

A MODERN ARCHAEOLOGY OF THE SASANIAN PERIOD: FORMER LIMITATIONS AND NEW PERSPECTIVES

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*Introduction**

It is never easy to handle theoretical and methodological issues arising from a particular scientific topic in a kind of review of studies, which is, in its way, what is being presented here. Studies of the archaeology of the Sasanian period have been the subject of numerous acute and critical comments by distinguished scholars in the past, including Huff (1986, 302-308) and more recently as well (1998-2011). Those issues which have been handled, too, have clearly always somewhat suffered from a complex of inferiority to other periods of the history of ancient Iran which are considered by far, the most formative and important: the Achaemenid and the Islamic eras. And this in spite of the fact that the majority of scholars have looked upon the period in question as a real golden age of Persian culture and art, and that it was quite often mentioned in later Islamic sources (including the *Shah-nameh* by Firdousi), as in many ways an apogee of the fabulous, formidable and legendary Persian Empires.

For many scholars the archaeology of the Sasanian period and also that of the early Islamic period, as Whitcomb rightly has pointed out (2010, 5), has always been considered a part of history, and especially of the history of art. This classification, set in stone, has had a long and respectable tradition so far, but at last it has begun to be seen from a different perspective by a growing number of scholars. According to this view, the study of the Sasanian period should be seen as a fully-fledged part of an "archaeological" discipline, and therefore should belong to the history of the archaeology of the ancient eastern civilisations¹, even if of its later periods. According to this new viewpoint, which, to tell the truth, is still to be fully accepted by the majority of scholars, the main subject of investigation is the study of the material and figurative culture and architecture etc., that emerge from activities in the field, using strictly archaeological and not methods related to history or the history of art.

Apart from my personal opinion, which, however, I will gradually try to submit, I think it is desirable to make some preliminary observations, the original motivations for which were the beginning of an Italian-Iranian archaeological cooperation project in the field in the important city of Bishapur (Amiri, Genito 2013; Genito 2014)², one of the so called "capital" of the Empire founded by Shapur I.

We do not need to go into the details of the documentation at our disposal (regarding rural villages, settlements, cities, city layouts, buildings, territorial units of various types, architectural remains, bridges, dams, palaces, rock reliefs) in order to understand without difficulty that the archaeology of the Sasanian period, still remains a blank, open page. Substantial and sudden changes of direction, perspectives and points of view are very possible and extremely likely to be credible, considering the small number of real archaeological excavations conducted on the Iranian plateau and outer areas so far. Of course there were good reasons for the existence of such a low level of knowledge of territorial remains (rural villages, settlements, cities, city layouts, buildings, territorial

*For all the geographical and archaeological names and denominations the most common and widespread names in western languages, have been used.

¹ The "ancient eastern civilisation", as a concept and a term, is, as we know, a Western creation that reflects a Eurocentric vision of the ancient world. Every region is considered, in one way or another, on the basis of its greater or lesser proximity to the Central Mediterranean [Near and/or Middle East, Central Asia, Far East, etc.]. Of course this terminology is not unusual because we find it everywhere in the epistemological view of themselves taken by the great ancient civilisations. Those which made widespread use of written records also misused their supposedly central role in relation to the supposedly peripheral role of other civilisations. It suffices, for example, to think of the very name of China, which basically means "land of the middle". When we study archaeological traditions, we can still clearly see that these trends are fully reflected in the use of terms such as Mesopotamia ("between the rivers"), the Mediterranean ("in the middle of lands") etc., which are terms still used in the Western world.

² There were only two short field seasons in 2012 and 2013 in the project planned in 2011, unexpectedly interrupted despite being inserted in the cultural programme between Italy and the Islamic Republic of Iran at the time. The project was sponsored by the Italian Ministry of Foreign Affairs and the Università degli Studi di Napoli "L'Orientale".

units of various types), architectural (bridges, dams, palaces) and iconographic monuments (rock reliefs) and functional and art objects (pottery, seals, clay sealings, coins, glass, silver textiles, mosaics, and/or simple items) belonging to this period. Much of this state of affairs, however, is to be considered as due to the methods and approaches which scholars took for archaeological research into the Sasanian period as they developed during the last century.

For some reason scholars preferred to focus both on particular macroscopic evidence and on the direct importance of easily discovered self-emergent monumental remains, casual, incidental finds and objects located in museums and private collections. Only recently have all these documents been submitted to detailed scrutiny in order to develop an investigative strategy which is more compliant with a more modern understanding of the context and of the spatial and territorial aspects of individual finds. Studies should have given due consideration to the fact that apart from the dynastic successions, the political events concerned and the amount of official epigraphic, numismatic and sphragistic data, there are also archaeological horizons whose interpretation does not always coincide with the interpretations of data of the former kind. Several attempts to give a true picture were made in the 1970s and 1980s, but they do not appear to have achieved the desired aim (Wenke 1975/1976; Trinkaus 1981a; 1981b; 1985), and still recently Whitcomb (1999, 210-211) warned against considering dynastic successions and lists of kings as guiding elements for archaeological research!

Another important issue directly arising from what we have just said is that in the history of these studies insufficient stress has been laid on the fact that a vast amount of space is given in scientific literature to many iconographic and detailed aspects present on materials of this class (see above) in spite of the fact that they were almost exclusively found out of any archaeological context. They belong to the cultural heritage of values, symbols, ideas and concepts of Iranian literary and legendary tradition, represented by Avesta and Pahlavi texts, which still form the basis for the historical background of the Sasanian dynasty. These traditions have strongly influenced the different interpretations attached to one symbolic element or another, almost all present in objects and iconographic items. We could also argue, without fear of contradiction, that the archaeological and artistic/historical documentation of the Sasanian period have completely overlapped, to the serious prejudice of full and reciprocal disciplinary autonomy; and that this has occurred much more than in other historical and cultural areas of the ancient world, though both fields of study followed parallel lines, which, as we know, never meet.

Now it seems that times have changed somewhat and that our days appear to be more mature; we are readier than in recent decades to accept new achievements and study the subject from different angles. The present ease and rapidity of scientific interchange³ appears now to be able, in a maieutic manner, to reduce any differences in approaches to knowledge and to exert more attraction on a growing number of users. It is hard to say whether in time modern “users” will correspond to or replace traditional “scholars” or if, hopefully, these two different ways of reading and consulting scientific information will provide research work with a different initial approach which will lead to a system of managing knowledge which is both broader-based and accessible to all.

For the moment we have to admit that all our efforts to approach scientific reality seem to be easier to make and that there is greater direct and immediate accessibility: articles, exhibitions, collections of studies and books are often available on line. This entire new situation has marked and continues to mark the life and approach to study of the new generations, now little prone to consulting books in libraries and, even often, in the case of archaeology, without any experience at all of direct contact with the field. Publications of all kinds are now available to be downloaded on internet with all that these processes imply in terms of rapid transmission, exchanges constituting mass consultation in the true sense of the term teetering between professional and non-professional dialogue.

History of research. An international background

Traditionally, the discovery of the ancient city of Doura Europos in Syria, located in the middle course of the Euphrates, has been considered by most scholars as the starting point of archaeological research into the Sasanian period. Until that time research studies and work regarding this historical period, including those in the field, had been limited, in practice, merely to data

³ It no longer seems to be the exclusive heritage of élites, which are still very self-referential today.

collected from reports and drawings by travellers and merchants, especially Europeans, who had crossed the lands and areas which belonged to the domains of this dynasty.

Animated by sincere and passionate curiosity, rather than by precise historical or archaeological interest, these travellers, merchants, priests and monks have left us a wealth of records of the ancient monuments and sites they saw which are still of use to us. Nevertheless there was no awareness in European culture of an Iranian dynasty under the name of Sasanians whose history was to be investigated even when the first real archaeological excavations commenced in 1850 and Sasanian finds emerged partly by chance. Before then the themes focused on, had been the Achaemenid period in Iran, the Assyrian and Babylonian eras in Mesopotamia and the cultures of the eastern provinces of the Roman Empire in Syria and Asia Minor.

The earliest account of a journey of interest, even indirect interest, to the study of the Sasanian period was written by Pietro della Valle (1843; 2001) who sailed from Venice in 1614 for a long journey lasting 12 years through Egypt, Syria, Palestine, Mesopotamia, Persia and India. His experiences and what he saw were recounted in two volumes in which, among other sights, he described the ruins of Palmyra, the famous caravan city in the Syrian desert.

Then during a long and well-known tour of Persia and surrounding areas, Carsten Niebuhr, one of the first travellers to take an interest in the culture of the Sasanians at the beginning of the 18th century, copied many inscriptions and representations of the rock reliefs of the period (Niebuhr 1776).

