

The Art of Sassanians

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The **Sassanian** dynasty had its inception in a town situated near ancient Persepolis, Istakhr or Sta capital of the Persis. Little remains above ground of the buildings of Istakhr, which once included an important fire sanctuary of Anahita, the Iranian goddess of water and fertility, but also a goddess of war.[1] The office of chief priest of the sanctuary seems to have been linked with the secular administration of the region of Istakhr, and both functions seem to have been hereditary in a family which traced its origins to a legendary 'Sasan', a distant descendant of the **Achaemenid** dynasty. From this family came Ardashir, whose name is a Middle Persian version of the Old Persian name Artaxerxes. Ardashir defeated Artaban, the last **Parthian** king, in 224 CE and, in a reign which lasted until 241 CE, firmly established the rule of the Sassanians by reorganizing the Persian empire and by associating with him in the latter part of this reign his vigorous and capable son Shapur. The origin of the dynasty determined its religious and conservative character and also expressed its greater stress on links with Achaemenid tradition than seems to have been the case in the time of the Arsacids. Such evidence of connections with earlier periods of Iranian greatness could probably be a political asset in the contest with the Arsacids, whose origin in Central Asia, far from the Persian heartland of Fars, was probably not forgotten.



Sasanian Silver-gilt Vessels, 5th-7th Century

In contrast with the Arsacid empire, which had a loose structure, the Sassanians were able to establish strong central power and thereby to control the unruly feudal aristocracy. In their well-trained army, Sassanians continued the effective units of heavy and light cavalry which had constituted the most powerful striking force of the Parthians. At the same time the Sassanian kings created an administration efficient that it permitted them to carry out programmes of irrigation, town building and industrialization on an unprecedented scale.[2] The wealth of Iran was probably never greater than in the time of the Sassanian power; it was the most formidable opponent of Rome, later of Byzantium.

In the first century of Sassanian rule, the empire was extended in the East at the expense of the Kushans, whose power was already on the decline. In the West expansion was limited by Roman counter-measures so that the Sassanian frontiers never extended for long beyond the Euphrates. The north Sassanian troops held the frontiers against the ever-threatening incursions of nomads. The threat of invasion by hordes of barbarians from the steppes was so fully realized by Byzantine politicians that large sums of Byzantine coins were sent to Iran for support of the troops on the frontiers; ostensibly these were contributions toward the extension and upkeep of the passes in the Caucasus.[3] At other times the Sassanians were fighting the armies of Byzantium as a result of the loss of towns of northern Syria like Antioch and the wealthy kingdom of Armenia. In the east a dangerous element appeared in the reign of Shapur II [310-379 CE] in the form of the White Huns, called Chionite-Hephthalites. Shapur II warred against the Huns, perhaps with some success, because he obtained auxiliaries from them for his campaigns in the West. The Huns, in turn, were attracted to the Sassanian empire by the prospect of trade with the East.

west. But they settled as 'confederates' in former Kusnan territory and harassed the empire in the 1st centuries.

At the same time as the frontiers of the Sassanian empire were thus threatened and [p. 192] often embattled, men and goods must have passed across them, coming and going from the Sassanian centre to the kingdoms of Central Asia. There excavations of Palaces and castles have brought to light wall-paintings which indicate close relationship with Sassanian Iran in such portable commodities as textiles and other products of the luxury trade.[4]

The greatest territorial extension of the Sassanian empire and the last apogee of its artistic activities reached in the time of Khusraw II (591-628 CE), a well known figure in the history and legend of the West, who had taken the Holy Cross from Jerusalem to his capital, Ctesiphon. The collapse of the empire began in Khusraw's own time as a result of the Byzantine counter-attack mounted by the Emperor Heraclius, who won back the western territories occupied by Khusraw and even besieged the latter's capital, Ctesiphon, where he was murdered by his son. Shortly thereafter came the attack of the Arabs who had only recently appeared as a redoubtable power in the Near east. Resistance of the Sassanians was broken in the battle of Nihavend in 642 CE. Yezdegerd III, the last king, who had taken flight with his court towards the East, was murdered in the region of Merv in 651 CE.

According to tradition the founding by the Sassanian Ardashir of a town which he called 'the glory of Ardashir' was considered by Ardavan, the last Arsacid, as an insufferable act of a vassal and to have provided the immediate cause for Ardavan's ill-fated military action against Ardashir. This tradition conveys something of the political significance which pertained to builders and buildings in this period.

The plan of Ardashir's town was circular, as were those of some Parthian towns. Aerial photographs of the fertile valley of Firuzbad [5] show the former circumference traceable in decayed earth ramparts in the wide fosse of a ruined circumvallation. Arab writers tell us that four gates gave access to the town and their position can still be recognized today. In the centre of the one-time city a tall block of masonry rose from an artificial platform, perhaps the remains of a fire tower.[6]

The principal palace of Ardashir was situated outside the town beside an [p. 193] abundant spring, which yielded sufficient water not only for the requirements of a large court but also for the irrigation of gardens. Even today palaces and gardens are planned in relation to springs which assure a plentiful supply of water. There is a dramatic contrast between Persian gardens with their luxuriant shady trees and cool pools and the dry dusty ground that lies beyond their walls.

Spring, garden and palace of Firuzabad formed an entity more obviously protected against the sun and the outside world than later buildings of similar type. The walls of this structure, which measured 100 x 55 metres.[7] were built of rubble with quick-setting mortar and were as much as 4 metres wide. The outer walls seem to have been slightly articulated by two rows of vertical niches [see the remaining fragment on the left in Figure 104]. This articulation, however, would not have detracted from the defensible appearance of the structure, to which the low heavy cupolas must have contributed. Originally the rubble walls were covered with stucco, which is still preserved in some places in the domed hall of the court of the palace. [p. 194] Niches, with a semi-circular top, were set in rectangular frames and moulded in the stucco. The lintel of these niches was formed by a cavetto cornice of the type used for the lintels of windows and doors in the palaces of Persepolis from which those of Firuzabad were surely in a conscious imitation of Achaemenid architectural features.[8] Here, in Firuzabad, as in the Parthian palace of Ashur, the iwan was combined with the ancient Near Eastern type of house in which the rooms open on an inner court to produce a complex which was well suited to the climate of these regions.

Later palaces show variations of the basic forms employed in the palace of Ardashir. Thus the palace of

Imaret-i Khusraw at Kasr-i Shirin, built in the time of Khusraw II (591-628 CE), is a gigantically extended complex of an iwan-shaped entrance hall, a square domed hall, side rooms and courts, as well as surrounding living quarters. The structure measured 250 metres in length and 190 metres in width, and rose on an artificial terrace 8 metres in height, in front of which extended a narrow water channel about 550 metres in length.

Equally gigantic proportions distinguished the palace of Ctesiphon the residence of the Sassanians after the overthrow of the Parthians.... Here another characteristic trait of Sassanian architecture manifests itself: it was not important that the façade should be structurally and logically articulated, as in buildings of classical antiquity, but rather that its should be richly [9] decorated with a pattern which could be extended at will.



