



ARCHAEOLOGY IV. SASANIAN

ARCHAEOLOGY

iv. Sasanian

Archeological field work has played a comparatively smaller part in forming the image of Sasanian history and culture than the large number of preserved monuments, buildings, and rock reliefs, collections of coins and objects of art. Most of these did not come from scientific excavations, a fact which has invited easy interpretations and stimulated a vivid but unreliable picture of the Sasanian world, complemented by the abundant legendary-historical literature, oriental and occidental. For a long time, archeological information was derived from the reports of early travelers in Iran and from the results of the first surveying expeditions, like those of Rawlinson, Flandin and Coste, Dieulafoy, de Morgan; even throughout the twentieth century, archeological surveys (e.g., by E. Herzfeld, A. Stein, L. Vanden Berghe, and others) remained the major means of discovery and documentation. It was only in the 1920s, that archeological excavations began to be aimed at Sasanian sites, e.g., the German-American expeditions to Ctesiphon (1928-32), resumed by the Italians (from 1964); the French expedition to Bīšāpūr (1935-41), continued by the Iranians (from 1968); and the American missions to Qaṣr-e Abū Naṣr (1932-35) and Eṣṭaḳr (1932-37). Others followed, like the soundings of French and American teams in Ayyvān-e Karḳa (1950) and Jondīšāpūr (1963), the German excavations at Taḳt-e Solaymān (from 1959), the British research at Tammīša (1964), the Iranian excavations at Kangāvar (from 1968), and the Iranian-German research at the palaces of Fīrūzābād (from 1975). In many cases



Sasanian levels or areas were touched during the excavations of mainly *non-Sasanian* sites, as in Kīš, Uruk, Susa, Sirāf, Tepe Yaḥyā, Tall-e Malīān (Malyan), Tepe Hissar (Ḥeṣār), Tūrang Tepe and others.

The archeological evidence points to a considerable regional heterogeneity of material culture within the Sasanian empire, although the historical sources indicate a tendency towards political centralism right from the beginning of the state. There is a clear prevalence of spectacular sites in the southwestern and northwestern provinces, marked by rock carvings and stone architecture, whereas the east seems to have continued the older Iranian and Central Asian traditions. From the different dates of the major sites it is evident that Fārs dominated in the earliest period of the empire but lost its role later on to Media. This shift of importance may be partly explained by the abundant economic resources of the Median provinces, but probably their close connection with the capital area of Ctesiphon/al-Madā'en, where the court had moved from the early centers in Fārs, was a major reason for their favored development. The government reforms and changes in aristocratic hierarchy, introduced by Ḳosrow I (A.D. 531-79) after the Mazdakite revolt, may have contributed to the spread of royal activities in Media as well.

The southwestern and southern plateau. Eṣṭaḳr, the birth place of the Sasanian dynasty (its earliest princes may be represented by sgraffitti on the walls of nearby Persepolis, see Herzfeld, *Iran in the Ancient East*, pp. 307ff.) was the capital of Fārs already during the Parthian period and continued in this role until it was replaced by Shiraz in early Islamic time. Although early an object of archeological research, its Sasanian layout remains hypothetical (D. Whitcomb in *Akten des VII. Internationalen Kongresses für Iranische Kunst und Archäologie, München, 7.-10. September 1976*, Berlin, 1979, pp. 363ff.; Schmidt, *Flights*, pp. 12ff.). Besides small finds and pottery there were fragments of sculpture and architectural decoration (Schmidt, *The Treasury*, pp. 105ff.; G. C. Miles, *Excavation Coins from the Persepolis Region*, New York, 1959; P. Bernard, *JA* 262, 1974, pp. 279ff.; R. N. Frye in *Akten des VII. Internationalen Kongresses*, pp. 335ff.). The mud-brick walls of Eṣṭaḳr and nearby Naqš-e Rostam are comparable to other Sasanian fortifications, although no precise date has been confirmed by excavation. (Herzfeld, *Iran in the Ancient East*, pp. 276ff.; Schmidt, *Persepolis III*, pp. 17ff.) Apart from the well-known rock reliefs at Naqš-e Rostam and Naqš-e Raḡab and the inscriptions on the Ka'ba-ye Zardošt and in the Ḥājiābād grotto (Schmidt, *ibid.*, pp. 13f., 122ff.; Vanden Berghe, *Archéologie*, p. 26; O. Klíma, *Archiv Orientalni* 36, 1968, pp. 19ff.; G. Herrmann,



Iranische Denkmäler VIII, Berlin, 1977), the most characteristic Sasanian remainders are the countless burial sites, exposure platforms, *astōdāns*, and fire bowls, for which the mountain ridges of the Eṣṭakr region are unparalleled in Sasanian Iran (Vanden Berghe, op. cit., pp. 45ff.; D. Stronach, *JNES* 25, 1966, pp. 217ff.).

