان که نمونه و معرف قدرت حیوان می‌باشد بسیار بزرگ خارج از حد طبیعی تشدید گردیده و بدین وسیله صفت مشخصه این حیوان که نیرومندی و قدرت است در نهایت کمال نشان داده شده است.



## فصل ششم

### مجسمه‌های مارلیک

در حفاری قبرستان سلاطین آثار زیادی بدست آمد که از آنجمله مجموعه بزرگی مجسمه‌های حیوانات و انسان که از مواد مختلفی مانند طلا، مفرغ، سفال و سنگ ساخته شده بودند. بعضی از این مجسمه‌ها بصورت کامل ساخته شده‌اند و برخی دیگر برای تزئین سایر اشیاء بکار رفته و فقط قسمتی از بدن حیوان بصورت مجسمه و کاملاً برآمده و برجسته ساخته شده و بقیه بدن بصورت نقش برجسته بر بدنه و متن ظروف نمایش داده شده‌اند. این وضعیت بخصوص در جامهای طلا مکرر مورد استفاده قرار گرفته و سر حیوان یا پرنده و یا انسان از بدنه جام کاملاً بیرون آمده و بصورت مجسمه ساخته شده در صورتیکه بقیه بدن بصورت نقش برجسته نمایش داده شده است. موادی که بیشتر برای ساختن این مجسمه‌ها بکار رفته سفال و یا فلزات مختلف بوده و بخصوص در مجسمه‌های کامل غالباً مفرغ می‌باشد. این مجسمه‌ها عموماً بشکل انسان و یا حیوانات مختلف و یا پرندگان ساخته شده‌اند. اگرچه بیشتر آنها بسبک خاص و رایج و عمومی مکتب مارلیک ساخته شده و یک بافت واحد و هم‌آهنگی را بطور کلی معرفی نموده و پیروی می‌نمایند ولی از نظر دقایق و جزئیات گاهی با یکدیگر تفاوت‌هایی داشته و بخصوص این وضعیت در اشیاء و یا مجموعه اشیائی که در یک آرامگاه وجود دارد در مقام مقایسه با مجموعه اشیائی که در آرامگاه دیگری قرار دارد ملاحظه گردیده و قابل لمس می‌باشد.

روبهرفته مجسمه‌های حیوانات موزون‌تر و متناسب‌تر و دقیق‌تر از مجسمه‌های انسان چه در نمونه‌های

## فصل پنجم

### ظروف موزائیک شیشه‌ای و بدل چینی

به منظور ساختن ظروف لعابدار و بدل چینی عموماً در گذشته مشکلات تکنیکی برای یک پارچه نمودن لعاب بر روی سفال وجود داشته است. مدتها طول کشید تا این مشکل تکنیکی رفع گردید و در حدود قرن شانزدهم پیش از میلاد مسیح بود که ظروف سفالی لعابدار تولید گردید.

در حفاری مارلیک تعداد قابل توجهی نمونه‌های ظروف موزائیک شیشه، بدل چینی و لعاب بدل چینی که در حدود ۸ نمونه می‌باشند آشکار گردید. اگر چه این تعداد بنظر نمی‌رسد که خیلی زیاد باشند ولی در مقام مقایسه با حفاری‌های دیگر که اشیائی مربوط به همین دوران نیمه دوم هزاره دوم پیش از میلاد مسیح را آشکار نموده و در هر کدام بیش از یک یا دو نمونه اشیاء شیشه‌ای آشکار نگردیده، مجموعه بدست آمده در حفاری مارلیک نسبتاً بزرگ و قابل توجه می‌باشد. در حفاری مارلیک سه عدد جام موزائیک شیشه‌ای، چهار ظرف بدل چینی و یک ظرف بدل چینی شیشه‌ای که قسمتی از آن کاملاً شیشه گردیده است و احتمالاً نمایش تولیدهای اولیه ظروف شیشه‌ای را می‌دهد آشکار گردید.

جامهای موزائیک شیشه‌ای بدست آمده در حفاری شامل شماره‌های م ۱۱۱۴، م ۱۱۱۵، م ۱۱۱۶، و ظروف بدل چینی شامل شماره‌های حفاری م ۳۰، م ۹۴، م ۱۰۳، م ۱۰۸۶، م ۱۰۸۷ می‌باشند.

آورده‌اند. گسترش این حکومت تمام دامنه‌های شمالی جبال البرز و تمام منطقه جنوبی بحر خزر و دریای مازندران را فراگرفته و نواحی مانند حواشی روسیه و ایران، قسمت شرقی آذربایجان و گیلان و مازندران را در بر می‌گرفته است. این اقوام مارلیک در این سرزمین وسیع مرکز صنایع فلزی و بخصوص مفرغی بزرگی را بوجود آورده که تولیدات آن بوسیله تجارت و یا از طرق دیگری به نواحی دوردست در مغرب تا حدود کرانه‌های شرقی دریای مدیترانه و در جهت مشرق تا دره رود سند منتقل گردیده است. نفوذ صنایع و هنر این اقوام را در منطقه وسیعی از دنیای باستان و هم‌چنین در تمدن‌های دورانهای بعد از آنها بخصوص به نحو چشم‌گیری در تمدن ماد و هخامنشی می‌توان پیگیری و مشاهده نمود.

ظروف مفرغی مارلیک براساس شکل و نقش خود به سه گروه ظروف مفرغی با اشکال مخصوص ساده شامل شماره‌های حفاری م ۱۷۲، م ۱۷۶، م ۵۰۸، م ۱۰۶۱، م ۱۰۶۲، م ۱۰۶۳، م ۴۱۲، م ۶۵۸، م ۶۳۱، م ۱۷۵، م ۷۲۸، م ۶۶۱، م ۱۸۶، م ۷۲۳، م ۱۵۱، م ۲۲۹، م ۱۱۶۱، م ۶۱۹، م ۱۳۹۹، م ۴۴، م ۱۴۰۰، م ۹۹۲، م ۱۴۰۱، م ۱۴۰۲، م ۱۵۴، م ۱۴۰۳، م ۸۲۲ و ظروف مفرغی با نقوش ساده و روان شامل شماره‌های حفاری م ۷۱۲، م ۱۱۸۵، م ۱۲۱۳، م ۱۳۹۲، م ۱۳۹۳، م ۱۳۹۷ و ظروف مفرغی با نقوش تزئینی و ظریف شامل شماره‌های حفاری م ۹۸، م ۱۷۸، م ۱۳۲۵، م ۱۳۹۱، م ۱۳۹۴، م ۱۳۹۵، م ۱۳۹۸ طبقه‌بندی شده‌اند. شرح و جزئیات این ظروف در متن کامل کتاب آمده است.

رویه‌مرفته می‌توان اظهار داشت که ظروف فلزی مارلیک در مقام مقایسه با آثار باستانی مشابهی که در حفاریهای دیگر دنیای باستان بدست آمده‌اند، بیانگر این نکته است که این آثار همگی در دورانی در حدود قرون سیزدهم تا دهم پیش از میلاد قرار گرفته‌اند. این تاریخ‌گذاری براساس مقایسه نوع و طرز ساخت و هم‌چنین هم‌آهنگی با آزمایش کربن ۱۴ که بر روی بقایای آثار آرامگاه شماره ۲۳ در ترانشه XV D انجام گردیده و تاریخ در حدود  $1457 \pm 55$  سال پیش از میلاد مسیح را (با اضافه یا منهای ۵۵ سال) تعیین می‌نماید و هم‌چنین با مطالعه بقیه آثار مکشوفه در مارلیک و بخصوص با توجه به مهرهای استوانه‌ای و مسطح بدست آمده در این حفاری پیشنهاد گردیده است.

بعضی از صفحه‌ها و نقوشی که بر روی اشیاء مارلیک وجود داشته و نیز سبک بکار رفته در ساختمان آنها در منطقه وسیعی رواج داشته است. اصل و سرچشمه بعضی از آنها بسیار قدیم‌تر از دوران مارلیک شروع شده و بیشتر آنها نوع تصاویر و شمایل‌هایی را که بوسیله هنرمندان مارلیک که از این نقوش و صحنه‌های سنتی آگاهی داشته و آنها را بکار بسته‌اند نمایش می‌دهند. در عین حال نقوش، صحنه‌های متعدد و سبکهای دیگری بوسیله هنرمندان مارلیک ساخته شده که کاملاً غیر معمولی بوده و منحصر به فرد در هنر مارلیک می‌باشند. گسترش و توزیع این اشیائی که با خصوصیات منحصر بفرد هنر مارلیک ساخته شده و یا از آن الهام گرفته‌اند بخوبی اشاره‌ای نسبت به تسلط، استیلا و نفوذ سیاسی اقوام مارلیک در دوران قرون سیزدهم تا دهم پیش از میلاد مسیح می‌باشد. هم‌چنین در سطح وسیع‌تری گسترش و نفوذ هنر مارلیک را چه در هنگام دوران وحدت و اقتدار سیاسی و چه پس از آن در زمانیکه وحدت و اقتدار سیاسی آن از بین رفته نمایش می‌دهد.

مطالعه و بررسی ما بر روی آثار مکشوفه در حفاری مارلیک متذکر این مطلب و نکته است که اقوام مارلیک در دورانی در حدود نیمه دوم هزاره دوم پیش از میلاد مسیح در ارتفاعات رشته جبال البرز مستقر گردیده‌اند و برای مدتی در حدود چند قرن در فاصله قرون چهاردهم تا دهم پیش از میلاد مسیح به پیشرفت و شکوفا نمودن هنر و صنایع خود در این منطقه پرداختند. این اقوام ظاهراً پادشاهی مقتدر و نیرومندی را در این منطقه بوجود

و نحوه ساخت به چند دسته در اینجا تقسیم گردیده‌اند. دسته اول ظروفی هستند که کاملاً ساده ساخته شده و در سطح آنها هیچگونه نقش و صحنه‌ای نمایش داده نشده و بعضی از آنها دارای شکل خاصی می‌باشند. دو نمونه از این گروه با شکلی شبیه به قوری ساخته شده و لوله درازی در یک طرف بدنه وجود دارد و در نمونه‌های شماره م ۱۶۲ و م ۱۶۳ در این فصل نمایش و شرح داده شده‌اند. یکی دیگر از نمونه‌های دسته اول فنجان کوچکی است که با نقش دایره‌های درشت فرو رفته در سطح ظرف تزئین گردیده است و در شماره م ۱۴ این فصل شرح داده شده است. دسته دوم ظروفی می‌باشند که با نقوش ساده و روان و روشن تزئین گردیده و عموماً سطح ظرف را در قسمتهایی با نقش ساده هندسی زینت داده‌اند و کف آنها با ترنج‌های بسیار ساده هندسی تزئین گردیده است. نمونه‌های این گروه در ظروف شماره‌های م ۲۰۲ و م ۵۴۶ این فصل نمایش داده شده‌اند. گروه سوم یا گروهی که کاملاً تزئینی و ظریف ساخته شده و نقش زیادی بر روی آن نمایش داده شده دارای فقط یک نمونه است که در این کتاب تحت ظرف شماره م ۲۷۷ شرح داده شده است. این ظرف نقره‌ای زیبا که لوله‌ای از طلا بدان متصل گردیده و شکل آن شبیه به ظروف ساده بدون نقش طلا و نقره و مفرغ با لوله دراز می‌باشد با نقش بسیار تزئینی و ظریف که از طلا ساخته شده و بر روی آن کار گذارده شده‌اند تزئین گردیده است.

## ظروف مفرغی

تعداد ظروف مفرغی ساده و تزئینی که در آرامگاه‌های مارلیک حفاری گردیده بیش از تعداد جامهای طلا و یا نقره می‌باشند. اگرچه تعداد زیادی از این ظروف مفرغی بعلت مورد استعمال آنها قطور و ضخیم ساخته شده و برای احتیاجات آشپزخانه مورد استفاده قرار می‌گرفته‌اند ولی تعدادی از آنها نیز بدنه‌ای ظریف و نازک داشته و بعنوان ظروف تزئینی ساخته شده‌اند و بعلت ظرافت و نازکی بدنه و هم‌چنین عدم مقاومت مفرغ در زیر زمین برای مدت طولانی، کاملاً زنگ زده و فلز در قسمتهایی از این جامهای تزئینی بکلی پوسیده و از بین رفته و در نتیجه این ظروف تزئینی مفرغی عموماً ناقص و شکسته می‌باشند و در بعضی موارد فقط قطعاتی از آنها باقیمانده است. بخصوص جامهای تزئینی مفرغی که بعلت امکان ساختن نقوش برجسته و بیرون رانده شده تزئینی بر روی آنها دارای بدنه بسیار نازکی بوده‌اند بیشتر در اثر این عوامل زمان و مکان آسیب دیده‌اند و در بیشتر آنها بدنه ظرف که نازکترین قسمت ظرف را تشکیل می‌دهد از بین رفته و فقط قسمتهایی مربوط به نزدیک لبه یا کف باقیمانده است. در بعضی از این ظروف بدنه نه فقط شکسته یا خورد شده بلکه بکلی از بین رفته و اثری از آن باقی نیست و حتی قطعات شکسته آن نیز بکلی پوسیده و با خاک یکسان و مخلوط شده است و فقط قسمتهایی از لبه و کف که ضخیم‌تر ساخته شده بوده‌اند وجود دارند.

## ظروف زرین

تعداد زیادی از ظروف فلزی که در حفاری مارلیک کشف گردیده‌اند از طلا ساخته شده‌اند. این ظروف زرین با اشکال گوناگون از قبیل فنجان، ظروف لوله‌دار مانند قوری، لیوان، کاسه و جام در اندازه‌های مختلف تولید گردیده‌اند. طلای بکار رفته در این ظروف از آلیاژهای مختلف و متفاوت بوده و هم رنگ آن و هم نرمش آن در ظروف مختلف گوناگون می‌باشد. بعضی از ظروف از آلیاژ سخت و محکمتری تهیه شده و مقدار مواد مخلوط شده با طلا بیشتر بوده و دارای سختی و استحکام بیشتری می‌باشد. و دیوارهٔ بدنهٔ ظروف ضخیم‌تر ساخته شده است و در مقابل ضربات و فشارهای وارده استقامت بیشتری داشته‌اند. ظروف زرین دیگر که از طلای خالص‌تری ساخته شده و مخلوط مواد دیگر با طلا کمتر بوده و طلا دارای نرمش بیشتری گردیده و هنرمند توانسته است با سهولت بیشتری نقوش برجسته و برآمده و تزئینات جالبی را بر روی ظرف نمایش دهد. بهرحال بعلت نازکی بدنه و دیواره ظروف و هم چنین نرمش فلز این گونه ظروف زرین استقامت زیادی در مقابل حوادث و ضربات و فشار خاک نداشته و عموماً در اثر فشار خاک و یا عوامل دیگر کاملاً در هم فشرده شده و صدماتی بدانها وارد آمده است. نرمش قابل ملاحظهٔ طلای این نوع ظروف باعث شده است که هنرمندان به بهترین وجهی بتوانند این ظروف را بنحو مورد نظر و مطابق ذوق و سلیقه خود با سهولت نسبتاً کافی ساخته و با تزئینات و نقوش بسیار ظریف و عالی زینت بخشند. همانطور که اشاره شد در اثر نرمش زیاد طلای بکار رفته در این ظروف زرین عموماً در اثر فشار خاک شکل اولیه و اصلی خود را از دست داده و شکسته و در هم فشرده شده و بخصوص بعضی از آنها صدمات فراوان دیده‌اند (تابلو رنگی ۱۹ الف).

