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# Paisajes, escrituras, símbolos y arquitecturas del antiguo Irán
# Landscapes, Scriptures, Symbols and Architectures of Ancient Iran

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# Introducción

El antiguo Irán, Persia, pero también Elam, constituye un ámbito de estudio apasionante del que cada vez tenemos más información. El número vigésimo sexto de nuestra revista hace un repaso por distintos aspectos que son objeto de investigación en la actualidad, y lo hace de la mano de investigadores iraníes, franceses, italianos y españoles.

Solemos recordar que la inscripción de Darío en Behistun fue la llave a partir de la cual se pudo descifrar el cuneiforme. La inscripción estaba escrita en persa antiguo, en babilonio y en elamita. A partir del persa se pudo comenzar a descifrar el babilonio, y el elamita tardaría algo más. Es muy interesante que la inscripción estuviese escrita en la lengua originaria de la zona, y que los aqueménidas lo reconociesen con su inscripción como tal. Visiones exógenas y posteriores no siempre han querido ver esta vinculación.

El trabajo de Silva Balatti sobre materiales inscritos del Irán aqueménida continúa una línea de trabajos sobre la escritura irania que aún hoy nos da alegrías y resultados interesantísimos.

La arquitectura irania es objeto de varios artículos en este volumen. El de Davide Solaris y Roberto Dan sobre el significado y la arqueología de Masjed-e Soleyman, reinterpretando su origen y su contexto socio-cultural, es el primero de ellos. El trasvase cultural que estudia Pierfrancesco Callieri de parte de babilonios en Persépolis nos habla de arquitectura, pero también de arqueología y de la información que obtenemos de ellas.

Carlos Fernández Rodríguez aborda la gestión del agua y de su papel en la habitabilidad en el sur de Irán durante la Edad del Hierro, que debe relacionarse con lo que sucede al otro lado del Golfo. Fernando Escribano Martín indaga en lo que conocemos como "jardín persa", en sus orígenes y en cómo ha evolucionado, y para eso debe partir de Pasargada en Persia, pero ir también más atrás para comprenderlo.

Sébastien Gondet aborda el desarrollo de la agricultura y la historia de la ocupación de la Persépolis aqueménida, aspecto clave para entender el funcionamiento de la capital persa, y Alireza Khounani los viñedos de la Nisa arsácida parta, un ejemplo concreto de agricultura y de comercio en otro periodo clave de la historia irania.

El ámbito material viene tratado con el trabajo de Giulio Maresca sobre la cerámica de Sistán en la Edad del Hierro, o el estudio más específico de Negin Meri sobre una bulla concreta conservada en una institución museística de Teherán.

Cerramos esta temática tan variada e interesante que hemos ido tratando de agrupar en esta introducción con el trabajo de Zahara Gharenhkhani, en el que realiza unas reflexiones sobre criaturas híbridas de la Persia preislámica y recapacita sobre su simbolismo, que va mucho más allá del tiempo en el que fueron concebidas.

La panoplia de estudios de diverso orden que aquí presentamos da cuenta del rico mundo que se está investigando en torno al Irán antiguo, cuyas manifestaciones elamita y persa, cada vez más claramente vinculadas, trascendieron también en el tiempo y en el espacio.

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# Foreword

Ancient Iran, Persia, and Elam constitute a fascinating field of study about which we have more and more information. The 26th issue of our journal allows a revision through several aspects of the current research along with Iranian, French, Italian and Spanish scholars.

We usually remember that cuneiform was deciphered thanks to the Darius' inscription in Behistun. It was written in Old Persian, Babylonian and Elamite. From Persian, it was possible to start deciphering the Babylonian, even if the Elamite took more time. It is indeed very interesting that the inscription was written in the native language of the region, and that Achaemenids recognised it. Some outside and later views have not understood this correlation.

The study of Silvia Balatti about written materials of Achaemenid Iran continues a line of research about the Iranian writing system that even today provides very interesting results.

The Iranian Architecture is the aim of some papers in this issue. The first one is the contribution of Davide Solaris and Roberto Dan about the signification and the archaeology of Masjed-e Soleyman, reinterpreting its origin and socio-cultural context. In the same way, the cultural transfer on behalf of Babylonians in Persepolis analysed by Pierfrancesco Callieri is related to architecture but also to Archaeology and to the information that we obtain from them.

Carlos Fernández Rodríguez explores water management and its function in the habitability of Southern Iran during the Iron Age, showing that it is to the situation on the other side of the Gulf. Fernando Escribano Martín investigates what we know as the 'Persian garden', as well as its origins and development. To do this, he should start from Pasargadae in Persia, but also from more ancient times.

Sébastien Gondet analyses agriculture's development and history of the Achaemenid Persepolis' occupation, which is a key aspect for understanding the functioning of this Persian capital. On the other hand, Alireza Khounani presents the vineyards of the Arsacid-Partian Nisa, a concrete example of agriculture and trade in another important period of Iranian history.

In terms of material culture, Giulio Maresca presented a paper about the Sistan pottery in the Iron Age, and Negin Meri developed specific research of an example of a bulla kept in a Museum of Teheran.

We close this wide ranging and interesting theme that we group in this foreword with the studies of Zahara Gharenhkhani reflects on some hybrid creatures of the Pre-Islamic Persia, reconsidering their symbolism, which goes beyond the time when they were conceived.

The array of studies of different kind that we present in this issue accounts for the rich world that is under investigation around Ancient Iran, whose Elamite and Persian manifestations, progressively more related, transcend both in time and space.

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# EXPLORING THE ARCHAEOLOGY AND SIGNIFICANCE OF MASJED-E SOLEYMAN: A REASSESSMENT OF THE ELYMAEAN TERRACE AND ITS SOCIO-CULTURAL CONTEXT IN SOUTHWESTERN IRAN

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***ABSTRACT***

*The archaeological complex of Masjed-e Soleyman is one of the most famous in the archaeology of ancient Iran[1]. From the time of its discovery until today, there has been much discussion of its chronology and its function. The contribution in particular provided by Roman Ghirshman is still the most significant to this day, although many of his interpretations can be considered outdated. The aim of this contribution is to provide a new analysis of the architecture of the site in the more general context of the archaeology of the Iranian plateau and to verify the validity of the proposals, not only chronological but also functional, regarding the complex.*

***KEYWORDS***

*Terrace, archaeology of Iran, Masjed-e Soleyman, Elymais, architecture.*

***RESUMEN***

*El complejo arqueológico de Masjed-e Soleyman es uno de los más célebres en la arqueología de la antigua Persia. Desde su descubrimiento hasta hoy, ha sido objeto de numerosos debates acerca de su cronología y su función. La contribución particularmente destacada de Roman Ghirshman sigue siendo la más relevante hasta la fecha, aunque muchas de sus interpretaciones pueden considerarse obsoletas. El propósito de esta contribución es proporcionar un nuevo análisis de la arquitectura del yacimiento en el contexto más amplio de la arqueología de la plataforma irania y verificar la validez de las propuestas, tanto en términos cronológicos como funcionales, relacionadas con el complejo.*

***PALABRAS CLAVE***

*Terraza, arqueología de Irán, Masjed-e Soleyman, Elymais, arquitectura.*

## 1. Introduction

Nestled in the foothills of the Bakhtiari mountains, Masjed-e Soleyman (Mosque of Solomon) is situated within a large bend bordered to the south by the Karun River. Approximately 2 km east of the site, there lies a watercourse bed, which flows north-south following the natural slope of the land and appears to have received other streams, although they are drained today. These streams could have supplied the ancient settlement. For nearly half a century, the valley served as an operational center for the *Anglo-Persian Oil Company* (APOC), following the discovery of rich oil deposits at the end of the 19th century by Jacques de Morgan, the first director of the *French Archaeological Mission to Susiana*[2], in this almost

[1] The content of this article has been thought jointly by both authors. In the specific, D. Salaris has written "Chronological Proposals", and "The Archaeological Context", while R. Dan has written "History of Studies", and "Monumental Architecture". "Introduction", "Masjed-e Soleyman: A Critical Approach", and "Conclusions" were written jointly.

[2] Ghirshman 1950: 205.

unpopulated area, which had previously represented a space for seasonal grazing by the Bakhtiari nomads.

In the northeastern part of the valley, still in a dominant position compared to the rest of the modern city, a monumental structure based on an artificial terrace (Figs. 1-2)[3] – which, long ago, attracted the attention of archaeologists and explorers – is built on a hill (30-40 m). The vast complex of Masjed-e Soleyman[4], usually considered a sanctuary, now sits amidst active oil wells in the modern city and offers visitors an elusive sense of calm and great firmness. During the Middle Ages, it was called *Talghar* (or *Tolqor*), the name of a land in the vicinity of the Karun river. Later on, the city was named *Jahangiri*[5], then *Naftun*[6], and finally, after the visit of Reza Shah Pahlavi[7], the name now bears *Masjed-e Soleyman*, which was assigned in 1926.

Masjed-e Soleyman became the center of the Iranian oil industry in 1908 and was not visited by Western explorers until the late 1920s. The surrounding environment, characterized by gas leaks and oil spills, left a strong impression on the first European visitors. A situation that was reflected in Pliny's description of "*places which are always burning*" and when reporting on the volcanoes he mentioned that "*likewise in Susa, at the White Tower, from fifteen apertures, the greatest of which also burns in the daytime*"[8]. It is possible that when mentioning the fires of Susa, he had in mind "*petroleum-gas burning*" from Masjed-e Soleyman[9]. Additionally, the area of Masjed-e Soleyman was a source of bitumen for the Mesopotamian urban centres from the 4th millennium BCE as demonstrated by the analysis of carbon isotopes in bitumen samples from Urukean context[10]. There is no doubt that this landscape is distinguishable from any other surrounding environments and well recognizable from miles away. The natural phenomena, often labeled as "divine," must have had a profound impact on the choice of the location for the monumental structure[11]. At the beginning of 20th century, Unvala reported the presence of an underground passage leading to the south-west side of the hill, whose entrance was blocked by a massive boulder due to the accidental deaths

[3] This kind of multiple terraces has been recently classified with the types T.A.b - T.B.b (Dan – Salaris forthcoming).

[4] Masjed-e Soleyman – also spelled in other ways such as *Masjed Soleyman*, *Masjed-e Solaymān*, *Masjed Soleiman*, and *Masjid-i-Sulaiman* – is known in the petroleum industry by the acronym *M.I.S.*

[5] Nowadays, the name *Jahangiri* remains to indicate a rural district (*dehestan*) in the region of Masjed-e Soleyman.

[6] This is a term with which the city was known before 1926 (Amerie 1925: 249; Nahai - Kimbell 1963: 109). Nowadays, the name *Naftun* is still used to designate the cemetery located southeast of the city.