Sasanian Silver-gilt plate, 5th-7th Century

Today only the left side of the façade of the palace of Ctesiphon remains standing.... [p. 196] On the axis as the great hall of the "Taq", but facing in the opposite direction, was a second hall only slightly shorter than the first and doubtless covered in similar manner by a barrel-vault. Communication between the two halls could not be established by the excavators, nor could any substantial suggestions be made to explain their function. In general scholars are inclined to accept the traditional interpretation of the standing hall as the great throne-hall of the palace, though its crude walls, built of lightly baked brick and gypsum mortar, retain none of the former magnificence. To get an idea of the original appearance of the building we have to turn to the Arab historians who tell of pictorial representations in the throne-hall along which was one of Khusraw I at the battle of Antioch. It is also from Arab sources that we obtain a description of the silk carpet representing a garden, embroidered with gold thread and sewn with pearls, called Spring of Khusraw, said to have been in the throne hall of Ctesiphon when the city was sacked by the Arabs. Other indications of the rich ornamentation of the palace came from the German excavations which yielded from the entire palace area mosaic glass cubes, many of them covered with gold. Together with the presence of mosaics on the upper part of the walls, perhaps even in the barrel-vaults, where the lower walls appear to have been covered with slabs of multi-coloured marble, of which fragments were also found. Lastly the outside as well as the inside of the palace of Ctesiphon, like other Sassanian palaces, had extensive stucco decoration, of which fragments were found in the vicinity of the great hall.

Further indications as to the appearance of the interior of Sassanian palaces can be gained from the excavations of the palace of Bishapur, situated in western Fars, near Kazerun. There the cross-shaped throne-hall had a cupola and sixty-four niches, the stucco frames of which were decorated with medallions of acanthus-leaves and palmettes, all painted in vivid red, yellow and black, like the acanthus-leaves and palmettes of the vaulting. The decoration of this hall was strongly influenced by Graeco-Roman prototypes. Such Western influence penetrated Sassanian art in the time of Shapur I (241-272 CE), who brought back about seventy thousand Roman prisoners as a result of his campaigns in Syria and of his victory over the emperor Valerian at Edessa. A large number of these prisoners were settled in Iran and furnished the Sassanian empire with architects, engineers and technicians who were employed in the great undertakings of the Sassanian government, in the building of bridges, dams and roads. One may also assume that the g

architectural activity of Shapur attracted artists and craftsmen from the West to seek employment :

Before the throne-hall other structures had been erected at Bishapur; a court with mosaics of Graeco-Roman derivation and a fire temple. The latter recalls in its plan earlier fire temples, especially the Hatra. It consisted of a square main room measuring 14 metres on each side. The room had four doors and was surrounded by corridors in which Ghirshman, the excavator, noted "an elaborate system of small conduits." [10] Another interesting feature of this temple described by Ghirshman were the bull capitals of stone which originally supported the wooden beams of the roof. In somewhat cruder form these bull capitals recall the Achaemenid capitals of Persepolis and Susa. They illustrate another conscious reminiscence of earlier prototypes such as we [p. 197] observed repeatedly in Sassanian art. Temples as the one discovered by Ghirshman at Bishapur represent a less frequent type of structure associated with the cult of fire than those in which the sacred fire was open to general worship. Such structures consist merely of an altar over which rose a cupola on four arches. A number of them, called Tchahar Taq, known even before Vanden Berghe conducted a highly successful investigation of Sassanian fire sanctuaries in the course of which he examined a complex of buildings not far distant from Firuzabad, he identified not only the Tchahar Taq, the emplacement of the open public fire, but also the close quarters where the principal fire was preserved, hidden from the eyes of the common worshipper and accessible only to the priests. [11]

In addition to these sanctuaries of the Zoroastrian religion [which has rightly been termed anti-Greek in architectural, since it produced little more than the cupola on arches and the square chamber surrounded by a corridor, there were also churches built in the Sassanian empire. While we cannot discuss these churches here, they should nevertheless be mentioned since the mere fact of the existence of a church, with its probable links with the West, may point toward an explanation of many Sassanian elements in European art and architecture. [12] [p. 198]

Of all the material remains of the Sassanian period only the coins constitute a continuous chronological sequence throughout the whole period of the dynasty, comparable to the unbroken sequence of Parthian coins. These Sassanian coins have the name of the king for whom they were struck inscribed in Pahlavi script, that is Middle Persian, which permits scholars to date them quite closely. In turn the coins themselves provide a basis for dating larger works of art. Occasionally stylistic parallels can be observed between the development of Sassanian art as a whole and the style of the coins, particularly at the beginning of the dynasty. As shown by our small selection of coins reproduced on page 177, the development begins with a rather stiff image of the founder of the dynasty, Ardashir I (224-241 CE), which was in itself the first stage of an evolution within the reign of that king. A more plastic rendering of the portrait prevailed in the time of Ardashir's successor Shapur I (241-272 CE), and under his successors the relief was flattened out and became prominent again in the time of Shapur II (310-379 CE), of whom we do not show a coin here. With higher relief, however, was combined a cruder handling of the features in the royal portraits. In the actual design of the coins was once more carefully executed, but the one-time portrait head had given way to a patterned design in which the greatest stress was placed on rich ornamentation....

On the obverse the Sassanian coins displayed the bust of the reigning monarch; occasionally a king associated his son or wife, or both, with him on the coins, thereby following Roman practice, presumably for dynastic reasons. The reverse side of the coins does not show the image of the ancestor as did the Parthian coins but, in conformity with the religious devotion of the Sassanian dynasty, an altar with a sacred fire whose hereditary guardians had been the ancestors of their royal family. The coins of Ardashir I show a table with lions' feet on top of which burns the sacred fire. It is supported in the centre by a column, and the feet also are placed on low supports. Perhaps there was a difference in meaning between this rendering of the fire altar and the one found on the coins of Shapur I where only a column supported a plinth on which the fire burns, and where the fire altar is flanked by two attendants, each of whom has one hand on a spear and rests the other hand on the hilt of his sword. The figures wear hatti

with one hand a spear and rests the other hand on the pommel of his sword. The figures wear batti crowns but lack the orb of curls on top of the head which distinguished the Sassanian kings, hence were probably priestly rather than royal guardians. Later a king and a priest were pictured and finally the time of Khusraw I (531-579 CE) onward, two royal figures shown full face in conformity with stylistic development of the period which favoured a directionless rigid frontality. Rare examples on the reverse of the coins a scene of investiture, such as a coin of Bahram II (276-293 CE), which shows a king facing the goddess Anahita with eagle or falcon cap.[13] [p. 199]

The most impressive and best-known works of Sassanian art are the rock reliefs, of which about 100 are known from the first two centuries of Sassanian rule. The largest number is in Fars, in the majestic valley of Naqsh-e Rostam, in the small bay of rocks at Naqsh-e Rostam, and on the steep inclines of the mountain at Bisapur. Reliefs were also cut singly into the surface of a rock incline, but so far only one has been discovered outside the province of Fars. It is in Azerbaijan and is thought to represent Ardashir I as a son of Shapur receiving the homage of the Armenians.[14]

Only a few of these reliefs have inscriptions; their identification with a specific king must therefore be based on the shape of the crown as distinguished in the coins discussed in the preceding pages, beginning on page 199.