Ardašīr Pāpakān, the first Sasanian great king of Iran started his career as governor of Dārābgerd. No traces of that early period have been found at Dārābgerd itself; the circular fortification of the old town is probably early Islamic (Stein, *Archaeological Tour*, pp. 190ff.; A. Creswell, *Early Islamic Architecture* I/2, Oxford, 1969, p. 21) and the *čahār-ṭāq* of Oġlan-qiz later Sasanian (P. de Miroschedji, *Iran* 18, 1980, pp. 157ff.). Yet, the importance of the area in early Sasanian time is testified to by the rock relief of Šāpūr I (Schmidt, op. cit., pp. 127ff.; G. Herrmann, *Iran* 7, 1969, pp. 63ff.; L. Trümpelmann, *Iranische Denkmäler* VI, Berlin, 1975), and the superbly stucco-decorated mud-brick construction at Ḥāḡiābād further south, together with other ruins dated in the time of Šāpūr II (M. Azarnoush, *Iranica Antiqua* 18, 1983, pp. 159ff.; 19, 1984, pp. 167ff.). Ardašīr-ḡorra/Fīrūzābād became the actual cradle of the new empire when Ardašīr I (A.D. 224-41) built his circular city in the Fīrūzābād plain and his fortress and palace nearby. Surveys have revealed the concentric and radiating layout of the city with its twenty sectors around an inner core, which probably contained the official buildings. The amazingly precise geometric pattern continues outside the mud fortification with its four gates and divides, like a spider's web, the farm lands of the plain, which seems to have been drained from a swamp (see *Architecture, Sasanian: Cities*, and D. Huff in *Proceedings of the IInd Annual Symposium on Archaeological Research in Iran, Tehran, 29th Oct.-1st Nov. 1973*, Tehran, 1974, pp. 155ff.; idem, *Archiv für Orientforschung* 29/30, 1983/84, pp. 296ff.). Excavations on the palace-fortress Qaḡ'a-ye Doḡtar have confirmed that Ardašīr built his mountain stronghold before his final victory over the Arsacids and his accession as great king; both these events are depicted in the rock reliefs below the castle. Small finds of crude jewelry, metal, sculpture, and glass indicate that the castle at first was the residence of a still unsophisticated warrior-court, and coins of the latest Sasanian type show that it eventually served as a stronghold against the Arab invaders. (D. Huff, *AMI*, N.S. 9, 1976, pp. 157ff.; 11, 1978, pp. 117ff.). Here, as in the larger palace in the plain (probably built a bit later), the Persepolis-inspired Egyptian stucco cornices clearly indicate Ardašīr's claim to be successor of the Achaemenid rulers. Soundings in the larger palace have proved that it was substantially



rebuilt and inhabited well into Islamic times. As the central seat of the Sasanian empire, however, it was replaced by Bīšāpūr, built by Ardašīr's son Šāpūr I (A.D. 241-72). Bīšāpūr is probably the most splendid of all Sasanian residences; it has a bridge, a castle, an enigmatic grotto with a statue of Šāpūr, and a nucleus of rock reliefs, to which others were to be added by his successors. Part of the ramparts and of the official section of the town have been excavated; the high quality of the small finds indicate that it prospered into early Islamic time (G. Salles and R. Ghirshman, *RAA* 10, 1936, pp. 117ff.; 12, 1938, pp. 12ff.; 13, 1942, pp. 93ff.; R. Ghirshman, *Bichâpour* I, Paris, 1971; II, Paris, 1956; A. A. Sarfaraz, *Bastan Chenassi va Honar-e Iran* 2, 1969, pp. 27, 69ff.; G. Herrmann, *Iranische Denkmäler IX-XI*, Berlin, 1980-83). The main building complex, partly from polished ashlar and formerly decorated with mosaics, painting, stucco, and sculpture, has been variously interpreted as a palace or a temple. It is important for understanding the development of the architectural type of the so called *čahār-ṭāq*, ruins of which are most frequent in Fārs and Kermān: two of them near Bīšāpūr, at Kāzerūn and at Emāmzāda Sayyed Ḥosayn (see *Architecture, Sasanian: Religious*, and L. Vanden Berghe, *Iranica Antiqua* 19, 1984, pp. 101ff.). Other early Sasanian remains in the Bīšāpūr area are the Nūrābād tower (see *Architecture, Sasanian: Funerary*) and the rock reliefs at Sarāb-e Bahrām, Sar Mašhad (Schmidt, *Persepolis III*, pp. 132ff.; L. Trümpelmann, *Iranische Denkmäler V*, Berlin, 1975) and Tang-e Qandīl (A. A. Sarfarāz, *Bastan Chenassi va Honar-e Iran* 6, 1971, p. 57; R. N. Frye, *Iran* 12, 1974, pp. 188ff.; Vanden Berghe, *Reliefs rupestres*). Of less certain, probably later, date are the ruins in the Bozpar, Gerra, and Farrāšband valleys to the east (see *Architecture, Sasanian: Religious and Palaces*).

In the Shiraz area with its early reliefs at Gūyom and Barm-e Delak (Schmidt, *op. cit.*, pp. 133ff.; W. Hinz, *Altiranische Funde und Forschungen*, Berlin, 1969, pp. 217ff.), an important, strongly fortified Sasanian settlement has been excavated at Qašr-e Abū Našr, apparently founded in Parthian times. The Sasanian layers have yielded, among coins and other small finds, a large number of late clay sealings, some with Middle Persian inscriptions apparently containing the name of Shiraz. This forerunner of Islamic Shiraz belongs to the few Sasanian settlements excavated on a larger scale. Except for parts of its fortifications, it has little in common with what is otherwise known of Sasanian architecture (W. Hauser, *Bulletin of The Metropolitan Museum of Art* 28, 1933/2, pp. 39ff.; J. M. Upton, *ibid.*, 29, 1934/2, pp. 3ff.; R. N. Frye, ed., *Sasanian Remains from Qasr-i Abu Nasr*, Cambridge, Mass., 1973; D. S.