[7] The Shah (r. 1925-1941) visited the city and Sar-Masjed in 1926. Considering the "*atashkade*" on the terrace built by Solomon, he suggested to the Iranian parliament to change the city's name from Maidan-e Naftun to Masjed-e Soleyman, a suggestion taken up within the year. The inhabitant of the town firmly believed that the ruins on the terrace represented the ancient "Temple of Salomon" and use to leave small oil lamp as *ex-voto* offerings (Ghirshman 1950: 217). This folkloristic practice, which is probably still performed nowadays (personal communication to D. Salaris by Prof. Gian Pietro Basello), had deep roots and was not eradicated by the Islamic doctrine.

[8] Pliny, II.110.237, "Susis quidem ad Turrim Albam XV caminis, maximo eorum et interdiu, campus".

[9] In this regard, the description given by J.M. Unvala (1928: 85) appears very appropriate, defining the site of Masjed-e Soleyman he said that "*to-day the sight of a number of jets of the petroleum-gas burning simultaneously day and night in different in the Maidan-i-Naft […]. During the daytime, they burn with a livid red glow and throw up in the volumes of nasty-smelling smoke, and during the night they illuminate the rough, but gorgeous scenery of the Bakhtiari Mountains like big bonfires*".

[10] Schwartz *et al*. 1999. See also Wright *et al*. 1978.

[11] On this point, it has been stressed by Maxime Siroux (1938: 157) how at Masjed-e Soleyman the "*architecture, si l'on juge de ce qui en subsiste, devait parfaitement mettre en valeur les phénomènes d'origine souterraine attribués à la divinité*" and still in 1938 "*les habitants des maisons voisines aiment à conter la force des 'dives' dont les jeux démoniaques se déroulaient sur ces puissantes terrasses par euxconstruites*".

of curious tourists, resulting from poisonous gas leakages[12]. *Sar-Masjed* is the name attached to the architectural complex at Masjed-e Soleyman. The pre-Islamic designation is unknown but its modern one has been derived from the location on top of a hillock overlooking a locality called "Sar-Masjed" ("the top of the mosque")[13]. The original extension of the place is still unidentified since the presence of modern buildings, particularly on the southern and eastern sides, prevents any systematic investigation of further archaeological remains. The main complex of Sar-Masjed, which occupies a space of almost 1.5 hectares and displays the presence of numerous buildings built on a broad terrace with levels at varying elevations, is easily identifiable. It can be assumed that the site served as a suitable surface for the construction of other buildings that have not yet been excavated, and while comparable and clerly identifiable ruins are not found in loco, their presence cannot be ruled out. The only archaeological investigations on the site were performed by Roman Ghirshman, whose work remains essential today for the study and evaluation of the complex, even if some of his interpretations are rather outdated.

The aim of this paper is to critically reanalyze certain aspects of the site, with a specific focus on its architecture, to reassess the previous functional, architectural, and chronological interpretations of the complex in academia. To achieve this, the authors conducted site visits on multiple occasions and carried out a thorough re-evaluation of the information currently available in the literature. The contribution has been conceived in two main parts following the History of Studies: a first section mainly dedicated to the presentation of Masjed-e Soleyman and the main proposals regarding the architecture, function, and chronology of the complex, as proposed by Roman Ghirshman[14]. The second part is instead focused on presenting some proposals for revising Ghirshman's data.[15]

## 2. History of Studies

The Western scholar acknowledged as being the first to indicate the site of the Masjed-e Soleyman ruins was the British officer Henry Rawlinson, who did not go there in person, but rather "*heard […] of the ruins of a great building, upon the banks of the Kuran, a short distance below Súsan, which was named Masjidi-Suleïmáni-Buzurg* [16]: *by the Bakhtiyáris it was usually likened to the superb remains at Kangáwer, and it doubtless, therefore, marks the site of another of the wealthy temples of Elymais*"[17]. He proposed an identification[18]of

[12] Unvala 1928: 85. See also Siroux 1938: 158-159.

[13] According to Masud Soltani – the former director of the Masjed-e Soleyman *Cultural Heritage and Tourism Organisation* (MSCHTO) – the monument has been under 24-hour security watch to protect the ancient site from intruders, including looters. Furthermore, as it has not benefited from attention to maintenance – the same applies at Bard-e Neshandeh – the site is at a critical stage, and indeed Soltani rang the alarm bells three years ago, declaring: "*The ancient monument requires urgent attention; its surface needs to be restored to protect it from further destruction and the whole structure is in need of strengthening*". He also affirmed: "*Due to the importance of the Sar-Masjed Fire Temple [...] we have asked the Khuzestan CHTO to pay more attention to the edifice*" (Masud Soltani 2010, The Circle of Ancient Iranian Studies). During our visit at the site in November 2015 allowed to confirm this grave situation of risk present in the archaeological area of Masjed-e Soleyman.

[14] The paragraphs of the first section are: *Chronological Proposals*; *The Archaeological Context;* and *Monumental Architecture*.

[15] The paragraphs of the second section are: *The Masjed-Soleyman Terrace: a Critical Approach*; and *Conclusions*

[16] Also worthy of note is the not completely clear distinction that Rawlinson makes: "*Masjidi-Suleïmán, or sometimes Masjidi-Suleïmáni-Kuchuk to distinguish it from another ruin, named Masjidi-Suleïmáni-Buzurg, which I shall hereafter speak of, and represent, without doubt, one of the ancient temples of Elymais*" (Rawlinson 1839: p. 78). See Schippmann 1971: 234-236 for further clarifications.

[17] Rawlinson 1839: 84.

[18] Rawlinson 1839: 86.

the sanctuary with the "Dianae templum augustissimum illis gentibus" recorded by Pliny[19]. "*The description of the ruins given by Major Rawlinson of these ruins […] greatly excited my curiosity*"[20], was Layard's initial reaction as he wrote in November 1941, which was only to be disappointed, on his later visits, to the extent of calling them "*insignificant*"[21]. His concise but approximate description led him to interpret the site as being a place for a Sassanian fire temple[22]. Layard reported the presence of an artificial terrace and traces of foundations for a building, emphasizing the absence of columns and architectural ornaments or inscriptions on all types of material[23]. As occurred at Bard-e Neshandeh, and even more so at Masjed-e Soleyman, many explorers and scholars came over the years to offer diverging interpretations. A brief list of these visitors included: Unvala[24], Godard[25], and Erdmann[26] who referred to Masjed-e Soleyman as a fire temple; Herzfeld, who interpreted it as a sanctuary; Vanden Berghe[27], who catalogued Masjed-e Soleyman as an Achaemenid fortification; and Siroux[28] and Stein[29], who avoided using the attribute of "fire temple," preferring to refer to "sanctuaries" for Zoroastrian worship. Later, during the 1960s, Roman Ghirshman of the *French Délégation Archéologique en Iran* stipulated a "*gentlemen's agreement*" with the Anglo-Persian Oil Company to carry out "*une modeste mission archéologique*" at Masjed-e Soleyman and the neighbouring Bard-e Neshandeh[30]. Ghirshman suggested that a Persian tribe erected the sacred terraces after they came to this area of the Zagros mountains around the 8th-7th centuries BCE[31]. In general, he proposed several interpretations now outdated. Indeed, he supposed that this Iranian community learned how to build the terraces when they were still living in northwest Iran under the control of Urartian rulers[32] and used the terraces as places of Zoroastrian worship throughout the Achaemenid period[33]. As discussed earlier, Ghirshman further assumed the possible presence of a Macedonian garrison – or rather, a Macedonian settlement – at Masjed-e Soleyman, emphasizing that underneath the *Grand Temple* there would be an older structure, noted only through limited investigative digs,

[19] Pliny, VI.31.135.
[20] Layard 1846: 81.
[21] Layard 1846: 61-62.
[22] Layard 1894: 340.
[23] See also Schippmann 1971: 236. Layard reported how the Bakhtiari tribes had anticipated the finding of King Solomon's hidden treasure in the palace, and describing their astonishment that this discovery had not been made, as well as their fear of having disturbed supernatural beings in the location. He also reported several legends relating to Masjed-e Soleyman, told to him by some of the Bakhtiari tribesmen (Layard 1894: 341-342). It is to be noted that when he was informed that there was "*sometimes called by the Lurs the Masjdi Suleiman*" (Layard 1846: 62), this phrase led Hansman to believe that Layard had not heard the ruins described in this way but was simply going back over references made by Rawlinson (Schippmann 1971: 227). A discussion regarding places outlined by Rawlinson and Layard, and their related descriptions and interpretations, is developed in-depth by Schippmann in his book on the fire temples (Schippmann 1971: 226-227, 234-236).
[24] Unvala 1928: 86-87.
[25] Godard 1949: 153-162.
[26] Erdmann 1941: 29.
[27] Vanden Berghe 1959: 64-65.
[28] Siroux 1938: 157-159.
[29] Stein 1940: 162-163.
[30] Ghirshman 1976: *Preface*.
[31] Ghirshman 1976: 55.
[32] On the history of Urartu, see Salvini 1995: 18-121 and Salvini 2006. On the Urartian cultural and architectural influences on the Iranian plateau, see Dan 2015.
[33] Ghirshman 1976: 281-282. For Ghirshman, this would have been proved by the building methods used on the terraces, which were consistently made up of walls of rough stone (Ghirshman 1976: 1950: 215; Stronach 1974: 246). This hypothesis did not in the slightest convince the German scholar, Schippmann, who regarded them as "*eine schlecht gelungene Nachahmung*" of the terraces of Pasargadae and Persepolis (Schippmann 1971: 248).

which was dated to the Seleucid period and dedicated to Athena *Hippia*[34]. He believed such a structure or structures would be like those described by Strabo as having been destroyed by a Parthian king[35], by the discovery inside and near the temple of two images of Athena and a series of votive terracotta of Macedonian horsemen. The use of limited findings to determine the deity to whom a temple was dedicated may be speculative, and for the moment it is probably better to leave the question open. At the same time, the absence of systematic surveys and excavations around the area of the site, in particular on southern and western sides, which cannot be adequately undertaken due to the presence of the modern city of Masjed-e Soleyman, ensure that the hypothesis of the presence of a Seleucid garrison at Masjed-e Soleyman proposed by Ghirshman cannot be entirely ruled out[36]. Ghirshman's discovery, though, of a statue of Heracles and various other finds near a smaller temple structure led him to identify this construction as a sanctuary for the Greek semi-god[37]. During the following Parthian period, Ghirshman argued that the *Grand Temple* would have served as a place of worship for the Iranian deities Anahita and Mithra based on the discovery of an image on a bronze plaque in Room no. 6 (which he identified as an *antecella*). According to the scholar, this interpretation was supported by the features of the so-called temple *cella* (i.e. Room no.4) with two entrances and two altars. The modest structure was attributed as being dedicated to Verethragna, whom the Greeks identified as Heracles[38]. As stressed by Ghirshman[39], this would be the first place of worship for a Greek deity in Iran. Concerning Ghirshman's assumptions of Masjed-e Soleyman as an Iranian sanctuary depositary of the sacred fire[40], some scholars soon expressed reservations. An example is Schippmann in his complete study on "*Die iranischen Feurheiligtümer*"[41], where he affirmed without hesitation that on the terrace of Masjed-e Soleyman there were no structural remains or discoveries of any kind that could be linked with places of Zoroastrian worship. Schippmann further believed that these complexes were used as independent Elymaean sanctuaries not connected with Iranian cults[42].