The ancient Iranian tradition of including natural reliefs in an historical or religious context was revived by the Achaemenids and reached its apogee under the Sassanian rulers. Ardashir I initially placed the rendering of his investiture by the god Ahura Mazda in Naqsh-e Rostam, at the entrance of a valley the sanctity of which was stressed in Achaemenid times by the sacred tower and the tombs of the first Achaemenid rulers. Surely the site had been chosen by Ardashir to unite the divine beneficial radiance of the Achaemenids, with his own person and with his family.[15] [p. 202]

In Ardashir's relief of his investiture, god and king are both on horseback and are of equal size; the curls or korymbos of the king is even higher than the crenellated crown of the god. Only the fact that the god holds the diadem and that the king reaches out for it indicates the dependence of the mortal king on the favours from the highest god. The emblem of the god is the barsom bundle which Ahura Mazda holds in his right hand. He wears a long beard cut off horizontally at the bottom and resembling the beards of the Achaemenid kings. The beard of the Sassanian king is either pulled through a ring or tied by a ribbon and therefore appears pointed and shorter. Both figures wear long loose garments, of which the upper part is like a cape in thin folds over a garment with long sleeves. The lower part falls in thin curves over the knees and hangs down beside it in slightly broadening folds. Both figures have their legs stretched toward the ground so that they seem to stand rather than to sit, which adds to their apparent height. Moreover, the unnaturally small size of the horses further enhances the size of the human figures. Pictorial stress on the principal figures by gradation of size according to their importance can frequently be noted in Sassanian art, which is more concerned with expression than with the [p. 203] rendering of natural forms and proportions.

Thus the horses bend their necks as in the Achaemenid reliefs of Persepolis, although the loose rendering of the present relief shows that this is merely one

present rendering show that this is merely one part of a pictorial formula. The second part is provided by the curve formed by the raised leg of the horse, the hoof of which rests here on the head of a fallen enemy. The two enemies are Ahriman, the personification of evil, and Ardavan, the last Arsacid king and representative of all the military opponents of the Sassanians. The heads of the enemies are worked in high relief, whereas the bodies are indicated by flat silhouettes behind the horses. Ahriman's curls look like bodies of snakes, but only in the front is a snake head clearly recognizable, indicating the sculptor's intent. Ardavan wears a helmet with what was probably a dynastic emblem of the Arsacids.

Behind Ardashir stands a page holding a fly-whisk and slightly disturbing the symmetry of the composition. Only the principal actions of investiture and triumph are related to an imaginary axis of symmetry. This closed directionless composition, a heritage of ancient Near Eastern art, expresses the irrevocability and permanent effect of the event. Erdmann pointed out correctly, however, that the apparent calm is effectively mitigated by the fluttering mantle at the back of the god, the pleated bands of the diadems, and the large tassels swinging from the harness of the horses.



Bust of a Sassanian King, 5th-7th Century

The relief is high and the hind legs of the horses are worked out almost fully in the round; the treatment of the surface, however, is restrained and limited to a number of delicate linear patterns, as seen in the folds of the bands or in the folds of the garments, which curve in different directions. Other reliefs with representations of the investiture of Ardashir at Firuzabad and Naqsh-e Rostam show god and king not on horseback, but Ardashir's successors mostly chose the mounted scheme for the rendering of investiture. The finest of these is a relief of Bahram I (273-276 CE). Ancient Near Eastern tradition successfully combined with Roman influence, which had penetrated Sassanian relief sculpture in the time of Shapur I (241-272 CE). Dictates of ancient Near Eastern schemes can be observed in the limitation of the scene to the two principal figures and in their traditional heraldic arrangement. The influence of classical artistic principles of antiquity is visible in the structure and modelling of the bodies, the logically varied rendering of the drapery, and the psychologically convincing and expressive gestures of the

Roman influence can be recognized after Shapur's successes in the West, especially with his victory over the Roman emperor Valerian. Perhaps the first relief in which Shapur's triumph was represented is carved in the rock at Naqsh-e Rostam, opposite the sacred Achaemenid tower on the socle of which appears an account of Shapur's deeds and military successes.

In the relief two Roman emperors, probably Philip the Arab and Valerian, look entreatingly toward the powerful Sassanian ruler. This identification of one Roman emperor is of recent date.[16] It is based on the resemblance of coin portraits of Philip the Arab to the profile of the kneeling emperor in an

version of Shapur's triumph, carved in the rocks near Bishapur. The inscription of Naqsh-i Rostem mentions that Philip the Arab had to pay five hundred thousand dirhams (that is, drachmas) to Shapur. The kneeling figure is Philip, the standing one toward whom Shapur extends his hand can be only Philip, whom the Persian king made a prisoner at Edessa in 260 CE.

The figure of the Romans together with the mounted king from a triangle whose apex is the korymbos Shapur, which breaks through the upper edge of the [p. 204] relief. This increases the size and majesty of the Persian king. The free composition of the relief, the vigorous modeling of the figures, the relative treatment of the king's drapery and of the mantles worn by the Romans, show some influence of Roman style. Yet this influence is limited to a fairly superficial imitation of Roman characteristics. Closer examination of the costume of the Roman emperors, for example, shows that the folds of the dresses are greatly patternized and do not contribute toward the visual understanding of the bodies which they are supposed to cover. One would therefore hesitate to ascribe such reliefs even to a Roman artist of the eastern provinces and would rather assume the hand of an Iranian sculptor who had merely seen Roman works of art. Such an indigenous artist could well have been responsible for the posture of the king, which combines the frontality of the thorax with the profile view of head and legs. This combined view is the best advantage in the present relief, in which the king's broad chest conveys the impression of great strength. A Roman artist of the period would have scarcely employed this ancient Near Eastern posture so successfully. Other reliefs which represent the triumph of Shapur show more direct Roman influence. They may partly be the work of sculptors from the Romanized region of northern Syria.

The scenes of investiture and triumph so far discussed, which show high relief and little action, may be viewed as a further development of Achaemenid sculpture. The rock-carving of Darius at Bisutun, especially is in high relief and may also be considered iconographically to belong to the scenes of triumph. In contrast to this type of relief those of the Parthian period are flat and probably show the transposition of wall-paintings into rock reliefs. From this tradition seems to derive a relief of Ardashir I (224-241 CE) at Firuzabad which represents an equestrian battle. This work [17] [not reproduced here] depicts in three single contests of increasing fury Ardashir's victory over Ardavan. The relief is flat and seems close to painting in the successful linear design and in the indication of evident pleasure with which ornamental details of armour and harness are drawn.

The theme of an equestrian battle occurs again on high relief at Naqsh-i Rostem, a work ascribed to Bahram II (276-293 CE) on the basis of the shape of the crown. The king who charges his opponent with a couched spear, galloping over a fallen enemy, resembles in his posture the figure of Ardashir in the relief at Firuzabad. The Roman opponent, however, differs from the sad rider who tumbles from his toppled horse in the relief of Ardashir. Instead he maintains himself on his horse and, though mortally wounded, holds his spear at the approaching king. Thus the rendering of the battle scene is far more dramatic than the earlier relief, in which the enemy no longer offered any resistance. In the lower half of Bahram's relief an unidentified Persian opposes a Roman horseman. The battle is as yet undecided. These equestrian reliefs of Sassanian times seem like illustrations of tournaments long before the age of chivalry in the West.