Whitcomb, *Before the Roses and Nightingales: Excavations at Qasr-i Abu Nasr, Old Shiraz*, New York, 1985).

Sasanian remains were found during the excavations at Tepe Malīān (probably ancient Anshan, see R. Alden and J. M. Balcer, *Iran* 16, 1978, pp. 79ff.), and very probably the ruins of Fasā contain Sasanian levels of settlement, as indicated by pottery and mud-brick layers on and around Tall-e Žoḥḥāk (Stein, *Iraq* 3, pp. 137ff.); some of the column bases found here during recent Iranian excavations, among them bell-shaped specimens of Achaemenid style, may be of Sasanian origin (see also J. Hansman in *Monumentum* H. S. Nyberg III, *Acta Iranica* 6, Tehran and Liege, 1975, pp. 289ff.).

A small Sasanian fortress and settlement was partly uncovered during the excavation of the early Islamic seaport of Sīrāf and is tentatively dated to Šāpūr II (D. Whitehouse, *Iran* 9, 1971, pp. 4ff.; 10, 1972, pp. 68ff.; 11, 1973, pp. 33ff.; 12, 1974, pp. 5ff.). The Sasanian history of Kārg Island was explored long ago (R. Ghirshman, *The Island Kharg*, Tehran, 1971; E. Haerinck, *Iranica Antiqua* 11, 1975, pp. 134ff.; A. A. Sarfarāz, *Jazīra-ye Kārk*, Tehran, 1355 Š./1976-77) and evidence for the Sasanian influence on the Arab coast of the Gulf is emerging (D. Potts in *Arabie orientale, Mésopotamie et Iran méridional de l'Âge du Fer au début de la période islamique*, Paris, 1984, pp. 85ff.).

In Kermān province substantial Sasanian levels were excavated on Tepe Yaḥyā (C. C. Lamberg-Karlovsky, *Excavations at Tepe Yahya, Iran, 1967-1969. Progress Report I*, Cambridge, Mass., 1970) and a number of Sasanian settlements have been surveyed in the Soḡūn Valley and down to the Gulf (L. Vanden Berghe, *Iranica Antiqua* 5, 1965, pp. 128ff.; A. Stein, *Archaeological Reconnaissances in North-Western India and South-Eastern Iran*, London, 1937). At Ġobayra remains of a Sasanian settlement and a nearby Sasanian city have been found (D. Bivar and G. Fehérvári, *Iran* 11, 1973, pp. 194f.; 13, 1975, pp. 180ff., D. Bivar, *AMI* 13, 1980, pp. 7ff.). However, the majority of Sasanian sites, frequently marked by impressive ruins, especially in Fārs and Kermān, have never been archeologically excavated, as, e.g., the enigmatic building at Sarvestān (see [Architecture, Sasanian: Palaces](#)).

The western lowlands. The early importance of Kūzestān and the Mesopotamian lowlands for the Sasanian rulers was demonstrated by Ardašīr I's foundation about A.D. 230 of city of his own, Weh-Ardašīr, next to the Parthian residence of Ctesiphon, and by the foundation of Jondīšāpūr and



Ayvān-e Karḡa by Šāpūr I and Šāpūr II. The latter two cities, although having most remarkable city plans, have so far been the object of only limited excavations (R. McC. Adams and D. Hansen, *Ars Orientalis* 7, 1968, pp. 53ff. and R. Ghirshman, *RA* 46, 1952, pp. 10ff.). Archeological research in the city compound of Ctesiphon started already in 1927-28 with the discovery of the site of Seleucia and of a circular city nearby, at the time thought to be both Ctesiphon and Weh-Ardašīr together. Meanwhile, further excavations have considerably advanced the knowledge about the topography of this political, economic, and cultural center of the Oriental world between the decline of Babylon and the emergence of Baghdad. Excavations of the circular city have revealed part of the fortifications, a late Sasanian church, and large areas of living quarters. Any large-scale occupation of the site appears not to have taken place until the beginning of the Sasanian period; earlier, Seleucid-Parthian finds consist of burials only. Thus it seems evident that the round city must be Weh-Ardašīr, also called Kōḡē and Māḡōzā, not Ctesiphon. In the area to the east of the circular city the layout of Ṭāq-e Kesrā, the main residence of the late Sasanian kings has been clarified (see [Architecture, Sasanian](#): Palaces). Excavations of other sites in the environs, such as al-Ḍabai, al-Ma'āreḡ, Omm al-Sa'āter and Tell Ḍahab revealed palatial buildings or rich houses with fragments of splendid stucco decoration and other small finds (J. Kröger, *Sasanidischer Stuckdekor*, Mainz, 1982). This area has been identified with Aspānbor, the New Ctesiphon, which developed during the later Sasanian period as a residential district with palaces and accompanying living areas, royal gardens, and hunting grounds. The large circumvallation of Būstān-e Ḳosrow may have been a *paradeison*, unless it was Weh-Antioḡ/al-Rūmīya, the city built by Ḳosrow I (A.D. 531-79) south of his capital for the transplanted population of captured Antioch in Syria. (O. Reuther, *Die Ausgrabungen der Deutschen Ktesiphon-Expedition*, Berlin, 1930; E. Kühnel, *Die Ausgrabungen der zweiten Ktesiphon-Expedition*, Berlin, 1933; O. Puttrich-Reignard, *Die Glasfunde von Ktesiphon*, Kiel, 1934; for reports on the recent excavations see M. Cavallero, G. Gullini, M. M. Negro Ponzi, R. Venco-Ricciardi and others in *Mesopotamia* 1-12, 1966-77.) The location of Parthian Ctesiphon itself, which continued to flourish all through the Sasanian period, and where the kings kept a royal palace, remains unknown. The most probable suggestion is that it was situated north of the circular city and modern Salmān Pāk (J. M. Fiey, *Sumer* 23, 1976, pp. 3ff.).