ظروف زرین مکشوفه در حفاری مارلیک براساس تزئینات بکار رفته در آنها به چهار گروه، ظروف طلای ساده شماره‌های حفاری م ۳۱، م ۱۵۰، ظروف با تزئینات نقطه‌چین شماره حفاری م ۷۶۱، ظروف طلا با نقش خطوط روان و ساده شماره‌های حفاری م ۱۳، م ۳۲۱، م ۳۵۴، م ۱۱۳۲، و ظروف زرین با نقوش تزئینی و ظریف شماره‌های حفاری م ۲۹، م ۲۰۱، م ۳۵۲، م ۳۵۳، م ۳۵۵، م ۵۱۵، م ۶۱۰، م ۷۶۲ طبقه‌بندی شده‌اند.

## جامهای سیمین

فقط تعداد تقریباً محدودی ظروف نقره‌ای در حفاری مارلیک بدست آمده است. اگرچه نقره در مقابل حوادث و زمان آسیب‌پذیرتر از طلا می‌باشد ولی ظروف سیمین مارلیک و حداقل آنها که باقیمانده‌اند از آلیاژ مقاوم و سخت‌تری ساخته شده و بهمین علت به نسبت سالم‌تر باقیمانده‌اند. این ظروف سیمین نیز براساس نقوش

باقیمانده‌اند و فشار خاک اندکی بدانها آسیب وارد آورده است.

در این کتاب ظروف مکشوفه در حفاری مارلیک ابتدا از نظر ماده و جنس بکار رفته در ساختمان آنها به چند گروه اصلی و مجزاکه عبارت از ظروف زرین، ظروف سیمین و ظروف مفرغی هستند تقسیم شده و سپس در هر گروه جداگانه از نظر نحوه، نوع، تکنیک و روش تزئینات به چند طبقه تقسیم گردیده‌اند.

۱۷ب). عموماً نقش تمام اطراف ظرف را فرا گرفته است و گاهی در یک ردیف و بعضی اوقات در چند ردیف نمایش داده شده‌اند. گاهی فقط یک نقش چند بار در یک ردیف در دورتادور ظروف تکرار شده است و در بعضی ظروف صحنه‌های مختلف دورتادور ظرف را فرا می‌گرفته‌اند. در بعضی از این جامها در ردیف‌های مختلف قسمتهای مختلف یک داستان نمایش داده شده و ردیف‌ها هر یک مکمل یکدیگر بوده و مراحل پیوسته یک داستان را نمایش می‌دهند (تابلو رنگی ۱۷ب).

یکی از عوامل مشترک تکنیکی و نقشی که در انواع صحنه‌های مختلف چه ساده و چه تزئینی مشاهده می‌گردد روانی و زیبایی خطوط و تحرک و زنده بودن نقوش می‌باشد. همه چیز در حال حرکت نشان داده شده و هیچ چیز یا شیئی در حالت سکون نمایش داده نشده است. گوزنها در حال جهش و حرکت (تابلو رنگی ۲۰ج)، اسب شاخدار در حال راه رفتن (تابلو رنگی شماره ۱۴ب)، گاو بالدار و سیمرغ در حال حرکت (تابلو رنگی شماره ۱۵ج)، شکارچی در حالت کشش کمان (شکل Fig. 7)، عقاب در حال پرواز با بالهای گشوده (شکل Fig. 9)، بز ماده در حال نوازش کردن بچه خود (تابلو رنگی شماره ۱۸الف) و بطور کلی همه صحنه‌ها دارای حرکت و در حال تحرک نمایش داده شده‌اند. اگرچه مقداری از صحنه‌های بکار رفته بر روی جامها از انواع نقوش سنتی هستند که موارد مشابه آن قبلاً نیز در تمدنهای قبلی و قدیمتر در دنیای باستان در منطقه‌ای وسیع و در مدتی طولیل وجود داشته و بکار گرفته شده است ولی در مکتب هنری مارلیک این صحنه‌های سنتی با حالت و حرکتی تازه و منحصر و مخصوص به این تمدن نمایش داده شده و از این نظر تفاوت کلی دارد.

یک حاشیه تزئینی هندسی عموماً نقوش و صحنه‌ها را در قسمت لبه ظرف و هم‌چنین نزدیک به کف ظروف محدود می‌نماید. بیشتر اوقات این حاشیه تزئینی بصورت نوار مارپیچ<sup>۱</sup> می‌باشد (تابلو رنگ ۲۰الف) و در ظروف بسیار تزئینی این حاشیه بصورت زنجیره‌های بافته پهن (تابلو رنگی شماره ۱۳الف) ساخته شده است. اکثر ظروف با نوعی نقش تزئینی در کف تزئین گردیده‌اند. نقش تزئینی بکار رفته در کف ظروف عموماً بصورت یک ترنج هندسی تنظیم شده است. در بعضی از ظروف این ترنج هندسی ساده بوده (شکل شماره ۱۸) و در بعضی دیگر در نهایت ظرافت و تزئین (تابلو رنگی ۱۵هـ) تنظیم گردیده است. تعداد کم و محدودی از جامها با نقوش دیگری بجز ترنج هندسی در کف ظرف تزئین شده‌اند. نقش حصیرباف (شکل شماره ۲۲ج)، نقش در هم پیچیده مثلثهای مسبک (شکل شماره ۲۰ب)، و یا نقش مدور پرندگان (شکل Fig. 8) نیز در کف جامها دیده می‌شود.

وضع و کیفیت جامها از نظر نگاهداری و سالم بودن متفاوت می‌باشد. بعضی از جامها در اثر فشار خاک یا عامل دیگری در هم فشرده شده، بعضی بصورت قطعات شکسته در آمده و بعضی نیز تا اندازه‌ای سالم‌تر



مستخرج بوسیله چکش کاری و کوبیدن بدست آمده و در انتهای استخوان‌های پرندگان کارگذارده شده است و در حفاری تپه زاغه در دشت قزوین در فلات ایران بدست آمده و متعلق به اواخر هزاره ششم پیش از میلاد مسیح می‌باشد از شاهکارهای صنعتی این اجتماع بوده و دلیل واضحی بر پیشرفت این تمدن در زمینه صنایع در این دورانهای باستانی می‌باشد. مدارک و آثار استخراج فلز بوسیله حرارت سنگ فلز و ذوب فلز در ضمن حفاری تل ابلیس که در نزدیک کرمان واقع شده است و قدمت آن به اواخر هزاره پنجم پیش از میلاد مسیح می‌رسد بدست آمده است. هم‌چنین در ضمن حفاری تپه قبرستان در دشت قزوین در ۲ کیلومتری تپه زاغه نیز آثار و مدارک استخراج فلز که شامل بوته ذوب فلز و قالب‌های مختلف بوده مربوط به نیمه دوم هزاره پنجم پیش از میلاد بدست آمد.

بلافاصله پس از استخراج فلز از طریق حرارت دادن سنگ فلز و ذوب نمودن آن و درک اهمیت این ماده در ساختن ابزار و ادوات و سایر وسایل زندگانی، بشر به فعالیت دامنه‌داری برای پیشرفت این تکنیک دست زد و بتدریج فلز یکی از مهمترین مواد در زندگانی صنعتی و اجتماعات انسانی گردید. هنرمندان و صنعتگران که این ماده جدید را از هر حیث برای تجلی هنر و استعداد خود مناسب تر می‌دیدند آنرا به بتدریج بخصوص در موارد تزئینی جایگزین موادی چون چوب، استخوان و یا سفال قرار دادند. در اواسط هزاره دوم پیش از میلاد فلز در سطح وسیعی در زندگانی بشر در خاور نزدیک و خاور میانه رواج یافته بود و یکی از مهمترین مواد در زمینه صنعت و تکنیک قرار گرفت و ادوات و ابزار، سلاح‌های جنگی، و ادوات و اشیاء تزئینی و بخصوص جامه‌های تزئینی از فلزات معمولی مانند مفرغ و فلزات قیمتی مانند طلا و نقره ساخته شد. فلزات گرانبها و قیمتی مانند طلا و نقره و بعضی آلیاژی آنها ارزش جامها و ظروف تزئینی را افزایش بسیار داده و مراکز مهم سیاسی و اقتصادی خواستار این چنین متاعهای گرانبهائی بودند، مرکز تولید اشیاء فلزی گرانبها و تزئینی گردیدند.

جامها و ظروف ساخته شده از فلز به اندازه‌های مختلف و به اشکال مختلف از قبیل فنجان، کاسه، ظروف با لوله بلند، جامه‌های تزئینی و لیوانهای متناسب تولید می‌گردیدند. این گونه ظروف فلزی از نظر تزئینات نیز مختلف بوده و از نوع بسیار ساده تا ظروف بسیار تزئینی با نقوش برجسته در کارگاههای آنها ساخته شده است. در زمینه تزئینات نیز نحوه‌های گوناگونی از قبیل خطوط نقطه‌چین، خطوط روان ساده، خطوط کنده و هم‌چنین نقوش برآمده بکار گرفته شده است. نقوش برآمده که عموماً داخل آنها خالی است و بطرز جالبی بوسیله چکش‌کاری برجسته شده‌اند در جامه‌های بسیار تزئینی بکار رفته و شاهکارهای هنری کم‌نظیری را بوجود آورده است. در این نوع تزئینات برآمده، سر حیوانات عموماً از تن و بدن ظرف بیرون رانده شده و کاملاً "برجسته ساخته شده‌اند (تابلو رنگی ۱۳ج). نقوش و صحنه‌ها هم‌چنین دارای انواع مختلف بوده و هم صحنه‌های ساده و عادی و هم صحنه‌های بسیار خیال‌انگیز و تزئینی با تصاویر خیالی بر روی این ظروف نمایش داده شده‌اند (تابلو رنگی

## فصل چهارم

### ظروف فلزی مارلیک

اجتماعات بشری در رهگذر تکامل و پیشرفت به تدریج به کشف فلزات دست یافتند و این پدیده مهم و ماده جدید که از مقاومت و دوام بیشتری برخوردار بود بجای سفال مورد استفاده هنرمندان قرار گرفت و استعداد هنرمندان بیشتر بر روی این ماده جدید تجلی نموده است.

از دورانهای بس قدیم یعنی حتی از دوران دیرینه سنگی (حجر قدیم) که اجتماعات غارنشین و اولیه برای ساختن ادوات خود از سنگ استفاده می نمودند به تدریج صنعتگران اولیه تجربیات خاصی نسبت به انواع سنگها و طرز استفاده از آنها برای ساختن ابراز و ادوات مختلف بدست آوردند و در طول این تجربیات بوده که بشر در اثر توجه، دقت و احتیاج به تدریج آگاهی خاص نسبت به انواع سنگهای فلزات که بصورت اولیه در طبیعت وجود داشتند بدست آورد. در طول دوران نوسنگی (حجر جدید) نیز صنعتگران آشنائی خاص با سنگ فلزات بدست آورده و بتدریج طرز استخراج فلز را از این سنگهای فلزات طبیعی بطریق ابتدائی و اولیه و با کوبیدن آنها به دست آوردند. استخراج فلز و استفاده از آن در کشور ما ایران در همان دورانهای اولیه بسیار پیشرفت نموده و بقایا و آثار مس استخراج شده بوسیله کوبیدن یا چکش زدن در حفاریهای تپه دهلران در دشت خوزستان که قدمت آن به حدود هزاره هشتم پیش از میلاد مسیح میرسد کشف گردیده است.

نمونه اولیه و ابتدائی مته‌های فلزی که ساختمان آنها از یک تکه بسیار کوچک مس طبیعی که از سنگ مس

در بیشتر این آرامگاهها مشاهده می‌گردد دلیل بر آن است که این تمدن و فرهنگ در تمام دورانی که این قبرستان مورد استفاده قرار می‌گرفته برای دورانی به مدت در حدود دو یا سه قرن ادامه داشته است. البته محتویات این آرامگاهها گاهی براساس خصوصیات هنری و تکنیکی با محتویات تعداد دیگری از آرامگاهها بیشتر مشابه و قابل مقایسه بوده و احتمال ارتباط آنها را در فاصله زمانی نزدیک‌تری در این دوران بیشتر می‌نماید. بهرحال آنچه مسلم است این است که فرهنگ یک پارچه و غنی، تکنیک پیشرفته صنایع و هم‌چنین نفوذ و استعداد هنری هنرمندان این مکتب در شاهکارهای صنعتی و هنری آنها که در آرامگاهها قرار داده شده‌اند بخوبی تجلی نموده و خصوصیات والا و ارزنده خود را آشکار می‌نمایند.

بافت مذهبی خاصی که داشته‌اند علاوه بر اشیائی که در آرامگاه قرار می‌دادند قسمتی از اسب مخصوص صاحب آرامگاه را نیز در جوار آرامگاه او در آرامگاه کوچکتری دفن می‌نمودند تا در دنیای دیگر مورد استفاده صاحبش قرار گیرد. همانطور که اشاره گردید فقط سه نمونه از این آرامگاهها یعنی شماره‌های ۴۹، ۵۱ و ۵۳ که هریک در جوار آرامگاههای ۴۴، ۵۰ و ۵۲ بودند و احتمالاً آرامگاه اسب خاص این سرداران را معرفی می‌نمودند آشکار گردید. از این سه آرامگاه دوتای آنها یعنی آرامگاههای شماره ۴۴ و ۵۲ محققاً مربوط به سرداران بزرگ و یا پادشاهان مبارزی بودند، در حالیکه آرامگاه سوم یعنی شماره ۵۰ مربوط به ملکه ثروتمندی بوده است. یک نمونه از این آرامگاههای اسبان در اینجا برای آشنائی خوانندگان محترم با وضع آن شرح داده می‌شود.