## 3. Chronological proposals

The assumptions proposed by Ghirshman in the 1970s to present the terraces already in use during the Achaemenid period were based on the discovery of some modest materials, amongst which were the theriomorphic extremity of a *rhyton*[43] analogous to those found at the "*Village perse-achéménide*" of Susa (6th century BCE)[44], and the white-alabaster head remarkably similar to the Achaemenid lapis-lazuli head from Persepolis (5th-4th century

[34] Ghirshman 1976: 281-282.
[35] Strabo XVI.1.18.
[36] Ghirshman (1976: 72) also assumed that if there were an expectation of there being temples and chapels for Greek deities as well as homes, none of these were found. Moreover, Ghirshman even suggested that evidence of such a Greek religious cult could have been from the era of Antiochus I (280-261 BCE), without offering any justification for such a proposition (Ghirshman 1976: 99).
[37] Ghirshman 1976: 191.
[38] Ghirshman 1976: 195-196. As further pointed out by Potts (2016: p. 368), it would be interesting to broaden the discussion regarding Greco-Iranian religious interactions with the aim of understanding if, for example, in this case, the representations of a Greek Heracles in an Iranian-Elymaean context could reflect the spontaneous worship of a Greek deity in Iran or an assimilation with the Zoroastrian god Verethragna or with a local deity. See also Bivar - Shaked 1964; Scarcia 1979; von Gall 1986: 212-213; Potts 1993: 352-353.
[39] Ghirshman 1976: 101.
[40] Ghirshman 1950: 216-217; Ghirshman 1969: 484, 492; Ghirshman 1972.
[41] Schippmann 1971.
[42] Schippmann 1971: 248. On the religious aspect, Hansman 1985: 240-246; Boyce - Grenet 1991: 35-48.
[43] Ghirshman 1976: 85.
[44] Ghirshman 1954.

BCE)[45]. As showed by Stronach, this head would not be earlier than the 5th century BCE[46], but this is not enough to consider the site in the list of the Achaemenid ones[47].

Schippmann firmly showed that no Achaemenid or preceding discoveries had exhaustively been made during the excavations at Masjed-e Soleyman, suggesting instead a more practicable Hellenistic or Parthian dating for most of the items found on site[48]. This point was partly supported by successive publications regarding the study of ceramics discovered during the excavations[49]. Haerinck suggested a dating between the 4th-3rd century BCE and 150 BCE, evaluating the arrival of Mithridates I in Susiana (*ca* 140-138 BCE) as a reliable *terminus ante quem* for the complex of Masjed-e Soleyman[50]. In this regard, the high quantity of *unguentaria*-like recipients, suggests a particular activity of the site around the 3rd-2nd century BCE. It is to this time of Greek presence that Ghirshman attributes the dating of the primitive phase of the *Grand Temple* (or "*temple antérieur*"), and the first phase of the smallest *temple of Heracles*.

The dating to the Seleucid period for the presumed terrace extension and the first foundation of the two main buildings is largely based on small finds that came to light during the French missions, mainly votive offerings such as terracotta objects, bronze figurines, jewellery and pottery. The modest nature of this material implies a certain caution in the approach, which however does not exclude the dating to the Seleucid period[51]. Unfortunately, the meagre numismatic data from this period offers inadequate support[52]; in contrast, the architectural and ceramic evidence propose a date between the 4th-3rd and early 2nd century BCE[53]. The structures erected on the terrace have primarily been ascribed to the Parthian/ Arsacid period, particularly with regard to the sculptures[54]. Nevertheless, it is plausible to consider a potential Seleucid-era date for the terrace itself, at least as concerns the earlier ground level (i.e., so-called temple of Athena *Hippia*)[55].

### 3.1. The Archaeological Context

The Masjed-e Soleyman is a massive stone structure located 100 km east-southeast of the ancient city of Susa (Shush). It is situated on the first foothills of the Zagros Mountains bordering the town of the same name. The complex is precisely located on the north-western outskirts of the city on a natural elevation, affording a dominant view of the plain to the west and south[56].

[45] Ghirshman 1954: pl. LXXIII.3.
[46] Stronach 1974: 246; Stronach 1978: 283-284.
[47] Boucharlat 2005: 238.
[48] Schippmann 1971: 248, 257.
[49] Haerinck 1983; Martinez-Sève 2004.
[50] Haerinck 1983: 14, 244. The pottery dating is generally proposed between 250 BCE to 150 BCE (Haerinck 1983: 14), however during his study Haerinck shows how along "Zone I" (Elymais and Susiana) the production may have started some time before (e.g., glazed ceramic) between 4th and 3rd century BCE (Haerinck 1983: 244).
[51] There is an interesting personal comment made by David Stronach, and reported by Susan B. Downey in her book "*Mesopotamian Religious Architecture. Alexander through the Parthians*" of 1988, where the Scottish archaeologist affirmed that during his many visits to Masjed-e Soleyman – while excavations were still under way – there was no pottery found that could be classified as Seleucid (Downey 1988: 131). However, this can be related to the fact that the surveys to deeper layers were very limited due to the agreement with *Archaeological Service of Iran*, and the site was mainly studied on its Parthian occupation level.
[52] Augé *et al.* 1979: 15-16.
[53] Haerinck 1983: 14, 244. Martinez-Sève 2004; Martinez-Sève 2014: 258.
[54] Hannestad - Potts 1990: 115.
[55] Callieri – Askari-Chaverdi 2013: 697.
[56] Coordinates: 31°59'0.73"N 49°16'53.84"E; elevation: 320 m. a.s.l.

The Masjed-e Soleyman complex unfolds across an extended trapezoidal surface (*ca*. 136×125 m)[57] constituted by an artificial terrace (Fig. 3)[58]. This terrace features an external retaining wall characterized by a cadenced alternation of buttresses and recesses (Fig. 4), showing a more intricate structure than that observed at Bard-e Neshandeh. It appears evident that the concept of the artificial terrace can be traced back to the tradition established during the Achaemenid era —as seen in Pasargadae and Persepolis— where palatial and temple complexes were elevated on large terraces,. A tradition that has its roots in the late Assyrian tradition[59]. At the same times, the intentional use of regularly spaced and protruding buttresses in the retaining walls is an element that can be connected to the fortification walls of Persepolis, which extends from the terrace to the Kuh-e Rahmat and are a remnant of the late Assyrian era, as seen, for instance, in Khorsabad. In the Iranian World, other examples of platforms/terraces equipped with regular buttresses include Pasargadae and Ulug Depe[60], both of which share a distinctive feature with Masjed-e Soleyman: integrated access stairs seamlessly incorporated into the body of the terrace (Figs. 5-6). At the level of site organization and buttress morphology, comparisons can be drawn with the walls of Old Nisa, the Arsacid capital constructed on an extensive clay platform dating back to the 2nd century BCE[61]. In particular, the buttress number "t" on the "Terrace I" of Masjed-e Soleyman[62], characterized by an obtuse angle instead of the conventional 90°, exhibits planimetric similarities with the northern and eastern bastions of Nisa[63].

A particularly interesting element positioned on the northern perimeter walls of the terrace are three blind windows or niches (Fig. 7), which present morphological comparisons in the Parthian era, as for example in the monument of Qal'eh Zohak[64]. Despite variations in construction and dimensions, this type of blind window must be considered in as an element inherited from the Achaemenid culture. It originated from the Urartian reinterpretation of Mesopotamian models, transmitted through cultural interactions with the Assyrians[65].

As previously introduced, the Masjed-e Soleyman complex is composed of a vast terrace that extends across multiple horizontal levels, which Ghirshman subdivided into six terraces (I-VI), each with varying dimensions and functions. The terrace is supported by imposing retaining walls —constructed from stone blocks of diverse geometries and sizes (Fig. 8)— which are characterized by regularly spaced rectangular buttresses. These architectural elements serve to confine the loose filler within the terrace (Fig. 9). Access to this extensive artificial terrace is facilitated through a main stairway located at the northeast corner, complemented by smaller staircases situated along the northern and southern flanks.

[57] These measures were taken by the authors in a visit at the site, in 2015. The maximum distance north to south extends from the projection on which stairway B was built to the projection identified by Ghirshman as terrace III; for the east to west axis, this extends from the entry to stairway H until the so-called *western sanctuary*. It is striking that Ghirshman (1976: 55) reports only terrace measurements of the most ancient phase (terrace I, 54×91.5 m) but does not continue with more comprehensive measures, reporting only the fact of an extension of the platform that took place towards the north and the west due to the Macedonian installation at Masjed-e Soleyman (Ghirshman 1976: 72).

[58] On the terminological distinction between "terraces" and "platforms", with a specific reference also to the Masjed-e Soleyman case, see Dan – Salaris forthcoming.

[59] On the difference between platform and terrace, with reference also to the Masjed-e Soleyman, see Dan – Salaris forthcoming. On the development of the Achaemenid platform and terraces from late Assyrian prototypes, see Dan 2023.

[60] Dan 2023.

[61] Jakubiak 2016.

[62] Ghirshman 1976: pl. III.

[63] Pugachenkova 1958: 33.

[64] On this monument and its interpretation, see Schippmann 1971: 372; Kleiss 1972: 160-165, figs. 34-35, pls. 42-33; Kleiss 1973: 171-182, figs. 4-17, pl. 41; Kroll 1984: 42, 118, tab. 5.

[65] On these aspects, also in reference to Masjed-e Soleyman, see Dan 2015: 43-46 and Dan 2023.