Northeast of al-Madā'en surveys have tried to identify the site of the last great Sasanian royal residence at Dastegerd, where Ḳosrow II (A.D. 590-628)



constructed a gigantic fortification, partly preserved, for his palace and administrative center (F. Sarre and E. Herzfeld, *Archäologische Reise im Euphrat- und Tigrisgebiet* II, Berlin, 1920, pp. 76ff.; K. Schippmann, *Bulletin of the Asia Institute* 1, 1969, pp. 43ff.).

During the excavations of ancient Kīš, besides five smaller, probably domestic Sasanian structures, three extraordinary buildings with abundant stucco decoration, among others busts of Pērōz (A.D. 457-84), were uncovered. The buildings have very distinctive layouts with columnar halls, *ayvāns*, and rooms arranged around a central court and basin. They have been dated to the fifth century A.D. or later and interpreted as palaces, although the excavation failed to give a clear idea of their context (McGuire Gibson, *The City and Area of Kish*, Miami, 1972; P. Moorey, *Kish Excavations 1913-1933*, Oxford, 1978). Somewhat similar buildings and a church were excavated at Hīra (D. Talbot Rice, *Antiquity* 6, 1932, pp. 276ff.; idem, *Ars Islamica* 1, 1934, pp. 51ff.), and recently at Tell Abū Ša‘āf where a hoard of clay sealings was found (A. Al-Kassar, *Sumer* 35, 1979, pp. 468ff.). Sasanian occupation has been reported from Mesopotamian excavations at sites such as Babylon (E. Schmidt, *Jahrbuch des Deutschen Archäologischen Instituts* 56, 1941, pp. 786ff.), Uruk (R. McC. Adams and H. J. Nissen, *The Uruk Countryside*, Chicago, 1972; B. Finster, *Baghdader Mitteilungen* 8, 1976, pp. 164ff.; idem, in J. Schmidt, *XXXI. und XXXII. Vorläufiger Bericht über die Ausgrabungen in Uruk-Warka 1973 und 1973/74*, Berlin, 1983, pp. 36ff.; T. Leisten, *Baghdader Mitteilungen* 16, 1985, pp. 151ff.; 17, 1986), and Susa (R. Ghirshman, *CRAI* 1950, pp. 233ff.; idem, *RA* 46, 1952, pp. 1ff.; R. Göbl, in *MDAFI* 37, Paris, 1960, pp. 39ff.; for recent excavation reports see P. Gignoux, R. Gyselen, M. Kervran, A. Labrousse and R. Boucharlat, P. de Miroschedji in *Cahiers DAFI* 2, 1972; 4, 1974; 7, 1977; 8, 1978; 10, 1979); surveyed settlements have been reported from Roqbat al-Madā‘en and Qosayr (B. Finster and J. Schmidt, *Baghdader Mitteilungen* 8, 1976), Samarra (A. Northedge, *Sumer*, in preparation) and other sites (Adams, *Land behind Baghdad and Heartland of Cities*). According to coin findings, occupation seems to have been interrupted or at least decreased during the fourth century A.D. in many of the ancient centers, such as Uruk, Susa, Masjed-e Solaymān, and Bard-e Nešānda (R. Ghirshman, *Terrasses sacrées de Bard-è Néchandeh et Masjid-i Solaiman*, MDAFI 45, Paris, 1976, pp. 135ff.), and only in some cases, e.g. in Susa, revived to a certain degree during the late phase of the empire.