Bahram II represented the greatest variety of subjects in his reliefs. One of them, also at Naqsh-i Rostem, was partly carved into an Elamite relief which was thereby mostly destroyed. The Sassanian relief shows the king in strictly frontal pose, his hands on the grip of his sword, which stresses the vertical axis of the scene. On either side of the king appear members of his family and his courtiers, as if seen behind a parapet, carved only as half-figures, down to the waist. Another unusual relief shows the king fighting lions to protect his consort and his son. This king also had himself portrayed on coins together with his wife and [p. 206] son. This may have been due to personal preference, to the influence of Roman coinage or to Elamite reliefs, of which one also shows a family group. [18]

in another place Ammianus says: "The Persians opposed to us serried bands of mail-clad norsemen close order that the gleam of moving bodies covered with closely fitting plates of iron dazzled the those who looked upon them, while the whole throng of horses was protected by coverings of leat

Thus very little can be seen of the king himself. Since the head and foreparts of his battle horse are covered with armour, the figure forms in the main a powerful block, the menacing impression of w been recorded by Ammianus. Our photograph shows the detail in the minute treatment of the surf single links in the chain of the cuirass, the helmet circled by a diadem, the rosette at the centre of t radiating design on the shield, and the tassels in the harness of the horse.

The striking difference between the yellowish colour of the helmet and the bluish-grey eye of the r have to be explained by the effect of lichen, mineral deposits and water upon the surface of the roc projecting arc of the knight's eyebrow seems to have prevented water from reaching his eye.[20] T of the horseman again recalls the knights of the Middle Ages of Europe. Despite the great differen time this visual relationship is not entirely accidental, since medieval chivalry absorbed many Near traditions in the course of the Crusades.[p. 209]

Placing sculptures at the back of an iwan marks a change in the position of the reliefs. These were longer carved on rocks in the open but were protected in the back of a vaulted hall. This change n resulted in a diminution in the size of the reliefs but also probably brought about the application of make the relevant parts stand out more clearly. Gradually the effect of such reliefs would become i closely related to painting than to sculpture.

The royal hunting reliefs on the side walls of the iwan at Taq-i Bustan certainly suggest an origin i painting. The scene to the left of the entrance is a boar hunt in a swamp, more precisely, in a lake overgrown with rushes through which elephants drive a herd of boars to pass in solid formation be royal huntsman's boat. In a dramatic move one of the boars breaks out of the herd and turns in the of the king. Perhaps it is meant to be the same gigantic animal which leaps toward the king's boat what may be a third rendering, falls beside the boat, transfixed by the king's arrows.[21] Female m accompany the king in the midst of the hunt and also at the end where he is shown smaller, standi boat, holding in one hand his bow and grasping a staff or spear with the other. Bustling elephants by their drivers to pick up the dead game and carry it away.

Within the means at the disposition of the Sassanian artist, this hunting scene in a landscape prese unified picture. Elephants and boars lead the eye of the viewer around the king and over the entire surface; reeds which are drawn across the bodies of the animals unite them with their surroundings; king dominates the entire picture by his size and by the space which surrounds him like an aura. Tl smaller figure of the king is stressed by a halo around the head. Another means by which the figure king was probably differentiated from its surroundings was the use of colour. The patterns of his g for example, delicately carved dog-headed and peacock-tailed dragons called Senmurw, and also tl plainer patterns in the robes of the other participants in the hunt, were all surely painted so as to be Likewise the plants and other details were probably painted, perhaps even the background and all figures. The picture is framed by the enclosing fence, camouflaged by reeds, and is seen from abov were folded out. On the right side, beside the fence, is a strip with elephants and boars, almost as i of tapestry had been added to the principal section. Such an extensive rendering of hunts as is seen reliefs, however, probably far transcended the abilities of the textile-workers of the period, the car silk-weavers. It is more likely that there was a connection with multi-figured scenes in stucco, in w examples of hunting scenes are known.[22] Moreover, there are stucco plaques from Ctesiphon wi renderings of boars, closely related to those seen in the relief of Taq-i Bustan. This and other relati between the reliefs of Taq-i Bustan and the stuccos of Ctesiphon, which Waschsmuth considered t Sassanian led him to date Taq-i Bustan to the late sixth or early seventh century. This would mean

in the reign of Khusraw II (590-628 CE), to whom also Herzfeld and Ghirshman would ascribe the iwan at Taq-i Bustan, whereas Erdmann thought that it represented the work of artists of the unfo King Peroz (457/59-484 CE).[23] The decoration on the outer wall of the iwan, especially the tree flank the entrance, might give some indication of the date of the reliefs. In these trees the Graeco-] acanthus-leaf is combined with natural and imaginary blossoms to form a marvelous tree design in perhaps even elements of Indian plant decoration can be found. Such fantastic tree designs must h influenced those [p. 210] of the early Islamic mosaics of the Dome of the Rock in Jerusalem. This relationship may point to a late origin of the reliefs on the exterior of the large iwan at Taq-i Busta Moreover, the relations here mentioned with works of art of distant countries illustrate the far-reac influence of late Sassanian art, which has been recently illustrated extensively by Ghirshma.[24]

Among the most distinctive products of Sassanian art are the plaques of moulded and carved stucc covered the crude masonry of brick or rubble. However, excavations in villas surrounding the roya of Ctesiphon showed that rich stucco decoration was used only in the principal hall and perhaps in room directly adjoining it, while other rooms had merely a covering of plain gypsum plaster.[25] E the representative rooms the use of stucco seems to have been concentrated in certain areas, espec the iwans, where it was employed both in the vault and on the adjoining walls, which were lavishl decorated with a multitude of patterns. Rosettes of stucco like that in Figure 112 were used in a b which may have crowned the roof of one of the palace buildings at Ctesiphon. These rosettes give indication of the method of manufacture of the stucco decorations. They were composed of four p each formed in a mould and then joined together with gypsum. A layer of finer gypsum probably c most of the plaques but it is not known whether or not they were painted. So far, traces of paint h found only on fragments of human figures and in the decoration of the vaulted hall at Bishapur. Th and varied ornaments of the stucco plaques consisted of bands, disks and squares, usually combine unending rapport. Geometric patterns and plant motifs were used singly or combined. Also animal entire animals and human busts were used in decorative panels. Even remains of a hunting scene v figures were discovered on the façade of the same palace at Ctesiphon which yielded the rosettes.

Only a few examples can be given here. They show that the ornamental patterns, which are by far majority, are based on the circle, which is often inscribed in a square. Moreover, ornaments with c motifs usually form the basis for unending rapports. The Sassanian ornaments thus have the charac imaginative and pleasing combination of single independent elements in contrast to a uniform cov the surface found in later Islamic ornament.

The stucco rosette from Ctesiphon serves as an example of the combination of palmettes, the most frequent element in Sassanian ornament, with the typically [p. 211] Sassanian heart shapes and the surrounding bead and reel which ultimately derives from classical Greek sources.

In a rosette from Bishapur which is inscribed in a square, palmettes alternate with blossoms which be tilted with a double band or a ring. This last-mentioned element may go back to Achaemenid ti garland of palmettes and bound blossoms is surrounded by a ring of pearls. In each corner of the sc there is a palmette, the ends of which continue in half-palmettes. The grooved leaves of these palm doubtless derived from the Western acanthus-leaves; similarly, the half-palmettes first occur in the Roman sphere. The multitude of combinations, however, of these palmette forms was an achieven the Sassanian stucco-workers.

Another decorative motif shows up right wings which frame a monogram-like combination of lett which show below the rudiment of a tail. These wings should probably be traced back to the wing of the Achaemenids, but it is not impossible that their Sassanian shape, with long feathers that are up at the end, and the almost circular coverts were influenced by Indian renderings of birds' wings.