## 4. Ghirshman's architectural and chronological proposal

Ghirshman identified four distinct occupation phases, which are reflected in the construction level of the complex:

An initial archaic period (*phase I*) or *époque perse*[66] (subdivided into two periods) was characterized by a single terrace (I) of 91.4×54 m on whose southern sector which the scholar identified as a podium for outdoor worship[67]. A rectangular-shaped room (2.70×1.15×2 m) with a roof composed of large slabs – one of which (1.60×1.15 m) discovered still *in situ* – was placed into a section of the northern foundation wall (north-west corner). This closed space was erroneously interpreted as an *atesh-gah*[68] where the fire was kept for subsequent ritual exposure on the podium. Although no trace has so far been found in such a place (i.e., podium) during this phase, the structure was identified with the rebuilding of the same podium (8.12×7 m)[69], that occurred in a second stage of terrace I[70]. During the so-called *phase II*, Ghirshman considered a widening of the terrace itself with the reconstruction of the southern substructure wall[71]. At this stage, the terrace was accessible through four staircases (A[72], B[73], C[74]-D), possibly connected to the ceremonial activities of the sanctuary as at Bard-e Neshandeh[75]. Whether it involved a Macedonian presence or not, a second construction phase (*époque séleucide*)[76] connected to a Greek community (garrison?) at Masjed-e Soleyman

[66] Ghirshman 1976: Pl. XLVI-XLVII. Ghirshman even refers to the presumed installation on this site of a Persian tribe towards the end of the 8th and the beginning of the 7th century BCE. The site would have been chosen because it was located in a valley close to a small watercourse (a landscape typical of this region), as at the location of nearby Bard-e Neshandeh. The village would have been near a spring, nowadays dried up, which gave its name to a section of the modern city about 2 km from the sanctuary, *Chashmen Ali* or "Spring of Ali." This village extended to the east and moreover to the south where there was a bare hill that Ghirshman thought may have covered the remains of a chieftain's dwelling (Ghirshman 1976: 55).

[67] Ghirshman 176: 61.

[68] The hypothesis advanced by Ghirshman (1976: *Neshandeh*, 21, *Masjed-e Soleyman*, 61-62) which identified the niches within the exterior facades of terraces at both Bard-e Neshandeh and Masjed-e Soleyman as fire-temples or *atesh-gah*, appears to be scarcely credible. These niches, already discussed above in this text, given that they are near access stairways and that they do not have flues, would seem "*far more likely to have sheltered oratories for cult-image*" (Boyce - Grenet 1991: 47). For the same misguided interpretation provided by Ghirshman about the niche of Bard-e Neshandeh, see Ghirshman 1976: 21.

[69] Ghirshman 1976: Plan VI.

[70] Ghirshman (1976: 62) also connected the disappearance of the podium with the confirmed destruction of the most ancient podium of Bard-e Neshandeh.

[71] The south foundation wall, where the hill has a cliff of 20 m that falls straight down into the modern city, is indeed to be considered as the most vulnerable part of the terrace, due to the most exposure to environmental and climatic severity.

[72] Ghirshman 1976: pls. XLVI, XLVII, LI.2-3, LIV.1. The principal stairway (A) is 24.40 × 4.50 m and made up of 20 steps with a height of 18-27 cm each (Pl. X.1).

[73] Ghirshman 1976: pls. XLVI, LI.1-2, LIV.2; fig. 25. This stairway (4.40/4.99 × 5.16 m; southeast corner) is composed of 29 steps.

[74] Ghirshman 1976: pls. XLVI, LIV.3; fig. 26. The stairway (pl. XII.c) is 4.90/4.55 × 5.16 (south side) and made up of 26 steps.

[75] Ghirshman (1976: 61) suggested the existence, during *phase I*, of a religious cult that would have followed the same process as on the superior terrace at Bard-e Neshandeh and attested in the Babylonian and Assyrian sources. During the ceremony, the worshippers most likely might have gone up on the northeast corner using the spacious stairway A, and then descending to leave the sanctuary by the minor stairways B (southeast corner) and C-D (south side). The ceremonies unfolded in all probability around a podium as at Bard-e Neshandeh (Ghirshman 1976: 50).

[76] Ghirshman 1976: 71, Plans III-IV; Pls. XLII, XLIII, XLIV, XLV. According to Ghirshman (1976: 73), during the so-called *époque séleucide* of Masjed-e Soleyman, the sanctuary had a fundamental function in the politics of the Seleucid kings for the internal administration of Iran, in particular regarding the mountainous region of Elymais.

was proposed by the French scholar due to the finding of some artefacts (e.g., Greek-style cavalry riders wearing the Macedonian *kausia*)[77]. During this phase, a new construction asset brought an expansion of the terrace towards the north and west. Ghirshman indicated the construction of three new platforms (II, III, IV), respectively flanking the north side of terrace I (Pl. XII.g), where the existence of a Greek garrison was suggested[78]. These terraces allowed a gradual ascent to the superior terrace (V) by three different levels[79] through the use of five stairways, of which four (H[80], J[81], K[82], L[83]) are placed one after the other, while the fifth (G[84]) separately accessed terrace IV. This array of stairways, levels, and terraces was considered as an indication of the significant influx of worshippers periodically visiting the sanctuary. A further three staircases (E[85], F[1][86], F[2][87]) also provided direct entrance to the superior terrace (V)[88]. According to Ghirshman, this new terrace reveals more thorough work with the use of smaller material selected with higher accuracy, which has assured a better conservation compared to the more ancient phase. Noteworthy, on terrace III, there is a small building (*north-east construction*) which was found, including two rectangular rooms with different entries both posted on the north side and not directly connected to each other. This construction was identified as a possible location for temple personnel of the same type as rooms nos. 7-8 in the lower terrace of Bard-e Neshandeh[89]. During this phase, the terrace had more than double its surface. On the west side, Ghirshman indicated a low and long north-south wall[90], which flanks the western limit of the most ancient terrace (I), as a structural border between this latter and a new and broader extension. The new identified platform (V) was slightly higher hosting two presumed temple buildings with walls composed of irregular stone blocks and earth, and two other smaller buildings with secondary functions. On the southeastern corner stood the so-called *Grand Temple* that Ghirshman placed within the third structural phase of Masjed-e Soleyman (*époque parthe*)[91]. An older structure was subsequently unearthed beneath the initially visible surface of the temple, and tentatively

[77] Ghirshman 1976: 79-80; Martinez-Sève 2004.
[78] Ghirshman 1976: 73.
[79] Ghirshman 1976. There is a difference of around 5.30 m between lower ground level and the superior terrace.
[80] Ghirshman 1976: Plan V; Pl. LV; fig. 22. This one is made up of three steps around 18.35 m wide. Even with smaller steps than those on stairway A, it seems it would have been destined to receive large crowds.
[81] Formed as stairway H with three steps, its dimensions of J were reduced (9.15 m). Interestingly, towards the top of stairway J, the doors of an underground chamber open surrounded by a corridor (1.75×2.70 m).
[82] The stairway K is divided into two parts: the bottom has five steps 18.50 m wide and the higher part has two steps, 13.40 m for the first one and 12.40 m for the higher one.
[83] This is 12.10 m wide and distributed over four steps.
[84] The stairway G is made up of 14 steps set between a buttress (H) and the substructure wall of terrace III, having a lower part of four steps 9.90 m wide and a superior section of 10 steps 8.45 m wide.
[85] Ghirshman 1976: pl. LV.5; fig. 30-31. The closest stairway to the mountain, it is made of four steps 5 m wide.
[86] Ghirshman 1976: Pl. LV.3; fig. 30-32. This is characterized by five steps 4.37 m wide.
[87] Ghirshman 1976: Pl. LV.4; fig. 32. According to Ghirshman (1976: 73), this is a later extension made of 14 steps 2.60 m wide.
[88] Ghirshman proposed that ascent to the sanctuary would have been along the stairways H, J, K, and L, thus keeping the main access on the northeast corner (as occurred with stairway A of terrace I). At the same time, descent would have been made along the other four stairways (E, F[1], F[2], G), all on the north side, the area that for the French archaeologist would have been the Macedonian quarter (Ghirshman 1976: 73).
[89] Ghirshman 1976: 74.
[90] Ghirshman 1976: pl. XLVI, XLVII. This wall has been defined as "symbolic" with the function of dividing the old terrace, along with the podium for Iranian fire worship, from the new area of worship used by the Macedonian community, in this way favouring the birth of Hellenistic-Parthian culture in the region (Ghirshman 1976: 76).
[91] Ghirshman 1976: 77.

dated to the Seleucid era (temple of Athena *Hippia*)[92]. Approximately 30 m. northwest of the *Grand Temple* and connected to it by a paved path[93], there are the remains of a multi-room rectangular structure conventionally labelled as a *temple of Heracles*, basing on the finding of a Heracles statue strangling the Nemean lion. Other structures discovered on terrace V included a further two-room *north-west construction*, whose use remains obscure due to the scarcity of items attributable to it, which were found here and on nearby stairway L on an axis with the portico of the *Grand Temple*[94]. About a dozen metres to the west of the latter, excavations revealed a small building —*southern construction*— with two rooms not connected to each other and with their entrances facing the side of the *Grand Temple*[95]. According to Ghirshman, at the time when Ardashir, founder of the Sasanian dynasty, seized control of Elymais in 224 CE, Masjed-e Soleyman represented one of the most important cult centres of the region[96]. The complex of Masjed-e Soleyman appear to have been seriously damaged by a period of religious intolerance during Shapur II's (r. 309–379) rule, based on monetary finds. This time did not cause the definitive cessation of the terrace, which remained in existence and underwent a further three new phases[97]. According to Ghirshman[98], during the 1st phase after its abandonment, a foundry was installed in the southern part of the *temple of Heracles*' *cella*. A tiled floor covered this area, while a low wall divided the *cella* into two halves with a small roughly-pierced door opening on the southern side. Its soil (*ca*. 50 cm above the level of the pavement) was littered with ashes and charcoal.

At any rate, this phase did not seem to have lasted long, and possibly stopped during the transformation undertaken in the western part of the terrace (2nd phase), where it already

[92] The name *Hippeia* (Hippia) appeared to have its roots in the Mycenaean period and was always used in a context of cavalry and military power. It seems that from ancient times these functions were linked to Athena, who was often given the epithet, "of the Horses." According to myth, Athena showed humanity how to tame horses, and she gave to Bellerophon —the conqueror of the Chimera— a golden bridle for his horse Pegasus (Burkert 1985: 221). Horses were a sign of nobility, an indicator of the cavalier class and their military capacity. *Athena Hippia* was probably the protecting goddess of this class. For this reason, statues of cavaliers were generally dedicated to this goddess and placed in their sanctuaries.

[93] Ghirshman (1976: 90) reports the distance between the two structures as being 15 m, but the examination of the plan that he published seems to indicate a greater distance (Ghirshman 1976: Plan III), data confirmed by our visit to the site in 2015.

[94] Ghirshman (1976: 101) suggests a dating to the Seleucid era because of the existence of a head of the Egyptian deity Bes (Ghirshman 1976: 101; Pl. CX.3; Pl. 68 GMIS 701) which is also well known from excavations at Susa.

[95] Ghirshman 1976: 118. It has been suggested by Ghirshman that the rooms of the "*southern construction*" were erected at different times: first, the smaller room (1.80×1.60 m) and then the larger (2.90×2.20 m), providing a Parthian date based on the relics found. Ghirshman offered this picture even if he also assumed that one of these spaces, identified as a possible habitation for temple guards, may have existed since the Seleucid era.