The most intense period in the history of the discoveries related to the Sasanians, however, was the 19th century, when travel reports followed one another at a faster and faster pace. In 1811-1812 James Justinian Morier (1812; 1818) and William Ouseley (1819-1823) discovered three rock reliefs at Naqsh- i Rajab in Fars, one pertinent to Ardashir I (224-241) (Fig. 1), two to Shapur I (241-272) (Figs. 2-3) and one at Naqsh- i Rostam (Fig. 4) also to Shapur I. Also in 1818 Sir Ker Porter copied some important inscriptions including those of the Hajiabad cave nearby and in front of Istahr to the north (Fig. 5) (Gignoux 1985). Soon after, in 1819 William Ouseley also saw and reported a tower (Fig. 6) (quoted) not far from the present town of Nurabad. Later Robert Ker Porter also (1821-1822) left a series of drawings and sketches of rock reliefs of the Sasanian period, including those of Ardashir's investiture and victory in Firuzabad (Fig. 7), of Shapur I's triumph in Naqsh-i Rostam and one with hunting scenes on one of the side walls of the grotto at Taq-i Bustan (Fig. 8).

Among the many sites they saw during their journey in Iran in 1840-41, Eugene Flandin and Pascal-Xavier Coste (Flandin, Coste 1851-52) mentioned the palace of Sarvistan (Fig. 9). In 1878 Friedrich Carl Andreas and Franz Stolze, who had meanwhile begun the first surveys in Persepolis, photographed two rock reliefs of the Sasanian period in Barm-i Dilak, 9 km east of Shiraz (Andreas, Stolze, 1882, pl. 145; Hinz 1969, 217 ff; Vanden Berghe 1983, 80-81, 136-137; Overlaet 2010, 337) (Figs. 10, 11).

The most important time for Sasanian archaeology only came in the 20th century, when the first excavations in Palmyra (now in the Governorate of Homs in Syria) began between 1902 and 1917, directed by Otto Puchstein, Daniel Krenker and Theodor Wiegand (1932) (Figs. 12, 13). A few years later, in 1920 a British military garrison discovered, by chance, the remnants of a building with frescoed walls, which led to the commencement of excavations at Doura Europos (now in the Governorate of Deir el- Zhor in Syria) (Figs. 14, 15). The following year, James Breasted of the Institute of Oriental Studies of the University of Chicago photographed the frescoes that had been found there and also worked on a series of trenches (Breasted, 1924). Between 1915-16 and 1926 Aurel Stein and Ernst Herzfeld, two fathers of Iranian archaeology, made a series of trips to southern and eastern Iran, after which they published some volumes on the major monuments visited (Herzfeld 1935; Stein 1940). During his travels the latter discovered, among other things, a possible rock sanctuary in Shami in Khuzistān⁴ in addition to the famous bronze statue (Figs. 16, 17), and the remnants of the Kuh-i Khwaga building in Sistan (Figs. 18, 19). In 1922-23 the archaeological work at Doura Europos resumed; Franz Cumont published the first results (1926), the Russian historian Mikhail Ivanovich Rostovtzeff with the Yale University resumed his interrupted excavations, and began publishing a series of preliminary reports followed by his final report in 1943, which is still in print (1929). Meanwhile in the 20th century the excavations in Palmyra also continued, first directed

⁴ Now work has been resumed by an Italian/Iranian activity directed by Dr Mehrkian (Iranian Centre for Archaeological Research, Izeh) and Dr Vito Messina of Università di Torino.

by Harald Ingholt, who published important studies on the sculptures there (1928), digging resumed later under Henri Seyrig (Amy, Seyrig 1936), Robert Amy (1933), Jean Cantineau (Cantineau, Starcky 1949), Jean Starcky (1941; 1949a, b, c, d; 1949-50) and Daniel Schlumberger (1951). In 1931-32 the excavations directed by Erich F. Schmidt at the proto-historic site of Tepe Hissar in North-Eastern Iran focused attention on a particular building of the Sasanian period at Damghan (1933), later converted into a mosque in the 8th century (Fig. 20). In 1932-34 another American team digging in 'Qasr-i 'Abu Nasr, near Shiraz, found private homes and commercial and industrial buildings of the Sasanian period (Frye 1973; Whitcomb 1985). This important fortified settlement gave up coins and other artifacts and a large number of clay *bullae*, some with inscriptions in Middle Persian from the Sasanian period (Winlock, Hauser and Upton 1933-34, 3-22; Frye 1973; Whitcomb 1985). In 1933 Stein visited the palace of Firuzabad (Fig. 21) and the nearby fortress of Qal'ah-ye Dokhtar (Fig. 22), perhaps dating back to the time of Ardashir I, and an Iranian-German research project started at the palaces of Firuzabad in 1975, while in 1935-36 excavation commenced at the important Sasanian "capital" of Bishapur, directed by Georges Salles and Roman Ghirshman (1956; Ghirshman 1971) (Fig. 23). The excavations directed by Oscar Reuther at Ctesiphon (Fig. 24), the ancient capital of the Parthian Empire, embellished and enlarged in the era of the Sasanian King Khusraw II (590-628) (now in the Governorate of Baghdad) marked the beginning of true archaeological research into the Parthian era (1930); in 1946-47 excavations in Susa resumed and in 1948 Richard N. Frye went on a tour of Persia, collecting large amounts of inscriptions which were to form the basis for the publication of the *Corpus Inscriptionum Iranicarum*⁵. Other French and American surveys at Ivan-i Karkhah in 1950 (Ghirshman 1952, 10-11; 1962, 183) brought to light the remains of another large 4th century building attributed to the Sasanian period (Fig. 25) north-west of Susa (Ghirshman 1950, 1-18), probably founded by Shapur I and Shapur II, which, however, were only excavated to a limited extent.

Among other archaeological excavations at Sasanian period sites which began afterwards were those of the joint German-American team at al- Madā'in in Ctesiphon, Iraq (Herzfeld 1919; 1920), in 1928-32 (Meyer 1929; Reuther 1930; Wachsmuth 1930; Waterman 1931; *idem* 1933; Kühnel 1933; Hopkins 1972; Fiey 1967; Al-Ali Saleh Ahmad 1968-69) (Hauser 2007); those of Italian teams after 1964 (Gullini 1966; Negro Ponzi 2005) (Figs. 26, 27); those of the French expedition to Bishapur in 1935-41 (Ghirshman 1936; 1938; 1939; 1945; 1956; 1971), which were continued by Iranians from 1968 under Sarfaraz (1969; 1970; 1974; 1975; 1976) and Mehryar (1379/2000; 1378/2000); and those of the American activities in Istakhr in 1932-1937 (Whitcomb 1979, 363-370; Schmidt E.F. 1970, 105 ff.; Bernard 1974, 279-297; Frye 1979, 363-370) (Fig. 28). More archaeological work followed, such as digging by Robert McC. Adams at Gundishapur in Khuzistan, 14 km south of Dezful (1962, 109 ff; 1965; Adams and Hansen 1968, 53-70) in 1963 (Abbot 1968, 71-73) (Fig. 29); and the German Archaeological Institute began work and excavations at Takht-i Suleiman in Azerbaijan in 1965 (Huff 1977) (Fig. 30). The British carried out research on the Tammisha wall in 1964 (Bivar, Fehérvári 1966, 35 ff) in the region of today's Golestan and Iranian excavations at Kangavar, east of Bisutun started in 1968 (Fig. 31). Here it seems reasonable to consider that the high terrace with columns, which had previously been put down as a "temple" from the Seleucid era, belonged to a late Sasanian palace (Lukonin 1977, 105 ff; Azarnoush 1981, 69-94).

In the 1960s the set of ruins known as Kuh-i Khwaga in Iranian Sistan, first identified by Stein (see above) and then partially excavated by Herzfeld, was investigated by a team led by Italian archaeologists Giorgio Gullini and Umberto Scerrato. In the following years archaeological activities in Iran focused on some new sites, on the recovery of previously interrupted excavations and on the discovery of new buildings. Among these activities we may mention work directed by Edward J. Keall in Qal'ye Yazdgird (Keall, Keall 1981; Keall 1982) in the Kermanshah region nearby Sarpol-i Zohab, and work at Tall Abu Sarifah in Iraq (Adams 1970). Among other activities we may report excavation and restoration work at Firuzabad and Qal'ye Dukhtar by a German and Swiss team (Huff 1976, 157-174; Huff, Gignoux 1978, 117-150) and work at Taq-i Kisra, Ctesiphon, conducted by Turin University. At Uruk-Warka, in today's governorate of al- Muthanna, the excavations directed

⁵ The C.I.I. was founded in 1955 in compliance with a resolution of the 22nd International Congress of Orientalists at Cambridge, with W.B. Henning as its first Chairman and Sayyed Hasan Taqīzāda (Taqizadeh) as its Honorary President. The first Secretary was Mary Boyce.

by Jurgen Schmidt revealed a rectangular *temenos* with circular corner towers around the temple, which originally had a defensive function and was afterwards used for worship (1970).

Materials and problems of the Archaeology in the Iranian plateau in Sasanian period

Although the picture of excavations and research activities regarding the Sasanian period is so variegated and complex, an archaeological history of this era is still to be written. The elements in such a history, as far as we know of these ancient times up to now, would mainly be the large numbers of monuments, buildings and rock reliefs which stand above ground already, and coins, seals, clay sealings, *bullae*, glass textiles, mosaic and stucco remains etc., collected and scattered in public and private collections or to be found on the antiquarian market. And this has undoubtedly favoured the construction of a substantially unreliable archaeological view, especially as, with the passage of time, a great amount of information from historical literature has been added to, and has sometimes overlapped, the archaeological picture, even if such historical information is basically legendary (Huff 1998-2001).

