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Ghadames (Libya). Surveying Data for a reconstructive proposal of the ruins locally known as “el-Asnam”, the Idols

The following paper covers a topic seldom studied in detail, namely the ruins locally known as el-Asnam (“the Idols”) of the funerary monuments from the Roman settlement of *Cydamus*, as well as the few related architectural elements reused as *spolia* in the actual town-oasis of Ghadames (Libya). The dispersal of most of them and the strong deterioration of the rude mortared rubble core preserved *in situ*, now stripped of their ashlar masonry, make it difficult to reconstruct the lost architecture of these funeral monuments. But detailed studies of the preserved data and, going forward, the formal and metrical coincidences with best preserved tombs with arcaded portico elevating on a cubic basement conserved in the Ghirza necropolis and in other sites of pre-desertic Tripolitania, allows us to make reliable assumptions about the original images of these monuments. The paper will analyse the most significant *spolia* recorded during the surveys, such as pecu-

liar capitals with heavy square-ended abacuses, plain and spirally fluted shafts, friezes and head-arches with carved geometric and phytomorphic patterns and iconographic subjects, mainly to re-create the virtual image of these funeral monuments and to define their chronological framework, that fits with the historical transformations and the wider cultural, social and economic dynamics of late Roman Tripolitania. The simple reiteration of flat and simplified decorative ensemble, the archaising representation of the wealth status of the client elite and the conscious references to classical models all emphasize the prestige of their monuments, which have been passed down from the late IV and V centuries. They can all be seen to be linked to the process of transmission of new models through the main caravan route still actively connecting the Libyan coast to the south of the region.

Keywords:

Late Antique Roman-Libyan Funeral Architecture; Late Antique and Early Byzantine decorative patterns; Re-use in Islamic Age; *Spolia*; Fezzan Tripolitania.

Despite the almost complete disappearance of the Roman settlement of Ghadames (the ancient *Cydamus*), the ruins locally known as *el-Asnam* (translated from Arabic as *the Idols*) attest the existence of a large necropolis located around 1 km south-west from the town-oasis of the Islamic period, analysed here by Ludovico Micara. Not far away, around 5-600 metres north, a similar ruin appears to have been transformed in the minaret of one of the oldest mosques of the town-oasis, the Sidi Yunus al-Qadim Jami, leaning just against the western city walls. Therefore the existence of a second funerary area cannot be excluded, also taking into consideration the fact that about 100 metres south-west from the mosque, is located Gasr el-Nasara (Castle of the Christians), which is a circular monument with a funerary chamber and not a tower, as the old maps report (Figg. 1-3) [1]. Perhaps, there was a third necropolis north-east of the oasis as the two mausoleums that Perviquière had seen there seem to confirm [2].

The "enigmatic" ruins of Ghadames have been written about from the early nineteenth century onwards, although with imaginative attributions to different monuments or civilizations [3]. J. Richardson, for example, visited the town-oasis in 1843 and gave us the first view of the plain of el-Asnam (wrongly named as *Kesar el Enasara*, Gasr el-Nasara) with seven Idols still visible but considering them to be probably part of the city wall dating from Roman times: "...with a small vault under them, apparently for water (water tanks) but it might have been an excavated tomb" (Fig. 4) [4]. G. Rholfs also speaks about square or circular defensive towers, belonging, however, to the Garamantic period [5]. Again E. Bernet thought that the Idols were part "...d'une ancienne forteresse berbère qui devait protéger, de ses formidables remparts, l'oasis construite à ses pieds": the image he gave is exemplary in this sense (Fig. 9)[6].

Finally, the mining engineer F. Vatonne, who participated in the French military expedition lead in 1862 by the Commander in Chief H. Mircher, talks about "*les Idoles*", already down to six, as "...peut-être, des monuments funéraires" [7]. Although

he considered them "...des affreuses ruines sans caractère et sans intérêt", he noted their particular «human» shape ("...elles ont la forme de la figure") and their constructive details ("...elles sont construites en très petits matériaux, pris sur place, noyés pêle-mêle dans le ciment") highlighting, as Richardson did despite his misidentification, the presence of funerary chambers ("...une sorte de niche voutée....à la base du piédestal inférieur") [8]. Vatonne was the first person to describe the monuments of the el-Asnam plain and identify the relationship between these ruins and the one annexed to the Sidi Yunus al-Qadim Jami: "...une autre construction analogue ...qui se trouve à un des angles du rempart, du côté nord-ouest et une porte de la ville basse (...) et une djemâ en ruines se trouvent à côté" (Fig. 5) [9]. His detailed report was taken up by H. Duveyrier, who drew only five Idols still standing in the plain (Fig. 6), less than those seen by Richardson about 20 years earlier (Fig.4). Duveyrier's chronological opinion, followed by E. Reclus, is clear: "...ruines sui generis postérieures à l'époque égyptienne et antérieures à l'époque romaine.....Les débris auxquels les indigènes donnent le nom d'idoles...appartiennent à l'époque garamantique, époque d'une civilisation indigène qui a laissé plus d'une trace dans le Sahara" [10].