[96] Ghirshman 1976: 133. The political transition under the control of the Sassanian authority (224-651 CE) did not seem to have affected, at least at the beginning, the performance of the local religious practices, which included the concomitant cult of four Mazdean deities, i.e. Ahuramazda (podium), Anahita and Mithra (*Grand Temple*), and Heracles (temple). Referring to the inscriptions of Antiochus I of Commagene which presented a Greco-Iranian dynastic cult with gods who bore Greek and Iranian names, Ghirshman debatably tried to connect these four Iranian deities (Ahuramazda, Anahita, Mithra and Verethragna/Heracles) to the four aspect of Zurvan, the tetramorphic god whose cult Ghirshman confidently considered to be existing prior to the establishment of the Achaemenid empire (Ghirshman 1976: 133-134). In reality, although the details of the origin and development of Zurvanism remain debated (for a summary of the opposing opinions, see de Jong 2014), it is generally accepted that Zurvanism was a "hypothetical" religious movement in the history of Zoroastrianism which is well attested in Greek, Syriac, Armenian and Arabic sources but surprisingly absent in any Zoroastrian texts found so far (de Jong 2014).

[97] Ghirshman 1976: 136.

[98] Ghirshman 1976.

leaned against the mountain. A new terrace VI (18×27 m) was then erected, according to Ghirshman, which entirely covered the *temple of Heracles*[99]. Its walls were composed of massive stones and fragments of columns, including three pieces of the Heracles statue (head, torso, and legs)[100]. Access was provided through a large door (1.15 m wide) on the northern side. The western area of the terrace presented a construction of which only the southern part of the rear remained, divided into two parts, with an access door opening on the south wall and a second one on the terrace[101]. The wall *apparatus* (high 0.82-1.28 m) was unrefined, the room partially cut into the mountain, and the rear wall directly covered with unworked stone slabs, placed and glued against the slope of the hill. The remains of four columns, which were constituted from reusing material supplied by the *Grand Temple*, were also found aligned along the primitive room of the construction[102].

According to Ghirshman, the third (and last) phase described the existence of Masjed-e Soleyman after the hostile activity led by Shapur II on the territory. As a replacement for the small columned structure of terrace VI, a new construction was established. It was considered the first structure to be cleaned out and analyzed on the platform by the French mission, which interpreted it as a sanctuary (*western sanctuary*)[103].

4.1. Monumental Architecture

When Ghirshman began working at the *Grand Temple* —aiming to discover any prior constructions under the visible temple of the Arsacid period— he first had to enter into an agreement with the *Archaeological Service of Iran*, which crucially limited the aspect of the mission. This agreement permitted excavations but it did not allow walls to be touched and it did not authorize any work that could have compromised the state of the monument[104].

The complex of Masjed-e Soleyman is dominated by two principal edifices built on stone foundations and delineated in rectangular environments: the major *Grand Temple* (Figs. 10-11) and a modest structure tentatively associate to Heracles (Figs. 11-12). According to Ghirshman, the visible structures of the *Grand Temple* concealed under its ground-level (Parthian) the remains of an "anterior" temple attributed to Athena *Hippia*[105], whose planimetry would not have been much different from the Parthian one (*phase II*). Few permitted surveys showed how the two construction phases (Seleucid and Parthian) of the walls were overlapped in some areas. To be more precise, the surveys on the north corridor[106] and on the southwestern section of Room no. 4[107], which passed through three different stratigraphic layers reaching a depth of around 3 m, were the more informative. The survey attained an accumulation of stones, which were dispersed in a bed of other pebbles to level the ground, derived from the demolition of a wall. It was possible to distinguish the walls of the most ancient parts, then covered with a layer of loose earth, and above which the two overlaid sections of the rear wall construction were raised. Remarkably, among that load

[99] Ghirshman 1976: pl. III-IV, IX.
[100] Ghirshman 1976: 136; Pl. LXX.
[101] Ghirshman 1976: plan IX, rooms nos. 3-4; Pls. XLV, XLVI, XLVII, XLVIII, XLVIX, LVIII.
[102] Ghirshman 1976: pl. LVIII. Ghirshman considered the building of this building modest assembled and the reusing of material from the *Grand Temple* inadequately executed, that prompted him to assume the laborious realization of terrace VI as an attempt to eliminate the *temple of Heracles* and its statuary in the logic of religious intolerance which pervaded that historical period.
[103] Ghirshman 1976: 138.
[104] Ghirshman 1976: 77.
[105] Ghirshman 1976: 80.
[106] Ghirshman 1976: Plan VII; Pl. LXIX.2.
[107] Ghirshman 1976: pl. LXXVII.1-2.

of stones, a considerable number of votive objects from the "anterior temple" were unearthed in a quite clear stratigraphic context[108].

After the archaic phase (Seleucid), and during the Parthian period, Ghirshman recognized four successive structural phases (*I*, *II*, *IIIa,* and *IIIb*) of the *Grand Temple*, among which *phase IIIa* (Fig. 10) was regarded as the most complete in plan, despite the fact that a major proportion of the complex was devastated by the digging of graves for a modern cemetery[109].

In *phase, I*[110] a line of stones evoked evidence of an initial wall structure[111] even though the limited evidence left makes it impossible to define an overall plan, even only in part. At this stage, the *Grand Temple* seems to be constituted by Room no. 4 (Ghirshman's *cella*) and Room no. 6 (Ghirshman's *antecella*) with the same plan of the *temple of Heracles* and the *western sanctuary*. This situation suggested to Ghirshman and other scholars that the temple of Athena *Hippia* during this phase could have had a planimetry similar to other Hellenistic shrines in Near East and central Asia, especially in Mesopotamia (e.g., Anu-Antum temple and Irigal temple at Uruk)[112].

The wall partitions during *phase II* were approximately the same as those in *phase IIIa*, except for room no. 7, with a surface apparently smaller compared to the plan of following phases, creating uncertainties in the definition of a plausible planimetry for the structure. As a result of some surveys (marked with an "S" on the plan), a certain number of walls and corners were identified, and tentatively combined to provide a consolidated plan despite knowing that other fractures could be interlayered between the partially revealed walls[113].

*Phase IIIa*[114] is considered the most complex and articulated planimetry, despite the depredations, which has undergone because of graves dug across its entire surface[115]. The roughly-squared perimeter (31×33.08 m) has a corridor of varying width[116] running along all four sides isolating the central block of the building from the outer wall. Four entrances lead into this exterior corridor: from the eastern corner, preceded by three steps (likely the main entry); on the northern corner another entrance on the same principal façade (much disturbed by the digging of graves); from the southeast corridor and practically in line with the latter; and a fourth entrance on the northwest side. The northeast façade is especially elaborate. Ghirshman envisioned a portico (no. 14) of 34.52 m between the two doors of the main northeast wall, completely paved and having three lines of columns[117] placed on bases, each composed of a thick *torus* then a *scotia* separated from another much thinner one. These

[108] Ghirshman 1976: 77.

[109] The main problem for Ghirshman was that this cemetery covered most of the southern area of the terrace. He defined this obstacle as almost insurmountable, but it was overcome after a plea was made to the Shah. The Shiite religion in Iran permitted relocation of graves older than 30 years, and the Shah granted the request because he did not want to limit archaeological work that could bring prestige to all of Iran (Ghirshman 1969: 484).

[110] Ghirshman 1976: Plan IV and VII.

[111] Ghirshman 1976: Pl LXXVII.1-2.

[112] Ghirshman 1976: 103. For planimetric comparisons, see Downey 1988; Shenkar 2011; Canepa 2015; Salaris 2017.

[113] Ghirshman 1976: 105.

[114] Ghirshman 1976: Plans III, IV, VII; fig. 36.

[115] Ghirshman 1976: pl. XLIII, XLIV, XLV, XLVI.

[116] The corridors on the NW (1-2), and NE (5-13) were larger, respectively 3.05 m and 2.40 m and built with a bench that ran along their interior walls. Corridors on the SW (no. 16) of 1.45 m and SE (no. 15) of 1.25 m were instead of smaller dimensions, and perhaps because of space restrictions and the need for ease of access they were not built with benches. All of this brought Ghirshman (1976: 105) to believe that the difference in dimensions indicated a difference in importance, supported by the fact that the NW and NE corridors framed the most important sectors of the temple, the facade with the main entrance and the most sacred area with its cella (no. 4) and antecella (no. 6).

[117] The 21 columns were arranged in rows of eight, seven and six columns, as counted from outside moving inwards.

were built on squared plinths (50 cm) that were still in place —as was the case at Bard-e Neshandeh— at the time of the French excavations. The principal entrance, located near the northeast corner, had a protruding threshold and a line of three steps (benches?) that flanked the entire northeast external façade and framed the main door. In the northwest corner of this façade, there was a low podium (4.90×3.75 m) which was accessed by three steps on the east side. A second door on the north façade led from the podium into the isolating corridor. From the main door, through corridor no. 13, the way ahead was via a long narrow vestibule (no. 12) of 10.20×3.10 m and passing through a door in line with the other two[118], which also provided access to a large court no. 11 (14.35×12.80 m) surrounded on all four sides by narrow benches[119]. Rooms nos. 4 and 6 were on the western side of the court, occupying the breadth of the vestibule and the court. Access came through a set of two identical doors (1.80 m) placed on the same axis in the northwest wall of the court and opening into Room no. 6 (16.92×4.28 m) and then Room no. 4 (15.80×2.58 m)[120]. Under the paving of Room no.6, in the northeast corner, excavators found a large water jar, and presumably a drain from outside the sanctuary which channelled water into it[121]. Two altars of different sizes (respectively: 2×1.10 m; and 1.40×0.90 m) rested against the rear wall of Room no. 4 in a direct line with the doors (Pl. XIII.b-d), while between the court and the isolating corridor (no. 16) on the south side, there was a long room of 13.68×4.05 m (no. 10), which could be entered only via the court (no. 11) through two doors of 1.70 m width[122]. Room no. 10 covered the length of the entire southwest side of the court (no. 11) and through a large door (2.20 m)[123] communicated with room no. 9, which was equal in length to the two southwest short sides of Room no. 4 and Room no. 6. According to Ghirshman, these two elongated rooms (nos. 9 and 10) were considered a sacred space (like Rooms nos. 4 and 6), or perhaps as sacristies[124]. At the north (northwest) corner of the building, a rectangular podium (4.90×3.75 m; elevated 0.70 m) was reached by three steps, while a door opened into corridor no. 5. Interestingly, a drain pipe was present in the external north-western wall near the north corner.