In spite of a tendency for the dynasty to have adopted a strongly centralised political system, there is material evidence, among other things, of extremely diverse regional cultures. Judging from the different historical aspects of the spectacular macroscopic architectural remains, “urban” and rock reliefs found in the southern and north-western provinces of the Sasanian Empire, we may infer that Fars played a central and dominant role in the first instance, and that after this, it gradually lost its position to the north-west, partly because this region was richer in economic resources and most of all owing to its greater proximity to the capital, Ctesiphon/al-Mada’in.

Istakhr, about 6 km from Persepolis, was the place of origin of the dynasty; already the “capital” of Fars during the Parthian era, it continued to be so until it was replaced in the post-Sasanian period (Whitcomb 1979, 363-370; Schmidt E.F. 1970, 105 ff.; Bernard 1970, 279-297; Frye 1979). Its mud walls and those of neighbouring Naqsh-e Rostam are attributed to the Sasanian period, although no precise chronology has ever been archaeologically confirmed (Herzfeld 1941, 276 ff.; Schmidt E.F. 1970, 17 ff.) Among the well-known rock-reliefs are those of Naqsh-e Rostam and Naqsh-e Rostam and the inscriptions on the Ka’ba-i Zardusht (Schmidt E.F. 1970, 13 s., 122 ff.; Vanden Berghe 1959, 26; Hermann 1980); among the archaeological remains we mention the so-called *astodan* (ossuaries), of which there are many traces in the Istakhr region (Van den Berghe 1959, 45 ff.; Stronach 1966, 217-227).

Ardashir-i Pabakan, the first great Sasanian king, was first governor in Darabgird, but it is far more likely that the large circular fortified territorial unit found there belongs to the Islamic period (Stein 1936, 190 ff.; Creswell 1969, 21) like its post-Sasanian *chahar Taq* (four pillars) (de Miroschedji 1980, 157-160) (Figs. 32, 33). The importance of the area is indicated by the presence of the rock relief of Sapur I (Schmidt 1970, 127 ff.; Trumpelmann 1975; Levit-Tawil 1992) (Fig. 34), and the structures of the Hajiabad manor house further south, along with other ruins dating back to the time of Shapur II (Azarnoush 1983, 159 ff.; *idem* 1984, 167-200; Genito 1997). Ardashir-Hurrah/Firuzabad became the true centre of the new empire when Ardashir I built this circular urban layout (Figs. 35, 36) with a concentric plan and twenty radiating areas around an inner core, which probably contained official buildings. The precise geometric model for the structure of this area is also followed outside the building with four doors and the agricultural fields of the plain, perhaps drained from a swamp, radiating outwards like a spider’s web (Huff 1974a, 155-179; Huff 1983-84, 296-298). Excavations in the nearby palace/fortress of Qal’a-ye Dukhtar and in the plains would have confirmed that Ardashir built them before his victory over the Arsacides and his ascent to the throne, and both of these events are depicted in the rock reliefs under the Qal’a (Huff 1974a, 157-174; Huff, Gignoux 1978, 117-150).

The “capital” was, however, Bishapur, built by the son of Ardashir, Shapur I, probably the most important and best preserved of all the settlements of the Sasanian period with a bridge that connected the inner city to the outskirts (Fig. 37), two external castles (Fig. 38), an enigmatic cave with a statue of Shapur (Fig. 39) not very far to the north and a core of rock reliefs attributed to him, in addition to others of his successors, all outside the city and along both banks of the nearby Shapur river, where there is a deep gorge, Tang-e Chowgan (Salles, Ghirshman 1936, 117 ff.; Ghirshman 1938, 15 ff.; Ghirshman 1971; 1956; Sarfaraz 1969, 27, 69 ff.; Hermann 1980, 83; Amiri, Genito

2013; Genito 2014). The main building complex with four iwans, decorated stuccoes and sculptures in the monumental area inside the city has been variously interpreted either as a palace or a religious building (Fig. 40).

A problematic and by no means secondary aspect of the archaeology of the Sasanian period is certainly, in fact, how to interpret the remains referred to as *chahar Taq*, which are very frequent especially in the provinces of Fars and Kerman (Vanden Berghe 1984, 201-228). They have been mainly considered as material evidence of acts of worship connected with fire, although there is much doubt about their chronology. In this case they would be open-space fire temples, distinctive structures round a square space, often covered by a dome with a corridor round the sides, of which Schippman (1971) made a short list; nevertheless they remain unclear and of uncertain attribution. Other Sasanian remains not very far from Bishapur are the rock reliefs of Sarab-i Bahram (Fig. 41), Sar Mashad (Schmidt 1970, 132 ff.; Trümpelmann 1975) (Fig. 42) and Tang-i Qandil, (Frye 1974, 188 ff.; Vanden Berghe 1983) between Bishapur and Nourabad (Fig. 43).

The tradition of making rock sculptures (see below), which had not been interrupted in Fars in the Parthian period, became extremely widespread during the Sasanian period with a long series of reliefs most of which are in fact located in the mountain ranges of Fars. The commemorative and celebrative (see below) tradition that this type of sculpture has always followed on the plateau is its main feature. Despite the numerous relationships scholars have thought to exist between this type of relief and Roman narrative reliefs of the Imperial age, the truth is that these surmises are very superficial even if they have been repeatedly proposed and discussed as an object of study. In Sasanian Iran, historical events are not represented, as they are in Rome, in their real context, but become an opportunity for symbolic and ideological exaltation of the sovereign. There are several levels at which we can read this particular form of figurative expression, which connotes meanings and peculiarly distinctive values, designed to remain fixed in the memory of the observer. From the gross but expressive figures represented in the earliest sculptures (3rd century), reliefs evolve through a middle phase (4th-5th century), in which they are very raised and statuesque, until they reach a final stage (6th-7th) in which we find true bas-reliefs which now have almost pictorial features.

The long Sasanian tradition, in fact, was still alive at the time of Khusraw II (590-628), when reliefs were probably executed in the great cave of the Taq-i-Bustan (Fig. 44). The attributions to Peroz (457-84), Khusraw II (590-628) or even to Ardashir III (628-30) are still to be proved (Sarre, Herzfeld 1910, 199 ff.; Herzfeld 1920, 71 ff.; Erdmann 1937, 79-97; Herzfeld 1938, 91-158; Von Gall, 1984, 179-190; Fukai, Tanabe *et alii* 1969-84). The façade, like a Roman triumphal arch, is decorated with reliefs of a stylised tree with large acanthus leaves; on the arch of the cavity, on the sides of a crescent, are two winged female figures, placed one opposite the other, supporting a cup full of berries or precious stones. These are probably two local deities of the Zoroastrian cult, Amortat and Havartat, here represented in a form that mimics the form in which the king celebrated Roman-Hellenistic victories. The innermost zone is divided into two parts: in the upper part there is a relief with a scene of the investiture of King Khusraw while receiving two wreaths, symbols of power, from Ahura Mazda and Anahita; a knight with a nimbus - a royal symbol - and a helmet is represented in the lower part, holding a shield in his left hand and a spear in his right. The front of the horse is protected by a caparison and pendants. This rider was identified with the Khusraw himself, portrayed in military clothing, with the typical chain mail vest of an Iranian warrior of the period. Royal hunting scenes are carved on the side walls of the cave in low relief: on the left the king and some members of his entourage chase boars in boats to the sound of music; to the right the king hits the deer in a reserve, while the killed wild game is taken away on elephants and camels. The figure of the king on the right-hand wall is interesting, depicted on horseback as he enters the park under a parasol: his image dominates all the others in height and is reproduced several times at different stages of the hunt he is participating in. The animal figures, arranged on different levels, are treated in a lively narrative style in accordance with the Mesopotamian animal tradition. These embossed reliefs, originally in colour, perhaps imitated paintings or even a carpet, according to an oriental decoration convention whereby individual figures are placed on a succession of planes in which the real prospect completely disappears (Fig. 8). In addition to other rock reliefs at Taq-i Bustan, among the archaeological materials gathered in front of the cave there are a torso of a male statue, a fire altar, columns, bases and some capitals, most of them from different places such as Kirmanshah, Qal'a-ye Kuhnah and Bisutun (Luschey 1968, 129-142; Kleiss 1968, 143 ff.).

The rock reliefs at Guyum (Fig. 45) (Haerinck, Overlaet 2009) on the road between Shiraz and Ardakan bear a striking full-figure representation of a King standing in a venerating position with bent forefinger holding a sword with his left hand.