A little later, the tireless traveler Largeau counted first ten and later only six monuments but, as he writes, only four of them were still preserved. His drawings reflect a similar situation (Figg. 7-8). To disprove their Garamantic derivation, Largeau sought evidence to point to a strange Phrygian origin ("...l'origine phrygienne me paraît incontestable") of their constructors, that he considered "*encêtres des Rhadamésiens*", although the particular style of some of the architectural elements suggested to him an Egyptian influence [11]. Perviquière, who gives a good image of the plain of el-Asnam with six monuments still visible (Fig. 10), rightly concludes that "...on peut tirer la conclusion que les Esnams sont elles-mêmes de très basse époque, mais nous avons vu qu'elles existaient à l'époque de la conquête arabe" [12]. Finally the el-Asnam funerary area was carefully

investigated by a group of Italian officers, stationed in Ghadames after the conquest of Libia [13], who became so passionate about culture, landscape and antiquity in this region that they actually came to replace specialist scholars. Relating to this F. Corò points out [14]: "*Durante il trentennio di amministrazione italiana della Libia, nessuna nostra Missione Archeologica visitò l'oasi di Gadames per compiere studi e ricerche sugli antichi monumenti che vi si trovano, al contrario invece di quanto avvenne per il Fezzan..... A Gadames invece nulla di tutto ciò e furono solo alcuni nostri ufficiali, appassionati della materia, che si dedicarono alla ricognizione di quanto riguardava le vestigia degli antichi monumenti gadamsini, ottenendo risultati che potranno servire ai dotti specializzati nelle varie scienze*".

The army captain A. Pavoni, in charge of the military occupation of Ghadames, was the first person to investigate the Asnam plain: in his image, three monuments are visible (Fig. 11a). He excavated one of the funerary chamber that can be identified, based on his one sketch and photograph (Fig. 11b) [15], with the monument after referred to as Asnam A (Fig. 23). However, his most important contribution can be considered the survey he carried out recording a good number of decorated architectural elements (unfortunately no longer identifiable) found on site ("*...rinvenuti sul Piano degli Idoli*") or reused as *spolia* in the town-oasis, for which, however, he assumed their provenance was from the plain of el-Asnam ("*...asportati evidentemente dal Piano degli Idoli*") [16].

Major Perugini, after him, gives two images of the el-Asnam area with only two monuments visible (Fig. 12) and simply observed that: "...in tutte le moschee e nelle attigue nicchie per le abluzioni, si osservano numerose colonnine con scanalature e larghe spirali, sormontate da capitelli di vario stile che sorreggono le arcate. Tali colonnine e capitelli, si trovano anche in qualche piazza e nel recinto in muratura del marabutto di Sidi Bedri; molti sono serviti per la costruzione di sedili di pietra o servono di gradini alle case" [17]. Lieutenant Bilotti, in the thirties, saw three monuments in the el-Asnam plain and the Yunus Idol "...à 500 m environ