## آرامگاه شماره ۴۹

این آرامگاه کاملاً کوچک که بشکل نامنظم ساخته شده دارای ۱/۵ متر طول و ۱ متر عرض و حد متوسط ۱ متر عمق بوده و در ترانشه XXII K در کنار گوشه شمال شرقی آرامگاه شماره ۵۰ قرار گرفته و در حقیقت تا اندازه‌ای در محوطه این آرامگاه وارد گردیده است. دیوارهای آرامگاه بسیار خشن در فاصله چند صخره سنگ طبیعی با سنگ شکسته و ملاط گل ساخته شده‌اند. محتویات این آرامگاه که شامل دهانه مفرغی اسب و ردیف دندانها و استخوان اسب می‌باشد حاکی از آن است که این آرامگاه متعلق به اسب مخصوص صاحب آرامگاه هم جوار بوده است (شکل Pl. 14A)

## محتویات آرامگاه شماره ۴۹:

ابزار و ادوات:

دهانه مفرغی اسب: م ۳۲۷

متفرقه:

استخوان گردن اسب

دندانهای اسب

## نتیجه گیری و اظهارات:

تقسیم‌بندی پنجاه و سه آرامگاهی که در قبرستان سلاطین مارلیک در ضمن حفاری آشکار گردیده‌اند عموماً براساس اندازه و طرز ساختمان آنها بوده و در هرگروه نیز تقسیمات جداگانه تری براساس محتویات بدست آمده در این آرامگاهها انجام گردیده است. اشیاء شبیه و قابل مقایسه‌ای که به‌مراه بافت و طرز تدفین مشابهی که

آرامگاههای ۲۱ و ۳۹ و آرامگاههای با محتویات معدود شامل شماره ۳۹ می‌باشند. شرح کامل هر آرامگاه و محتویات آنها در متن کامل کتاب آمده است.

### گروه سوم: آرامگاههای کوچک بشکل نامنظم:

این گروه شامل آرامگاههایی می‌باشد که نسبتاً از نظر اندازه کوچک هستند و بشکل نامنظم ساخته شده‌اند. دیوارها عموماً با مقدار قابل ملاحظه‌ای سنگهای ورق زردرنگ که از خارج به تپه حمل گردیده ساخته شده و گاهی نیز تمام ساختمان دیوارها از اینگونه سنگ احداث گردیده است. برای نمونه می‌توان آرامگاه شماره ۳۶ را نام برد که کلیه دیوارهای آن با سنگ ورق زرد رنگ ساخته شده است. محتویات این آرامگاههای تقریباً کوچک عموماً غنی بوده و در بعضی از آنها تقریباً تمام کف آرامگاه پوشیده از اشیاء مختلف می‌باشد و گاهی نیز اشیاء بر روی هم انباشته شده‌اند. بعضی اوقات یک یا دو تخته سنگ ورق زردرنگ نیز در کف آرامگاه مشاهده می‌گردد ولی بر رویهم نظم و ترتیب خاصی برای قراردادن اشیاء در آرامگاه وجود ندارد. در بعضی از این آرامگاهها قطعات بسیار کوچک استخوان که هنوز بصورت کاملاً پوسیده و پودر در نیامده بودند وجود داشتند ولی بر رویهم به اندازه کافی نبودند که بتوانند تجسمی از وضع جسد و اسکلت کامل بوجود آورند و یا ارتباط آن را با اشیاء در آرامگاه روشن نمایند. بر اساس محتویات داخل آرامگاهها این گروه نیز به آرامگاههای مردان، زنان و یا احتمالاً مشترک با توجه به خصوصیات صاحب آرامگاه تقسیم‌بندی شده است.

این گروه آرامگاهها نیز براساس محتویات آنها به چهار دسته آرامگاههای مردان، آرامگاههای زنان، آرامگاههای نامشخص و آرامگاههای هنرمندان و صنعتگران طبقه‌بندی شده‌اند. آرامگاههای مردان شامل آرامگاههای شماره ۲۷، ۱۸ و ۲ و آرامگاههای زنان شامل آرامگاههای ۳۲، ۳۶، ۲۴ و ۱۹ و آرامگاههای احتمالاً مربوط به مردان و یا به زنان شامل آرامگاههای ۳۳، ۵ و ۱۶ و آرامگاههای هنرمندان و صنعتگران شامل آرامگاههای ۴۰، ۶، ۴۱، ۸ و ۴ می‌باشند. شرح کامل این آرامگاهها در متن کامل کتاب آمده است.

### گروه چهارم: آرامگاه اسب

سه نمونه از این نوع آرامگاه در حفاری مارلیک آشکار گردید. این آرامگاهها عموماً بسیار کوچک ساخته شده و از نظر طرز ساختمان شبیه به سایر آرامگاههای مارلیک ساخته شده و دیوارها عموماً با سنگ شکسته طبیعی و ملاط گل احداث گردیده‌اند. محتویات این نوع آرامگاهها عموماً شامل استخوانهای گردن اسب، دندانهای اسب، دهانه مفرغی و حلقه‌های مفرغی بوده و اشاره بر آن دارد که این آرامگاهها برای اسب مخصوص صاحب آرامگاهی که در جوار آن آرامگاه داشته است ساخته شده‌اند. بنظر می‌رسد که این اقوام براساس عقاید و

## الف - آرامگاه‌های بزرگ که ظاهراً متعلق به مردان می باشد.

در این گروه از آرامگاهها که بنظر می‌رسد به سرداران و یا سلاطین سردار رزمنده تعلق داشته باشد انواع مختلف سلاحها مانند شمشیرها، خنجرها، سرنیزه‌ها، سرگرزها، ترکش و تیرداناها، کلاه‌خودها و کمربندهای فلزی رزمی در آرامگاه به‌مراه جسد دفن گردیده است. دکمه‌های تزئینی ظاهراً به تعداد زیادی بر روی لباس مردگان که بر تن داشته‌اند وجود داشته و تعداد محدود و انگشت‌شماری گردن‌بند، گوشواره نیز به‌مراه مرده وجود داشته است. در چند عدد از این آرامگاهها نحوه تنظیم اشیاء و محل قراردادن جسد در رابطه با اشیاء بطور منظم و بدون اضطراب باقی مانده بود.

در این گروه آرامگاههای مردان شامل شماره‌های ۵۲، ۲۶، ۴۴، ۲۵، ۴۷ و ۲۹ و آرامگاههای زنان شامل آرامگاههای شماره ۴۵، ۵۰ و ۱۴ می‌باشند. البته شرح کامل هریک از این آرامگاهها و محتویات آنها در شرح کامل کتاب آمده است.

## گروه دوم - آرامگاههای متوسط الاندازه تقریباً چهار ضلعی

این گروه شامل آرامگاهی است که متوسط الاندازه و بشکل چهارضلعی ساخته شده‌اند. حاجت به تذکر است که این آرامگاهها بغیر از شکل ظاهری آنها در موارد دیگر وجه اشتراکی با یکدیگر ندارند. ساختمان این آرامگاه و مصالح ساختمانی بکار رفته شبیه به گروه اول آرامگاهها بوده و احتمالاً ممکن است فقط بعلت وجود سطح کافی در لابلاهی صخره‌های تپه بوده که این آرامگاهها تصادفاً بصورت تقریباً چهار ضلعی ساخته شده‌اند. دیوارها از قطعات شکسته سنگ طبیعی تپه با ملاط‌گل متکی به تپه ساخته شده و فقط شمای داخلی آنها هموار و صاف چیده شده است. قطعات سنگ زرد رنگ که از خارج تپه آورده شده در بعضی قسمتها به تعداد معدودی در ساختمان دیوارهای آرامگاه بکار رفته‌اند. علی‌رغم شکل ظاهری و کیفیت ساختمانی آرامگاه که بهتر شده محتویات این آرامگاهها به غنای محتویات و اشیاء آرامگاههای بزرگ‌تر نبوده و چه از نظر کیفیت و چه از نظر کمیت با آنها برابری نمی‌نماید. این گروه آرامگاهها بنظر می‌رسد هم متعلق بمردان و هم زنان بوده و یا احتمالاً تدفین مشترک زن و مرد در آنها انجام گردیده است.

این گروه آرامگاهها نیز براساس اشیاء محتوی در آنها به چهار دسته آرامگاههای مردان، آرامگاههای زنان، آرامگاههای مشترک و آرامگاهها با محتویات بسیار معدود طبقه‌بندی شده‌اند. آرامگاههای مردان شامل شماره‌های ۳، ۱۲، ۱۳، ۱ و ۴۲ و آرامگاههای زنان شامل شماره‌های ۱۰، ۱۵ و ۲۳ و آرامگاههای مشترک شامل

انواع مختلف آرامگاهها در قسمتهای مختلف تپه وجود دارند و محل خاصی در سر تپه اختصاص به گروه خاصی از این آرامگاهها داده نشده است و توزیع آرامگاههای گروههای مختلف در نقاط مختلف تپه یکسان بوده و فقط تعداد بیشتری از آرامگاهها در قسمت وسطای منطقه شمالی تپه متمرکز و مجتمع گردیده‌اند. در اینجا همانگونه که اشاره گردید آرامگاههای مارلیک به چهار گروه تقسیم‌بندی شده و از هرگروهی چند نمونه آن شرح داده شده است. اگر چه این گروهها شباهتهای کلی از نظر طرز ساختمان و محتویات داشته و یک تمدن را معرفی می‌نمایند دقیقاً و کاملاً" همزمان با یکدیگر نبوده ولی دورانی در حدود دو یا سه قرن را که تمدن مارلیک در این منطقه استمرار داشته است بر رویهم معرفی می‌نمایند. این وضعیت برای نمونه‌های آرامگاههای هر چهار گروه وجود داشته و در حالی که نمونه‌های هرگروه ممکن است یک شباهت کلی از نظر طرز تدفین و یا تنوعهایی از نظر طرز ساختمان ر یا محتویات آنها که مربوط به هویت صاحب آن و درجه ثروت آن با یکدیگر داشته باشند دلیلی برای همزمانی دقیق آنها با یکدیگر و یا تفاوت همزمانی آنها در طول دو یا سه قرن در دوران تمدن مارلیک نخواهد بود.

## گروه اول - آرامگاههای بزرگ

آرامگاههای این گروه از نظر اندازه بزرگ بوده و شکل هندسی خاصی نداشته و بشکل نامنظم ساخته شده‌اند. این آرامگاهها هریک در فاصله مابین چند تخته سنگ بزرگ واقع گردیده و فاصله بین این آرامگاهها با دیوارهایی بهم مربوط گردیده و حدود آرامگاه را بوجود می‌آورند. این دیوارها با سنگ شکسته و ملاط گل ساخته شده‌اند (شکل Pl. 15C - آرامگاه شماره ۵۲) دیوارها عموماً با ندودی از گل در نمای داخلی هموار گردیده و بقایای این اندود گلی در بعضی از گوشه‌های آرامگاهها هنوز باقیمانده است. حد متوسط این آرامگاهها عموماً در حدود پنج متر در سه متر و نیم طول و عرض داشته ولی آرامگاههای بزرگتری نیز مانند آرامگاه شماره ۴۵ که در حدود ده متر طول و پنج متر عرض دارد در بین آنها مشاهده می‌گردد. این آرامگاهها بنظر می‌رسد متعلق به سرداران بزرگ یا پادشاهان سردار و یا ملکه‌های بسیار مهم و ثروتمند بوده که بهمراه اشیاء نفیس و اموال فراوان آنها که عموماً خصوصیات شخصی آنها را نیز تا اندازه‌ای مشخص می‌نماید در آرامگاههایشان مدفون گردیده‌اند. با وجودیکه عموماً استخوانهای اسکلت‌ها در این آرامگاهها به طرزبندی پوسیده و اثرات زیادی از آنها باقی نمانده است ولی در دو عدد از این آرامگاهها به اندازه کافی قسمتهایی از استخوانها در جای خود باقی مانده بود که تا اندازه‌ای نحوه قرار دادن جسد را در آرامگاه مشخص می‌نمود (شکل Pl. 16B). در دیگر آرامگاهها عموماً محتویات آرامگاهها از نظر کثرت جواهرات یا کثرت اسلحه می‌تواند معیاری برای تشخیص صاحب آرامگاه از نظر جنسیت باشد. البته حاجت به تذکر است که ظاهراً مردان نیز جواهراتی با خود داشته و تعداد محدود و

آرامگاهها رعایت نگردیده و دگرگونیهائی در آرامگاههای مختلف در اجرای آن ملاحظه می‌گردید که احتمالاً به علت تفاوت میزان اقتدار و ثروت صاحب آرامگاهها و بخصوص در کمیت و کیفیت اشیاء همراه مردگان ایجاد گردیده بود. مثلاً در آرامگاه ثروتمندان جامها و ظروف زرین در دست یا جلوی مرده قرار داده شده بود (شکل Pl. 13B) ولی در قبور افراد عادی در زینب‌بیجار ظروف سفالی بجای جامهای طلائی بهمان نحو گذارده شده بود و نحوه مشابه طرز تدفین در هر دو یکسان مراعات شده بود (شکل Pl. 5A).

## انواع آرامگاهها

اگرچه یک نقشه و یا شکل خاصی برای ساختمان آرامگاههای مارلیک وجود نداشت ولی تفاوتیهائی در آنها از نظر اندازه، مصالح ساختمانی، شکل و محتویات داخل آرامگاهها وجود دارد که براساس اینگونه تفاوتیهائی کلی شاید بتوان آنها را در گروههای جداگانه‌ای در چهارگروه با توجه بدین نکته که موارد یکسانی نیز در گروههای مجزا وجود دارد تقسیم‌بندی نمود. بعلمت اینکه ظاهراً این قبرستان مدت طولیلی در حدود دو یا سه قرن برای دفن مردگان این اقوام مورد استفاده قرار گرفته مسلماً این آرامگاهها معرف و نمایشگر دورانهای پیشرفت و شکوفائی و همچنین اضمحلال و سیر قهقرائی این تمدن می‌باشند ولی بهرحال یک وجه مشترک و بافت کلی که خصوصیات طبیعت این تمدن و فرهنگ را مشخص می‌نماید نمایش می‌دهند.

پنجاه و سه آرامگاه که هریک از نظر اندازه، شکل و کمیت و کیفیت محتویات تفاوتیهائی دارند در حفاری قبرستان مارلیک آشکار گردید. این آرامگاهها بطرز پراکنده در سر این تپه قرار گرفته و تعداد بیشتری از آنها در قسمت شمالی و شرقی تپه مجتمع گردیده در صورتیکه مرتفع‌ترین قسمت تپه در طرف جنوبی و غربی سر تپه قرار داشت. این اجتماع آرامگاهها در طرف شرقی سرتپه و دامنه‌های آن ممکن است احتمالاً اشاره‌ای بدین نکته باشد که تمایل برای ایجاد آرامگاهها بیشتر در قسمت شرقی تپه که خورشید ابتدا در آن جهت طلوع می‌نماید بوده است ولی بهرحال چون در قسمتهای دیگر نیز آرامگاهها ایجاد گردیده‌اند قبول و تأیید این نظریه فقط براساس تمرکز بیشتر آرامگاهها در جهت شرق تپه بسیار مشکل بوده و کار آسانی نیست. ناگفته نماند که اهمیت قرص خورشید در افکار این اقوام با نمایش تعداد زیادی ترنجهای تزئینی هندسی که در کف بیش از بیست و پنج عدد جامهای تزئینی مارلیک نمایش داده شده و احتمالاً قرص خورشید را معرفی می‌نمایند با توجه بدین نکته که این جامها چون با الهام از عقاید مذهبی ساخته و در آرامگاهها در مراسم تدفین جای داده شده‌اند بخوبی مشاهده گردیده و ممکن است این وضعیت نیز نظریه فوق را تا اندازه‌ای تثبیت و تأیید نماید. بهرحال احتمال این نظریه که خورشید بعنوان یک عنصر و عامل مهم در بافت عقاید مذهبی آنان محسوب می‌گردید با شواهدی که در بالا بدان اشاره گردید بعید نمی‌باشد.