The northwestern plateau. The shifting of royal centers from southwest to



northwest, indicated already by the increasing importance of al-Madā'en/Ctesiphon, becomes fully evident when we consider the archeological remains in Azarbaijan and Kurdistan/Kermānšāh. There are some early royal monuments, e.g. Ardašīr's relief at Salmās (W. Hinz, *Iranica Antiqua* 5, 1965, pp. 148ff.), the inscription of Meškīnšahr (G. Gropp, *AMI*, N.S. 1, 1968, pp. 149ff.; H. S. Nyberg, *BSOAS* 33, 1970, pp. 144ff. [containing some fanciful readings, see R. N. Frye in *Acta Iranica* 4, pp. 244f.]) and the towerlike, enigmatic monument with the victory inscription of Narseh (A.D. 293-303) at Paikuli (E. Herzfeld, *Paikuli* I-II, Berlin, 1924; H. Humbach and P.O. Skjærvø, *The Sassanian Inscription of Paikuli* I-III, Wiesbaden, 1978-83), but most of them have only a commemorative character, and evidence for early royal residences and cities, like those from the early Sasanian period in Fārs, is still lacking in this area. The monuments also did not become points of crystallization for further large-scale activities, like the reliefs of Ardašīr II (A.D. 379-83) and Šāpūr III (A.D. 383-88) at Ṭāq-e Bostān. Next to these reliefs a huge grotto, decorated with reliefs, perhaps the most magnificent piece of Sasanian rock art altogether, was carved in late Sasanian time, but its exact attribution—to Pērōz (A.D. 457-84), Kōsrow II (A.D. 590-628), or even Ardašīr III (A.D. 628-30) is still debated (F. Sarre and E. Herzfeld, *Iranische Felsreliefs*, Berlin, 1910, pp. 199ff.; K. Erdmann, *Ars Islamica* 4, 1937, pp. 79ff.; E. Herzfeld, *Am Tor von Asien*, Berlin, 1920, pp. 71ff., idem, *AMI* 9, 1938, pp. 91ff.; H. v. Gall in *Orientalia J. Duchesne-Guillemin Emerito Oblata*, *Acta Iranica* 33, Leiden, 1984, pp. 179ff.; S. Fukai, K. Tanabe, and others, *Taq-i Bustan* I-IV, Tokyo, 1969-84; see also [Architecture, Sasanian](#): Rock art). There have been some unreported soundings but no large-scale excavations carried out at this site and the nearby vast mud-brick enclosure, perhaps a *paradeison*. The archeological material gathered in front of the grotto contains the torso of a male statue, something which is possibly a fire altar, columns, bases, and some remarkable capitals but comes mostly from other places, such as Kermānšāh (where additional material has been reused and stored in mosques), Vendernī, Qaḷ'a-ye Kohna, and Bīsotūn (H. Lushey, *AMI*, N.S. 1, 1968, pp. 129ff.; W. Kleiss, *AMI*, N.S. 1, 1968, pp. 143ff.). Excavations in Bīsotūn have revealed mostly non-Sasanian remains (W. Kleiss, *AMI*, N.S. 3, 1970, pp. 133ff.; H. Lushey, *Archäologischer Anzeiger*, 1974, pp. 114ff.). Large quantities of blocks of ashlar and the terrace and rock cutting of Tarāš-e Farhād, a quarry intended for preparing a gigantic rock tableau of uncertain destination (W. Salzmänn, *Archäologischer Anzeiger*, 1976, pp. 110ff.), must stem from a projected Sasanian architectural program, which evidently was to surpass all previous achievements. The late Sasanian date of the Bīsotūn capitals indicates



a correspondingly late date for the unfinished program. Technical affinities of the quarry with traces of workmanship at Țāq-e Bostān point in the same direction. A bridge and other sites in the vicinity, such as Taḳt-e Šīrīn (de Morgan, *Mission I*, pp. 97ff., IV, pp. 289ff.), Sarmaĵ (L. Trümpelmann, *Archäologischer Anzeiger*, 1968, pp. 11ff.), and Harsīn (A. Godard, *Athar-é Iran* 3, 1938, pp. 67ff.; D. Huff, *AMI* 18, 1985) probably belong to the same period. The terrace of Kangāvar, east of Bīsotūn, with its border of columns which until recently was regarded as a Seleucid temple, turned out after excavation to be a late Sasanian palace, mentioned in early medieval chronicles (V. Lukonin, *VDI* 2, 140, 1977, pp. 105ff.; S. Kambakhsh-Fard, *Bastan Chenassi va Honar-e Iran* 6, 1971, pp. 10ff.; 9-10, 1972, pp. 2ff.; idem, *Iran* 11, 1973, pp. 196ff.; M. Azarnoush, *AMI* 14, 1981, pp. 69ff.).

At Țāq-e Gerra, halfway between Bīsotūn and al-Madā'en, there is a small, enigmatic *ayvān* with a horseshoe-shaped archivolt which resembles closely Syrian architectural elements and may actually be of Syrian provenance. It was originally dated into mid or late Sasanian time but recent excavations have brought to light dovetail pinnacles from its crenellation, a familiar shape in early Islamic architecture (D. Huff, *Archäologischer Anzeiger*, 1972, pp. 537ff.; H. v. Gall and W. Kleiss, *AMI*, N.S. 4, 1971, pp. 20ff.; W. Kleiss, *AMI*, N.S. 6, 1973, pp. 74ff.; S. Kambakhsh-Fard, *Traditions architecturales en Iran* 4, 1976, pp. 2ff.).

The vast palace and temple complex and fortress of Qaṣr-e Šīrīn, further west, on the way towards al-Madā'en, is attributed by literary tradition to Țosrow II (A.D. 590-628). Surveys of these ruins have disclosed several, contradictory, plans. Even less is known of the probably contemporary nearby palaces of Ḥawš Korū and Sar-e Pol-e Zohāb (see [Architecture, Sasanian: Palaces](#)).

There seem to be considerable Sasanian phases at the late Parthian stronghold of Qal'a-ye Yazdegerd (E. and M. Keall, *Iran* 19, 1981, pp. 33ff.; 20, 1982, pp. 51ff.). A number of Sasanian sites, cities, fortresses, *čahār-ṭāqs*, and burials were discovered in the Zagros valleys of Luristan. Among the limited excavations are recent Iranian soundings at Darrašahr (de Morgan, *Mission IV*, pp. 360ff.; A. Stein, *Old Routes*, pp. 189ff.; L. Vanden Berghe, *Iranica Antiqua* 9, 1972, pp. 1ff.; E. Haerinck and L. Vanden Berghe, *Iranica Antiqua* 12, 1977, pp. 167ff.).