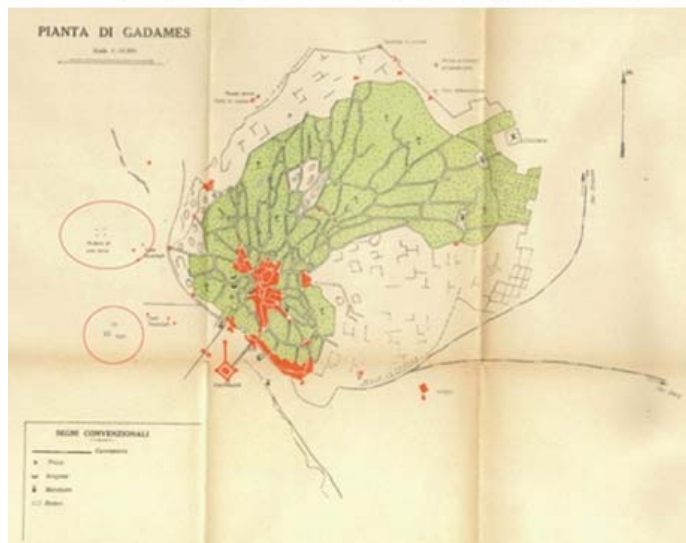
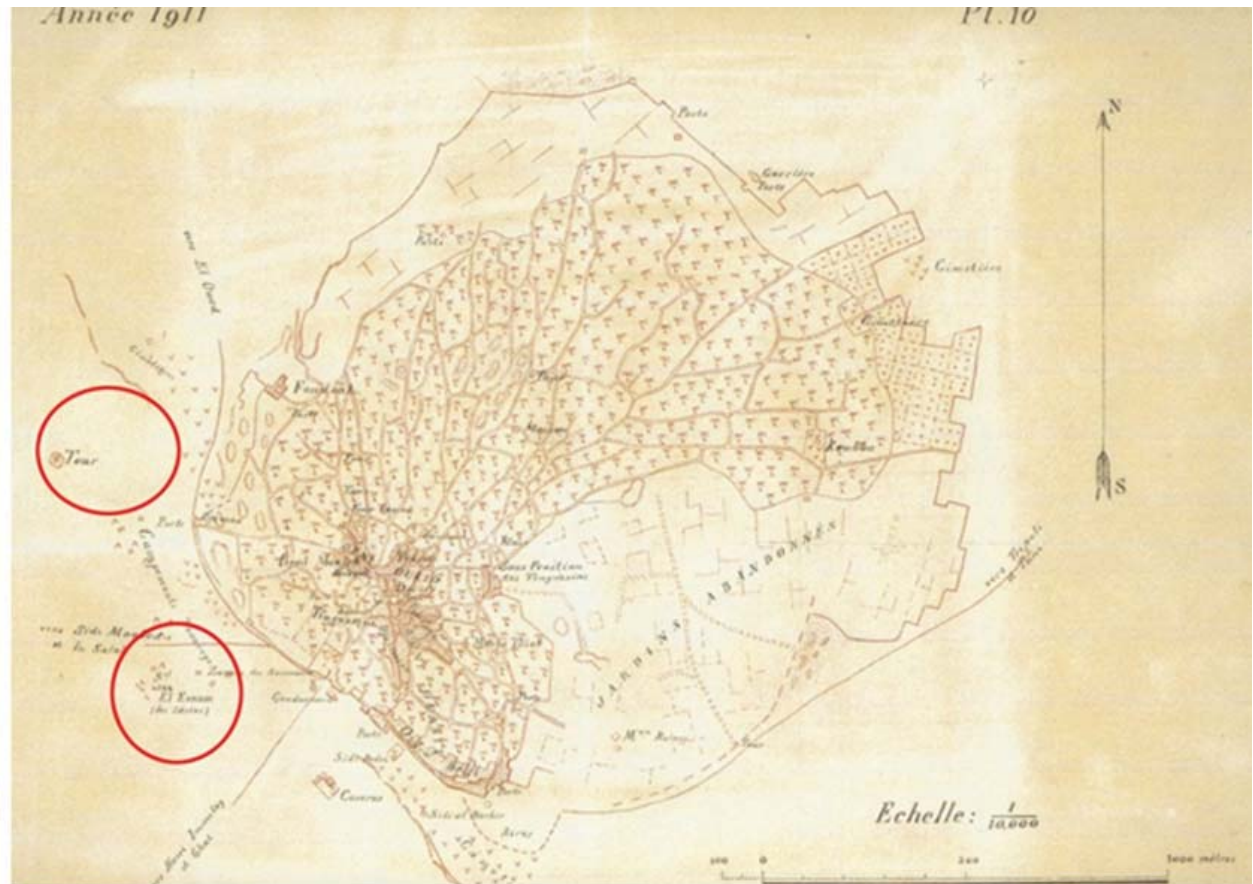
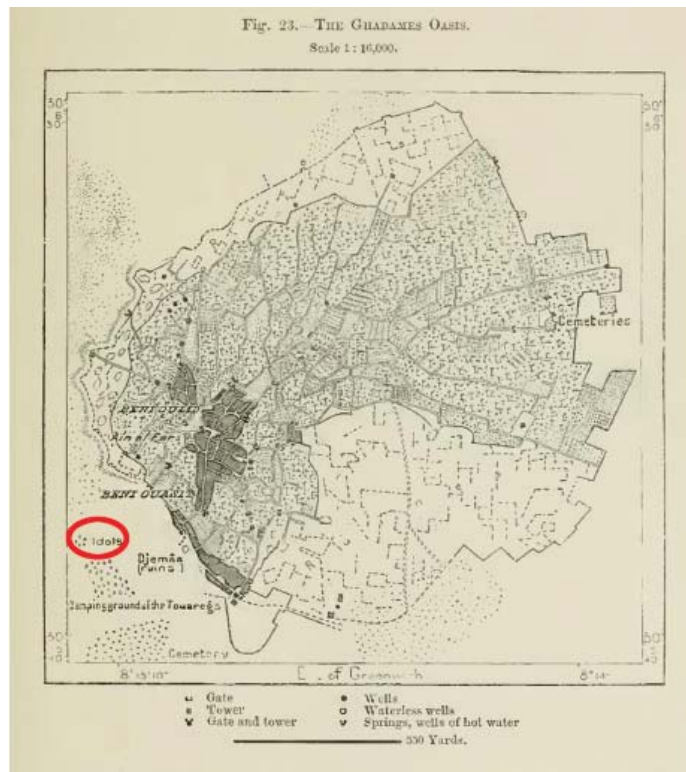