آرامگاهها از بین رفته و آثاری از آنها باقی نمانده بود تشخیص هویت صاحب آرامگاه از نظر زن یا مرد بودن آنها غیرممکن بود و بنابراین محتویات و اشیاء درون آرامگاه بیشتر در این تشخیص راهنما و ملاک بوده است. در آرامگاههایی که در آنها جواهرات زیاد و بخصوص بسیار ظریف وجود داشت و فقط تعداد معدودی سلاح قرار داده شده بود آرامگاه زنان و برعکس در آرامگاههایی که تعداد کثیری سلاحهای سنگین ولی تعداد معدودی زیورآلات قرار داشت بعنوان آرامگاه مردان مشخص گردیده‌اند. بنظر می‌رسد مردان نیز از بعضی جواهرات مانند انگشتر و گوشواره و یا موی بند استفاده می‌نموده‌اند و در آرامگاههایی که بدون هیچ شک و تردیدی متعلق به مرد بوده و محتویات آن شامل تعداد زیاد و متنوعی از سلاحهای سنگین می‌باشد بعضی از این نوع جواهرات نیز وجود داشت<sup>۱</sup>.

علاوه بر این که در آرامگاه مردان و یا زنان بیشتر اشیاء مربوط بدانان قرار داده می‌شد رسوم عمومی دیگری وجود داشت که در همه آرامگاهها یکسان بدان توجه گردیده و در کلیه آرامگاهها چه متعلق به مردان و چه زنان از آن پیروی گردیده است. براساس این رسوم و عقاید اشیائی مانند لوازم آشپزی و آشپزخانه و ظروف فلزی، سفالی و سنگی که عموماً داخل آنها مملو از غذاهای مختلف بوده است در آرامگاه قرار داده شده‌اند<sup>۲</sup>. (شکل Pl. 13C) مجسمه‌های فلزی و سفالی حیوانات اهلی و وحشی، ظروف تزئینی بشکل حیوانات که احتمالاً برای نگاهداری مایعات مقدس یا شراب بوده (شکل Pl. 17C)، مجسمه سفالی و فلزی مردان و زنان که بیشتر از سفال ساخته می‌شده و در قسمت باروری آنها تشدید و تأیید شده و احتمالاً خدایان و یا ارباب انواع حاصلخیزی و یا باروری را معرفی می‌نمایند همگی بهمراه مردگان در آرامگاهها در جاهای مخصوصی قرار داده می‌شدند.

در بعضی از این آرامگاهها مجموعه کثیری از این اشیاء بهمراه مرده دفن گردیده و تقریباً بیشتر فضای آرامگاه مملو از آن می‌باشد و بعلاوه محدودیت فضا آنها را بر روی هم قرار داد و انباشته‌اند<sup>۳</sup> (شکل شماره ۱۶الف).

در بعضی موارد این تنظیم تدفین بعلاوه که کاملاً مشخص نیست در آرامگاه مضطرب گردیده و گاهی کف آرامگاه از حالت افقی خارج و بصورت سراشیبی درآمده بود (شکل P. 13D) که احتمالاً در اثر اضطرابات کلی مانند زلزله و یا نشست زمین بوقوع پیوسته بود. این وضعیت در تعداد قابل توجهی از آرامگاهها مشاهده گردید. حاجت به تذکر است که این بافت و رسوم منظم تدفین بطور کاملاً یکسان بخصوص در محتویات

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۱ - مثلاً در مجسمه نیم تنه طلاکه یکی از سلاطین را نمایش می‌دهد (شکل شماره ۱) گوشها سوراخ شده و در آنها گوشواره وجود دارد. هم‌چنین در آرامگاه شماره ۴۷ ترانسه XXII E که مسلماً متعلق به مردی بوده است جواهرات قرار داده شده بود.  
۲ - استخوان پرندهگان و یا حیوانات که هنوز در این ظروف باقیمانده است حاکی از آن است که در این ظروف غذا وجود داشته که در طول زمان فاسد گردیده و استخوانهای موجود در آن باقیمانده است.  
۳ - در آرامگاه شماره ۲۶ در ترانسه XVIII C که در حدود ۱/۵ در ۱/۵ متر ابعاد آن بود و وسعت زیادی نداشت تمام فضای آرامگاه از اشیاء ارزنده و نفیس پر شده بود و در حدود دویست و پنجاه عدد شینی در آن قرار داده شده بود.

بزرگ تخته سنگهای ورق زرد مفروش گردیده بود (تابلو رنگی شماره ۱۰ الف). تحمل اشکالات انتقال این تخته سنگهای بزرگ از فاصله دوردستی در حدود پانزده کیلومتر حاکی از آن است که برای این نوع سنگ در ساختمان آرامگاهها اهمیت خاصی قائل بوده‌اند. عموماً حتی در صورتیکه ساختمان آرامگاه از این نوع سنگ ساخته نشده بود ولی چند قطعه از آن در ضمن ساختمان بکار رفته بود و یا حداقل در کف آرامگاه قرار داده شده بود.

## نحوه و روش دفن در آرامگاه

در تعداد زیادی از آرامگاههای مارلیک بعثت سنگی که در این تپه وجود دارد و چندان مستحکم نیست و هم‌چنین کیفیت خاک تعداد زیادی رخنه و خلل وجود دارد و بنابراین اسکلت مردگان بخوبی پایدار نمانده و اگر چنانچه بر روی زمین کف قبر دفن گردیده باشند تقریباً بکلی اسکلت پوسیده و بصورت گرد درآمده و آثار وجودی آن از بین رفته است. با وجود براین در بعضی از آرامگاهها هنوز قطعات پوسیده‌ای از استخوانهای اسکلت یا جمجمه در هم خورده شده در وضع کاملاً بدی باقیمانده است. در آرامگاههایی که ابتدا در کف آن تخته سنگهای بزرگی قرار داده و سپس مردگان را بر روی این تخته سنگها دفن نموده‌اند وضعیت اسکلت‌ها و یا استخوانهای متعلق بدان بهتر بوده و باندازه کافی نگاهداری شده که بتواند تصویری از وضعیت و حالت قراردادن جسد در آرامگاه مجسم سازد.

در این قبیل آرامگاهها قطعات باقیمانده در قسمت‌های مختلف آرامگاه و جهت قرارگرفتن آنها تا اندازه‌ای معرف وضعیت تدفین می‌باشد. علاوه بر اسکلت در آرامگاهها اشیائی نیز بهمراه مرده در مراسم کفن و دفن قرار داده شده‌اند. نحوه و طرز عمومی تدفین بنظر می‌رسد که براین روال بوده که ابتدا مرده را در کف آرامگاه ساخته شده و یا بر روی تخته سنگ طویل بزرگی که در کف آرامگاه قرار داده شده عموماً بر پهلو می‌خوابانند. شواهد و مدارکی که بدست آمده نشان می‌دهد که عموماً جسد را با لباسهای رسمی و تشریفاتی با دگمه‌های تزئینی و زیورآلات دیگر بخاک سپرده‌اند<sup>۱</sup> (شکل Pl. 16B). در بدن مرده بخصوص در مورد زنان انگشترها، گوشواره‌ها، گردن‌بندها، دستبندها و سنجاقهای تزئینی و در مورد مردان بیشتر سلاحهای جنگی مانند شمشیرها، خنجرها، قمه‌ها، سرنیزه‌ها، سرپیکانها، سرگرزها و ادوات رزمی دیگر مانند ترکش‌ها، کلاه‌خودها، کمربندهای فلزی رزمی، مچ‌بندهای حفاظتی، سنج‌های فلزی و گاهی زینت‌آلات گرانبها اغلب در زیر و یا بر روی اسکلت قرار گرفته بودند (شکل Pl. 11A).

بعثت اینکه اسکلت و حتی قطعات استخوان بقدری پوسیده و از بین رفته بودند و یا بکلی در بعضی از

۱ - آثار و بقایای پارچه که در نهایت خوبی و ظرافت بافته شده با دگمه‌های طلا که بر روی پارچه لباس دوخته شده بود بدست آمده است. در آرامگاه شماره ۵۲ در ترانشه XXIII G بیشتر از پنجاه عدد دگمه‌های تزئینی طلا بر روی اسکلت پراکنده شده بود و همراه آنها قطعات پارچه که بعضی پوسیده ولی برخی بهتر باقیمانده بود وجود داشت.

و کف آرامگاه را تعیین نموده‌اند. برای ساختمان دیوارهای آرامگاه نیز از صخره‌های بزرگ که در محل طبیعی قرار داشته باشد، بدون جابجا نمودن و حرکت آنها استفاده نموده و فاصله مابین آنها را عموماً تا ارتفاع این صخره‌ها با قطعات شکسته سنگ و ملاط گل بصورت دیوارکھائی ساخته و متصل نموده‌اند و براساس همین وضعیت شکل عمومی ثابت و خاصی نیز در ساختمان آرامگاهها در نظر گرفته نشده و هریک از آنها عموماً در بیشتر موارد دارای شکل نامنظم مخصوص همان آرامگاه می‌باشد (نقشه No. 5).

حاجت به تذکر است که در محل‌هائی که وضعیت طبیعی تخته سنگهای بزرگ اجازه می‌داده است برای ساختمان آرامگاههای چهارگوش و هندسی شکل سعی گردیده و در این زمینه بعنوان مثال می‌توان آرامگاههای شماره ۲۳ و ۲۱ و ۱۵ و ۱۳ و ۱۰ را نام برد. این آرامگاههای ذکر شده عموماً شامل آرامگاههای متوسط الاندازه و یا کوچکتر بوده و برای ساختمان آنها محل و فضای بزرگی ضرورت نداشته و امکان ساختمان آنها در فضای بازتری وجود داشته است (شکل شماره ۵ ب). آرامگاههای بزرگ که دارای محتویات زیادی بود و مسلماً آرامگاههای مهمتری را معرفی می‌نمایند بعلت وضعیت شرح داده شده در بالا عموماً دارای شکل خاص هندسی نبوده و به شکل نامنظم و متفاوت ساخته شده‌اند و شکل آنها به تبعیت از وضع طبیعی صخره‌های تپه تنظیم گردیده است و بعنوان نمونه شاید بتوان آرامگاههای شماره ۵۲، ۵۰، ۴۵، ۴۴، ۴۲، ۴۱، ۳۸، ۲۹، ۲۶، ۲۵ و ۱۴ را نام برد (تابلورنگی IXB).

همانگونه که قبلاً تذکر داده شد فضای بین صخره‌ها با دیوارهائی که از تخته سنگ شکسته و ملاط گل به طرز خشن و نامنظم ساخته شده متصل گردیده و عموماً برای این کار از سنگهای طبیعی سر تپه که از ترکیبات سولفات آهن می‌باشند استفاده شده است (شکل شماره ۵ ج). دیوارها عموماً فقط در نمای داخلی هموار و صاف ساخته شده‌اند و پشت آنها که به تپه قرار دارد دارای نما و حدود مشخصی نمی‌باشد (شکل شماره ۶ ب). علاوه بر این مصالح ساختمانی که در سر تپه موجود بوده است یک نوع سنگ ورق زردرنگی نیز برای احداث بعضی از آرامگاهها و یا قسمتی از آنها بکار گرفته شده است. این سنگهای لایه و زردرنگ که در تپه موجود نمی‌باشند از معادن اطراف که در سرچشمه‌های گوهررود در فاصله پانزده کیلومتری تا تپه وجود دارند بدین منظور استخراج و به سر تپه برای ساختمان بعضی از آرامگاهها منتقل و حمل گردیده است. این سنگهای ورق و لایه زردرنگ که از استحکام و مقاومت بیشتری برخوردار هستند بنظر می‌رسد دارای اهمیت خاصی یا در بافت عقاید مذهبی این اقوام و یا از نظر استحکام بوده‌اند. در بعضی از آرامگاهها که محتویات آنها از نظر اشیاء بسیار غنی بوده تمام ساختمان آرامگاه با این نوع سنگ ورق زردرنگ ساخته شده بود و در ساختمان خود آرامگاه نیز دقت بیشتری بکار برده شده بود. یکی از این آرامگاهها آرامگاه شماره ۳۶ بوده که اگرچه بسیار کوچک از نظر اندازه و حجم ساخته شده بود تمام محوطه داخل آن با اشیاء نفیسی انباشته بر روی هم پر شده بود و کف آرامگاه نیز با قطعات

آزمایشی هیأت و یا بقایای حفاریهای غیرمجاز چه قبل از دوران حفاری ما و چه بعد از آن بخوبی آشکار می‌گردید. بهرحال بنظر می‌رسد که تمام این دره بعنوان محلی برای آرامگاههای مهم در سرته مارلیک و قبور عادی در بقیه سطح دره در دورانی همزمان با تمدن مارلیک مورد استفاده واقع شده است و شاید احتمالاً انتخاب این تپه بعنوان قبرستان سلاطین بقیه سطح دره را مورد نظر افراد عادی برای دفن مرده‌گان خود قرار داده است.

ادامه حفاری در سرته و آرامگاههای آن باعث ظاهر شدن اشیاء ارزنده و نفیسی گردید که بتدریج تصور این مطلب را که قله این تپه بمنظور آرامگاه سلاطین و یا حکمرانان این اقوام بکار گرفته شده است تأیید می‌نمود. این اشیاء هم‌چنین ثابت می‌نمود که این سلاطین دارای نفوذ و قدرت سیاسی زیادی بوده و بوسیله آن توانسته‌اند چنین ثروت عظیمی را در آرامگاههای خود در هنگام تدفین جای دهند. علی‌رغم آثار بسیار ارزنده و نفیسی که در این آرامگاهها قرار داده شده بود خود این آرامگاهها بطرز ابتدائی و خشنی در لابلای صخره‌های طبیعی ساخته شده و نشان می‌داد که این اقوام در زمینه ایجاد آرامگاههای خود به پیشرفت زیادی از جهت معماری نایل نگردیده بودند. با وجودیکه در زمینه ساختمان آرامگاهها دقت فراوانی بکار گرفته نشده بود ولی نحوه و روش تدفین حاکی از آن بود که بافت منظم و مرتبی که احتمالاً براساس عقاید مذهبی آنان بوده است در تمام سطوح اجتماعی آنان پیروی گردیده و چه در آرامگاه سلاطین و چه در قبور افراد عادی پیروی گردیده و فقط تفاوت آنها از نظر کیفیت اشیاء بوده است که در آرامگاه متمولین و متمکنین اشیاء نفیس تری جای داده شده و در قبور افراد عادی اشیاء کم‌بهارتری براساس همان بافت مذهبی مشابه قرار داده شده است. علت وجود این ساختمانهای خشن برای آرامگاهها را شاید بتوان در اثر وضعیت طبیعی منطقه جستجو نمود که بعلت وجود چوب فراوان در این مناطق جنگلی برای ساختمان منازل و ساختمانهای مسکونی نحوه معماری سنگی آنها چندان پیشرفتی ننموده و در این زمینه تجربه زیادی نداشته‌اند. در حال حاضر نیز بیشتر ساختمانهای جالب مسکونی از چوب بنحو جالبی ساخته می‌شود و تزئینات چوبکاری زیادی در آنها بکار می‌رود. شاید اقوام باستانی تمدن مارلیک نیز به همین وضعیت از چوب برای معماری منازل مسکونی استفاده نموده و از سنگ با دوام و مقاومت بیشتر فقط در ساختمان آرامگاههای خود استفاده نموده و در احداث آنها تبحر چندان نداشته‌اند.