The later Sasanian kings clearly favored the Median provinces, which brought about the construction of palaces and other royal monuments along the road



from al-Madā'en into the Iranian highlands. This seems to have been the reason for the rise of the Ādur Gušnasp temple to the rank of the most venerated fire sanctuary of the later Sasanian period, identified with present-day Taḳt-e Solaymān. Excavations there indicate that the first large-scale buildings are no earlier than the fifth century, although unconnected, small-scale settlements from Parthian and Achaemenid times were uncovered underneath. The early temple was built from mud-brick and surrounded by mud-brick fortifications; all the structures were successively replaced by stone and brick masonry. The close connection of the sanctuary with the Sasanian court is indicated by a palace, side by side with the temple complex, which contains two shrines. The official function of this, and probably other Zoroastrian sanctuaries as well, reached far beyond its religious purpose and into the domain of civil administration, as shown by a hoard of clay sealings found in the entrance buildings of the temple (R. Göbl, *Die Tonbullen vom Taht-e Suleiman*, Berlin, 1976; for excavation reports see H.-H. von der Osten and R. Naumann, *Takht-i Suleiman*, Berlin, 1961; R. Naumann et al., *Archäologischer Anzeiger*, 1961, pp. 28ff.; 1962, pp. 633ff.; 1964, pp. 1ff.; 1965, pp. 619ff.; 1975, pp. 109ff.; D. Huff, *AMI* 10, 1977, pp. 211ff.; idem, *Archiv für Orientforschung* 29-30, 1983-84, pp. 239ff.; see also Architecture, Sasanian: Religious). Traces of rural settlements and vernacular fortifications, contrasting sharply with the splendor of the royal and religious centers, were found, e.g., in the environs of Taḳt-e Solaymān (D. Huff, *AMI*, N.S. 7, 1974, pp. 203ff.), at Baṣṭām (W. Kleiss and others, *Bastam II*, Berlin, 1986), and at Haftavān Tepe (C. Burney, *Iran* 8, 1970, pp. 157ff.; 10, 1972, pp. 127ff.; 11, 1973, pp. 153ff.).

The central and eastern provinces. The general picture of major Sasanian sites changes towards the central and eastern parts of the Iranian plateau: ashlar as building material disappears, even stone-mortar masonry becomes rarer and mud-brick ones more frequent. None of the known sites are comparable to the early Sasanian ones in the southwest or the late ones in the northwest.

Sasanian remains came to light under the Friday Mosque in Isfahan (E. Galdieri, *Isfahan: Masḡid-i Ġum'a* I, 1, Rome, 1972, pp. 361ff.; ISMEO Activities, *East and West*, N.S. 25, 1975, pp. 538ff.; 26, 1976, pp. 593ff.; 27, 1977, pp. 451ff.), and a strong mud-brick fortress was surveyed near the city (M. Siroux, *Iranica Antiqua* 5, 1965, pp. 39ff.). A palatial, middle or late Sasanian structure with rich stucco was excavated at Tepe Heṣār/Dāmḡān, and related buildings, which are dated to the early Islamic period, but carry on Sasanian tradition, were



partly excavated at Čāl Tarḵān, Nežāmābād, and Tepe Mel in the Ray area (see Architecture, Sasanian: Palaces; cf. also G. Pézard in *MDAFI* XII, Paris, 1911, pp. 51ff.; F. Kimball in *Survey of Persian Art*, pp. 579ff.; E. F. Schmidt, “Tepe Hissar Excavation 1931,” *The Museum Journal of Philadelphia* 23, 1933, pp. 455ff.).

In Ray itself, the northeasternmost Sasanian rock relief, possibly of Šāpūr II, was erased already by Fath ‘Alī Shah Qājār (Schmidt, *Persepolis* III, pp. 140ff.).

Excavations in Šahr-e Qūmes, probably ancient Parthian Hekatompylos, uncovered, among other Sasanian traces, a burial repository, which gives welcome insight into Zoroastrian funerary practices (J. Hansman and D. Stronach, *JRAS*, 1970, pp. 142ff.). Excavations in Nišāpūr, the former capital of Khorasan (founded by Šāpūr I or II), in spite of its important pre-Islamic history produced little Sasanian material and its early topography is still hypothetical (C. K. Wilkinson, *Nishapur, Pottery of the Early Islamic Period*, New York, 1974; R. W. Bulliet, *Studia Iranica* 5, 1976, pp. 67ff.). The prosperity of Khorasan during Sasanian time, with a great number of flourishing settlements, was ascertained by recent surveys in the Dāmḡān area and the upper Atrek valley (K. Maurer Trinkaus, *The Partho-Sasanian North-East Frontier: Settlement in the Damghan Plain*, Ann Arbor, 1981; idem, *Iranica Antiqua* 18, 1983, pp. 119ff.; R. Venco Ricciardi, *Mesopotamia* 15, 1980, pp. 51ff.), as well as in the Gorgān plain, where on Tūrang Tepe a mud-brick fortress with a fire temple built later on top of its ruins, has been excavated (J. Deshayes, *Iran* 11, 1973, pp. 141ff.; R. Boucharlat in *Le Plateau Iranien et l’Asie Centrale des origines à la conquete islamique*, Colloques internationaux du C.N.R.S., no. 567, Paris, 1977, pp. 329ff.). Excavations at the so-called Wall of Alexander, which is generally thought to be a late Sasanian defense against Turanian peoples, point to a possible Parthian origin (M. Y. Kiani, *Parthian Sites in Hyrkania*, Berlin, 1982; D. Huff, *Iranica Antiqua* 16, 1981, pp. 125ff.). The brick wall of Tammīša (D. Bivar and G. Féhervári, *Iran* 4, 1966, pp. 35ff.) and the fortifications of Darband on the Caucasian shore of the Caspian where excavations have uncovered the mud-brick predecessors of the present stone walls, are of Sasanian date (S. Khan-Magomedov, *Derbent*, Moscow, 1979; M. I. Artamov, *Sovetskaya Arkheologia*, 1946, pp. 121ff.; A. A. Kudryavtsev, *Sovetskaya Arkheologia*, 1978, pp. 243ff.).