Fig. 1 - The town-oasis in a plan by E. Reclus with the indication of "Idols" near the Touareg camp (Reclus, E. (1876-1894), fig.23, p.85).
Fig. 2 - The town-oasis in the map attached to the monographic book of I.Perugini dedicated to Ghadames: there are the names of *Idoli* for the plain of el-Asnam, and "Rudero di una torre" for Gasr el-Nasara (Perugini, I. (1929).
Fig. 3 - The town-oasis in a map of 1911 with highlighted the plain of el-Asnam and the Tower near the ruins of the Sidi Yunus al-Qadim Jami (IGM Firenze, Biblioteca, Sezione Carte, N° 1929).

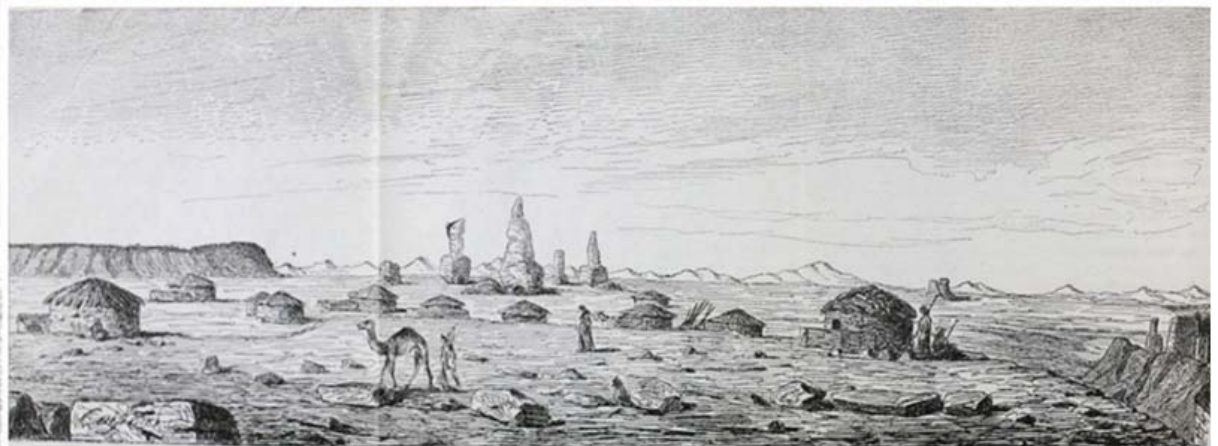
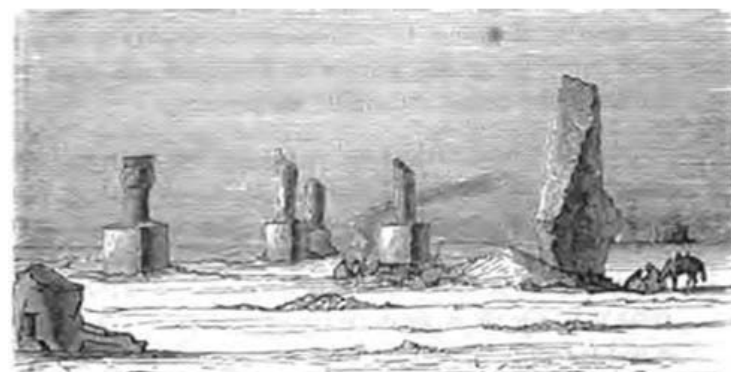
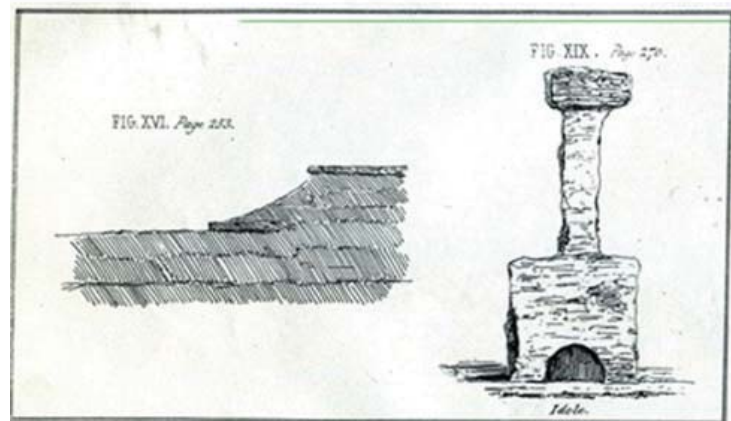
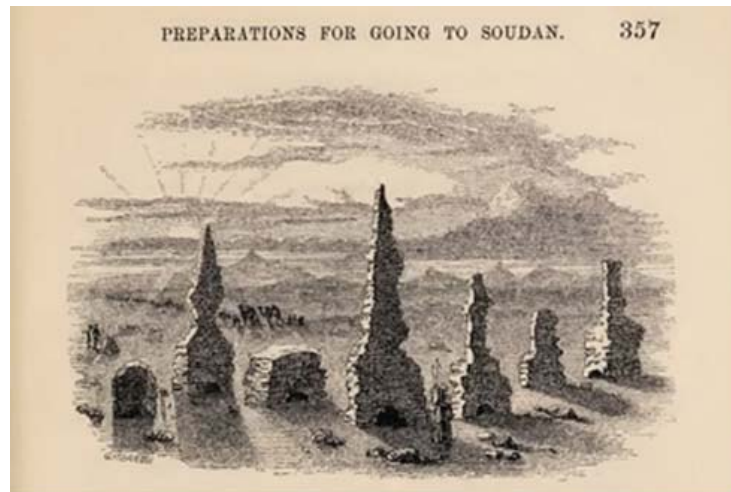