بررسی محل احداث آرامگاهها در سرته نمایشگر این وضعیت است که برای تعیین هر آرامگاه از نقشه و یا بافت خاصی پیروی ننموده‌اند و بنظر می‌رسد که وضعیت و حالت تخته سنگهای طبیعی راهنمای آنان در انتخاب محل آرامگاهها بوده و در فاصله مابین صخره‌های بزرگ طبیعی آنها را جای داده و احداث نموده‌اند (شکل شماره ۵ ب). عمق خاک در فاصله این صخره‌ها نیز میزان عمق آرامگاهها را بوجود آورده و براساس همین وضعیت تفاوت زیادی در عمق آنها بین یک متر تا سه متر مشاهده می‌گردد. بنظر می‌رسد که هیچگونه تلاشی برای عمیق نمودن محل آرامگاه ننموده و هر آن اندازه که بستر سنگ طبیعی تپه اجازه می‌داده است خاک برداری نموده و عمق

## فصل سوم

### آرامگاه‌های مارلیک

بعلت اهمیت خاصی که این تپه هم از نظر طبیعی و احتمالاً هم از نظر مذهبی داشته است، این تپه که در دره گوهررود وضع خاص و شاخصی در مقایسه با طبیعت همجوار خود دارد به منظور دفن حکمرانان و سرداران و خانواده آنها در دوران مارلیک مورد استفاده قرار گرفته است. بقایای این قبرستان باستانی بعلت مساعدت آب و هوا همگی در زیر سطح تپه که کاملاً با گل و گیاهان وحشی پوشیده شده بود قرار گرفته و بکلی پنهان گردیده بود. چنانکه در نظر اول بهیچوجه نمی‌توان تصور نمود که در دل این تپه آثار گرانبهائی مربوط به دوران‌های گذشته وجود دارد.

در حقیقت این تپه که بعلت موقعیت شاخص و ارتفاع آن نسبت به مزارع اطراف بصورت انبوهی از آثار باستانی نمایش داده می‌شد در بررسی بیشتر معلوم گردید که از سنگ طبیعی تشکیل گردیده و در طول زمان فرسایش یافته و سنگها بصورت خرد شده در آمده و ترکها و سوراخها و حفره‌هایی در دل تپه فراهم آورده است. در قلّه این تپه که تا اندازه‌ای منحنی و خمیده می‌باشد پنجاه و سه آرامگاه بوضع ساختمانی خشن و نامنظمی در لابلاي صخره‌های بزرگ سنگی جای داده شده‌اند. منظره زیبا و باشکوه، اهمیت مذهبی و هم‌چنین سطح صخره ای تپه و وجود قطعات سنگ شکسته برای ساختمان احتمالاً دست بدست یکدیگر داده و این تپه را برای استفاده بمنظور قبرستان سلاطین مورد انتخاب قرار داده است. اگرچه آرامگاههای بسیار غنی در سر این تپه واقع شده بودند ولی بقیه سطح این دره نیز با آرامگاههای متفرق و پراکنده پوشیده شده و این مطلب در ترانسه‌های

هنری و تاریخی از این دوران شکوفا باقیمانده است. در حفاری پنجاه و سه آرامگاه مکشوفه در قبرستان سلاطین مارلیک چندین هزار اشیاء مختلف کشف گردید که مجموعهٔ منتخب و جالبی از هرگروه و دسته این اشیاء در فصول این کتاب شرح داده شده است. اشیاء مشروحه در هر فصل نیز با نمونه‌های مشابه و قابل مقایسه‌ای که در تمدنهای دیگر خاورمیانه و خاور نزدیک در حفاریهای دیگر نیز بدست آمده مقایسه گردیده‌اند. در فصول آخر کتاب نکات و نظراتی که درباره روشن نمودن و شناساندن این تمدن ارزنده که در غبارگذشت زمان خاطره آن از صفحات تاریخ نیز محو گردیده بود به عرض خوانندگان محترم خواهد رسید. سپس درباره اصل و سرچشمه این تمدن و موقعیت آن در تاریخ ایران و نفوذ و گسترش آن در رابطه با دنیای باستان نکاتی تذکر داده شده و بعللی احتمالی پایان و خاتمه و هم‌چنین محو آن از صفحات تاریخ تا آنجا که مدارک مستند اجازه می‌دهند می‌پردازیم.

آنها هر کدام قبوری در لایه فوقانی و لایه تحتانی وجود داشت که براساس اشیاء همراه با مردگان دورانی همزمان با تمدن مارلیک را معرفی می نمود. قبور لایه فوقانی بنظر می رسد دورانهای اخیر این تمدن را معرفی می نمایند. ترانسه کوچکی نیز در گندمزار قشلاق حفاری گردید که در آن اشیائی همزمان با دوران مارلیک آشکار گردید. در اواخر پائیز سال ۱۳۴۱ حفاری مارلیک به اجبار در اثر توطئه ای که بوسیله افراد با نفوذ در دستگاه دولت و اعضای خانواده سلطنت که بنحوی در عملیات حفاریهای مخفیانه و جمع آوری و قاچاق و تجارت عتیقه شرکت داشتند متوقف گردید. اگرچه در این هنگام تقریباً هیأت حفاری ما تمام سطح قبرستان سلاطین را در محوطه سرته مارلیک به پایان رسانیده بود ولی محوطه های دیگری مانند دامنه های تپه مارلیک، بیشتر قسمتهای تپه پیله قلعه، زینب بیجار، دور بیجار و جازم کول و قبرستانهای باستانی زیادی که در تمام سطح دره پراکنده و حائز کمال اهمیت از نظر تمدن گذشته این ناحیه بودند به ناچار ترک گردیده و حفاری در آنها انجام نگرفت و هیأت ما به اجبار به سوی تهران بازگشت نمود. در تمام دوران سال بعد اینجانب تلاش زیادی برای شروع مجدد عملیات حفاری انجام داده و مبارزات دامنه دار را بر علیه قاچاقچیان آثار عتیقه و همدستان فاسد آنها در وزارتخانه های دادگستری و فرهنگ سابق پیگیری نمودم و بالاخره در اثر این فشارها و گزارشات، وزارت فرهنگ مجبور گردید در جهت اوامر مسئولین مملکت هیأت ما را برای ادامه حفاری به منطقه مارلیک اعزام دارد.

متأسفانه هنگامی که هیأت ما برای شروع کار به دره گوهررود مسافرت نمود، ملاحظه نمودیم که در این غیبت یکساله هیأت تمام منطقه جنوبی این دره مانند لانه زنبور در اثر عملیات حفاری قاچاق و غیرقانونی سوراخ سوراخ گردیده و اشیاء و آثار باستانی آن چپاول گردیده و به یغما رفته است. در اثر این تخریب چون انجام عملیات علمی حفاری بی نتیجه بود من تصمیم گرفتم منطقه را از نظر تخریب آثار باستانی بررسی و نقشه زمین عملیات تخریبی یکساله حفاران غیرمجاز را تهیه نموده و مراتب را به مقامات مسئول وزارتخانه و مملکت به امید و آرزوی یافتن راه چاره ای برای جلوگیری از عملیات مشابه در آینده گزارش دهم. در این بررسی دره ما ملاحظه نمودیم که متجاوز از دو هزار چاله بزرگ و کوچک برای یافتن اشیاء باستانی در سطح دره بوسیله عوامل این قاچاقچیان پس از رفتن ما از این دره حفر گردیده است. هنگامیکه از کارگران قبلی خود در دهکده نصفی از کم و کیف این عملیات خلاف قانون جو یا گردیدیم، اظهار داشتند که در حدود چهارصد نفر کارگر بوسیله این قاچاقچیان استخدام و بکار حفاری مشغول بوده اند و برای حق السکوت روزانه برای هر کارگر مبلغ پنج ریال به ژاندارمهای محلی باج و رشوه پرداخت می گردیده است. احتمالاً نیز بیشتر اشیاء کشف شده در این عملیات قاچاق نیز برای معاملات به خارج از کشور از طرق غیرمجاز انتقال و به موزه ها و مجموعه داران فروخته شده است. بنابراین اینک فقط مجموعه آثار مکشوفه در حفاری هیأت مارلیک در موزه باستانشناسی تهران (موزه ایران باستان) معرف آثار و بقایای این تمدن و فرهنگ والا و ارزنده مارلیک بوده و بعنوان یک مجموعه مستند

بموازات مدتی که در مارلیک هیأت بکار خود مشغول بود چند ترانسه آزمایشی به منظور شناسائی و چگونگی هویت آثار باستانی دیگر در این دره گوهررود حفاری گردید.

یکی از مهمترین این ترانسه‌های آزمایشی یا حفاریهای فرعی در تپه مرتفع پیله‌قلعه انجام گردید. این تپه در حدود نیم کیلومتر در جهت شرقی تپه مارلیک در کرانه غربی گوهررود قرار گرفته است. در حفاری این تپه هیأت موفق گردید سطح قسمت فوقانی تپه را حفاری نموده و ترانسه‌ای نیز در دامنه غربی تپه باز نماید که در آن بقایای سه طبقه بزرگ و جالب آثار معماری و همچنین بر روی هم هفده لایه استقرار تا روی خاک پیکر آشکار گردید. لایه‌های اول تا هفتم دورانی که قدمت آن از اوایل هزاره دوم تا اواخر هزاره دوم پیش از میلاد بود معرفی می‌نمودند. لایه‌های هشتم تا سیزدهم شامل دورانی از اواخر هزاره دوم تا اوایل هزاره اول پیش از میلاد مسیح بود که همزمان با قدمت قبرستان سلاطین در تپه مارلیک بود. لایه‌های چهاردهم و پانزدهم که بقایای طبقه دوم معماری را معرفی می‌نمودند تاریخی در حدود فاصله مابین تمدن مارلیک و تمدن ساسانی را در بر داشتند. لایه شانزدهم آخرین طبقه معماری بر روی این تپه را معرفی می‌نمود و شامل یک قلعه دفاعی بود که بنا بر شواهد و آثار بدست آمده در آن متعلق به دوره ساسانی بود و قدمت آن در فاصله قرون دوم تا ششم میلادی قرار داشت. لایه هفدهم معرف دورانی بود که زمین قلعه ساسانی در دوران اسلامی تعمیر گردیده و مورد استفاده قرار می‌گرفته و تاریخ استفاده از این قلعه بنا بر قطعات سفالین بدست آمده تا حدود قرون پنجم هجری یا یازدهم میلادی ادامه داشته است.

ترانسه دیگری در جهت جنوب غربی تپه مارلیک در منطقه‌ای که آثار حفاریهای غیرمجاز در باغات و برنجزارهای اطراف دیده می‌شد و بنام علی‌کرم باغ خوانده می‌شد حفاری گردید. در این ترانسه نیز بقایای قبور ساخته شده و منظمی آشکار گردید که در آنها اسکلت‌هایی که تا اندازه‌ای پوسیده شده بودند نیز قرار داشت. اشیاء بدست آمده در این آرامگاه حکایت از آن داشت که احتمالاً این آرامگاهها مربوط به ابتدای استقرار تمدن مارلیک در این نواحی بود و دوران آغازی و شروع این تمدن را معرفی می‌نماید.

ترانسه تقریباً بزرگ و وسیعی نیز در بالای تپه زینب بیجار که در جهت جنوب شرقی تپه مارلیک با فاصله نزدیکی وجود داشت حفاری گردید. در این ترانسه بقایای قبوری بدون ساختمان آرامگاه آشکار گردید. اشیاء دفن شده به‌مراه مردگان در این قبور دلالت بر آن دارد که این قبور همزمان با آرامگاه سلاطین مارلیک بود و احتمالاً دوره‌های اواخر این تمدن را معرفی می‌نماید.

دو ترانسه آزمایشی نیز در دامنه‌های شرقی دره گوهررود در طرف مقابل تپه مارلیک در ناحیه‌ای که بنام قشلاق نامیده می‌شود و حفاران غیرمجاز چندین بار در آنجا کند و کاو می‌نمودند و بوسیله ژاندارمهای محافظ تپه مارلیک متفرق گردیده بودند حفاری گردید. در یک ترانسه دو لایه باستانی تا روی خاک پیکر آشکار گردید که در



شماره ۱ آشکار نمی‌نمود با وجود بر این بخوبی ثابت می‌نمود که تپه چراغعلی تپه یک تپه کاملاً سنگی طبیعی نبوده و در آن در دورانهای باستان فعل و انفعالاتی انجام و آثاری بوجود آمده است. بهرحال هیأت تصمیم گرفت که در این قسمت براساس شطرنج‌بندی نقشه کلی تپه ترانسه‌هایی را بطور کامل حفاری نماید و بنابراین حفاری در ترانسه‌های XXIII و XXXII و XXIII و LXXII شروع گردید و از آن پس حفاری کامل تپه براساس نقشه تهیه شده و ترانسه‌های تنظیم گردیده و در قسمت‌های منظم شطرنجی ادامه داده شد. در ضمن حفاری بطرف عمق تپه بزودی در این قسمت آثار مسکونی چهارگوشی بصورت مستطیل شکل در داخل محوطه این چهار دیواری آشکار گردید که در قسمت شرقی آن قرار گرفته و طرف شمالی این سکو به دیوار شمالی این محوطه متصل می‌گردید. سطح این سکو در قسمت فوقانی با قطعات سنگهای شکسته هموار گردیده و در ساختمان آن از تخته سنگهای بزرگ استفاده شده بود (شکل شماره ۳ الف). در گوشه شمال غربی این چهار دیواری بقایا و شواهد و آثار ساختمان یک اجاق که در آن خاکستر و ذغال باقیمانده بود و در سطحی بالاتر از کف بقیه اطاق بود مشاهده می‌گردید. هنگامیکه حفاری در جهت عمقی به کف این چهار دیوار نزدیک می‌گردید بتدریج اشیاء و آثاری نیز آشکار می‌گردیدند.