In Sīstān archeological research has been continued at the mud-brick fire temple of Kūh-e K̄vāja, one of the chief monuments of Sasanian religious architecture, and more fragments of its formerly outstanding wall paintings have been discovered. The origin of the sanctuary seems to go back into



Achaemenid time. The present, Sasanian, state of preservation shows general similarities of layout with the Ādur Gušnasp sanctuary at Taḳt-e Solaymān (Stein, *Innermost Asia* II, pp. 909ff., III, pls. 455ff., IV, figs. 52ff.; Herzfeld, *Iran in the Ancient East*, pp. 291ff.; G. Gullini, *Architettura Iranica dagli Achemenidi ai Sasanidi*, Turin, 1964; D. Facenna, *East and West*, N.S. 31, 1981, pp. 83ff.). Although recent archeological interest has mostly been devoted to the pre- and post-Sasanian remains of Sīstān, some Sasanian traces have been reported from surveys, signaling important connections of the material culture of this easternmost province of Iran with the Middle Asian, Turanian, countries, which were partly and temporarily under Iranian suzerainty (Stein, op. cit., II, pp. 972ff.; W. Fairservis, *Archaeological Studies in the Seistan Basin*, New York, 1961; K. Fischer, ed., *Nimruz I-II*, Bonn, 1974-76).

Archeological material. (Here only some types of objects which are of special relevance for the excavation of Sasanian sites are mentioned). *Coins*—invaluable for dating—were highly standardized in the Sasanian empire, due to its centralized administration; and are thus easy to identify. There are very few gold medals, the normal coinage being silver. The majority are drahms; tetradrahms and obols are rare. In addition, large quantities of copper coins are found, generally in a corroded, partly unrecognizable, condition. The frequency of the coining of the different kings is very irregular; the majority is late Sasanian (F. Paruck, *Sasanian Coins*, Bombay, 1924; R. Göbl, *Sasanidische Numismatik*, Braunschweig, 1968; R. Curiel, “Un trésor de monnaies sasanides tardives au Cabinet des Médailles,” *Bulletin de la Société Française de Numismatique* 28, 1973, pp. 454ff.; R. Gyselen, “Le trésor monétaire sasanide trouvé en 1976 dans . . . l’Apadana,” *Cahiers DAFI* 7, 1977, pp. 61ff.; M. Mitchner, *Oriental Coins and their Values. The Ancient and Classical World 600 BC.-AD. 650*, London, 1978; D. Bivar, “Sasanians, Kushans, Kushano-Sasanians, Hephtalites,” in *A Survey of Numismatic Research 1972-1977. International Association of Professional Numismatists, Publication* 5, Berne, 1979; R. Curiel and R. Gyselen, “Une collection de monnaies de cuivre sasanides tardives et arabo-sasanides I,” *Studia Iranica* 9, 1980, pp. 165ff.; M. Mochiri, *Étude de numismatique iranienne I-II*, Tehran, 1972 and 1983).

Seals and sealings are among the most characteristic phenomena of Sasanian archaeology. Most of the seals consist of stones, mostly semi-precious, and have a somewhat hemispherical shape, perforated for a suspension device of metal or cord. There are seal rings from metal, with a bezel from metal, stone, or glass, and complete rings from stone. Aside from the problem of dating



them, their value as archeological guides is limited by the fact that they are very often found out of their original context, in later levels, as they were kept, handed down, or traded as precious objects. The Sasanian clay bullae with seal impressions are of greater archeological significance. They differ sharply from the common Seleucid clay sealings by their larger size and often great number of impressions. They went out of use in Islamic time. Generally they are found burnt, although they must have been unbaked when in use. They probably had a wide range of purposes, which are still debated: Besides controlling closures, their foremost purpose seems to have been that of official or personal confirmation, witness the seals attached to the Sogdian documents from Mount Mugh (G. Frumkin, *Archaeology in Soviet Central Asia*, Leiden, 1970, pp. 71ff.). Clay bullae were found, partly in the form of hoards, at excavations such as those at Qaṣr-e Abū Naṣr, Taḳt-e Solaymān, Susa, Tell Abū Ša'āf, Dvin, Kōkē, and Tūrang Tepe (A. Borisov and V. Lukonin, *Sasanidskie gemmy*, Leningrad, 1963; D. Bivar, *Catalogue of the Western Asiatic Seals in the British Museum, The Sassanian Dynasty*, London, 1969; R. Göbl, *Der sasanidische Siegelkanon*, Braunschweig, 1973; idem, *Die Tonbullen vom Tacht-e Suleiman*; R. N. Frye, ed., *Sasanian Remains from Qasr-i Abu Nasr*; R. Gyselen, "Une classification des cachets sasanides selon la forme," *Studia Iranica* 5, 1976, pp. 139ff.; J. Lerner, *Christian Seals of the Sasanian Period*, Istanbul, 1977; C. Brunner, *Sasanian Stamp Seals in The Metropolitan Museum of Art*, New York, 1978; P. Gignoux, *Catalogue des sceaux, camées et bulles sasanides*, Paris, 1978; A. Kalantaryan, *Rannesrednevekovye bully Dvina*, Erevan, 1982).