Sasanian remains were also identified in Tall-i Malyan (probably the ancient Anshan) (Alden, Baker 1978, 79-92), and most likely in Fasa, where related levels emerged in Tall-e Zahhak (Stein 1940, 111-125); some of the bases of the columns found, including some bell-like in Achaemenid style, may also be of Sasanian origin (Hansman 1975, 289-309). A small Sasanian fortress and a settlement were found during the excavation of the Islamic harbour at Siraf and dated to the time of Shapur II (Whitehouse 1971, 1-17; 1972, 63-68; 1973, 205 s.; 1974, 1 - 30) as also Sasanian and Christian remains on the island of Kharg (Ghirshman 1971; Haerinck 1975, 134 ff.; Potts 1984, 85-144). Sasanian period levels have been identified in Tepe Yahya (Lamberg-Karlovsky 1970), and in a number of settlements in the Sawgan valley in the Persian Gulf (Vanden Berghe 1965, 128 ff.; Stein 1937) and Gubayra (Bivar, Fehervari 1973, 194-195; 1975, 180-181; Bivar 1980, 7-20).

Particularly impressive ruins were found in Fars and in Kirman, which have not been excavated in modern times, like the building of Sarvistan, which still remains enigmatic as ever even if its complex archaeological and territorial conceptuality has been explored (Figs. 46, 47) (Bier 1986).

The importance of the ancient plains of Mesopotamia is shown in Ardashir's foundation of the city of Weh-Ardashir, near the Parthian settlement of Ctesiphon (not far from today's Baghdad) (Fig. 6), where archaeological research started in 1927-28 with the discovery of Seleucia and a circular city nearby.

In the area east of Ctesiphon, the Taq-i Kisra (Fig. 27) has been interpreted as a principal residence of the kings, while excavations at other sites in the surrounding area revealed rich stucco decoration in buildings and found other small artifacts (Reuther 1930; Kühnel 1933; Puttrich Reignard 1934; Cavallero, Gullini, Negro Ponzi, Venco-Ricciardi *et alii*, 1966-77; Kröger 1982). The position of Parthian Ctesiphon itself, which continued to thrive throughout the Sasanian period and where the king had a royal palace, remains unknown, although some argue in favour of the hypothesis that it was situated to the north of the modern town of Salman Pak (Fiey 1976, 3-38). To the north-east of al-Mada'in investigations have sought to identify the site of the last great Sasanian royal residence in Dastagird (Sarre, Herzfeld 1920, 76 ff) (Messina 2015).

During the excavations at Kish, about 20 km north-east of Al-Hilla and not far from Babylon in Iraq, in addition to smaller internal Sasanian structures three buildings with stucco decorations were discovered, including busts (McGuire, Gibson 1972; Moorey 1978). Almost similar buildings and a church were excavated at Hirah, south of Kufa (Talbot Rice 1932, 276-291; Talbot Rice 1934, 51-73) and, recently, at Tall 'Abu Sha'af where a number of *bullae* were also found. A phase of Sasanian occupation has been reported from the excavations in Mesopotamia from Babylon to Uruk (Adams, Nissen 1972; Finster 1983; Leisten 1985, 151-163; Leisten 1986, 309-367), and Susa (Gyselen 1977a, 61-74; 1977b; Kervran 1974, 21-41; Kervran 1977, 75-62; Labrousse, Boucharlat and de Miroschedji 1978, 137-153; Labrousse, Boucharlat and de Miroschedji 1979, 19-136; Labrousse, Boucharlat 1979, 155-176; Kervran 1979, 177-190) and Ruqbat al- Mada'in, Qusayr (Finster, Schmidt 1976, 27-39), Samarra and other sites (Adams 1965). Many of the old centres, such as Uruk in Iraq and Susa, Masjid-i Suleiman and Bard Nishanda in Khuzistan, seem to have become uninhabited or, at least, to have suffered a sharp decline (Ghirshman 1976, 135 ff).

The displacement of the royal centres from the south-west to the north-west, which is marked by the increasing importance of the city of al- Mada'in Ctesiphon, becomes fully evident when we consider the remains in Azerbaijan, in Kurdistan and in the province of Kermanshah, as demonstrated by the rock relief at Salmas (Hinz 1965, 148-160) (Fig. 48), the inscription of Mishginshahr (Gropp 1968, 149-158; Nyberg 1970, 144-153; Frye 1975, 237-245), and the enigmatic tower monument with an inscription of the victory of Narseh (293-303) at Paikuli (Herzfeld 1924; Humbach, Skjærvø, I- III, 1978-83) in Iraq in the Sulaymanya province (Fig. 49).

Excavations at Bisutun revealed largely pre-Sasanian remains (Kleiss 1970, 143-148; Lushey 1974, 114 ff): a terrace and the rock carved Taras-i Farhad whose use is uncertain (Salzmann 1976, 110-13). A bridge and other nearby sites, such as those of Takht-i Shirin (Trumpelmann 1968, 11-17), and Harsin in the Kermanshah region (Godard 1938, 7-80; Huff 1985, 15-44) probably belong to the same period.

In the Taq-i Girra, halfway between Bisutun and al-Mada'in, there is a small iwan with a horseshoe-shaped archway, the original dating back to the Parthian or even the middle or late Sasanian period; excavations brought a battlement with dovetail pinnacles to light (Huff 1972, 517 ff.; Kleiss 1971, 51-112; Kleiss 1973, 7-80). Surveys made in the palace complex of Qasr-i Shirin, further west, on the road to al-Mada'in, attributed, from the literary tradition, to Khusraw II (590-628), have provided several contradictory evidence. In the late Parthian fortress of Qal'a-ye Yazdgird in Kermanshah region there appear to be considerable Sasanian phases (Keall, Keall 1981, 33-80; Keall 1982, 51-72), and many Sasanian sites, towns, forts, *chahar Taq* and burial sites were discovered in the Zagros and Lurestan valleys, including Darrashahr (probably the Elamite Madatu) (de Morgan 1896, 341 ff.; Stein 1940; Vanden Berghe 1972, 1-48; Haerincx and Vanden Berghe 1977, 167 ff.).

The last Sasanian king preferred the north-west provinces; the rise in the rank of the "temple" sanctuary of Adhur Gushnasp, identified today with Takht-i Suleiman in West Azerbaijan (Fig. 8), seems to confirm this. Excavations indicate that the first buildings are to be dated no earlier than the 5th century, although small settlements from the Achaemenid and Parthian periods were discovered there, also providing important clay *bullae* finds (Göbl 1976; von der Osten, Naumann 1961; Naumann 1975, 109 ff.; Huff 1977, 211-230). Traces of rural settlements and fortifications, sharply contrasting with the splendour of the royal religious centres, have been found on the outskirts of Takht-i Suleiman (Huff 1974b, 203-214), and at Bastam again in West Azerbaijan (Kleiss *et alii* 1979-1988; Burney 1970, 157-173; Burney 1972, 127-142; Burney 1973, 153-172).

The overall picture of the great Sasanian sites changes in the central and eastern areas of the plateau; stone walls become rarer and mud brick walls more frequent. Sasanian remains were unearthed during the excavations of the Friday Mosque in Isfahan (Galdieri 1972, 361 ff.; Galdieri 1975, 538 ff.; Galdieri 1976, 593 ff.; Galdieri 1977, 451 ff.; Genito, Saiedi Anaraki 2007, 111-128; *idem* 2009; *idem* 2010, 55-83; *idem* eds, 2011), and a large mud brick fortress was partially excavated at Sofeh in the vicinity of the city by the local *Iranian Centre for Archaeological Research*. A late Sasanian palatial structure with rich stucco decorations and buildings dating back to the early Islamic period were found in Hissar Tepe/Damgan; other monuments were partly excavated at Chal Tarchan, Nizamabad and Mil Tappah, where work and digging resumed in the area of Ray (Pezard, Bondoux 1911; Kimball 1938, 579 ff.; Schmidt E.F. 1933, 455ss.; Schmidt E.F. cit., 140 ff) as well as at Shahr-i Qumis (Sad-i Darvāzah - "Hundred Ports"), probably the ancient Hekatompylos in the province of Semnan (Hansman, Stronach 1970, 142 ff). Excavations at Nishapur, the former capital of Khorasan (founded by Shapur I or II), despite its important pre-Islamic history, have provided little datable material and its ancient topography is still purely hypothetical (Wilkinson 1974; Bulliet 1976, 67-89). The wealth and importance of Khorasan are confirmed by surveys in Ambon and in the upper valley of Atrek (Trinkaus 1981a; Trinkaus 1981b; Trinkaus 1985, 119-174; Venco Ricciardi 1980, 51 ss.), as well as in the plain of Gorgan, where at Tureng Tepe, a fire temple built over a ruined fortress, was excavated (Deshayes 1973, 141-152; Bouchardat 1977, 329 ff.). The excavations of the "Wall of Alexander" seem to indicate that these are Parthian remains (Huff 1981; Kiani 1982, 125 ff.) (Sauer, Rekavandi, Wilkinson *et alii* 2013). The brick wall at Tammisha (Bivar, Fehérvári 1966, 35 ff.) and the fortifications of the Caucasian Derbend on the shore of the Caspian Sea are of the Sasanian period (Khan Magomedov, 1979; Kudryavtsev 1978, 243-258). Significant fragments of wall paintings were discovered in Sistan during work on the mud brick fire temple at Kuh-i Khwaga, one of the main monuments of Parthian-Sasanian religious architecture, The original arrangement of the sanctuary presents similarities with the sanctuary of Adhur Gushnasp in Takht-i Suleiman (Stein 1928, 909 ff., Pl. 455 ff., fig. 52 ff.; Herzfeld 1941, 291 ff.; Gullini 1964; Faiservis 1961; Fischer, Morgenstern and Thewalt 1974-76). The excavations at Bandyan, 3 km north-west of Darrah Gaz in northern Khorasan are especially noteworthy among the most recent archaeological work on the Sasanian period on the plateau: in the 1990s a large room with stucco decorations of great value was brought to light (Rahbar 1997; 1998; 1999) in addition to five inscriptions in Middle Persian (Bashash 1997, 33-38).