In the next construction stage (*phase IIIb*)[125], some structural adjustments appeared to have been made, such as the removal of almost all the benches of court no. 11 and corridors (nos. 1, 2, 5, 13) likely due to the elevation of the ground, or the installation of two doors on the short sides of the Room no. 6, one opening into corridor no. 5 and the other communicating with Room no. 9. Additionally, vestibule no. 12 accommodated a small socle (4.20×2 m) on the northeast rear wall, and the northern short-side wall of Room no. 4 was doubled in thickness. According to Ghirshman, towards the end of the temple's existence, the wall structures between court no. 11 and chamber no. 10, and those between the latter and Room no. 9 could have been removed to create a large L-shaped court[126]. Finally, the stone slabs of the Room no. 6 and Room no. 4 were covered with new paving, separated by a 15-cm layer of earth[127].

Contrary to the area where the main building was erected, on its upper part the terrace was not affected by the cemetery's invasiveness[128]. Moving to the northwestern flank a

[118] Ghirshman 1976: pl LXIV.1-2.
[119] In this area, the modern tombs were numerous, and according to Ghirshman (1976: 106), cover stones for court no.11 were cleared to make way for them.
[120] Ghirshman 1976: pl. LXVI.1-2-5.
[121] Ghirshman 1976: pl. LXV.2, 4.
[122] Ghirshman 1976: pl. LXIV.3-4.
[123] Ghirshman 1976: pl. LXVIII.4.
[124] Ghirshman 1976: 107.
[125] Ghirshman 1976: fig. 37.
[126] Ghirshman 1976: 108.
[127] Ghirshman 1976: pl. LXVII.1-2. The paving of room no. 10 in front of the two doors was covered by a layer of gypsum, typically used in the Sassanian period.
[128] The graves began from the southern corner (Ghirshman 1976: 119).

modest structure (possibly consecrated to Heracles) stood as a simplified version of the *Grand Temple*.

The so-called *temple of Heracles* (17.08×8.03 m), which roughly faced east, consisted in Room no. 5 (Ghirshman's *antecella*) measuring 13.10×3.40 m, Room no. 6 (Ghirshman's *cella*) of 17.05×2.50 m and an additional room (no. 13) that opened to the outside (Pl. XIV.2). This last room (interpreted as a sacristy[129]) was situated between the Room no. 5 and the northern wall of the temple, thus reducing the length of Room no. 5. As in the *Grand Temple*, access to Room no. 5 involved two doors (respectively of 1.65 m and 1 m). Three steps, with the top level marked by some *graffiti*, were identified as low benches, which were made of large stone slabs running along the external wall of Room no. 5[130]. A single entrance – in line with the larger one that opened into Room no. 5 – provided access in its turn into Room no. 6. Two bases, probably for statues, also flanked this door. The small room no. 13 (3.65×3.3 m) – north of Room no. 6 – may have been used as a sacristy, and it had the particularity of opening to the outside only on the southeast side like Room no. 5 (similar to environment no. 4 at Bard-e Neshandeh). As reported by Ghirshman, the northwest wall of Room no. 6 seemed to have been adjacent to an older construction (no. 9) which was 17.10 m long and 2.95 m wide[131]. In a subsequent phase, the temple had a further six rooms added, reasonably because of the major construction that became structurally inadequate to hold the increasing number of worshippers or votive statues[132]. Two sets of two communicating rooms (nos. 14-15 and 16-17) were then located on the northeast side of the temple, where the section was composed of one short side of Room no. 6 and one of Room no. 13, and additional two chambers (nos. 12 and 18) which were adjoined at the southern corner of Room no. 5.

The dating for these changes is not known, but what appears evident to Ghirshman is that the *temple of Heracles* of Masjed-e Soleyman was repeatedly modified during its prolonged existence. These structural adaptations were probably not caused by a protracted destructive action – as perhaps occurred in the *Grand Temple* – but rather involved diverse restorations, which caused it to disappear in the Sasanian era under terrace VI, replaced by the more modest *western sanctuary* characterised by an innovative vaulted roof[133].

## 5. The Masjed-e Soleyman terrace: a critical approach

In this section, a systematic reanalysis and reorganization of the data presented by Ghirshman are undertaken, encompassing both the nomenclature of the structures (terraces and buildings) and the chronology of the archaeological phases he identified. One of the primary issues with Ghirshman's proposals is related to the structural subdivision of the terraces and the names assigned to the different structures preserved on them. Assigning names such as the *Grand Temple*, *Temple of Heracles*, Temple of Athena *Hippia*, etc., has contributed to the prevailing notion within the scientific community that it could confidently

[129] Ghirshman 1976: 90.

[130] Ghirshman (1976: 91) compared these stone slabs with those present within the terraced rooms (*salles aux gradins*) at Dura-Europos in Syria, and as such these would have included benches for people attending sacred rites. Ghirshman (1976: 91) further suggested a similarity between these steps/seats and those present at the temple of Ai Khanoum in Afghanistan, where, however, the steps constitute the base of the temple, undermining the hypothesis that they could have been used as benches by spectators (Downey 1988: 132). The French archaeologist speculated that the steps of the *Temple of Heracles* might have been an addition in the Parthian era and so would not have been present in the original phase (Ghirshman 1976: 189).

[131] Ghirshman 1976: 90-91; Pl. LXII.1-2, 5. As suggested by the finding of red earthenware of the same type found at Susa from the same period, this construction could be traced back to the Persian epoch, when the temple was supposed to lay against the hill.

[132] Ghirshman 1976: 119.

[133] Ghirshman 1976: 138-139, pl. LVIII.1-2-3.

possible to attribute a sacred function to these buildings. To address this concern, an alternative approach is adopted, involving the reorganization of the complex of structures by assigning new nomenclature.

In this paragraph, the terraces are being re-evaluated, and a new numbering system is being implemented, taking into account considerations of stratigraphy and site plan. Subsequently, a new nomenclature for all the structures previously described by Ghirshman is being introduced

## 6. The terrace

Ghirshman classified the Masjed-e Soleyman complex into six terraces built during various historical periods (Fig. 3), spanning from the Achaemenid to the Sasanian era. However, based on the existing state of available data —including the textual and photographic materials provided by Ghirshman in his publications— such a detailed sub-division of the terrace complex does not appear to be supported by sufficient evidence. Considering both the architectural evidence and the distinct features observed on the "different" terraces, the system of terracing appears highly homogeneous in terms of construction technique, access points, and the articulation of external walls with buttresses, all of which bear significant similarity to each other (Figs. 13-14). The apparent disparities in block sizes utilized in construction, which could be interpreted as a chronological indicator, might be better explained by structural considerations. For instance, a comparison between the dimensions of the blocks used in the substantial corner buttresses and those in the linear stretches of walls reveals a marked contrast, with the latter being significantly smaller. The observation suggests that even if multiple construction phases took place, they probably occurred within a relatively limited timeframe, rather than spanning several centuries as implied by Ghirshman's reconstruction. In this context, Ghirshman's criterion for subdividing Terrace I and Terrace II is illustrative. This criterion relies on a low wall running approximately from north to south, located in the central part of the complex (see Fig. 15). According to the excavator's identification, this wall serves as the demarcation between the Achaemenid terrace (Terrace I) and the presumed later Seleucid-Sasanian expansions (Terraces II-VI). However, it is argued that the absence of a comprehensive examination of this wall segment, which lacks the characteristics of a terrace boundary or a retaining wall, does not provide substantial evidence for the division of the terrace into two major sections (i.e.,Terrace I and II). Without additional investigations, it should be considered as part of the same architectural phase. From this perspective, the "small wall" could be interpreted either as a dividing threshold between two areas on the same terrace or as a low connecting step between areas positioned at slightly different elevations. Similar "small walls" are found in the north-western area, where Ghirshman divided Terraces II, III, IV, and V. These structures evidently serve as connecting steps between different floor levels situated at varying elevations.

## 7. The structures

This contribution does not serve as the appropriate framework for conducting an exhaustive analysis of each individual building encountered on the terrace[134]. Nevertheless, in order to recognize the limitations in Ghirshman's interpretations, it is useful to consider the case of the so-called "Podium" situated on the southeastern flank of the terrace (Fig. 16), which Ghirshman tentatively identified as an Ateshgah[135]. The scholar proposed two distinct architectural phases for this "Podium". Firstly, during the earlier phase of Terrace I it was connected to the Achaemenid era. Later renovations were associated with the expansion of

[134] The authors defer this systematic analysis to a future contribution.
[135] Ghirshman 1976: 61-64.

the terrace's southern side, which apparently belonged to the second phase of Terrace I. This phase was also speculatively attributed to the Achaemenid era. It is immediately apparent from the published excavation plans that both architectural phases of the Podium overlay one of the two enclosing walls. This undermines any plausible scenario of contemporaneity between what Ghirshman interpreted as the ancient phase of the terrace (*époque perse*) and the two phases of the podium's construction. A noticeable discrepancy in Ghirshman's reconstruction proposal is likewise discernible in the representations of these two phases[136]. The podium is shown on the axonometric rendering of Phase I of Terrace I as being recessed in respect to the perimeter wall, which is incompatible with the excavation plans since the podium should either cover or intersect with the wall[137].

Below, a concise table enumerating the structures of Masjed-e Soleyman is provided, accompanied by both Ghirshman's original nomenclature and our newly suggested names for these structures

| Ghirshman 1976 | Salaris – Dan 2023 |
|---|---|
| Podium (perse - phase I) | Building A |
| Temple of Athena Hippia (séleucide - phase II) | Building B2 |
| Grand Temple (séleucide - phase III) | Building B1 |
| Temple de Heracles (séleucide - phase III) | Building C |
| NE construction (parthe - phase IV) | Building D |
| NW construction (parthe - phase IV) | Building E |
| S construction (parthe - phase IV) | Building F |
| Western Sanctuary (parthe - phase IV) | Building G |

Challenging the architectural, chronological, and functional assumptions encompassing the entire complex of Masjed-e Soleyman prompts a comprehensive reevaluation of its potential functions. It is no longer possible to categorically classify Masjed-e Soleyman as a sacred terrace. This terraced complex clearly aligns with a broader tradition rooted in both Iranian and Mesopotamian heritage, characterized by elevated complexes encompassing palatial and sacred elements. Given the current stage of research, it remains unfeasible to restrict all the structures within Masjed-e Soleyman to an exclusively sacred function. Nonetheless, the possibility that certain phases may have seen the presence of structures serving as centers of power cannot be excluded. This potential interpretative perspective could offer insight into the current absence of identified administrative centers in the Elymaean highland.