در این هنگام هیأت حفاری ما شامل چهار نفر اعضاء هیأت و در حدود سی نفر کارگر بود (شکل شماره ۳ ب). در میان این کارگران افرادی که قبلاً نیز برای حفاران غیر مجاز کار کرده بودند نیز وجود داشتند و این افراد که در حفاریهای غیر قانونی به کندن زمین در نهایت عجله عادت نموده بودند تا بتوانند اشیاء نفیس را هرچه زودتر بدست آورند و عموماً در این منطقه این اشیاء نفیس شامل اشیاء فلزی بودند سعی می‌نمودند بهمان وضع نیز در حفاری ما انجام وظیفه نموده و در نهایت سرعت حفاری نموده و به آثار دیگر مانند سفال و سایر مدارک مستند ارزنده توجهی نداشتند. سایر کارگران که تصور می‌نمودند این افراد از نظر حفاری دارای تجربه کافی هستند از آنها پیروی نموده و می‌خواستند بهمان نحو حفاری نمایند و برای اینکه نشان دهند کارگران خوبی هستند بسرعت خود در کار و بطرف عمق زمین می‌افزودند. این مشکل برای هیأت ما مدتی وجود داشت تا توانستیم به کارگران تفهیم نمائیم که هیأت ما فقط برای یافتن اشیاء ارزنده حفاری نمی‌نماید و هر شیئی برای ما همانقدر ارزش دارد و بخصوص بقایای معماری از ارزش خاصی برخوردار هستند. ولی مدتها طول کشید تا ما توانستیم بالاخره عجله نمودن آنها را برای یافتن اشیاء جلوگیری نموده و الگو و نمونه کار خود را بدانها بیاموزیم. بتدریج کارگران در این زمینه تجربه اندوخته و حفاری نه فقط در تپه کاملاً مستقر گردید و کم‌کم جنبه منظم و عادی و طبیعی از نظر برنامه کار بخود گرفت.

حفاری مارلیک برای مدت چهارده ماه بطور مداوم از اوایل پائیز سال ۱۳۴۰ تا اواخر پائیز سال ۱۳۴۱ بکار خود ادامه داد و در این مدت در حدود پنجاه و سه عدد آرامگاه که در آنها مجموعه عظیمی از آثار عتیقه که شرح قسمتی از آنها در این کتاب آمده است آشکار گردید.

ایرج مافی در ضمن همکاری با اینجانب به امور استخدام کارگران و اداره امور اداری هیأت و پرداخت حقوق کارگران و مخارج دیگر هیأت نیز رسیدگی می نمود.

ترانسه آزمایشی شماره یک همان مسیر ترانسه آزمایشی قبلی را ادامه می داد و بعلت اینکه در ابتدا نیز در همین ترانسه آثار ارزنده ای بدست آمده بود بنظر می رسید که مدارک دیگری نیز در زمینه آثار معماری و یا شواهد دیگر که بتواند راهنمای حفاری باشد در آن آشکار گردد. ولی برخلاف انتظار در آن نه شواهد معماری و نه آثار و اشیاء دیگری در روز اول کار آشکار گردید و فقط به ندرت قطعات شکسته سفال و مفرغ که نمونه کاملی را مشخص نمی نمودند جمع آوری گردید.

ترانسه آزمایشی شماره ۲ که در قسمت شرقی تپه شروع شده بود در ظرف مدت یک روز حفاری به بستر سنگ طبیعی تپه رسیده که با وجودیکه تا اندازه ای پوسیده و خورده شده بود ولی بنحوی حکایت از وضع اصلی و طبیعی تپه می نمود (شکل Pl. 3D) و حفاری بر روی این طبقه که لایه ای طبیعی بود چندان عمقی نداشت. در این وضعیت تصمیم گرفته شد که این ترانسه را در جهت شمالی بر روی این لایه سنگ طبیعی گسترش داده و از کنده کاری در داخل این لایه سنگ پوسیده و خرد شده فعلاً تا بدست آوردن شواهد تازه خودداری نمائیم. در این ترانسه نیز در مدت سه روز اول حفاری هیچگونه آثاری بدست نیامد و در آن هنگامیکه تقریباً تصمیم داشتیم آن را متوقف نموده و در قسمت دیگری حفاری نمائیم در گوشه از آن آثاری که بنظر می رسید گوشه ای از دیوار خشنی را نمایش می دهد آشکار گردید.

یک طرف این دیوار تقریباً مشخص ولی طرف دیگر قطر آن مبهم و بهیچوجه مشخص نبوده و نامعلوم بود. در وهله اول بنظر می رسید که احتمالاً این قسمت جزئی از دیوار قطور و ضخیمی باشد که بمنظور دیوار دفاعی دور تپه را فرا می گرفته و بخصوص چون در حاشیه تپه واقع شده بود این تصور را تأیید می نمود ولی کوشش ما برای پیدا نمودن طرف دیگر قطر دیوار کاملاً بدون نتیجه بود. بنابراین عملیات حفاری در آشکار نمودن همین طرف دیوار و ادامه آن پیشرفت داده شد و بزودی در حدود دو متر از نمای آن آشکار گردید و برای ما مسلم گردید که این دیوار در پشت به سنگ طبیعی تپه پیوسته و حفاری ما در داخل اطاق و یا ساختمانی که در جوار سنگ طبیعی ساخته شده و بدان تکیه دارد قرار گرفته است. بتدریج گوشه این دیوار که به دیوار دیگری در زاویه نود درجه و عمودی متصل گردیده بود و گوشه محفظه و یا اطاقی را نمایش می داد آشکار گردید. حفاری در جهت ادامه حدود این دیوار در سطح تپه ادامه داده شد و بتدریج آشکار گردید که این دیوار محوطه تقریباً چهارگوشی را که در بعضی قسمت های شمالی آن نامنظمی هائی وجود دارد محصور می نماید. (در ادامه حفاری بعدها مسلم گردید که این دیوار مربوط به آرامگاه شماره ۵۰ (نقشه No. 5) سلاطین مارلیک می باشد).

اگرچه در این ترانسه آزمایشی نیز اشیائی آشکار نگردیده بود و در ضمن هیچگونه ارتباطی را با ترانسه

مدتی در حدود چند هفته باعث درگیریها و کشمکشهایی بین طرفین مختلف نموده و کارگران حفاری هر روز که از دهکده‌ها برای کار می‌آمدند اخبار جالبی از این گونه فعالیتها که در دهکده‌هایشان انجام می‌گرفت با خود به تپه می‌آوردند و اظهار می‌داشتند که سه نفر فرزندان چراغعلی فعلاً "مرکز توجه همه قرار گرفته و گروه‌های مختلف برای جلب رضایت آنها فعالیتهای فراوانی انجام می‌دهند ولی با توجه به بافتهای خانوادگی و سنتی که در دهات ایران و بخصوص در بین اقوام وجود دارد و تقریباً همگی افراد ساکن در یک دهکده بنحوی قوم و خویش با یکدیگر هستند رسیدن به یک توافق کلی امکان‌پذیر بنظر نمی‌رسد. بتدریج پس از چند روزی اختلافات خصمانه شدیدی در بین بعضی از افراد با نفوذ دهکده بوجود آمد و بقدری در این زمینه در محیط دهکده سرگرم شده بودند که دیگر فرصت مراجعه به تپه و مزاحمت فراهم نمودن برای هیأت ما برای بعضی از آنان وجود نداشت. با وجود براین برخی دیگر هنوز همه روزه به تپه مراجعه نموده و ادعاهای خود را پیگیری نموده و سعی می‌نمودند فهرستی از آثار مکشوفه بدست آورند. حضور آنها در سر تپه و در محیط حفاری عموماً باعث اضطراب عملیات حفاری می‌گردید بخصوص که بعضی اوقات وارد بحث و گفتگو با کارگران که مشغول کار بودند می‌گردیدند. بنابراین به ناچار اینجانب به ژاندارمها توصیه نمودم که در جلوگیری از ورود افراد متفرقه به محیط کارگاه‌های حفاری شدت عمل بخرج دهند. این وضعیت به تدریج از تعداد مراجعین به تپه کاست ولی باعث بعضی درگیریهای بین بعضی از آنان که سماجت بخرج می‌دادند با ژاندارمها گردید که بنحوی فیصله می‌گردید.

بتدریج تب درخواست و ادعا برای دریافت سهمی از آثار مکشوفه تا اندازه‌ای در اطراف تپه بصورت عمومی فروکش نموده و فقط افراد ماجراجویی که سالیان دراز از حفاری غیرقانونی و خرید و فروش عتیقه بهره‌مند گردیده بودند سعی می‌نمودند که با طرح نقشه‌هایی مشکلاتی برای هیأت فراهم آوردند و روی این اصل هیأت بناچار می‌بایست قسمتی از وقت خود را صرف نگاهداری از اشیاء مکشوفه و یا حتی حفاظت جان اعضای خود بنماید.

## ترانسه‌های آزمایشی شماره ۱ و ۲

همانطور که قبلاً نیز اشاره گردید پس از بررسی سطح تپه هیأت تصمیم گرفت در دو قسمت عملیات حفاری را شروع نماید تا پس از بدست‌آوری شواهد و مدارکی در این دو ترانسه آزمایشی براساس آنها عملیات حفاری را تنظیم و ادامه دهد. بموازات شروع کار در این دو ترانسه نقشه دقیق تپه و تقسیم کلیه تپه به خانه‌های شطرنجی برای شناسائی نقاط مختلف تپه و پیروی منظم از آنها در عملیات حفاری ادامه داده شد. ترانسه آزمایشی شماره ۱ که در دامنه شمالی تپه شروع شده بود بوسیله آقای سیف‌الله کامبخش سرپرستی می‌گردید. ترانسه آزمایشی شماره ۲ در دامنه شرقی تپه شروع و سرپرستی آن با آقای محمود کردوانی بود. در ضمن آقای

تشکر نموده و تقاضای توجه بیشتری را نیز برای آینده که ممکن است مشکلاتی در پیش باشد بنمایم. ایشان با روئی گشاده مرا پذیرفته و وعده همه‌گونه مساعدت و همکاری دادند و انصافاً باید اقرار نمایم تا مدتی که در این سمت در رودبار بودند از بذل هرگونه فداکاری و مساعدت در حمایت از هیأت و جلوگیری از عملیات غیرقانونی مربوط به آثار عتیقه و حفاریهای غیر مجاز دریغ نمودند. متأسفانه پس از دو سه ماه از شروع حفاری ایشان از این منطقه منتقل گردیده و این انتقال بسیار به زیان هیأت که از پشتیبانی مداوم ایشان برخوردار بود گردید.

پس از بازگشت به تپه برای یک بررسی کلی در دره گوهر رود بهمراهی دو نفر از کارگران که اطلاعات زیادی راجع به وضعیت دره و همچنین عملیات و فعالیتهای مالکین در منطقه و ارتباط آنها با یکدیگر در اختیار داشتند تپه را ترک نمودم و بطرف ارتفاعات دره حرکت نمودیم. در این بررسی کلی مشاهده گردید که در بعضی از قسمتها آثار حفاریهای مخفیانه وجود دارد. در یکی دو روز بعد که سرگرم حفاری بودیم بیشتر اوقات عده زیادی از افراد برای رسیدگی به وضعیت ادعای خود نسبت به سهم بردن از اشیاء مکشوفه مراجعه نموده و این مراجعات مکرر باعث اضطراب کار حفاری می‌گردید. بالاخره بعلت تکرار این مراجعات از آنها خواستم که چند نفر نماینده از طرف خود انتخاب نموده و در فرصت بیشتری در وقت مناسب برای صحبت در این مورد بفرستند. نمایندگان آنها که عبارت از کدخدای سابق و کدخدای فعلی و یکی از مالکین محلی بودند با وجودیکه هیچکدام عملاً مالک این تپه نبودند ولی ادعا داشتند که چون تپه را در گذشته حفاظت نموده و نگذارده‌اند در آن حفاری انجام گردد بدین لحاظ باید سهمی از اشیاء بدیشان تعلق گیرد. پس از مدتی گفتگو اینجانب اطلاع حاصل نمودم که مالک اصلی این تپه شخصی بنام چراغعلی بوده است که فوت نموده و فعلاً ورثه او که عبارت از دو دختر و یک پسر می‌باشند، مالک حقیقی تپه می‌باشند که ایشان نیز به تپه در گذشته توجهی ننموده و از کشت و فعالیت کشاورزی در روی تپه در چند سال گذشته خودداری نموده و آن را بصورت متروکه رها نموده بودند.

همانطور که قبلاً نیز اشاره نمودم براساس قوانین باستانشناسی در حفاریهای دولتی کلیه اشیاء مکشوفه متعلق به ملت شناخته شده و فقط جبران خسارت به مالک محل تعلق می‌گیرد. در صورتیکه محل حفاری زمین زراعتی باشد مالک آن ضعف بهره سالیانه آن را دریافت خواهد نمود. هم‌چنین قانون برای دولت تکلیف معین کرده است که پس از اختتام عملیات حفاری زمین مزروعی باید بصورت اولیه هموار گردیده و تحویل داده شود و در صورتیکه دولت تصمیم بگیرد آن محل را بعنوان یک اثر ملی و باستانی نگاهداری نماید البته بهای ملک باید به مالک آن پرداخت گردد و برای تعیین ارزش ملک نظر هیأتی مرکب از سه نفر کارشناس خبره قطعی خواهد بود.

پس از مدتی بتدریج این مطلب برای مدعیان سهم از آثار مکشوفه روشن گردید که فقط در صورت مالک بودن محل ممکن است خساراتی بدانها از طرف دولت پرداخت گردد. بنابراین بیشتر آنها در صدد برآمدند که بنحوی جلب نظر فرزندان چراغعلی را نموده و آنها را مساعد با خود بنمایند. رقابت بین این افراد بدین منظور

آزمایشی دوم در قسمت شرقی سر تپه تعیین گردید. حدود و وسعت این ترانشه‌های آزمایشی هر کدام بر روی زمین معین و بوسیله ریسمان بندی مشخص گردید و برای هنگامیکه کارگران سر کار خواهند آمد آماده گردید. سپس تصمیم گرفتیم که نقشه کاملی از تپه تهیه نموده و تپه را برای حفاری کلی به شطرنج‌بندیهای منظم تقسیم نمائیم. در این هنگام آقای شعبان کوچکپور از دهکده نصفی مراجعت نموده و به همراه خود شش نفر کارگر آورده بود که بلافاصله در دو ترانشه‌های آزمایشی تعیین شده شروع بکار نمودند و بدین احوال حفاری تپه مارلیک آغاز گردید. صبح روز بعد در حدود سی نفر کارگر که برای کار از دهکده نصفی و دهکده‌های اطراف مراجعه نموده بودند نام‌نویسی و بکارگمارده شدند.