Material Culture

Archaeological items such as pottery, *bullae*, seals, clay sealings, coins, glass, silver plates, textiles and mosaics deserve to be described in greater detail. They are not always useful for the purposes of precise chronology given their uncertain provenance but they are highly representative

because of the numerous epigraphic, iconographic, and technical issues they give rise to; they may also contribute to the historical reconstruction of the period. As for crafts, we must at least draw attention to products of great artistic value even if we cannot date them. They are mainly objects or fragments of objects not found in archaeological contexts whose iconographic and stylistic development it is very difficult to establish.

The study of the pottery has made considerable progress in recent years, even if we still do not know enough about the types of product and there is not yet enough proof of what we assume. There are differences between the craft traditions of the various regions, especially between Mesopotamia and the plateau, but they are not very significant apart from the fact that there are only small numbers of glazed ceramic finds on the plateau, while they were very common in Mesopotamia, which suggests that these products were not made in Iran before the 8th century. Some ancient *pithoi* from Firazabad, engraved with inscriptions by potters, are decorated with simple protruding bands, horizontal grooves, engravings and cross waves widespread over different other sites (Venco Ricciardi 1967, 93 ff.; Lamberg-Karlovsky 1986, 6 ff.; Schnyder 1975, 180 ff.; Wenke 1975/1976, 31 ff.; Finster, Schmidt 1976; Alden 1978, 79 ff.; Venco Ricciardi 1980, 51 ff.; Keall, Keall 1981 33 ff.). To sum up, Sasanian ceramics, on the whole still little known, are not easily distinguishable from those of the Parthian era. Pot-bellied jars are to be mentioned among their characteristic shapes, while reliefs executed in the mould or brought to the slip are among the most popular decorative techniques, with engravings and embossed decorations. Also noteworthy is that turquoise or blue glazing seems to have been quite popular.

Seals are also among the most characteristic articles of the time. Most of them constitute a class of particularly interesting objects which are evidence of intense legal and administrative activity, consist of semi-precious stones, slightly hemispherical in shape and perforated to hold a metal or string suspension device. Generally in hard stone, they express the imagination and skill of the Persian craftsmen who managed to present the usual Sasanian figurative themes in such minute spaces. At the same time these objects bear the engraved names and activities of officials and religious dignitaries and are thus a valuable source for the reconstruction of the complex imperial bureaucracy.

The bullae on the other hand, made of clay lumps bearing the stamp of one or more seals, testify to bustling commercial activity and economic traffic. Such objects, most of which were found in the excavations of Qasr-i Abu Nasr (Fars), Takht-i Suleyman (Azerbaijan), Susa, Tall Abu Sha'af, Dvin (Armenia), Kakhe, Tureng Tepe (Borisov, Lukonin 1963; Bivar 1969; Göbl 1973; Göbl 1976; Gyselen 1976, 139 ff.; Lerner 1977; Brunner 1978; Gignoux 1978; Kalantaryan 1982), and Ak Tepe (Turkmenistan), bear inscriptions generally providing the names of officials or priests and of administrative districts and had the function of commercial transport firms' receipts for the deposit that the buyer had put down as security for the payment of the contents of the consignment. The enormous documentary value of these objects is obvious; along with others such as terracotta seals for documents, they enrich our knowledge of a particularly important aspect of the cultural life of the time.

The coins, generally in silver, such as *drachmas*, *tetra-drachmas* and *oboli*, are very standardised and, therefore quite easy to identify (Paruck 1924; Göbl 1968; Curiel 1973, 454 ff.; Gyselen 1977a, 61 ss.; Mitchiner 1978; Bivar 1979 418 ff. Gyselen, Curiel 1980, 163 ff.; Mochiri 1972; 1983).

Coinage is a documentary source of the utmost importance, since the depictions of the clothes, crown and emblems as they changed according to the sovereign are very useful for dating. Sasanian currency was not in line with the Hellenistic type used by the Parthians; it generally bears the bust of the monarch in profile on the obverse and a fire altar placed between two assistants on the reverse.

Glass is a very particular material too (an under-cooled liquid); widespread during this period, it is found in different types of objects: multi-coloured beads, discs for windows, small balsam jars, glasses and thin-walled hemispherical cups often decorated with carved facets or circular caps that cover the outer body (Puttrich-Reignard 1934; Negro Ponzi 1968/1969, 293 ff.; Negro Ponzi 1972, 215 ff.; Fukai 1968; Fukai 1977; Genito 1977).

We do not know of any definite centres of production of glass vessels, though they are very characteristic and widely imitated objects. Some fused glass cups from northern Persia with a type of

decoration of Syrian origin and cut glass were produced with a particular faceted and/or disc-shaped decoration, some examples of which have been found outside Iran, including China.

One of the most characteristic artistic production are constituted by the famous silver plates decorated with scenes of hunting, induction ceremonies or banquets. Their widespread presence, mainly not on Iranian territory, suggests that these objects were probably gifts sent abroad by the dynasty, or in a broader sense the court, or brought in from other countries as objects used in diplomatic and administrative activities. Whatever their use was, these objects scattered east and west themes and iconographies of a typical Sasanian style and repertoire and inspired a number of other local productions such as Sogdian, Khorezmian and Greek-Bactrian. Various techniques were used in their realisation: casting in forms, moulding, embossing, engraving, etching, gilding, inlay and niello. The upper parts, usually rolled, chiselled or cast separately, were then inserted into holes drilled into the bottom.

Among the precious metal products we should also mention silver sculptures representing animals or parts of animals and even kings' heads and pottery and gold, mainly consisting of cups, generally oblong and lobed.

Another expression of the finest craftsmanship were certainly textiles, on whose chronological development it is again impossible to make any reliable comment. They were primarily manufactured in centres like Susa, Shushtar and Gundishahpur, but fragments have been recovered spread around Asia and Europe, where they were mainly found in the treasuries of abbeys and cathedrals, brought to them by pilgrims as places for the custody of relics gathered in the holy places of the East. The decorations are typical of the Sasanian style: medallions with leaves and pearl frames, including animal figures, often addressed to the tree of life, symbolic hunting scenes or figures inserted within a reticule.

Paintings and mosaics are mainly documented from sources other than archaeological data. Painting, as we know, was widespread at the time of Shapur II (309-379), while Ammianus reports the favourite thematic iconographies from the Sasanian painters: hunting and war. There are few surviving fragments, including the examples from Ivan-e Kharkha (Gyselen, Gasche 1994) and Ctesiphon. Remains of mosaics are more numerous, almost all originating from Bishapur and, especially from a large cruciform courtyard hall and iwan. The motifs in the classically inspired panels showed courtiers, musicians, dancers and men and women's heads, fitting in with local tastes and far distant from the Hellenistic-Roman mosaic tradition, which usually placed them at the centre of the representation as the main subject of the decoration, while the Iranians relegated them to the edges.

The Present territorially oriented Issues

While a history of research into the Sasanian period needed a broad international perspective in which Iran and several European countries and individual Iranian and European scholars played their part from the 17th to the 20th century, historically research into the related material and architectural and artistic culture has been considered as being limited to the Iranian plateau only. Although this was the geographic centre of the Empire, it presents not a few puzzling, elusive and at times disconcerting documents. An overview of the documented material which we could, if we wish, define as more international, would in future have to take other work and studies into account, with the help of which we must try to bring that old but still useful concept of *Iran extérieure* up to date.

In the history of research into the Sasanian period, even today we can still observe that there is a prevailing tendency to have issues with the various methodological changes that archaeological research has gone through at its own expense, at least until the last decades of the 20th century, and to hold these changes in low esteem! It is beyond doubt, too, that the methods and criteria that have mainly been adopted until now ideally relate to the entire heritage of the unquestionable value of the tradition of architectural, artistic, historical, even iconographic and literary studies that have constituted the very essence of studies of the period.

Let us take some examples in order to try better to understand the most important challenges facing today's archaeological research into the period of the political rule of the Sasanian dynasty, starting with one of the most widespread direct material and figurative forms of evidence of the Sasanian dynasty, rock reliefs. We can but stress the fact that many of these sculptures, which have

enriched the Iranian landscape and beyond⁶, have often been observed and studied as isolated phenomena of great importance in the history of art and of great commemorative and celebrative significance. Much less emphasis, on the other hand, has been given to them as the significant elements of a successful attempt to institutionalise or, if this term is preferred, sacralise a territory. We are talking especially about mountain passes, river bends, etc, a way of occupying a territory which may be dated back, as we know, to very ancient times. It is well known that the Zagros and the Elburz mountain chains have, from the beginning, constituted crucial physical aspects of a difficult, impervious landscape, sometimes also characterised by forbidding heights, which could also be glorified ideologically and religiously until it became co-essential to all the political events which occurred on the areas of the plateau.