Even battlements were formed in stucco, as shown by examples found in Bishapur. Within the merlon is a palmette-tree which has in its middle part two pairs of wing-palmettes, one above the other. The palmette is probably the noblest form among the Sassanian palmettes, which survived long after the fall of the empire.[26]

An even longer life in art was enjoyed by the battlements themselves, which probably formed the model for the crenellations above the edge of many buildings of Sassanian times, as is suggested by the rock-cut crenellations above the entrance to the Taq-i Bustan. The examples found at Bishapur already show the elegant decorative form of the merlon which survived into the early Islamic period, which recalls only distantly the protective crenellated parapet of Assyrian times from which these merlons were ultimately derived. The presence of battlements in the royal crowns, however, shows that they were [p. 212] still felt to be effective symbols of protective power. Perhaps the use of battlements is indicative of the meaning of other ornaments which may not only have been purely decorative but also protective and beneficial. Probably such a meaning also pertains to the figured motifs of Sassanian art. Thus the boar's head represents an incarnation of the god of war and victory, Verethraghna. The boar's tusks which stand up on the forehead like a diadem, the powerful tusks, the eye in which a piercing glance is produced by a small cavity in the eyeball, are the simple means by which was created a convincing impression of an animal possessed of supernatural power.

Another example of a symbolic representation may be the rendering of two ibexes and a tree--here a vine. The precise significance of this ancient motif may well have changed from period to period, but in this late age it probably still represented a symbol of strength and fertility. In comparison with the severely symmetrical and sharply stylized rendering of the early cylinder in Plate 5, the Sassanian vase shows a slight mitigation of the rigid symmetry of the motif by the lay of the animals' forms and the distribution of grapes and leaves. The horns bend backward in a graceful sweep with an alternating interplay of the ends, both of which come to touch the animals' backs side by side. At first glance the rendering seems naturalistic, but in reality it is quite unnatural and is caused only by the artist's desire to create an attractive design. The rounded bodies of the animals are only slightly articulated and contrast with the sharply carved leaves, the grapes with globular berries, and the spirals which are meant to represent water. These elements seem to form the background for the rampant and playful animals in front. In spite of the severity of the compositional motif and the schematic simplification of the forms, some suggestion of depth is given here and an impression of a natural scene is conveyed; we may feel the echo of the genre scenes of Graeco-Roman art.

At Ctesiphon were found stucco reliefs with Dionysiac dancers and other motifs [p. 213] strongly influenced by Hellenistic art. Probably this renewed influence from the West should be explained by the resettlement near Ctesiphon of the population of Antiochia by Khusraw I (531-578 CE). Also large fragments of a winged horse were found and the torso of an animal which may have been a lion. From the description one gathers that they were almost sculptured in the round and were probably gate figures as those known in ancient Near Eastern Art.

A figure in stucco of a saint from a church at Ctesiphon, which belonged approximately to the fifth century, was made in a different style from that of the reliefs.[27] The crude rendering of naturalistic drapery points to provincial Roman heritage. This single example, however, is not enough to suggest that this Western style was generally characteristic of Christian sculptures in the Sassanian period.

The proverbial wealth of the Sassanian court is fully confirmed by the existence of more than one hundred examples of bowls or plates of precious metal known at present. One of the finest examples is the silver plate with partial gilding in the Metropolitan Museum of Art in New York. The king, identified by his crown as Peroz (457/459-484 CE), is hunting on horseback fleeing game: two Argali bucks or mountain sheep which are represented in a second rendering where they appear already transfixed by the king's arrows.

which are represented in a second rendering where they appear already trampled by the king's army lying lifeless under the hooves of his horse. This alone indicates the symbolic character of the hunt scene, which is also stressed by the representation of the king in full regalia with the crown worn on official occasions.

The composition is carefully balanced. The figure of the king marks approximately the middle of the half of the circular bowl. The ruler's bow, his crown, the fluttering ribbons of the diadem, the acorn tassels of the harness, the hind legs of the horse and the four moufflons fill the outer rim of the bowl almost regular intervals. The stress on the circle, and also the imaginary axis which can be laid through the figure of the king, stabilize the movement of the hunt from left to right, expressed by the galloping horse and the fleeing moufflons; in fact the movement is transformed into a circular one.[28] The design on the thick single-shell plate was partly engraved, partly raised in slight relief from the bottom of the bowl. The figures and details which are in high relief were hammered separately and then applied to the plate. They were fitted with their edges into a groove created by two ridges formed by pushing up the silver on either side. Subsequent smoothing, engraving, and mercury gilding hid the joins.[29] In addition, the gilding served to introduce colour effects by the lay of gold and silver. Thus the face of the king in silver and also his hand which spans the bow are clearly differentiated from the golden crown and diadem which frames and accentuates the king's head. Niello is used for details meant to be shown in black: the horns, hooves and tails of the moufflons, a pattern on the king's quiver, and the middle part of the bow, perhaps meant to be made of horn. Such colour effects correspond to the painterly tendency of Sassanian art in the fourth and fifth centuries.

The silver plate in the Metropolitan Museum belongs to a group of plates which show the king hunting or pursuing a game. These hunting plates belong to the fourth and partly to the fifth century. The figures are relatively small and numerous, the composition is free and assured. The relief of the applied figures is so high that they sometimes almost seem blown up from within.

An earlier group is represented by a plate in the Hermitage which shows a royal hero with ram's horns on his helmet. The representation is quite dramatic: in [p. 214] the hero the king fights a dangerous boar at close quarters and runs his sword into the animal's back in an assured and elegant gesture. The figures are large, and the principal figure is calm in contrast to the violent movement of the animals. The composition favours acute angles formed by the lines of action. The figures remain mostly within the limits of the plate, and only single parts are applied in low relief.[30]

Until now the heroic huntsman of the bowl was considered to be a successor to the throne, judging from the ram-horned helmet thought to characterize the wearer as the prince of the Kushan territories, the Kushanshah. More specifically he was thought to be Bahram I (272/3 CE) or Bahram II (233-276 CE) (this is not quite certain).[31]

A slight shift in the dates of this plate, however, would not influence the relative stylistic sequence of the hunting plates, which leads from designs with large figures to others with small and numerous ones.

The third and latest group of hunting plates originated in the fifth century. In these plates separate figures are no longer applied but the whole plate is cast and subsequently finished by chasing and engraving. This technique was used for [p. 216] the hunting plate in the Bibliothèque Nationale, one of the best-known works of Sassanian art. Because of the exceptionally free composition of the herd of game animals on the plate and because of unusual details in the attire of the king and in the harness of the horse, which are a misunderstanding of the conventions followed by the artists of the Sassanian court, this plate has been assigned to a late Sassanian workshop located somewhere outside the great centres of Iran.[32]

A few silver plates show the king in scenes other than the hunt. An example is a plate in the Hermitage

which shows in the main part a ruler surrounded by his dignitaries while in the small segment below seated on his horse in the posture for the 'Parthian Shot', aims at fleeing Argali rams. The crown of the king in the hunting scene probably shows a simplified version of the one worn by the enthroned king in the principal section of the bowl, a figure identified with Khusraw I (531-578 CE).[33] The rigid front here observed in the rendering of this ruler is also seen in the gold bowl of Khusraw in the Bibliothèque Nationale in Paris, where it is preserved under the traditional name of 'la tasse de Solomon' which when it belonged to the treasure of Saint-Denis.[34]

The rendering has become so schematic and flattened that the king with his [p. 217] sword between legs seems to stand before the throne instead of sitting upon it. His throne is a bench which rests on winged horses that turn their heads toward the monarch like the dignitaries who surround the king plate. The manner in which these dignitaries reverently cross their arms over the chest and hide their hands in their sleeves surely renders a fairly accurate picture of the strict ceremonial at the Sassanian court.