Fig. 4 - The el-Asnam in 1843, where: "...I have made a sketch of what remains of these ancient building" (Richardson, J. (1843), p.357).

Fig. 5 - The Idole attached to the Jami Yunus al-Qadim in a sketch published in Vatonne, F. (1863), Fig XIX.

Fig. 6 - *Vue des ruines des Esnamen à Ghadamès, d'après un dessin de M. H. Duveyrier* (Duveyrier, H. (1864), tav. XI, fig.2)

Fig. 7 - *El-Açnam - Tombeaux anciens près Rhadamès, fac-simile d'un dessin de M. Largeau* (Largeau, V. (1877), pl. between pp. 340-341)

Fig. 8 - *Village de Touareg et ensemble des ruines sur le plateau d'El Açnam, près Rhadamès, d'après une aquarelle de M Largeau* (Largeau, V. (1877), pl. between pp.378-379).

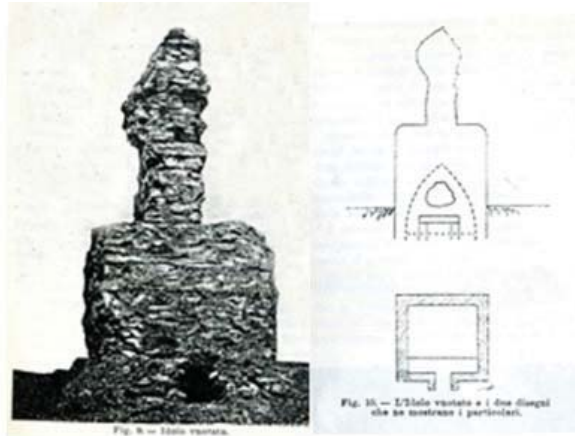


Fig. 9 - Ghadamès - Les "Idoles" et l'ancienne enceinte de l'oasis" from Bernet, E. (1912), pl. after p. 136.

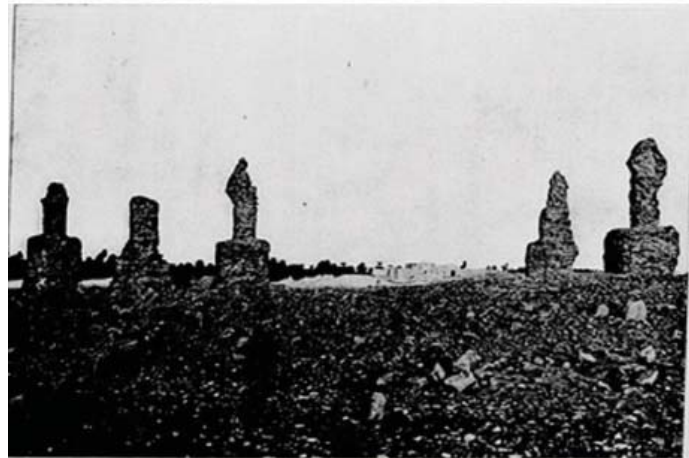
Fig. 10 - Les idoles "el Esnam" (vue prise de l'Ouest) (Pervinquière, L. & Donau, E. (1912), pl. VII.

Fig. 11 a - Tre Idoli (Pavoni, A. (1913), fig. 8 on p. 312.

Fig. 11 b - Idolo vuotato; L'idolo vuotato e i due disegni che ne mostrano i particolari (Pavoni, A. (1913) on pp. 312-313).

Fig. 12 - Views of the el-Asnam plain with the only two surviving monuments (Perugini, I. (1929), pl. between pp. 84-85).