سپس اینجانب تصمیم گرفتم که به شهر رودبار رفته و جریان شروع حفاری را به آقای نحوی مدیر کل اداره باستانشناسی گزارش دهم و در ضمن نحوه تماس با هیأت را در صورت ضرورت به اطلاع ایشان برسانم. در این هنگام چند نفر از مالکین ساکنین محلی که در حاشیه تپه بانتظار گفتگو درباره طلب سهم خود از آثار باستانی ایستاده بودند برای صحبت مراجعه نمودند ولی چون در حال حرکت بطرف رودبار بودم بدیشان اظهار داشتم که بعداً در فرصت مناسبتری مراجعه نمایند و بدین طریق گفتگو با آنها را در یک وضعیت مسجل تری که کار حفاری کاملاً به جریان افتاده و در وضع شناخته شده و مسلمی قرار گرفته باشد در عهده تأخیر قرار دادم. ضمناً به همکاران سفارش نمودم که وارد هیچگونه صحبت و گفتگویی درباره ادعای ایشان نگردیده و اظهار دارند که در اینمورد هیچگونه اختیار و مسئولیتی نداشته و باید با خود من مستقیماً تماس بگیرند. در عین حال به سه نفر ژاندارمی که مأمور حفاظت حفاری بودند تذکر دادم از ورود افرادی که بخواهند حفاری را مضطرب نمایند جلوگیری نموده و افراد متفرقه و مراجعه کنندگان با اجازه هیأت باید به کارگاههای حفاری در سر تپه وارد گردند. سپس تپه را ترک نمودم و بطرف رودخانه سرازیر شده و پس از عبور از رودخانه بمنظور تماس با اداره باستانشناسی بطرف شهرک رودبار که نزدیک‌ترین محل برای تلفن به تهران بود و در ضمن مرکز ژاندارمری منطقه در این شهر وجود داشت عزیمت نمودم. در رودبار متوجه گردیدم که خط تهران بسته است و باید برای تماس با تهران از طریق منجیل که در حدود بیست کیلومتر فاصله داشت ارتباط برقرار نمود. بالاخره در منجیل با اداره کل باستانشناسی تماس حاصل نموده و اطلاع دادم که از دیروز حفاری چراغعلی تپه را شروع نمودم و اینک هیأت مشغول عملیات حفاری می‌باشد. آقای نحوی مدیر کل باستانشناسی از اینکه توانسته‌ام مستقیماً اجازه حفاری از وزارتخانه بدست آورم کاملاً متعجب گردیده بود. اینجانب ایشان را برای دیدن حفاری در اولین فرصت ممکن دعوت نمودم. در هنگام بازگشت از منجیل در سر راه بمركز ژاندارمری رودبار مراجعه نمودم تا هم رونوشتی از نامه وزارتخانه را بمركز ژاندارمری در تهران که برای آنها تهیه شده بود ارائه داده و هم در ضمن با جناب سروان گلبانگ رئیس این منطقه آشنا شده و از ایشان بعلت کمک‌هایی که تا آنوقت بمنظور حفاظت هیأت انجام داده بود

راه در لابلای باغهای زیتون، کرانه پرپیچ و خم گوهررود و شالیزارهای خشک و درو شده رو بطرف بالا صعود می نمود. در حالیکه تقریباً در حدود یک کیلومتر بطرف تپه طی کرده بودیم آقای سیف الله کامبخش سرپرست هیأت بررسی در حالیکه شخصی در پشت سر او ساک او را در پشت شانه حمل می نمود از دور نمایان گردیدند. در ضمن تبادل سلام و تعارفات معمول بخوبی در چهره و سیمای ایشان حالت خستگی و هیجانی که در این چند روز با آن روبرو بوده اند مشاهده می گردید. آقای کامبخش در این هنگام همراه خود آقای شعبان کوچکپور را معرفی نموده و اظهار داشت که ایشان بعنوان محافظ و همراه او می باشد. آقای شعبان کوچکپور که اندامی کاملاً موزون و ورزیده داشت و از کشتی گیران محلی بود در تمام مدت روز به همراه آقای کامبخش بود و آثار عتیقه نفیسی را که در ترانشه حفاری کشف و آشکار شده بود و در ساک آقای کامبخش وجود داشت و محل مورد اطمینانی برای نگاهداری آنها وجود نداشت در پشت خود حمل می نمود. بلافاصله به آقای کامبخش اطلاع دادم که خوشبختانه اجازه حفاری تپه دریافت و احکام لازم برای این کار صادر شده است و در ضمن صحبت به راه ادامه داده و بزودی به سر تپه که در آنجا دو نفر دیگر هیأت بررسی آقایان کردوانی و مافی منتظر ما بودند رسیدیم.

در این هنگام از سال چراغعلی تپه بصورت تپه ای متروکه که در اطراف و سطح آن سنگهای شکسته بنفش رنگی در لابلای تخته سنگهای طبیعی عظیم پراکنده شده و بیشتر سطح آن با خارها و بوته های وحشی پوشیده شده بود بنظر می رسید. در قسمت شرقی سر تپه یک اطاقک نیمه مخروبه ای که در گوشه ای از آن مقداری کلش برنج انبوه شده بود قرار داشت. چادر محل زندگانی و استقرار هیأت بررسی در فاصله ای نه چندان دور از این اطاقک نیمه مخروبه که محل استقرار سه ژاندارم همراه هیأت بود برپا گردیده بود. بقیه سطح تپه تقریباً با بوته ها و بقایای خارهای خشک پوشیده شده و آثار و بقایای کنده کاری و اضطراب در دامنه شمالی تپه در یک قسمت مشاهده می گردید. پس از یک بررسی سریع و مقدماتی در ترانشه آزمایشی که بوسیله هیأت بررسی حفر گردیده بود داخل چادر ایشان گردیده و آثار مکشوفه در ترانشه را که عبارت از دگمه های طلا، مجسمه های مفرغی حیوانات و مهرهای استوانه ای بودند از ساک پشتی خارج نمودم و ضمن نشان دادن آنها به شرح مشکلات و گرفتاریهایی که بوسیله مالکین محلی، حفاران غیر مجاز و دلالان عتیقه برای آنها فراهم گردیده است پرداختند. بدون لحظه ای درنگ آقای شعبان کوچکپور را به دهکده نصفی فرستادیم تا به کارگرانی که در ترانشه آزمایشی کار کرده بودند اطلاع دهد که برای شروع کار در همان روز بعد از ظهر در سر تپه حاضر گردند. در بعد از ظهر برای تعیین نمودن محل شروع کار در سر تپه اطراف و جوانب را بررسی نمودم و پس از بررسی دقیق وضعیت تپه تصمیم گرفتم در دو ترانشه آزمایشی در سر تپه شروع بکار حفاری بنمائیم. محل ترانشه آزمایشی اول (نقشه No. 5) در محل دامنه های شمالی تپه در ادامه همان ترانشه آزمایشی هیأت بررسی تعیین گردید. محل ترانشه

چراغعلی تپه و پيله قلعه را در وسط درختان با دست به من نشان داد. و اظهار داشت که هیأت در سر تپه نزدیک به دهکده نصفی مستقر می‌باشند.

چراغعلی تپه (مارلیک) تپه مرتفع و مخروطی شکلی بود که رأس آن دایره‌وار و مدور بود. در هنگامیکه برای اولین بار در مقابل این تپه ایستاده و بدان با امید و آرزو می‌نگریستم بهیچوجه بخاطرم خطور نمی‌نمود که این تپه جزء لایتجزائی از وجود من در مخاطرات و در امنیت، در خوشبختی و تنگ‌بختی، در پیشرفت و ناکامی برای سالهای سال در آینده خواهد بود. از همان نگاه اول ظاهر این تپه جلب نظر مرا نموده و بدان علاقه‌مند گردیدم و با وجودیکه اینک در حدود بیست سال از آن زمان می‌گذرد هیچگاه از اینکه با چنین موانع و مشکلات بزرگی که در رابطه با این حفاری از همان لحظه اول که قدم در سطح تپه نهادم مواجه شدم متأسف نگردیده‌ام. حفاری مارلیک تأثیر بسزا و مهمی در زندگانی اداری و شغلی و همچنین در زندگانی عمومی من نمود. بهره‌وریها و مخاطرات عظیمی در زندگانی باستانشناسی و حرفه‌ای من بنوجود آورد و بر روی هم دوران بس متنوع و هیجان‌انگیزی که سراسر مملو از موارد جالب بود و در آن حتی یک لحظه کسل‌کننده نیز وجود نداشت در رهگذر من قرار داد. حفاری مارلیک تأثیر بسزائی نیز در توسعه و پیشرفت فعالیت‌های ملی و ایرانی باستانشناسی که تا آنوقت تقریباً در یک سطح گسترده وجود نداشت نموده و راه را برای انجام اینگونه فعالیت‌ها هموار و صاف نموده و موفقیت این حفاری باعث گردید که بتوان برنامه‌های شبیه بدان را در حفاری مناطق باستانی دیگر کشور مورد تأیید و پشتیبانی مسئولین دولتی و مملکتی در سالهای بعد از آن قرار داد. این حفاری منبع و سرچشمه لایزال و نیرومندی برای حل مشکلات و رفع آنها در زمینه پیشرفت و توسعه باستانشناسی ایران در اختیار قرار داد و در این رهگذر بارها هر آنگاه که ضرورت داشته از آن استمداد گرفته و بهره‌برداری گردیده است.

بهر تقدیر، نزدیک به حوالی ظهر بود که برای عبور از رودخانه سفیدرود در قایق نشسته و به طرف قهوه‌خانه لات که در آنطرف رودخانه قرار داشت حرکت نمودیم. در ضمن عبور از رودخانه با مشهدی آقاجان که هم قایق رانی می‌نمود و هم مالک قهوه‌خانه و مزرعه و باغ زیتونی که در اطراف آن قرار داشت بود شروع بصحبت نمودم و از وضع زندگانی و اوضاع منطقه جو یا گردیدم. او اظهار داشت که برای گذران زندگانی خود و خانواده‌اش هم به زراعت مشغول و هم امور قهوه‌خانه و قایقرانی را اداره می‌نماید. پس از پیاده‌شدن از قایق برای رفتن به سر تپه و محل استقرار هیأت حفاری راهنمایی خواستم. در این هنگام جوان ورزیده و نیرومندی که بابا نام داشت و فرزند مشهد آقاجان بود به جلو دوید و با چهره متبسم اظهار داشت که او برای هیأت حفاری چند روزی در ضمن حفاری ترانشه آزمایشی کار کرده و مرا به سر تپه راهنمایی خواهد کرد. او بسته کوچکی را که بهمراه داشتم برداشته و در جلو راه افتاد و من در پشت سر او در حالیکه کیف دستی خود را در دست داشتم به دنبال او روان گشتم.

دارند دانسته و مراجعین را برای تماس مستقیم با اداره کل باستانشناسی و وزارت فرهنگ در این زمینه راهنمایی و هدایت نمایم.

در حالیکه سخت اینگونه مسائل افکار مرا بخود مشغول نموده بود متوجه گردیدم که به نزدیکیهای شهر قزوین رسیده و سیاهی باغهای میوه و تاکستانهای آباد و پر برکتی که اطراف و حومه این شهر را فراگرفته‌اند از دور ظاهر می‌گردد. پس از توقف کوتاهی در شهر قزوین و صرف صبحانه بیدرنگ به مسافرت خود بطرف رودبار ادامه دادم. جاده قزوین به رودبار هم از نظر کیفیت و هم از نظر وضع جغرافیای با جاده تهران به قزوین که تقریباً در حاشیه هموار دشتهای جنوبی رشته جبال البرز قرار گرفته و یکنواخت می‌باشد تفاوت کلی دارد.

پس از عبور از شهر قزوین این جلاده در تپه ماهورهای جنوبی دامنه‌های البرز به مسیر خود ادامه داده و در دو طرف راه دهکده‌های آباد در دره‌های سرسبز البرز مشاهده می‌گردند. در ضمن سطح این تپه ماهورهای دو طرف جاده بعلت مساعد بودن آب و هوا از گلها و بوته‌های وحشی پوشیده شده و زیبایی و طراوت خاصی در بر دارد. بخصوص طبیعت در اطراف این جاده در گردنه معروف کوئین و اطراف آن در نهایت زیبایی و لطافت تجلی نموده است. این گردنه که در حدود تقریباً سی کیلومتر در جهت شمالغربی شهر قزوین واقع شده است بصورت دروازه‌ای برای ورود به قسمتهای کوهستاهی کوههای البرز محسوب می‌گردد و در فصول اواخر پائیز و زمستان عبور از این گردنه که بیشتر اوقات با برف پوشیده شده است خالی از اشکال نیست. پس از عبور از گردنه‌های پربیچ و خم کوهستانی که جاده قدیم از لابلای آنها عبور می‌نمود بالاخره از ارتفاعات البرز عبور نموده و بطرف شهر لوشان و منجیل سرازیر شدیم. شهرهای لوشان و منجیل که از یکدیگر فاصله زیادی ندارند در دامنه‌های شمالی جبال البرز واقع شده‌اند و بخصوص شهر منجیل در ملتقای رودهای شاهرود و قزل‌اوزن قرار گرفته و در اینجا سد سفید رود در بستر رودخانه ساخته شده است. از این محل به بعد بتدریج وضعیت طبیعی اطراف تغییر یافته و دره‌های سرسبز اطراف جاده و رودخانه سفیدرود را کاملاً فرا گرفته‌اند. پس از عبور از شهر کوچک رودبار بزودی به دهکده رستم‌آباد رسیدیم. در این دهکده من از محل هیأت بررسی باستانشناسی و چراغعلی تپه جو یا شدم. اظهار داشتند که برای رفتن به تپه باید در حدود یک کیلومتر بازگشت نموده و به محل قهوه‌خانه‌ای که در کنار سفیدرود می‌باشد رفته و در آنجا با قایق از رودخانه گذشته و بطرف تپه رهسپار گردم. بنابراین بطرف رودخانه حرکت نمودم و بطرف قسمتی که در مقابل مصب گوهررود و در نزدیک قهوه‌خانه حرکت نمودم. بستر رودخانه سفیدرود در این قسمت در حدود یک کیلومتر عرض دارد و رودخانه فقط در قسمت جنوبی آن جریان دارد و بیشتر بستر رودخانه خشک می‌باشد. اگرچه در این طرف رودخانه زمین خشک و بدون درخت و مزارع در نزدیک کرانه رودخانه بود در طرف مقابل تمام کرانه رودخانه که گوهررود جریان داشت و به سفیدرود در این نقطه می‌پیوست سبز و خرم بوده و پوشیده از مزارع و درختان بود. قهوه‌چی، در وسط دره تپه‌های عظیم



نمود. جناب آقای درخشش بمن نگاه کرده و اظهار داشتند منتظر چه هستید بلافاصله شروع بکار نمائید! فعلاً" چه احتیاج دارید؟

اینجانب تقاضا نمودم که بلافاصله حکمی برای حفاری چراغعلی تپه صادر نموده و در ضمن نیز ابلاغهای مأموریت حفاری را برای اعضاء هیأت ما صادر فرمایند. به دلیل اینکه در این موقع تقریباً پاسی از شب می‌گذشت و ماشین‌نویس وزارتخانه رفته بود، ابلاغهای مأموریت اعضای هیأت حفاری با خط زیبا و خوش آقای بنی‌هاشمی خوش‌نویس و خطاط وزارت فرهنگ سابق که هنوز تا آنوقت شب در وزارتخانه بود نوشته شد و به امضای جناب آقای وزیر رسید و در اختیار اینجانب قرار داده شد. ایشان ضمناً از مسئول دفتر وزارتت خواستند که شرح لازم به اداره کل ژاندارمری و هم‌چنین به مسئولین وزارت فرهنگ در استان گیلان برای حفاظت و تأیید و پشتیبانی از این هیأت حفاری دولتی تهیه نموده و سایر تسهیلات لازم را برای پیشرفت کار هیأت فراهم آورند. اینجانب پس از تشکر از جناب آقای محمد درخشش وزیر و آقای دکتر غفوری معاون وزارتخانه به منزل آمده و همان شبانه تقریباً پاسی از نیمه شب گذشته عازم محل حفاری گردیدم.