Religious themes are rarely represented on the metal plates. One of the few examples dating from the fifth or from the early sixth century is a plate from Cherdynye which shows a bird that gently supports a nude female with his claws.[35] In Sassanian times the motif of eagle and woman--first on the gold bowl of Hasanlu--may have been connected with the cult of the goddess Anahita, whose association with a bird of prey is manifested in the headgear which she wears on coins (see above,

One group of plates and ewers made of precious metal or bronze is mainly decorated with figures of animals and monsters. A silver plate of the fifth to sixth century is particularly charming.[36] In the central medallion a cock or pheasant holds the royal necklace with ribbons, probably a symbol of the king's auspicious radiance. This central medallion is surrounded by a vine from which branch off eight smaller vines, each of them rolled up to form a circular space filled by a leaf, a flower, or a bird with a small flower. A wreath of small heart-shaped forms separates the central medallion from the vines. The composition of the design, which is based on the circle, the favourite form of Sassanian artists, is rhythmically organized, but the variety in the imaginary blossoms prevents any impression of monotony.

A different type of metal vessel with figured decoration comprises tall ewers with flattened body and a projecting narrow spout. This form may be related to Graeco-Roman prototypes. An interesting example can be seen on such an ewer in the Bibliothèque Nationale: two pairs of lions with crossed bodies on either side of a flowering tree. The design of the tree is somewhat reminiscent of the trees on the pillars of the iwan at Taq-i Bustan and even recalls--very distantly--the elaborate palmette-tree of some of the ivories from Ziwiye. The lions have an eight-pointed star on the shoulder and manifest a relation with earlier works of Iranian art, the gold bowls of Hasanlu and Kalardasht. Once again one is made aware of the extraordinary continuity of some of the motifs in Iranian art. In the Sassanian period the art of cutting gemstones flourished, as did all the other arts. The shape most frequently used was still the three-quarter sphere with flat base created in Parthian times. The distinctive form with flattened sides, oval and large perforation, however, may have been a creation of the Sassanian seal-cutters, as well as the straight and curving lines [p. 218] precisely and beautifully carved into the surface of the seal-stones. All hemispherical seals are perforated to receive the metal loop by which they were attached as a pendant since they could have hardly been worn in rings. Those which were worn in rings are flat bezels with a convex, concave or flat sealing surface, most frequently made of carnelian or sard. The fact that the engraving of these stones is most effective if viewed against the light suggests that they should have been mounted on a movable setting. However, no such setting is preserved and the only extant rings with Sassanian seal-stones have the bezel solidly set into the metal. In addition to the red sard and carnelian translucent chalcedonies and agates were most frequently employed for seal-stones. For the globular uncut seals, however, dark green jasper, flecked with red, and jasper breccia were also favoured. Colourful stones were highly polished and were in themselves lovely ornaments. Some connection

have existed between the shape of the seal-stone and the device of the engraving. This is especially the faceted and decoratively cut seals which frequently have a design of lilies on the base. The carving is done with much use of a mechanical drill, which produced globular forms. Details are usually indicated by lines which vary little in width and are judiciously applied to stress the main characterizing features.

The resulting globular appearance of the figures seems to have pleased Sassanian taste, since it conveys a stylistic feature noted throughout the art of the period from reliefs to silver bowls. There is much variety in Sassanian seals, some of which are carefully engraved, others cursorily done; but the spacing is usually good and a certain assurance in the engraving differentiates the genuine seals from modern forgeries. This style may have originated in the eastern part of the empire, but at present it is difficult to speculate on its chronological and topographical classification of the material because the impressions of seals from recent excavations have not yet been published. Most of these seals on clay bullae [37] [p. 220] occur in groups, centering around the large imprint of the seal of an official. Such official seals must have played an important role. According to Arab Writers Khusraw II (590-628 CE) had nine seals of state, and giving the seals was an important office. From the impressions and extant seals we learn that some of the dignitaries merely had inscriptions engraved on their seals but others had busts, presumably of their heads, and carved according to fixed conventions: the nose is indicated by a straight line and the nostril by a curve, two pointed ovals form the lips, a long thin curving line renders the moustache, and short curved lines indicate the outline of the pointed beard and the hair, although this may also be shown by more rounded incisions. The eye is shown by a small ball set between the acute angle of the lids, over which arches the strong curve of the eyebrow. Usually the high officials who are portrayed by these busts wear necklaces and ear-rings, the latter indicated by a minute globular pendant. Such carefully cut seals, however, are in the minority among the large number of those which are rendered in a very cursory

Equally frequent as human heads or busts or palmettes are representations of animals. Of these the most common is perhaps the winged horse, seen in the same pose as the horses on the relief of Ardashir, the neck bent in a semi-circular curve and one leg raised in a complementary curve. Even more than human heads these horses are rendered according to a fixed scheme. Other animals often shown are the bull and ram, the latter wearing a necklace with the pleated ribbons of the royal diadem. The meaning of such renderings of a ram was probably connected with the auspicious royal radiance [xvarnah] mentioned above on page 202.

Another frequent group of designs shows either a female figure holding blossoms, a hand holding blossoms, or only one or more blossoms. The clue for the interpretation of all these seals is given by an extensive scene in which a small female worshipper stands in adoration before a large female figure [p. 221] holding blossoms, surely the Persian goddess Anahita.[38] We may therefore conclude that the hand holding blossoms, or blossoms alone, can stand for the same goddess and that part of her features and symbols can represent the whole deity.

Unfortunately there are very few such carefully engraved scenes which would permit us to identify with certainty other gods and their symbols, the great variety of which cannot be adequately exemplified.

A large number of Sassanian seals are decorated with so-called monograms. The simplest form consists of a crescent moon which tops a horizontal bar that terminates on either side in a curving hook. The precise meaning of these monograms is still unknown, though they have been associated with peasants' house marks and also with objects resembling standards which are used by some nomadic peoples.[39] Their occurrence in seals, however, surely indicates that they served one of the principal functions of the seal-stone, namely to protect the wearer and bring him good fortune.

Remains of Sassanian silks woven with elaborate patterns came to the churches and monasteries of the West as wrappings of Christian relics. There are therefore many fragments preserved in European

... as a mapping of Sassanian robes. There are therefore many fragments preserved in European collections which give some idea of the brilliantly coloured and effectively patterned garments worn by the Sassanians. After the fall of the Sassanian empire Byzantine silk-weavers continued the Sassanian tradition for centuries with few changes in pattern but with more muted colours.

Our example shows such Byzantine work; the pattern consists of two identical medallions each featuring a dog-bird, the so-called Senmurw, facing right. Rosettes with pearl borders are placed at the point where the two medallions touch. The border of the medallions is formed by rinceaux of Hellenistic derivation. The design is woven in white, purplish red, soft green and a yellow on a dark blue background. The principal figure of the pattern, the Senmurw, seems to have been used exclusively for the robes of kings, to judge by the renderings on the reliefs of Taq-i Bustan. On these reliefs alone he has a pattern of Senmurws placed symmetrically opposite each other on either side of an imaginary axis. The Senmurw is known only in Sassanian art. He has the head of a dog or wolf, the forepaws of the same animal, gills at the shoulders and the tail of a peacock. For a long time there seemed to be no connection between this monster and the lion dragons or griffins of earlier times, but recently some indications of possible connections has become known.[40]

Other textile patterns are preserved in the renderings of the non-royal participants in the hunts at Taq-i Bustan. Geometric, vegetal and animal motifs appear in scatter patterns or aligned in rows, or fitted into squares or circles. Blossoms conform to these basic forms of square and circle and are usually divided into four.[p. 222]

Patterns are frequently composed of birds, ducks, fowl, parrot or eagle, which are combined with other elements such as floral medallions, or borders of hearts, to form a clearly organized pattern in which each element retains its individual value. Like all other works of Sassanian art with figured decoration, these textile patterns were surely also meant to bring the wearer luck and recommend him to the protection of the gods.