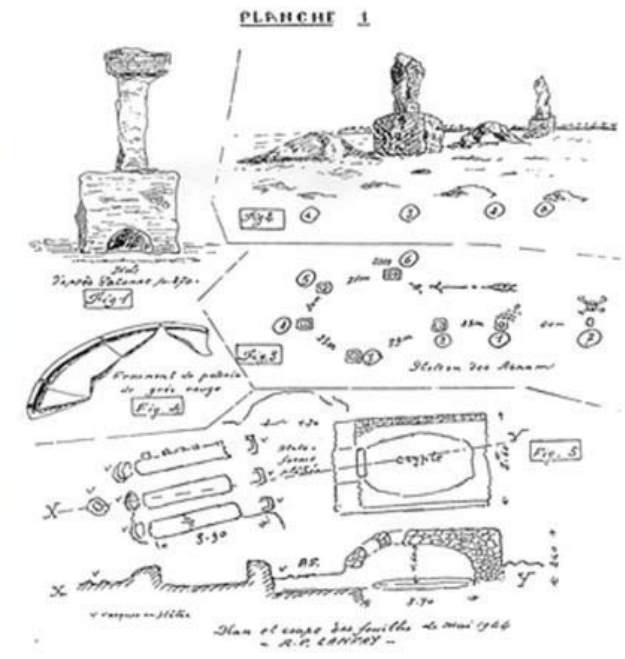
Fig. 13 - In 1944 Father Lanfray sketched the Yunus and el-Asnam tombs and a plan of the el-Asnam area (Mercier, M. (1953), 1-2, between pp. 31 and 36).



TENDE TOUAREGGI PRESSO GLI IDOLI



GLI IDOLI



de distance, à la limite occidentale de l'oasis, dans un vieux cimetière de la tribu des Beni Ulid, brance Toscou". He increased the excavations on the plain, exploring several funerary chambers (now hardly identifiable) and discovering a good number of architectural elements that must have decorated the monuments, since they were found nearby, in the actual chambers or inserted in the masonry. For this reason the lieutenant deduced that: "... on sait qu'à Ghadamès on trouve un peu partout, dans les mosquées et dans les cimetières, des nombreuses colonnes lisses ou ayant des rainures hélicoïdales, des chapiteaux et des bas-reliefs de l'époque byzantine. Les fragments de pierre trouvés dans les cryptes sont de la même qualité. Même les motifs d'ornementation qui reviennent continuellement font croire qu'ils appartiennent à la même époque" (1^{re} Note). Furthermore, after later discoveries, he confirmed his opinion: "*Ces dernières découvertes appuient l'hypothèse déjà formulée, que les mausolées appelés idoles ne sont que des anciennes tombes chrétiennes, peut-être de personnalités importantes, que le terrain environnant n'est autre chose qu'un cimetière chrétien (surface) e que tous les fragments trouvés avec les troncs de colonne, les chapiteaux, très nombreux à Ghadamès, devaient faire partie des monuments funéraires et des idoles mêmes*" (2^e Note) [18]. Unfortunately, no image or graphic reproduction of these finds is available. Conversely Father J. Lanfry (who belonged to the Société des Missionnaires d'Afrique) carefully sketched what he discovered in 1944. He also drew the first plan of the el-Asnam ruins, identifying on the ground seven monuments and other earth tombs (Fig. 13) [19]. Later F. Corò showed great interest in all this data and published the first report of the *spolia* that he had the opportunity of identifying during his stay in Ghadames in 1940 and 1941 as an officer [20].

It is significant to highlight these discoveries relating to the antiquities of Ghadames in order to introduce the aim of this preliminary work. Despite the progression of studies, the antiquities of Ghadames have been only mentioned marginally and never in any detailed analysis. Moreover, no

reconstructive hypothesis has been realised apart from the schematic lines drawn on top of a photograph by S. Stucchi (Fig. 14) [21].

Professor Paolo Cuneo, with his broad culture and great breadth of vision, had the insight to include this specific research in the programme of field surveying he undertook between 1989 and 1995 for the study of the different architectural and urban aspects of the town-oasis of Ghadames in the Islamic period [22]. Within this survey, accurate measurements were carried out on the ruins themselves, including the analysis of their structure, now consisting only of a rude mortared rubble core. A good number of *spolia* were also identified in the town-oasis, where they still qualify public squares and covered streets, with resting places (*Majlis*) and religious buildings, as mosques (*Jami*) and seats of brotherhood (*Zawiyat*), with annexed baths (*Hammam*), as well as open mosques (*Musalla*) connected with extra-urban burials of revered men of faith.

The cataloguing of these *spolia* and of the stones now recovered in the local Museum (Turkish Fort) together with the data previously collected (as described above), made it possible to formulate a reconstructive architectural proposal of the two surviving monuments on the plain of el-Asnam (from now Asnam A and Asnam B) (Figg. 15-16) and of the monument attached to the Yunus al-Qadim Jami (from now Asnam Yunus) (Fig.17).