Evidence of an extensive use of figural representations on a rock surface, which cannot have taken place by chance, comes from several different periods in the plateau in its broader sense: the Elamite period (with the rock reliefs at Kul-e Farah, at Eshkaft-e Salman in Khuzestan, at Sar-i Pol Zohab in the Kermanshah region and at Kurangun in Fars, etc.) (Figs. 50, 51, 52, 53), spans the Achaemenian and post-Achaemenian ages (with the famous rock monument/document in Bisutun, the rock tombs in Naqsh-e Rostam and the rock building in Qadamgah) (Figs. 54, 55); remains containing precise ideological and religious characters (like the macroscopic rock sanctuaries at Shami, Masjed-e Suleyman, and Bard-e Nishandeh in Khuzestan) come from the Hellenistic period (Figs. 16, 56, 57); the Parthian period is represented by the rock reliefs in Tang-e Sarvak, Hung-e Nauruzi, etc. (Fig. 58) Hung-e Adzhar, etc., always in Khuzestan (Fig. 59); and we come to the Sasanian era with the monumentalisation of springs, important river passes (bridges) and even urban landscape at Bishapur (seven rock reliefs, which, in practice, introduce us to the aspect of the “town”). These remains are some of the most successful and scenically impressive examples of figurative art; everything was designed to plan and these works were cut into the most durable already existing material support, rock, which miraculously turns into the most sensational instrument of political propaganda. The territory certainly remains one of the most neglected aspects in the traditional approach to the archaeology of the Sasanian period.

Obviously there are also other aspects to be considered analysing these rock-sculptures as the possible diverse schools of artistic production which were more recently dealt with by other scholars. These contributions have dealt with architectural and iconographical aspects of the period, suggesting particular and important innovative points of view as the topographical setting with the strong role of the water and rocks (Canepa 2009; 2010; 2013a; 2013b; 2014), in attempts to identify unpublished artistic schools within an imperial program of ideological propaganda (Callieri 2014).

From a territorial viewpoint too, we cannot help bearing the dynamics of the settlement patterns in mind; these must always be precisely interpreted as factors in the manner of occupying and inhabiting a territory, especially if we are in a particular geological setting with a semiarid climate and only a few seasonal and torrential streams, with some exceptions (Khuzestan, southern Caspian Sea and Sistan areas).

The issue is even more important if we consider the settlements on the plateau that date back to the dynasty, like the decisively important cases of the circular architectural and urban layouts of Firuzabad/Gur, Darabgird and Sar Mashad: obviously these remains do not represent proper “cities” in the sense that we usually attach to the term, even if there are some differences among them. In a Western way of thinking they look more like actual urban-territorial units, with a strong economic and productive role, in which the inhabited areas, often only consisting of palatial buildings, are directly linked to the rural and geological landscape, forming a whole system whose single constituents are hard to make out.

Bishapur, which is diametrically opposite in layout to those we have just mentioned, cannot be seen as a very typical city as well, even if it is presumed to have been built to a Hippodamean pattern. Today it becomes harder and harder to interpret it as it was interpreted in the 1930s and 1940s, but the most correct way of observing Bishapur is as an urban unit with ample space for fields

⁶ It is very recent the discovery in North-East Afghanistan at Rag-i Bibi, of an important rock-relief of Sasanian tradition (Grenet 2005; Grenet *et alii* 2007), which, located, as usually, alongside the right side of a river, gives new light to the proper extension of the related culture much beyond the political limits of the Empire and with a particular set of new iconographies.

and gardens, yet to be analysed (Amiri, Genito 2013), and a palatial area of the Sasanian time first and of the early Islamic age afterwards.

Within the broader framework of the architecture of the Sasanian period and the complicated issues which are still under scrutiny (function, chronology, attribution), some aspects of Sasanian palaces which have been only generally analysed and observed so far, such as those relating to their religious dimension or to their most particular “palatial” character, should be considered in greater detail.

Best known is certainly the monumental type represented by a series of palaces dating from the 3rd and 5th century, most of which located in Fars. The Taq-i Kisra is the heir to a long building tradition whose main achievements were the palaces of Firuzabad and Qal‘a-ye Dukhtar (dating back to Ardashir I), Bishapur (built by Shapur I), Iwan-i Kharkha and Sarvistan.

The Taq-i Kisra is the grandiose palace of Ctesiphon that tradition dates back to Khusraw I (531-579). It consists of a throne room of colossal size and an iwan in a façade, which is the biggest among those known with a width of 25m and a height of 30m. The arch, once parabolic, astounds with its grandeur and the high technical level achieved in its construction, but its shape, rather than the result of aesthetic considerations or stability, is due to the typical Sasanian construction process, which involved, without the use of ribs, the arrangement of an inclined plane of courses of bricks resting on one another, starting from the bottom wall and gradually projecting towards the inside. This expedient reduced the space to be covered and made the contour of the arch parabolic and not semi-circular. The façade, with its rows of blind arches of horizontally superimposed levels, is similar to the *frontes scenarum* of Roman architecture, although its similarity to the Classical style is not reflected in the vertical axes which do not meet, in the approach to the massive and the minute and in the relationship between the diameter and height of the columns.

The architectural complex of Qasr-i Shirin in the Kermanshah region comes from the time of Khusraw II. The most important of the remains of the various buildings are those of the Imarat-i Khusraw, which is, however, like an Achaemenid construction on a huge terrace reached by flights of stairs. The plan, mostly still uncertain, includes an *iwan* which served as a vestibule to a square room covered by a dome, flanked by two other much smaller *iwans* divided into three aisles by a double row of massive pillars. Beyond, a square courtyard is surrounded by a portico with cross-shaped corner pillars, while behind it are more courts with other *iwans*. The layout of the building, with some differences, coincides with that of the earliest buildings in Firuzabad and Sarvistan, respecting symmetry and hierarchical differentiation in large spaces (Sinisi 2005). A second very similar building is located in Eawsh Kure, 5km away, while the function of a third, Chahar Qapu, is still uncertain but was probably religious; it consists of a square with a door/empty space on each side covered by a dome and was perhaps surrounded by a corridor with a vaulted roof.

Two other buildings, Damghan in northern Persia and Kish, complete the Sasanian civil architecture scenario. The first presents a courtyard overlooked by a three-nave *iwan*, divided by two rows of three columns, perhaps circular, giving access to a square room, probably domed. The second has an *iwan*, also with three naves, at the end of which is a domed hall opening into an apsidal room of Roman origin.

We must not overlook the question of religious architecture among the varied and in some ways still problematic archaeological issues already dealt with here. To tell the truth this is a thorny problem owing to the numerous implications arising from the difficult comparison between the sparse archaeological evidence and the literary documents, which are also too meagre but are certainly more detailed, from the Avestan and Pahlavi traditions. A fire temple in Zoroastrianism is the place of worship where fire together with clean water are agents of ritual purity. Clean, white “ash for the purification ceremonies [is] regarded as the basis of ritual life”, which “are essentially the rites proper to the tending of a domestic fire, for the temple [fire] is that of the hearth fire raised to a new solemnity” (Boyce 1975). In the meantime different issues have been treated by different scholars as regard as the pre-Macedonian and Hellenistic time as well (Shenkar 2007; 2011).

The characteristic feature of the Sassanid fire temple was its domed sanctuary where the fire-altar stood (Boyce 1987, 9-10) This sanctuary always had a square ground plan with a pillar in each corner that then supported the dome (the *gombad*). Archaeological remains and literary evidence from *Zend* commentaries on the Avesta suggest that the sanctuary was surrounded by a passageway on all four sides. On a number of sites the *gombad*, made usually of rubble masonry with courses of stone, is

all that survives, and so such ruins are popularly called in Fars *chahar Taq* (Boyce 1987, 10). Ruins of temples of the Sassanid era have been found in various parts of the former empire, mostly in the southwest (Fars, Kerman and Elam), but the biggest and most impressive are those of Adur Gushnasp in Media Minor. Many more ruins are popularly identified as the remains of Zoroastrian fire temples even when their purpose is of evidently secular nature, or are the remains of a temple of the shrine cults, or as is the case of a fort-like fire temple and monastery at Surkhany, Azerbaijan, that unambiguously belongs to another religion. The remains of a fire-altar, most likely constructed during the proselytizing campaign of Yazdegerd II (r. 438-457) against the Christian Armenians, have been found directly beneath the main altar of the Echmiadzin Cathedral, the Mother See of the Armenian Apostolic Church. The remains of a probable fire temple, later converted to a church, have been found within the ruins of the abandoned medieval Armenian city of Ani.