Thus a textile with the head of a boar is probably to be interpreted as protection for a warrior. The most impressive and best preserved fragment of such a textile was found in Central Asia. Within a border of pearls appears the powerful head of the animal, which seems all the larger in contrast to the small pearls which is stressed by the surrounding rim. The open muzzle shows the sharp teeth of the lower jaw which fills the circle better than a head with closed muzzle. The second tusk and the second ear which are added to the sharp profile of forehead and snout are remains of the three-quarter view favoured in the Hellenistic period. The head is divided up into smaller planes which are set off from each other by stepped patterns. Horizontal striping appears only in the collared mane which terminates the head at the back, as in the stucco relief from Damghan. In both renderings the mane gives a certain height and dignity to the animal's brow.[p. 224] Most of the lines meet at an acute or a right angle. In part this effect may have been achieved by the technique of weaving, though this would apply more to a coarser weave than to the fine silk of the Astana. The effect of the pattern, however, was surely stressed intentionally since the sharp angles are the symbol of the god of war and expression of aggressiveness and defensibility.

We may look back from here to the small figure of a boar from Tepe Sarab, in which its characteristic outline, even its movement, was rendered by modest means. The animal as such seems to have been portrayed in the clay figurine. In the textile pattern and in the Stucco relief from Damghan, both created after many millennia, the artist no longer wanted to show merely the animal; he wanted to express the form of the animal, human qualities raised to the superhuman divine level.

Both the early and the late renderings give only essentials. By excluding all indications of time and space such as the three-quarter view of the later period--which was given up in the textile pattern of the head in favour of a pure profile view, in the concentration on basic forms, and in the use of these f

decorative purposes resides much of the attraction of Iranian art.

The wide distribution of the textile and other products shows that the art of the Sassanians, heirs to the ancient artistic tradition of Iran, was understood and appreciated in the early Middle Ages from Central Europe.

The great revival of an appreciation of Iranian art in our own time is due to the influence of modern art. Modern art has educated us to esteem varied 'patternizations' of natural forms and to analyze with the creation of new forms, suggestive of life, from what are actually quite abstract elements. The expression of this art, however, often intense and powerful, belongs to a world of thought into which we may rarely if ever penetrate. [p. 225]

Notes:

1. The nature of Anahita and her cult as well as the relations of the early members of the Sasanian family to the goddess and her sanctuary were extensively discussed by M. Chaumont, 'Le Culte d'Anahit à Staxr et les premiers Sassanides,' *Revue de l'histoire des religions* CLIII [1958], pp. 175-176.
2. This unprecedented agricultural and industrial growth in Sasanian times has been proved at the province of Khuzistan by Adams, 'Early South-western Iran,' especially pp. 116-120.
3. R. Gobl drew attention to these Byzantine payments to the Sasanians in *Die Münzen der Sasanier im Koninklichen Münzkabinett Haag* [Koninklijk Penningkabinet, 's-Gravenhage, 1962], p. 5.
4. A useful summary and bibliography of these Russian excavations in Central Asia is given by Frumkin in *Bibliotheca Orientalis* XIX [1962], pp. 122-125.
5. Aerial photographs were taken by E. F. Schmidt and his collaborators and published in *Flight over Ancient Iran*, Pl. 18.
6. The most extensive recent description of the site of the ancient town was given by Sir Aurel Stein, 'An Archaeological Tour in the ancient Persis,' *Iraq* III [1936], pp. 117-119.
7. The measurements given for these buildings are taken from Reuther, *Survey I*, pp. 534 ff. page 534.
8. Erdmann, however, draws attention to the rather extensive survival of such cavetto cornices from the Achaemenid period, though he does not deny the likelihood of a conscious architectural reminiscence by the builder of Firuzabad. K. Erdmann, 'Lückenforschung im iranischen Kunst des Orients I' [1950], p. 35.
9. The measurements for the arched hall are taken from H. Lacoste, 'L'arc de Ctesiphon ou Taq Kasra [Mésopotamie],' *Sumer* X [1954], p. 13.
10. The German excavations in Ctesiphon were published by O. Reuther, *Die Ausgrabungen der Deutschen Ktesiphon-Expedition in Winter 1928/29* [Wittenberg, 1930] and by E. Kühnel and W. Wachsmuth, *Die Ausgrabungen der zweiten Ktesiphon-Expedition [Winter 1931-32]: vorläufiger Bericht* [Berlin, 1933]. Both publications were edited by the Islamische Kunstabteilung der Staatlichen Museen in Berlin; the second report was jointly headed by the Staatliche Museen in Berlin and the Metropolitan Museum of Art, New York.
11. For a plan, photographs and a description of the principal features of the temple of Bishapur, see Ghirshman, *Persian Art* [1962], pp. 148-150 and Figs. 189-192.
12. Vanden Berghe's report on his investigations of Sasanian fire sanctuaries was published in 'Découvertes de monuments sassanides dans le Fûrs [Prospection hiver 1959-60 et hiver 1960-61]' *Iranica Antiqua* I [1961], pp. 163-198; cf. especially pp. 175-181, where Vanden Berghe describes the fire temple of Kerman and the closely similar structure of Tawiz. Cf. also Ghirshman, *Iranica Antiqua* I [1961], pp. 199-200.