Furthermore, the mortared rubble ruins on site allow us to establish close similarities with other funerary sites of Tripolitania and principally in the Fezzan region. In addition to Ghirza in Wadi Ghirza [23], which conserves the most significant monuments (Fig.18a-b), Bir Nesma, in Wadi Soffegin [24], and Khanafes, in Wadi Shetaf [25], both in close proximity to Ghirza, must also be mentioned (Figg. 19-20). With a good probability also in Wadi al-Mzi, tributary of the Soffegin [26] and Mezgura, near Nalut in the Gebel [27], there were similar monumental tombs with arcaded portico running around a central pier and elevating on a high square basement (Figg. 21-22). Undoubtedly, the good state of conservation of these sites, mainly in Ghirza, helps to re-create a similar original image also for the

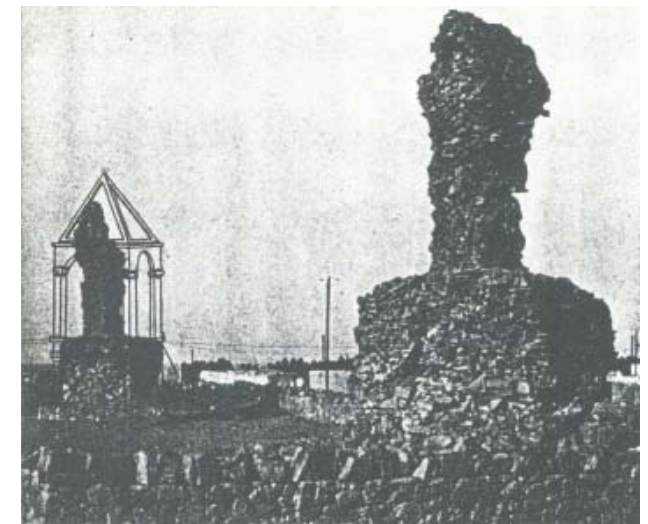


Fig. 14 - Schematic reconstructive hypothesis in: Stucchi, S. (1987), fig. 67.



Fig. 15 a, b, c, d - el-Asnam plain: views of the funerary monument A.

ruins in Ghadames, now stripped of their ashlar masonry and of any kind of architectural element. As can be seen in Father Lanfray sketches (Fig. 13), the el-Asnam ruins seem to be irregularly spaced, seemingly in a random position, except for the supposed eastward orientation of the funerary chambers entrance (Fig. 23) [28]. This funerary area, once much larger, must have arisen in a crucial point of access to the city from the west, where traditionally there were Touareg camps, and not far away from Hofret Rahma (a natural depression with a lake and tanks) and from Suk Dahara (the Old Market square) (Fig. 1-3). In front of the existing monuments A and B, spaced around 20-23 metres apart, the ruins indicated with C - D - E are around 40-45 metres distant toward the east from the previous ones. The ruin C (Fig. 24) is 30 metres away from the couple D - E, separated between them by just 3 metres (Fig. 25). Overall, five monuments are currently visible in the el-Asnam plain, certainly those seen by Duvyrier, Pervinquière or Pavoni (Figg. 6, 10, 11a), three of which (C-D-E) are now reduced to a heap of ruins (Fig. 24-25).

The reconstructive proposals of Asnam A and B and of Asnam Junus is based on metrical and architectural coincidences with some of the best preserved temple tombs with arcaded portico conserved in the Ghirza North Necropolis (Fig. 18a-b). Tomb Asnam A appears as the biggest surveyed mortared rubble core. It fits, in terms of plant and relative elevation [29], with Ghirza Tomb North B and F, with their large central pier in place of a cella, which is a vaulted chamber under the podium (Fig. 18a) [30]. The central pier is surrounded by a portico of sixteen columns (five per side) that carried directly over the capitals arched lintels (four per side), each consisting of a single stone supporting external frieze and cornice [31]. The spoiled core of Asnam A still reveals a podium enhanced in height [32]. To the current measures, the thickness (around 25-30 cm.) of the regular squared ashlar masonry must be added: few negative traces resist on the concrete (Fig. 15c-d). In addition, the base mouldings must have projected around 20-25 cm. or more. The square perimeter

at base is therefore rebuildable in 5.20 metres and this measure fits for a monument with arcaded portico equipped with four arch-heads on each side (Fig. 26) [33].

A similar typology can be attributed to Asnam C that lies in ruins just to the south (Fig. 24). Its podium core is 4.50 metres square at the base: including the ashlar facing masonry and the base mouldings, its size would be bigger than Asnam A and closer to South Tomb B in Ghirza.