در طول راه در دل شب، بتدریج سعی می‌نمودم رشته افکار را در مورد حفاری متمرکز نموده و برنامه روشنی برای مواجه با افراد محلی و سایر کسانی که ادعاهائی درباره سهم بردن از این حفاری دارند و فعلاً بزرگترین مشکل را برای ادامه حفاری بوجود آورده‌اند تنظیم نمایم. طرق گوناگون و افکار مختلفی یک یک در خاطر من نمود و پس از مدتی بالاخره تصمیم گرفتم بمحض ورود به تپه قبل از هر چیز بلافاصله عملیات حفاری را شروع نموده و از این نظر اینگونه مدعیان را در مقابل یک عمل شروع شده و در حال جریان قرار دهم. براساس قوانین و مقررات باستانشناسی ایران برای هیچکس بجز دولت هیچگونه سهمی در حفاریهای دولتی در نظر گرفته نشده است و اموال مکشوفه که از آثار ملی محسوب می‌گردند سهم ملت ایران است و در اختیار دولت قرار می‌گیرد. البته با وجودیکه این نکته در مواد قوانین تحقیقات و باستانشناسی در فصل حفاری صراحتاً توضیح داده شده است ولی بعلمت اینکه سالیان متمادی حفاریهای غیرقانونی بطور مداوم بوفور تقریباً بدون جلوگیری جدی از طرف دولت بوسیله حفاران غیرمجاز و دلالان عتیقه استمرار داده شده بود بتدریج برای این افراد و عده‌ای از مردم این توهم و تصور بوجود آمده بود که این اموال عتیقه می‌تواند به تصاحب هرکسی که بتواند آن را بدست آورده قرار گیرد. بخصوص حفاران غیرمجاز و دلالان عتیقه در این مورد بقدری گستاخ گردیده بودند که خود را مدعی و مالک این اموال تصور می‌نمودند. بهر حال بمنظور تثبیت و استقرار هیأت و استمرار عملیات حفاری اینجانب تصمیم گرفتم که از درگیری با این گروه حتی‌الامکان در ابتدای شروع بکار خودداری نموده و صرفاً بکار حفاری که مأموریت آن بعهده اینجانب و اعضای هیأت محول گردیده اقدام نموده و هرگونه تماسی که با هیأت در مورد سهم بردن از اشیاء مکشوفه گرفته شود آن را خارج از اختیارات هیأت که فقط مأموریت حفاری

## فصل دوم

### حفاری

برای کسب اجازه و انجام تشریفات حفاری به جناب آقای دکتر تقی غفوری مقام معاونت محترم وزارت فرهنگ مراجعه و پس از شرح اهمیت حفاری در تپه مارلیک ایشان فرمودند بهتر است خدمت جناب آقای محمد درخشش مقام محترم وزارت فرهنگ رفته و جریان امر را خدمت ایشان عرض نموده و نظر ایشان را در این زمینه جستجو نمائیم. پس از ورود به دفتر ایشان، اینجانب کلیه جریانات سفر به گیلان را شرح داده و ایشان با دقت و توجه خاص گوش داده و سپس اینجانب نسبت به اعزام هیأت بررسی به منطقه رحمت آباد اطلاعاتی در اختیار ایشان گذارده و اهمیت اینکه لازم است در چراغعلی تپه یک هیأت ایرانی برخلاف گذشته که فقط هیأت‌های خارجی حفاریهای منظم علمی را انجام می‌دادند مشغول بکار گردد برای ایشان به تفصیل شرح داده و در ضمن صحبت استنباط نمودم که نظر ایشان از برخورد با این موضوع مساعد و موافق می‌باشد. ایشان سؤال نمودند در صورتیکه این موضوع چنان ضروری و مهم است چگونه تاکنون گزارش برای ایشان نفرستاده‌ام. جریان امر را در ضمن شرح اینکه این گزارش برای ایشان چند روز است که تهیه گردیده ولی بعلت نگرانی از نظر تأمین بودجه مخارج حفاری یا دلایل دیگری در دفتر مدیر کل اداره کل باستانشناسی متوقف گردیده است به اطلاع ایشان رسانیدم. ایشان به آقای دکتر غفوری رو نموده و سؤال نمودند آیا می‌توان بودجه آن را تأمین نمود؟. آقای دکتر غفوری پاسخ دادند در صورتیکه اینجانب مخارج حفاری را در حدود دویست تا دویست و پنجاه هزار ریال در ماه که فعلاً برآورد نموده‌ام محدود نموده و در این مورد قول حتمی بدهم ایشان نیز بلافاصله آن را تأمین خواهند

تپه مارلیک که در محل به نام چراغعلی تپه (نام مالک آن چراغعلی بوده است) مشهور می‌باشد در قسمت وسطای دره گوهر رود در محلی که در حدود ۱/۵ کیلومتر عرض دره می‌باشد واقع شده است. اگرچه در نظر اول چنان استنباط می‌گردید که شاید بیشتر ارتفاع این تپه شامل بقایای باستانی باشد ولی در حقیقت کلیه ارتفاع این تپه از سنگ طبیعی بوجود آمده که در بالای آن دو قله وجود دارد که یکی در قسمت جنوب شرقی و دیگری در جنوب غربی تپه قرار گرفته‌اند. در محوطه قله تپه ۵۳ عدد آرامگاههایی که بطرز خشنی از سنگهای شکسته و ملاط گل در لابلای صخره‌های بزرگ طبیعی سر تپه احداث گردیده‌اند وجود دارد. قله بالای تپه بوسیله نهر آبی در اطراف محصور گردیده که این جوی آب باغهای زیتون دامنه‌های تپه را مشروب می‌نماید. محوطه قله تپه در بالای این مجرای آب در حدود ۱۳۵ متر طول شرقی - غربی و در حدود ۸۰ متر عرض شمالی - جنوبی دارد. قله مرتفع تر تپه که در قسمت جنوب غربی وجود دارد در حدود ۱۱ متر از مجرای آب اطراف تپه بالاتر بوده و قله جنوب شرقی فقط در حدود ۸ متر از نهر آب بالاتر است (نقشه شماره ۳).

شماره ۱ ج) که در فاصله مابین آنها باغهای زیتون (شکل شماره ۱ د) و باغهای میوه در نزدیک دهکده‌ها مشاهده می‌گردد. نواحی کمی مرتفع‌تر در دو طرف دره اختصاص به مزارع جو و گندم دارد که بطریق دیم و با آب باران کشت و زرع می‌گردد. نواحی دست نخورده دره عموماً بوسیله درختهای زربین که بطور متفرق و پراکنده در دره وجود دارند و این درخت نوعی از درخت کاج می‌باشد به‌مراه بوته‌های وحشی فرا پوشیده شده است. در جهت شمالشرقی این دره قله پر برف دلفک (دارفک) که بیشتر ایام سال قسمتهائی از آن با برف پوشیده شده مشاهده می‌گردد (تابلو رنگی شماره ۲).

عموماً ریزش باران در دره گوهر رود بسیار ملایم بوده و بصورت گردریزی از رطوبت نزول می‌نماید و علاوه بر آنکه رطوبت کافی بوجود می‌آورد به آسانی تولید سیل نمی‌نماید و بهمین علت آب گوهر رود عموماً بسیار زلال و صاف بوده و در عبور از پستی و بلندیهای بستر رودخانه در بعضی از قسمتها بصورت آبشار فرو می‌آید. در کرانه‌های بستر رودخانه قطعات نزار با گل‌های پفکی آنها بر زیبایی دره افزوده‌اند. در این دره تعدادی تپه‌های طبیعی که دارای قله مخروطی شکل می‌باشند قرار گرفته‌اند که در نظر اول بسیار شبیه به تپه‌های باستانی می‌باشند. بعضی از آنها مورد استفاده اقوام باستانی قرار گرفته و در آنها قبور مردگان خویش را جای داده‌اند. در قسمت غربی دامنه‌های دره که وسعت بیشتری دارد پنج عدد از این تپه‌ها وجود دارند که از نواحی مجاور برجستگی داشته و کاملاً مشخص می‌باشند و در آنها آثار باستانی نهفته گردیده است (شکل Pl. 2C). این پنج تپه عبارتند از مارلیک که مهمترین آنها است، زینب بیجار، دور بیجار (شکل شماره ۲) پيله قلعه (شکل شماره ۲ د) و جازم کول. احتمالاً بعلت غنای طبیعت و امتیازات خاص این دره، اعتدال هوا، حاصلخیزی زمین و وفور آب این منطقه از دورانهای باستانی مورد نظر اقوام بوده و شاید پایگاهی برای حکمرانان شمالی ایران بوده است. در دوران تمدن مارلیک این دره بعنوان محل قبور و آرامگاههای این اقوام مورد استفاده قرار گرفته و احتمالاً محل استقرار و مرکز سیاسی آنها نیز چندان از این محل دور نبوده است. اگر چه بعضی از اقوام باستانی مردگان مهم را برای دفن مسافت زیادی منتقل می‌نمودند ولی این وضعیت برای ساکنین عادی وجود نداشته است. بعلت اینکه بیشتر سطح این دره از قبور باستانی پوشیده شده بنظر می‌رسد این دره از نظر مذهبی برای ساکنان این منطقه اهمیت خاصی داشته و حکمرانان و سلاطین آنان قله تپه مارلیک را برای دفن خود و خانواده انتخاب نموده و مورد استفاده قرار داده‌اند. بر همین منوال و روش بقیه دره نیز بوسیله اهالی و اقوام مسکون در این منطقه بعنوان قبرستان مورد استفاده قرار گرفته است. اگرچه عملیات حفاری ما در قسمت بالا و قله تپه مارلیک متمرکز گردیده بود ولی پس از آنکه حفاری هیأت ما بعلى متوقف گردید و ما به اجبار منطقه را ترک نمودیم، تمام نواحی دره بوسیله حفاران غیرقانونی و قاچاقچیان آثار باستانی ویران گردیده و کلیه قبور عادی آن حفاری و اشیاء درون آنها به یغما و ایلغار چپاول گردید.

## فصل اول

### موقعیت جغرافیائی تپه مارلیک

تپه مارلیک بطور کلی در استان گیلان قرار گرفته و از نظر آب و هوا و خصوصیات منطقه‌ای شباهت کلی به سایر نواحی این استان دارد. بعلت رطوبت فراوان که به دامنه‌های شمالی رشته جبال البرز در این استان از بحر خزر می‌رسد، عموم " این نواحی سرسبز و از جنگل پوشیده شده است.

تپه مارلیک در دره گوهر رود که یکی از رودهای کوچکی است که به سفید رود می‌پیوندد قرار گرفته است. این دره در منطقه رحمت آباد رودبار در حدود چهارده کیلومتر در شمال شهر رودبار زیتون در طرف شرقی رودخانه سفیدرود واقع شده است. مصب گوهررود در محل اتصال به سفیدرود در طرف جنوب این رودخانه قرار دارد که در طرف مقابل شهرک کوچک رستم آباد در آنطرف رودخانه می‌باشد. دره گوهر رود که در حدود یک کیلومتر در بعضی قسمت‌ها پهنای آن می‌باشد در جهت شمال به جنوب در حدود ۱۵ کیلومتر طول دارد. تپه مارلیک در طرف مغرب این دره واقع شده و در حدود یک کیلومتر و نیم تا محل اتصال گوهررود به سفید رود فاصله دارد (نقشه شماره ۲). نزدیکترین دهکده به تپه مارلیک دهکده نصفی می‌باشد که بزرگترین دهکده در این دره گوهر رود بوده و تقریباً در ۷۰۰ متری در جنوب تپه مارلیک واقع شده است.

دره گوهررود دره‌ای است بینهایت زیبا که در آن چند دهکده و مزارع و باغهای اطراف آنها وجود دارد. این دهکده‌ها عموماً در قسمت‌های کم ارتفاع تر دره قرار گرفته و قسمت‌های مرتفع دره در انتهای جنوبی آن بیشتر از جنگل پوشیده شده است (تابلورنگی شماره ۱). قسمت‌های کم ارتفاع دره عموماً با مزارع برنج پوشیده شده (شکل

پیش‌گفتار

فصل اول: - مقدمه و تشکر  
- موقعیت جغرافیائی

فصل دوم: - حفاری

فصل سوم: - آرامگاهها  
الف - مراسم تدفین  
ب - انواع آرامگاهها

فصل چهارم: - ظروف فلزی مارلیک  
- ظروف زرین  
- ظروف سیمین  
- ظروف مفرغی

فصل پنجم: - ظروف موزائیک و شیشه‌ای و بدل چینی

فصل ششم: - مجسمه‌های مارلیک  
- مجسمه‌های انسان  
- مجسمه‌های سفالی حیوانات  
- مجسمه‌های مفرغی حیوانات

فصل هفتم: - جواهرات  
فصل هشتم: - مهرهای استوانه‌ای و مسطح  
فصل نهم: - ظروف سفالی  
فصل یازدهم: - ادوات و ابزار  
فصل دوازدهم: - نتیجه‌گیری

تلخیص و ترجمه

## حفاری مارلیک

در این فصل بطور خلاصه مختصری درباره حفاری مارلیک که متن کامل این کتاب را تشکیل می‌دهد برای استفاده علاقه‌مندانی که با زبان فارسی آشنایی دارند و هموطنان عزیز تهیه گردیده و تقدیم حضورشان می‌گردد. البته حاجت به تذکار است، تنظیم خلاصه‌ای که در این مختصر بتواند جامع دقایق و کلیه نکاتی که در کتاب آمده است باشد کار سهل و آسانی نبوده و بالمآل نارسائیهای خواهد داشت. ولی تا آنجا که در حوصله و ظرفیت آن بوده اهتمام گردیده اطلاعات کلی بطور خلاصه با در نظر گرفتن فصول مختلف کتاب عرضه گردد. بدین منظور چکیده‌ای از هر فصل کتاب در چند صفحه مستقل و جدا از هم تنظیم گردیده و امیدوار است مورد استفاده علاقه‌مندان قرار گیرد.

عزت‌الله نگهبان