Among the structures that present significant interpretative issues, the two phases of Building B (B1: *Grand Temple*; B2: Temple of Athena *Hippia*) deserve special consideration. Notably, Phase B1 —commonly referred to as the *Grand Temple*— lacks unequivocal evidence supporting its exclusive use for sacred purposes, both in terms of its architectural features and the materials found within. A notable feature in this regard is the discovery of two podiums in Room no. 4. Ghirshman interpreted these as small altars for sacred statues, but it is plausible that they functioned as pedestals for the thrones of regional kings. This alternative perspective gains support from the axial alignment —and consequently the absence of a bent-axis— of these podiums with the openings of Room no. 6 and Court no. 11. Notably, individuals entering the large Court no. 11 would have had a direct view of the two low podiums, a circumstance that raises questions regarding their exclusive sacred function. Therefore, it is important to explore comparative studies, such as the analysis of temple architecture in Mesopotamia

[136] Ghirshman 1976: 69, 131, figs. 29, 42.
[137] Ghirshman 1976: fig. 29.

during the Seleucid period. Among the diverse types of structures, the sanctuary of Bit Resh is particularly significant, housing the temple of Anu-Antum. This complex clearly illustrates the pivotal role played by the presence and coexistence of an axial *antecella-cella* block and the bent-axis structural model within a sacred edifice[138].

Significant is also the structure B2, which seems to represent the earliest archaeological evidence discovered at Masjed-e Soleyman[139]. Although it makes it difficult to assign an exact chronological period, it attests to an architectural phase that predates the Parthian period. This architectural structure provides evidence of distinct archaeological strata within the terrace. These layers may represent remnants from a pre-existing site that were integrated into the construction of the terrace, without necessarily being associated with an underlying structure[140].

Additionally, the discovery of terracotta figurines and other paraphernalia as moveable artifacts within a relatively uncertain archaeological and architectural context does not provide unequivocal confirmation that structure B2 was designed as a sanctuary. This perspective —which highlight the need for interpretative caution— finds corroboration in other archaeological excavations in Iran and Mesopotamia dating back to the 1st millennium BCE. In these endeavours, votive figurines and ritual paraphernalia have been unearthed in conjunction with architectural contexts of varying complexity and function. An example can be found at the archaeological site of Tell Halaf in northeastern Syria[141]. Here, a notable assemblage of terracotta figurines, characterized by the depiction of horsemen adorned with the distinctive *kausia* headgear appears in the Hellenistic layers at Tell Halaf during the 2nd century BCE[142]. Analogous to the similar prototypes from Masjed-e Soleyman, the Hellenistic horsemen are depicted with the so-called *kausia* on their heads[143], a distinct element of Macedonian origin traceable archaeologically to the latter part of the 4th century BCE[144]. This data can be confidently used as a *terminus post quem* for dating of the B2 building at Masjed Soleyman. However, it is noteworthy that the horsemen figurines from Tell Halaf do not appear to have been employed for votive purposes, as indicated by Stern's observations, given their absence from dedicatory contexts within Syrian temples[145]. The presence of the *kausia* headgear, instead, may be indicative of local royal associations or reflective of evolving political dynamics, particularly within the Hellenistic-Greek sphere, where the *kausia* held connotations of regal authority[146]. A common variation on the Masjed-e Soleyman type, also present at Susa and Uruk, places a small 'oriental goddess' figure between the necks of a double-headed horse[147]. The female figure is nude allowing for interpretation either as a divine goddess or as a representation of a mortal woman, potentially the results of spoils of war. The introduction of this female figurine serves to enhance the votive and amuletic attributes of the figurine, calling on female fertility as well as male military strength[148]. In summary, while the recovery of votive figurines and ritual paraphernalia undeniably contributes valuable insights into the tapestry of religious beliefs and practices, their presence in isolation does not confer

[138] Downey 1988: 38-42.
[139] In Ghirshman's perspective, the oldest structure is the so-called podium and terrace I, which we have demonstrated can hardly be considered as the oldest element of the complex.
[140] Consider, for example, the artificial terrace built in Susa by Darius I, which cut through and incorporated an older tell into its structure (Ladiray 2013: 140, fig. 121).
[141] Katzy 2020.
[142] Katzy 2020: 214.
[143] About the origins and the distribution of the *kausia* see Jansen 2007.
[144] Jansen 2007.
[145] Stern 1982: 161.
[146] Katzy 2020: 216.
[147] Martinez-Sève 2002: no.761-765, 766-767.
[148] Ghirshman 1976: 79-80; Martinez-Sève 2002: 481.

indisputable confirmation of a singular religious context for the associated structures. The presence of these votive artifacts within ceremonial or architectural settings, as witnessed at Tell Halaf or Masjed-e Soleyman, does not unequivocally designate the entire complex as an exclusive sanctuary or religious site.

## 8. Conclusions

The occupation phases proposed by Ghirshman for Masjed-e Soleyman, as at Bard-e Neshandeh, appear more based on theoretical data than methodically developed. In general terms, no surveys have been conducted with the purpose of providing a meticulous stratigraphic study of the terraces, which are fundamental to understanding the chronology of the site and the architectural structures on it, and the relationship between the different stratigraphic contexts. However, it is important to mention that Ghirshman's excavations were relatively shallow limited by the agreement with the *Archaeological Service of Iran*. Through some surveys, it emerged that the stratigraphic layer of the 3rd century BCE, where the terracotta figurines had been found, lay 3 m deep beneath the Building B1[149]. In the section of Building C, instead, the excavations stopped at the "anterior" construction (no. 9) on the northwest of the Room no. 6 where some red ceramic fragments were found, chronologically attributed to the Achaemenid period[150], with no attempts to excavate deeper. As a result, the foundation plan in *phase I* for the walls of structure no. 9 —only 80 cm beneath the walls of Building C's Room no. 4[151]— and the respective location of the earliest occupational layer are missing, while the difference in *strata* is evidently slight compared with those, which have been observed for the Building B1. The measurements reported on the various topographic plans[152] are those that correspond to the latest levels of occupation without providing any significant data for the earlier contexts.

In light of factors discussed up to this point, it appears that the foundation of the terrace to the pre-Achaemenid period is rather insubstantial. On the other hand, the ceramic findings, such as terracotta statuettes and coroplathes seem to demonstrate that the site was occupied between the post-Achaemenid era and 2nd century BCE[153], but it is impossible to clarify the aspect of the terraces at the time. With this in mind, the Parthian era is responsible for most of the visible structures, while the last phase of the principal temple and the Building G may be dated to the proto-Sasanian period.

Finally, it is essential to provide some general conclusions regarding the remarkable case study of Masjed-e Soleyman and the archaeological and interpretative distortions that continue to influence not only this significant site but, more broadly, the archaeology of Elymais. Ghirshman's classification of two of the most representative sites in this region of Iran, namely Masjed-e Soleyman and Bard-e Neshandeh, as the "sacred terraces" of Elymais, along with his interpretation of all discovered structures within a sacral and religious framework —often with an incorrect use of ancient sources— may potentially concealed the presence of probable centers of political and administrative power in this region of the Zagros.

The architectural design of Masjed-e Soleyman's terrace unequivocally aligns with a well-established tradition prevalent in Mesopotamia,[154] which reached its zenith on the Iranian plateau with the construction of Persepolis. This tradition is characterized by the elevation of political and religious complexes atop extensive platforms or artificial terraces.

[149] Ghirshman 1976: 77.
[150] Ghirshman 1976: 90.
[151] Ghirshman 1976: 90.
[152] Ghirshman 1976: Plan IV and VIII.
[153] Martinez-Sève 2004.
[154] Consider the Assyrian palaces, expecially Sargon II's palace of Khorsabad.

It is highly probable that Masjed-e Soleyman conforms to these standards in terms of architectural structure, and the buildings that have been found there are most likely used for both religious and political purposes.

Regarding its chronological history, it seems evident that a site occupied this location prior to the extensive developments during the Parthian period, however it is difficult to date it precisely. The evidence that is currently available is insufficient to determine whether there are any potential underlying terraces beneath the ones that are currently visible or whether the main terrace included an older site of a different kind within its perimeter, as was customary in the area.

In conclusion, it is essential to maintain an open-ended perspective when considering the archaeological complexities of Masjed-e Soleyman. We must remain receptive to the prospect that future excavations at the site may unveil new interpretations and dating. The archaeological works carried out in Khuzestan have shown how the Seleucid and Parthian eras represented a period of considerable activity in southwestern Iran[155], probably based on a certain socio-political stability[156]. The valuable work led by the *Iranian-Italian Joint Expedition in Khuzestan* over the last ten years in the area of Izeh-Malamir and Kaleh Chendar is just the last example.

The development of a critical perspective is crucial in the intricate landscapes of the Iranian plateau and the broader Ancient Near East, where the data available often stemmed out from excavations conducted during the pioneering years of archaeological research. This critical approach should challenge established theories and assumptions that need to be reevaluated and reformulated in light of new methodological approaches and comparative data. This process is indispensable for the advancement of interpretative research, both functionally and chronologically. Within this framework, the case study of Masjed-e Soleyman stands out as a remarkable example of the transformative power of critical analysis in resolving historical and archaeological complexity.

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[155] Boucharlat 1985; Martinez-Sève 2002. It cannot be ignored that the last and so far, only excavations of this site, as its "neighbouring" at Bard-e Neshandeh, were those conducted under Ghirshman in the 1960s (Ghirshman 1976).
[156] Salaris 2021: 40-44.

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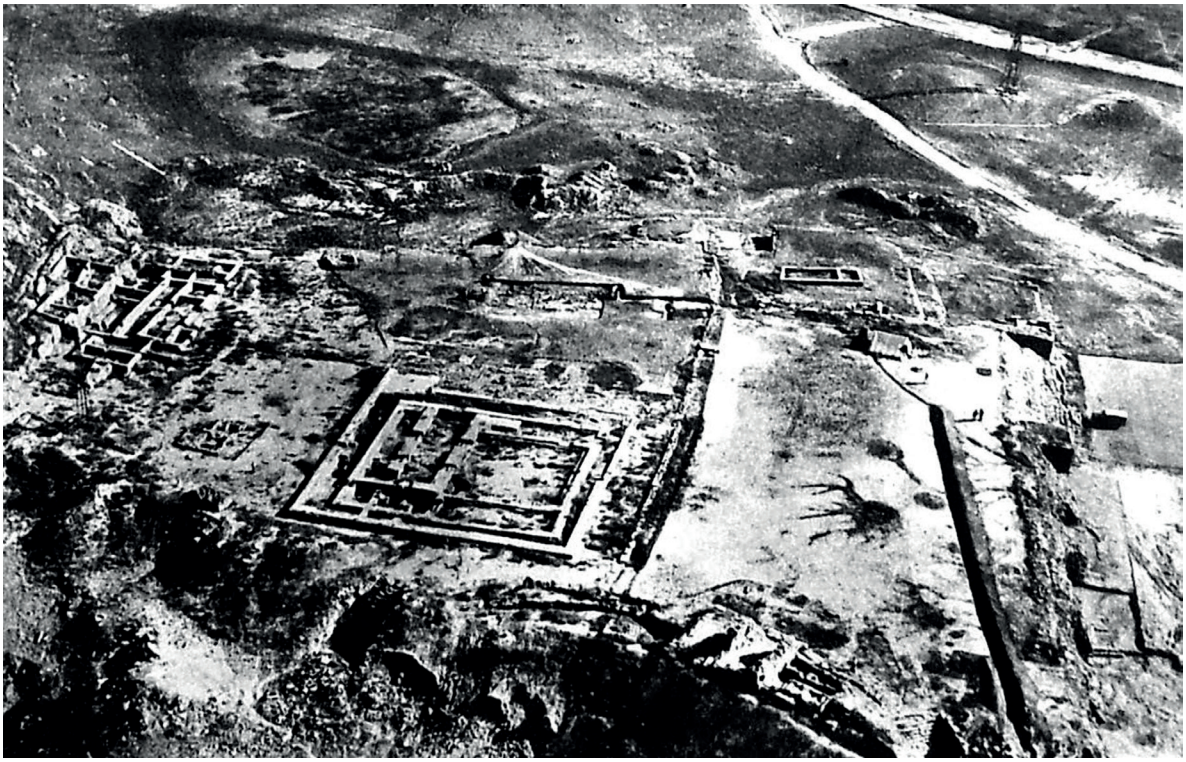

Fig. 1. Aerial view of Masjed-e Soleyman, seen from north-east (after Ghirshman 1976: Pl. LI.2).