- the fire temple of KUNDI SHIZ and the closely similar structure of Tang-i-Chak Chak. In the interpretation of the structures discovered by him, Vanden Berghe follows K. Erdmann in *Iranische Feuerheiligtum*, passim, especially pp. 50 ff. and 53 ff.; and A. Godard, 'Les Monuments de feu,' *Athènes et le monde iranien* III [1938], pp. 7-80. The largest fire sanctuary of Sasanian Shiz, now Takht-i Suleiman, is not yet fully excavated. Nevertheless, the German excavator Naumann, made some important preliminary suggestions concerning this complex: it was a combination of fire temple and palace. The palace surrounded the fire temple in a large rectangular plan, and in the centre of a gigantic square court was the lake. Surrounding the court were large iwans on the sides, while the fire temple lay in the main axis of the complex. There are some inscriptions which according to Naumann relate the complex to that of Kuh-i Khwadja. See R. Naumann, *Archäologischer Anzeiger* 1961, cols. 29-54, especially col. 50.
13. The role of the Christian Church of the Sasanian empire as a mediator between East and West is discussed by K. Erdmann in *Kunst*, pp. 43-44. Moreover, the same author cited examples of relations between products of early medieval and Sasanian art in 'Die universalgeschichtliche Stellung der sasanidischen Kunst,' *Saeculum I* [1950], especially pp. 512-517. Examples of such relations are also given by Ghirshman, *Persian Art* [1962], 'The Diffusion of Sassanian Art,' pp. 283 ff.
 14. For a discussion of the coins showing the investiture of the king by the goddess Anahita, see Gbl's article, 'Investitur im sasanidischen Iran . . . ' cited in the Bibliography under 'Coins'.
 15. Some coins of Ardashir already show considerable sculptural quality in renderings of the king's portrait. These may have been produced by die-makers who came from the West. R. Gbl drew attention to these coins and made several helpful suggestions for this survey of Sasanian coins, to which I also want to acknowledge the active help of George C. Miles.
 16. Erdmann discussed in 'Die Entwicklung der sassanidischen Krone,' *Ars Islamica XV-XVI* [1958-59-90, note 10, the Sasanian literary and pictorial tradition available to the early Arab historians concerning the crowns of the kings and their colours.
 17. Tabari's text is quoted from the translation by M. H. Zotenberg, *Chronique ... de Tabori ... I* [1869], pp. 205-206.
 18. Erdmann cited the German translation of this description on p. 117 [left column] of his article mentioned in note XV/16.
 19. For a translation of the description in the royal legend of Ardashir of the ram which was seen by Ardashir's horse and which represented the auspicious radiance, the xvarnah, see G. Widengren, *Iranische Geisteswelt* [Baden-Baden, 1961], p. 302.
 20. The relief in Azerbaijan was reproduced by Vanden Berghe, *Archéologie*, Pl. 150a and by Herzfeld, *Iran*, Pl. CVII, top. Another relief [in the village of Hung Naurzi], was listed by Vanden Berghe, probably showing a Sasanian king [*Archéologie*, pp. 62-63], but was subsequently published as a Parthian relief, 'Le Relief parthe de Hung-Inaceruzi,' *Iranica Antiqua III/2* [1963], pp. 15-16.
 21. The explanation of the choice of Naqsh-e Rostem for the location of Ardashir's relief is given by Erdmann, *Kunst*, p. 50.
 22. See the article by B.C. MacDermot, 'Roman Emperors in Sassanian Reliefs,' *The Journal of the American Oriental Society* XLIV [1954], pp. 76-80.
 23. Excellent reproductions of these reliefs are given in Ghirshman, *Persian Art* [1962], pp. 125-126.
 24. The relief of Bahram II which shows the king fighting lions was carved in a rock near the village of Sar Mashad, in the vicinity of Kazarun. Herzfeld reproduced details of the relief in *Iran*, Pl. CVII, top. Vanden Berghe reproduced a photograph in *Archéologie*, Pl. 74a and in *Iranica Antiqua III/2* [1963], Pl. XXIV, one of the Elamite relief near Malamir with a family group. A drawing of the relief is published in *MDP III* [1901], Pl. 32a.
 25. The excerpts from Ammianus are here quoted from *Ammianus Marcellinus*, Loeb Class. Lib. XXIV.6.8 and XXIV.1.12. A discussion of the type of helmet worn by the Sasanians can be found in S. V. Grancsay, 'A Sasanian Chieftain's Helmet,' *Bulletin of the Metropolitan Museum of Art* [April 1963], pp. 253-262.
 26. I owe this information to W. B. Trousdale, at present associated with the Smithsonian Institution.

- Washington, DC.
27. On the basis of the beautiful reproduction of the boar hunt of Taq-i Bustan in R. Ghirshman *Art* [1962], pp. 194-196, Miss E. J. Holmes suggested the interpretation of the three boars as actually rendering only one animal in continuous narration, a device occasionally used in ancient Near Eastern art, for example, in the altar of Tukulti-Ninurta I from Assur, most conveniently reproduced in Frankfort, *Art and Architecture*, Pl. 73 [B].
 28. See the reproduction of the composite stucco panel from Chah-Nar Tarkhan near Teheran, now in the Philadelphia Museum of Art, in Ghirshman, *Persian Art* [1962], p. 187. An example of a plaque with a single boar found near Ctesiphon was shown by Erdmann, *Kunst*, Fig. 41.
 29. For the bibliography of the controversy over the date of the Taq-i-Bustan, see Vanden Berg, *Archéologie*, pp. 188-189, Nos. 247-250.
 30. See Ghirshman's chapter on 'The Diffusion of Sassanian Art' in *Persian Art* [1962], pp. 283-290.
 31. See, for the observations which led to these statements, Kühnel's remarks in *Die Ausgrabung der zweiten Ktesiphon-Expedition* [Winter 1931/32], p. 16 ff.
 32. In Bouché, p. 174, Ghirshman assigned the battlements of Bishapur to the Early Islamic period [the late seventh rather than the first half of the eighth century, p. 173], although he stressed the Sasanian character of the wing palmette.
 33. The stucco sculpture of a saint was published in *Mitteilungen der Deutschen Orient-Gesellschaft* [April 1929], Fig. 13, p. 25.
 34. A similar transformation of a horizontal into a circular movement was noted by Erdmann in a bowl found at Poltava and assigned to Shapur II [310-379]; see *Kunst*, pp. 93-94.
 35. I owe the information contained in this description to the Conservation Department of the Metropolitan Museum of Art. The description of the technical process agrees substantially with that given by Erdmann, 'Die sasanidischen Jagdschalen' on p. 199 [continuation of note 3 from the foregoing page], *Jahrbuch der preussischen Kunstsammlungen* 59 [1936], pp. 193-232.
 36. The classification and dating of the 'hunting bowls', which Erdmann presented in extenso in the article cited in note XV/35, were summarized by him in 'Zur Chronologie der sasanidischen Jagdschalen', *Zeitschrift der deutschen morgenländischen Gesellschaft* 97 [1943], especially 243.
 37. The correctness of the dating of the bowl in the time of Bahram I [273-276] or II [276-293] was questioned by R. Göbl in an oral communication to the present author.
 38. The origin of the bowl in a workshop other than those of the Sasanian court was suggested by Erdmann on p. 265 of the article cited in note XV/36.
 39. The different attributions of the bowl in the Hermitage are cited by O. Maenchen-Helfen, 'Crenelated Mane and Scabbard Slide,' *Central Asiatic Journal*, Pl. III/2 [1957], p. 113.
 40. The cup of Chosroes I is conveniently reproduced in Ghirshman, *Persian Art* [1962], p. 205, 244.
 41. Reproduced by C. Trever, *Nouveaux plats sasanides de l'Ermitage* [Leningrad, 1937], Pl. III.
 42. The bowl is reproduced in *Survey IV*, Pl. 215 B.
 43. The following remarks on sealings of clay bullae are based on samples of bullae from Takht-Nasr near Shiraz in the Metropolitan Museum, kindly shown to the writer by Mrs. Prudence Harper, who will publish these sealings in collaboration with R. N. Frye. A good framework for the dating of Sasanian gems seems to have been worked out by V. Lukonin in Y. J. Borisov and V. Lukonin, *Sasanidskie gemii* [State Hermitage Museum, 1963], English summary on pp. 33-36.
 44. The seal with the goddess Anahita and the female worshipper is in the British Museum [B. 1. 119358] and is unpublished.
 45. The suggestion that the 'monogram' closely resembles peasant house marks and 'Tamgen' of peoples was made by Erdmann in *Kunst*, p. 115.
 46. Mrs. P. Oliver Harper published a bronze bowl with a Senmurv; however, the representation of the monster contains reminiscences of earlier renderings of lion griffins. See 'The Senmurv', *Bull.*

the Metropolitan Museum of Art [Nov. 1961], 95-101.

http://www.iranchamber.com/art/articles/art_of_sassanians.php