Pottery, in view of its lack of formal and decorative elaboration was apparently no object of social esteem in Sasanian Iran. Although its study has been advanced considerably during recent years, its typology is still insufficiently known. There seem to be considerable differences of ceramic traditions in the various regions of Sasanian Iran, especially dividing Mesopotamia from the Iranian plateau. The scarce finds on the plateau, of blue- to green-glazed pottery, very common in Sasanian Mesopotamia, make it questionable whether this ware was produced in the highlands before the eighth century A.D.; the specimens found there may have been imported. Large, well-fired storage vessels, partly with characteristic Y-shaped rims for domed covers, are among the few seemingly common features at least in the western areas of the plateau. Some of the early *pithoi*, e.g. from Fīrūzābād, carry incised potters' inscriptions. The simple decorative patterns include protruding bands, horizontal grooves, flatly waved and cross-hatched incisions, often from combs (Adams, *Land behind Baghdad*, pp. 131ff.; R. Venco



Ricciardi, "Pottery from Choche," *Mesopotamia* 2, 1967, pp. 93ff.; C. Lamberg-Karlovsky, *Excavations at Tepe Yahya*, pp. 6ff.; R. Schnyder, "Keramik- und Glasfunde vom Takht-i Suleiman 1959-1968," *Archäologischer Anzeiger*, 1975, pp. 180ff.; R. Wenke, "Imperial Investments and Agricultural Developments in Parthian and Sasanian Khuzestan," *Mesopotamia* 10/11, 1975/1976, pp. 31ff.; B. Finster and J. Schmidt, "Sasanidische und frühislamische Ruinen im Iraq," *Baghdader Mitteilungen* 8, 1976; J. Alden, "A Sasanian Kiln," *Iran* 16, 1978, pp. 79ff.; R. Venco Ricciardi, "Survey in the Upper Atrek Valley," *Mesopotamia* 15, 1980, pp. 51ff.; E. and M. Keall, "The Qal'eh-i Yazdigird Pottery," *Iran* 19, 1981, pp. 33ff.; K. Trinkaus, *The Partho-Sassanian Northeast Frontier*; M. Y. Kiani, *Parthian Sites in Hyrcania*.

Glass was rather widely used. Beads and gambling stones from multicolored glass pastes of different techniques are frequently found; glass sometimes even replaced precious stones in gold mountings of jewelry. The production of blown glass discs for windows is attested, e.g., at Takht-e Solaymān. Among glass vessels, small balsamaria are frequent. Besides thin-walled beakers there are hemispherical goblets from thick material with wheel-cut facets or circular calots covering the outside body (C. Puttrich-Reignard, *Die Glasfunde von Ktesiphon*; M. M. Negro Ponzi, "Sasanian Glassware from Tell Mahuz," *Mesopotamia* 3/4, 1968/1969, pp. 293ff.; idem, "Glassware from Abu Skhair," *Mesopotamia* 7, 1972, pp. 215ff.; S. Fukai, *Study of Iranian Art and Archaeology*, Tokyo, 1968; idem, *Persian Glass*, New York, 1977).

BIBLIOGRAPHY

General works: R. McC. Adams, *Land behind Baghdad*, Chicago, 1965.

Idem, *Heartland of Cities*, Chicago, 1981.

E. Flandin and P. Coste, *Voyage en Perse I-V*, Paris, 1843-54.

R. Ghirshman, *Iran. Parthians and Sasanians*, London, 1962.

G. Herrmann, *The Iranian Revival*, Oxford, 1977.



- E. Herzfeld, *Archaeological History of Iran*, London, 1935.
- Idem, *Iran in the Ancient East*, London, 1941.
- V. Lukonin, *Persia II*, London, 1971.
- J. de Morgan, *Mission scientifique en Perse*, Paris, II, 1895, IV, 1896.
- A. U. Pope, *A Survey of Persian Art I (text)-IV (plates)*, London and New York, 1938.
- E. F. Schmidt, *The Treasury of Persepolis*, Chicago, 1939.
- Idem, *Flights over Ancient Cities of Iran*, Chicago, 1940.
- Idem, *Persepolis III*, Chicago, 1970.
- A. Stein, *Innermost Asia II-IV*, Oxford, 1928.
- Idem, "An Archaeological Tour in the Ancient Persis," *Iraq* 3, 1936, pp. 111ff.
- Idem, *Old Routes of Western Iran*, London, 1940.
- L. Vanden Berghe, *Archéologie de l'Iran ancien*, Leiden, 1959.
- Idem, *Bibliographie analytique de l'archéologie de l'Iran ancien*, Leiden, 1979.
- Idem, *Reliefs rupestres de l'Iran ancien*, Brussels, 1984.