Fig. 2. Aerial view of Masjed-e Soleyman, seen from east (after Ghirshman 1976: Pl. LI.3).

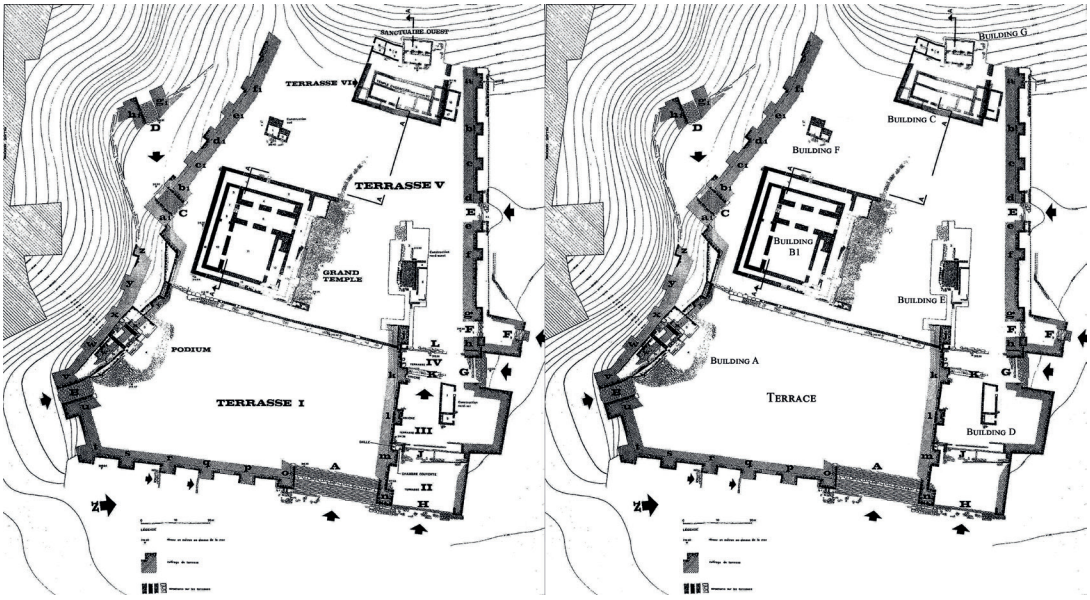


Fig. 3. On the left, plans of the structures investigated by Ghirshman
(after Ghirshman 1976: Pl. III); on the right the same plan with the features renamed.

Fig. 4. The eastern retaining wall of the terrace of Masjed-e Soleyman (D. Salaris 2015).

Fig. 5. The main stair entrance to the terrace (A) on the eastern side of the complex
(R. Dan 2015).

Fig. 6. The secondary stair entrance on the south side of the complex (R. Dan 2015).

Fig. 7. The buttress “k” with one of the blind windows/niches (D. Salaris 2015).

Fig. 8. The corner buttress “n”, where is well visible the different masonries used (R. Dan 2015).

Fig. 9. The corner buttress “n” seen from the top, where is visible the filling of the terrace with loose materials (D. Salaris 2015).

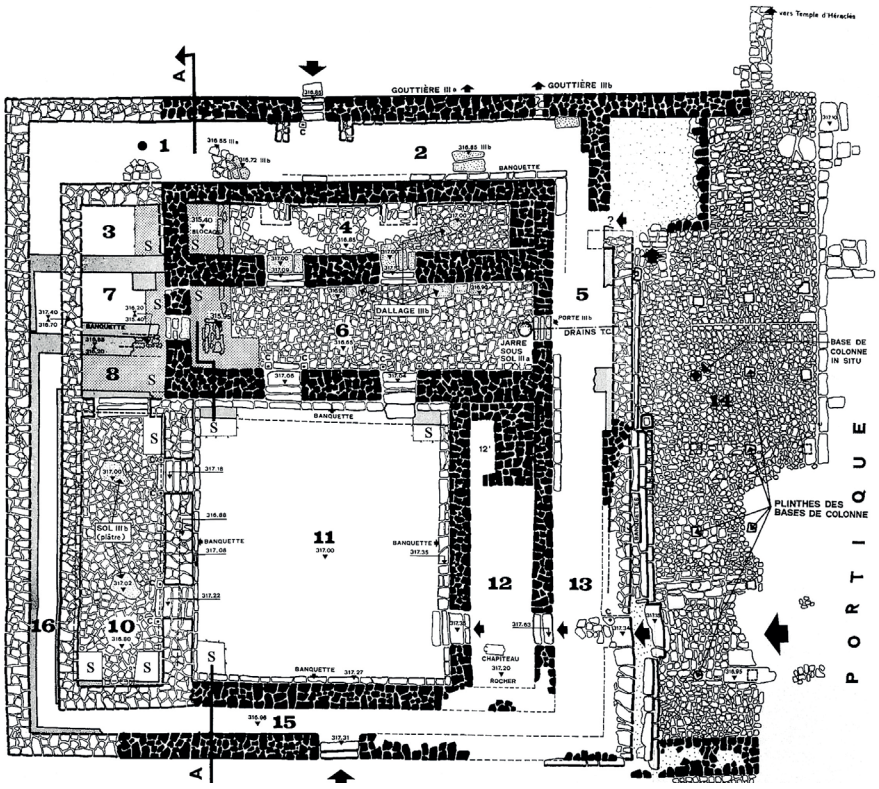


Fig. 10. Plan of the building B1, the so-called "Grand Temple" (after Ghirshman 1976: Pl. VII).

Fig. 11. General view of the terrace as seen from the relief to the west. In foreground the Building C (Temple of Heracles); on the right Buildings B1 (Grand Temple) and A (Podium) are visible (D. Salaris 2015).

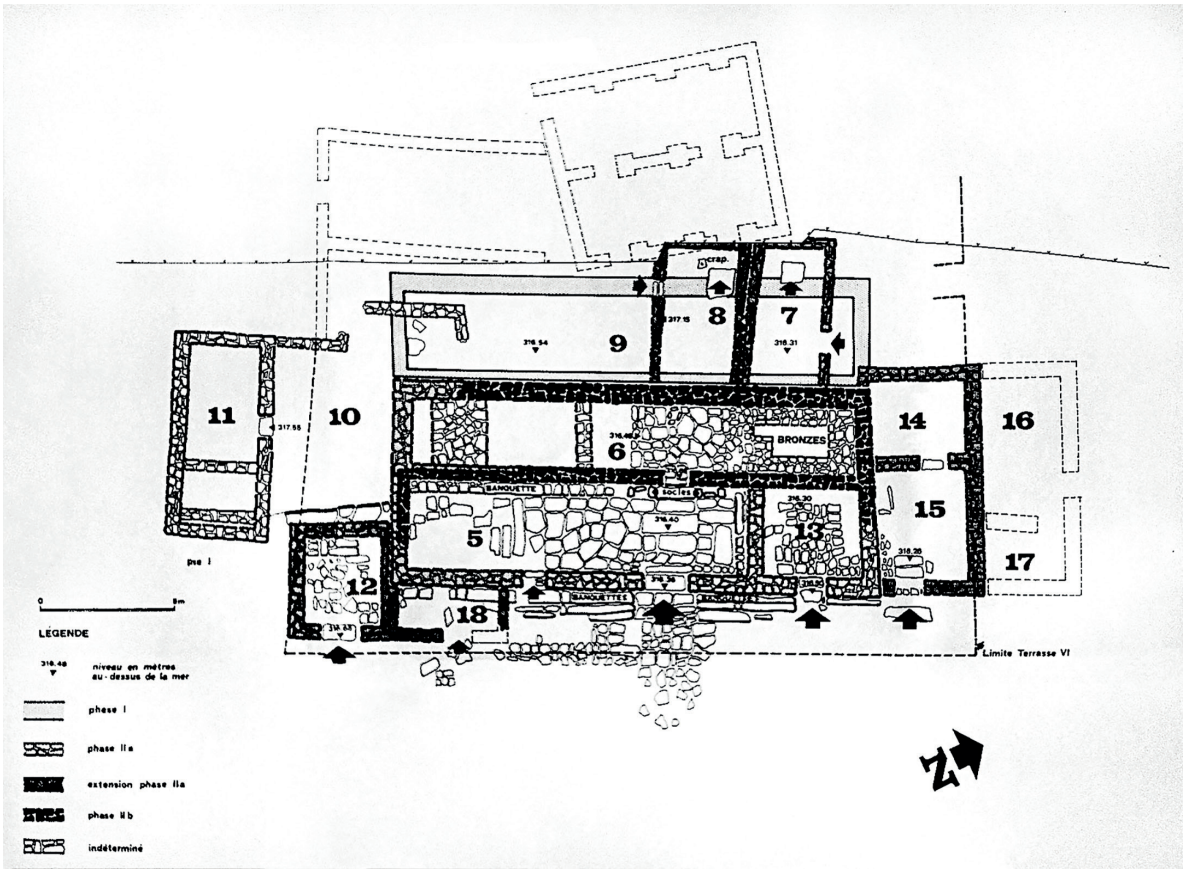


Fig. 12. Plan of the Building C, the so-called “Temple of Heracles”
(after Ghirshman 1976: Pl. VIII).

Fig. 13. View of the stairway “E” with the “a-e” buttresses and the relief on the western side of the terrace in the background (R. Dan 2015).

Fig. 14. The low stair between the terraces “II and III” as defined by Ghirshman (D. Salaris 2015).

Fig. 15. The low wall which, according to Ghirshman, divided the “Terraces I and V” (D. Salaris 2015).

Fig. 16. View of the Building A, the so-called “Podium”, as seen from west
(R. Dan 2015).

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