Archaeologically, religious evidence has traditionally suggested two basic recognisable functional architectural types of buildings, possibly connected to Zoroastrian beliefs (Schippman 1971): *atesh Gah*, where the sacred fire might have been guarded, and *chahar Taq*, where the fire was probably exposed during public ceremonies. The functional organisation of the cult, through these two distinct types of buildings, is generally traced back to Shapur I, before whom religious buildings were probably very different and still relatively unknown. The earliest of these buildings, dating back to Ardashir I, is located in the centre of the city of Firuzabad and consists of an artificial platform on which stood a stone and plaster tower, probably of a truncated pyramidal shape. Now very much damaged, it had an external spiral staircase and was where the fire was displayed to the public, while the sanctuary of the true fire itself, built just outside on a terrace, was known as Takht-i Nishin (Huff 1972).

Among what we call fire temples, which should also include new finds and excavations like those at Bandian (Rahbar 1977; 1998) and Khone-ye Div (Kaim, Hashemi 2007; Kaim, Bakhtiari, Hashemi 2013) at Khorasan, Shyan, Mile Milege, Palang Gerd in western Iran, Dehqayed in Borazjan district in Busher province in Iran, and at Mele Hiram in Turkmenistan (Kaim 1997-1998; 2001; 2002a; 2002b; 2002c; 2004; 2010; 2011), we must not overlook the one in Bishapur, located to the south-west of the main courtroom in the palatial area of the city. This consists of a square stone building going down to 7 metres under the ground, to which access was gained *via* a long staircase. A corridor went all round it according to the usual Iranian temple plan. The temple, probably dedicated to Anahita, the goddess of fertility and water, also presents traces of a deliberate reminder of some capitals similar to those of Persepolis; these traces were found 4 m high on one of the walls of the building.

Among the *chahar Taq* temples we should mention Kurma Yak, with a corridor that unites an oblong building divided into three areas; Tall-gange, with a small dome over each corner; Baz-i eur, with an indoor domed room with large vaulted openings; Takht-i Suleiman (north-western Persia), which has a very complicated plan and has a number of buildings connected to it; Atash Kuh in the Markazi province, with a heart-shaped dome on pillars; and finally Kunar Siyah, the only complete Atesh Gah, found along with Tang-e Chak Chak.

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Fig. 1 - Rock relief at Naqsh- i Rajab in Fars, Ardashir I (224-241 BC), photo by the author



Fig. 2 - Rock relief at Naqsh- i Rajab in Fars, Shapur I (241-272 BC), photo by the author



Fig. 3 - Rock relief at Naqsh- i Rajab in Fars, Shapur I (241-272 BC), photo by the author



Fig. 4 - Rock relief at Naqsh -i Rostam, Shapur I (241-272 BC), photo by the author



Fig. 5- Rock inscription at Hajiabad cave, nearby and in front of Istakhr city to the north, photo by the author



Fig. 6 - The Nurabad-tower, photo by the author

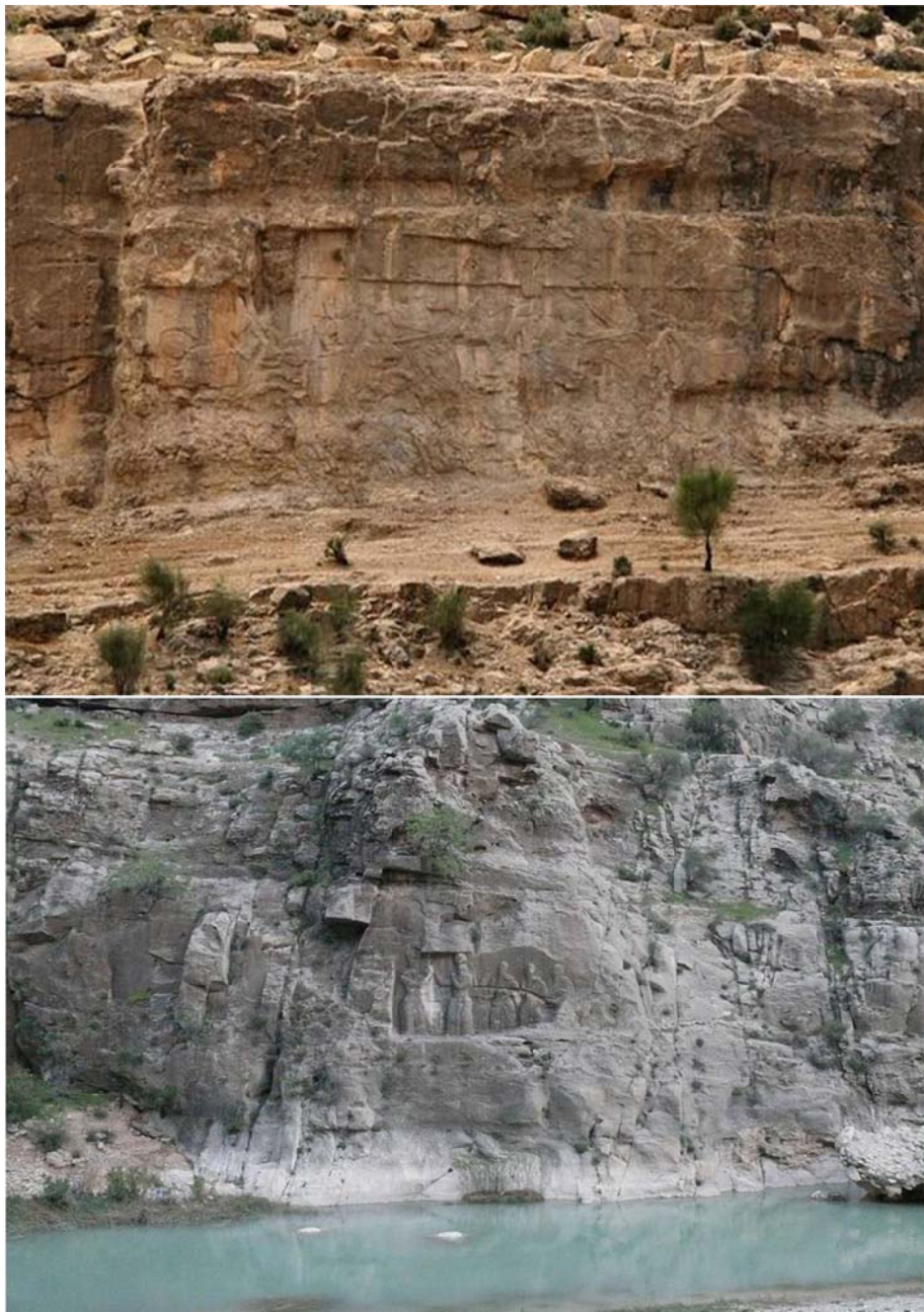


Fig. 7 - Rock reliefs, Ardashir I: military victory (above) (Firuzabad I), and investiture (below) (Firuzabad II), photos by the author



Fig. 8 - Taq-i Bustan, relief with boar hunting scene on one of the side walls of the main grotto, photo by the author



Fig. 9 - Sarvistan palace, Fars province, photo by the author



Fig. 10 - Rock reliefs at Barm-i Dilak, Fars province, 9 km east of Shiraz, general view, photo by the author



Fig. 11 - Rock reliefs at Barm-i Dilak, Fars province, 9 km east of Shiraz, details, photo by the author



Fig. 12 - Location of Palmyra in the Syrian desert, general, after Google Earth 2016



Fig. 13 - Palmyra archaeological remains in the Syrian desert, details, after Google Earth 2016



Fig. 14 - Location of Doura Europos in the Syrian desert, general view, after Google Earth 2016



Fig. 15 - Doura Europos archaeological remains in the Syrian desert, details, after Google Earth 2016



Fig. 16 - Location of Shami, in Khuzestan province, general view, after Google Earth 2016



Fig. 17 - Teheran Museum, bronze fragmentary statue of the so-called Shami prince, photo by the author



Fig. 18 - Location of Kuh-i Khwaga remains on the basalt mountain in the not any more existing Hamoon lake, in Sistan province, general view, after Google Earth 2016



Fig. 19 - Remains of Kuh-i Khwaga palace and surroundings, in Sistan province details, after Google Earth 2016



Fig. 20 - Tariq-Khaneh, Damghan, Semnan province, photo by wikipedia



Fig. 21 - Palace of Sarvistan, Fars province, photo by the author



Fig. 22 - Palace of Qal'a-ye Dokhtar Firuzabad, Fars province, photo by the author



Fig. 23 - Location of Bishapur, Fars Province, general view, after Google Earth 2016



Fig. 24 - Location of Al'Mada'in, Baghdad Governorate, Iraq, general view, after Google Earth 2016



Fig. 25 - Location of the palace of Ivan-i Kharkha, Khuzestan province, general view, after Google Earth 2016



Fig. 26 - Location of Taq-i Kisra, Baghdad Governorate, Iraq, general view, after Google Earth 2016



Fig. 27 - Taq-i Kisra, Baghdad Governorate, Iraq, photo by Wikipedia



Fig. 28 - Location of Istakhr, Fars province, general view, after Google Earth 2016

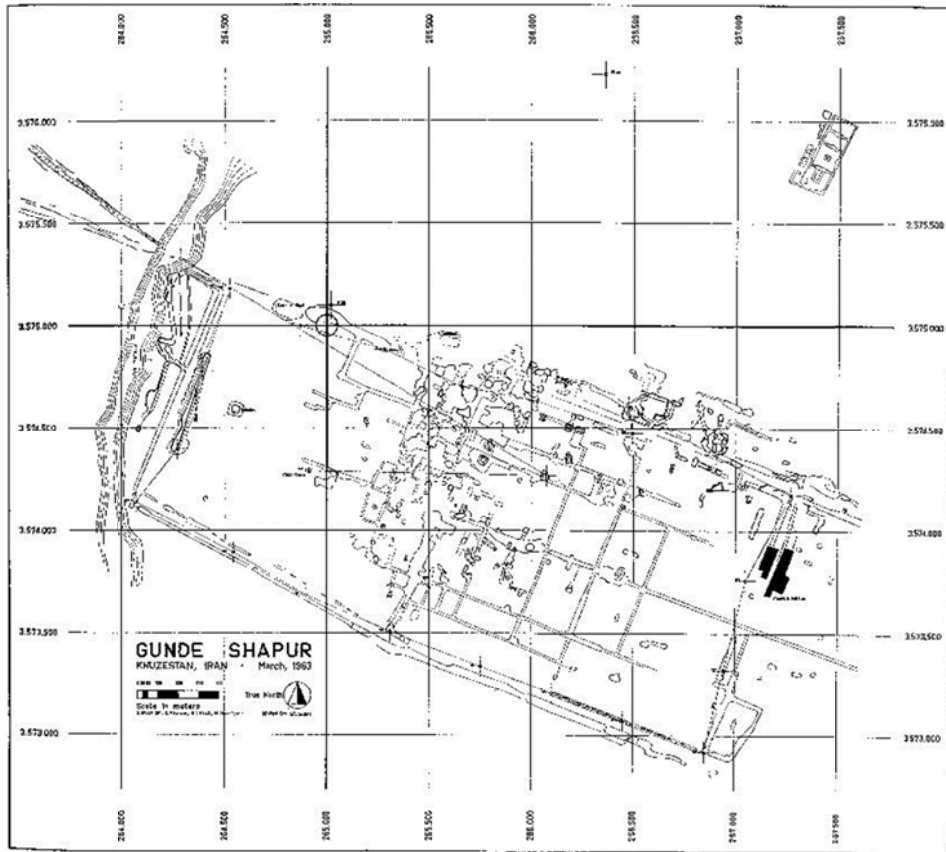


Fig. 29 - General map of Gundishapur, Khuzestan province, after Adams, Hansen 1968



Fig. 30 - Location of Takht-i Suleyman, West Azerbaijan, Iran, general view, after Google Earth 2016



Fig. 31 - Location of Kangavar, general view, after Google Earth 2016



Fig. 32 - Location of Darabgerd and its circular shape, Fars province, general view, after Google Earth 2016



Fig. 33 - Location of Darabgerd, Fars province, details, after Google Earth 2016



Fig. 34 - Rock relief at Darabgerd, Fars province, Shahpur I, photo by the author



Fig. 35 - Location of Firuzabad, Fars province, general view, after Google Earth 2016



Fig. 36 - Location of Firuzabad, Fars province, details, after Google Earth 2016



Fig. 37 - Bishapur, Fars province, a bridge (Pol-e Gabri) between Tang-e Čhowgan and the southern extremity of the city, photo MAI, by the author



Fig. 38 - Bishapur, Fars province, the two castles, Qala-ye Pesar to the left, and Qala-ye Dokhtar to the right, photo MAI, by the author



Fig. 39 - Bishapur, Fars province, Cave of Shahpur, photo by E. Cocca



Fig. 40 - Bishapur Palace with four *iwans*, Fars province, photo by the author



Fig. 41 - Rock relief at Sarab-i Bahram, Fars province, photo by the author



Fig. 42 - Rock relief at Sar Mashad, Fars province, photo by the author



Fig. 43 - Rock relief at Tang-i Qandil, Fars province, photo by the author



Fig. 44 - Main grotto at Taq-i Bostan, Kermanshah province, photo by the author



Fig. 45 - Rock relief at Guyum, Fars province, photo by the author



Fig. 46 - Location of Sarvistan palace, Fars province, general view, after Google Earth 2016



Fig. 47- Location of Sarvistan palace, Fars province, details, after Google Earth 2016



Fig. 48 - Rock relief at Salmas, West Azerbaigian, photo by the author



Fig. 49 - Remains of the Paikuli Tower, Sulaymanya Province, Iraq, photo by MAI in Kurdistan, source: internet



Fig. 50 - Rock Reliefs at Kul-e Farhah, Izeh, Khuzestan province, photo by the author

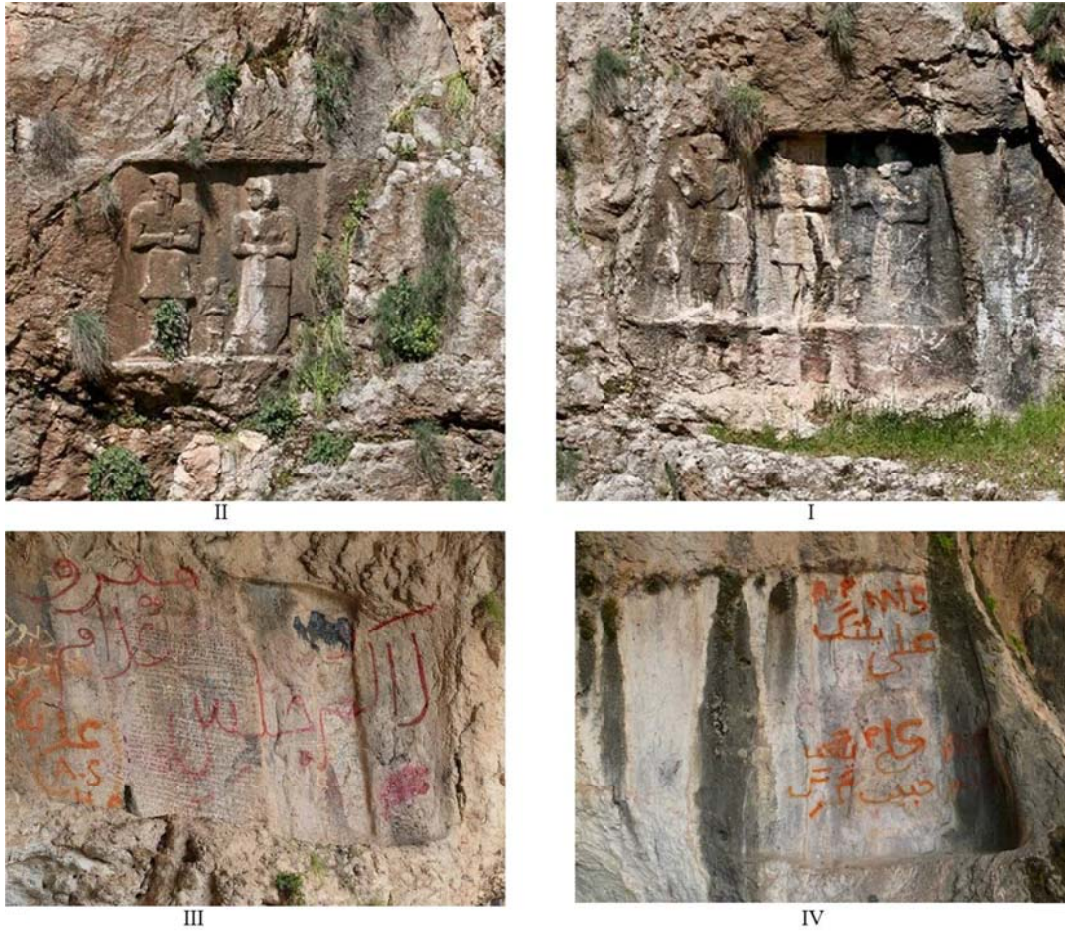


Fig. 51 - Rock Reliefs at Shikaft-e Salman, Izeh, Khuzestan province, photo by the author



Fig. 52 - Rock Relief at Sarpol-i Zohab, Kermanshah province, photo by the author



Fig. 53 - Rock Relief at Kurangun, Fars province, photo by the author



Fig. 54 - Naqsh-i Rostam, the Achaemenian rock-graves and the Kaaba-i Zardusht, Fars province, photo by the author



Fig. 55 - Rock façade at Qadamgah, Fars province, photo by the author



Fig. 56 - Location of Masjed- e Suleyman rock-sanctuary, Khuzestan province, general view, after Google Earth 2016



Fig. 57 - Location of Bard-i Nishandeh rock sanctuary, Khuzestan province, general view, after Google Earth 2016



Fig. 58 - Rock Relief at Tang-e Sarvak II, Khuzestan province, photo by the author



Fig. 59 - Rock Relief at Xong-e Adzhar, Khuzestan province, photo by Iranian-Italian Archaeological Mission in Khuzestan