The surveyed mortared rubble core of Asnam B and Asnam Yunus result in slightly inferior measurements [34] and recall very closely those of Ghirza Tomb North C, the only with a three arched portico on each side (Fig. 18a-b) [35]. Its podium appears again debased, compared to the two slender tombs of Ghadames [36] (Figg. 27-28). The Yunus Tomb is the only one that preserves evidence (Fig. 17a-b) of the original base mouldings consisting now in a projecting mortared rubble (around cm. 20-25 and 20 in height) that allows us to estimate the real measurements at the base of this tomb in 4.15 metres, including the lost facing masonry. The same proportions can be estimated for Asnam B where, as well as in Asnam Yunus, the traces of the lost squared masonry are still visible on the podium concrete (Fig. 16c-d).

The form of the solid mortared rubble on the top of the central pier suggests actually the pyramidal roof of these three monuments. It is conserved in tomb Asnam A and B (Figg. 15a, 16b) but not in the tomb annexed to the Sidi Yunus Jami that is flat because it was reused as a minaret (Fig. 17a-b). The pyramid seems to be a variation on the otherwise similar arcaded tombs of Ghirza with their well-established flat roof, "...development of the temple-tombs rather than of the tower-tomb" [37]. Pyramidal roofs characterize a huge variety of this latter type and their architectural extreme version consisting of the obelisk – tombs. This typology spread in the Libyan Predesert in the wake of a long coastal tradition dating from Hellenistic times and expressing, through revisited classic forms, the strong Punic influences persisting in the Maghreb hinterland still in late Roman period [38]. It is therefore conceivable that also in

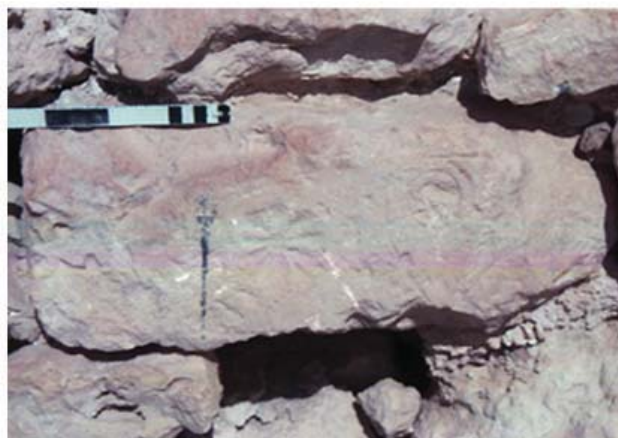


Fig. 16 a, b, c, d - el-Asnam plain: views of the funerary monument B.



Fig. 17 a, b - Views of the funerary monument used as the minaret of the Sidi Yunus al-Qadim Jami.

Fig. 17 c, d - View from above of the old mosque of Sidi Yunus al-Qadim and detail of a decorated stone walled in its rubble masonry.



Cydamus, in the true desert, the local elite, with deep-rooted relations with the North, did not want to give up this traditional element of strong symbolic value and, for this reason, included the pyramidal element in the multiple stores scheme of a temple tomb with arcaded portico. In addition to the pyramidal roof, the higher basements come also into play in this reinterpretation of the modular model as visible in Ghirza [39]. Therefore, the three survived funerary monuments in Ghadames had to appear definitely much more slender. They must have reached, despite the different measures on the plan, the same height estimable in little more than 8 metres. The roofing system of the second storey portico was the same as in Ghirza [40]. Three rectangular coffer slabs, once encasing the overlying roof morated rubble, certifies this (Fig.29).

A proof of knowledge of slender obelisk in the necropolis of Ghadames - if not indeed their real presence - is provided by a carved stone fragment (part of a frieze or doorjamb?) found, as locally reported, in a farm about 200 metres away from the Asnam Yunus (Fig. 30) [41]. The low relief represents a columned aedicule on a high stepped podium, surmounted by a marked pyramid with an imaginative large akroterion (in shape of an arboreal element?) fixed on the apex. It recalls the imposing top storey of the unique example of tower tomb at Ghirza (South Necropolis), when it stood intact [42].

The only akroterion currently conserved in Ghadames (Fig. 31) [43], brings back to the ornamental sima of the temples tombs with arcaded portico widely represented in Ghirza, where flat roofs are edged with corner vegetal akroterions (generally palmettes) and spiral riceaux, with opposite trend separated by a central akroterion [44]. Is this a clue to the existence of flat roofs also in *Cydamus*?

It is difficult to establish this, due to doubts about the origin of this single stone and the general scarcity of other remains.

The ruinous state of the el-Asnam site, underlined several times, prevents us from verifying what observed by Largeau and Bilotti [45] and, above all, sketched by Richardson, Duveyrier and Largeau or photographed by Pervinquière (Figg. 4, 6-10). Therefore, the presence of different funerary typologies in the necropolis of *Cydamus* cannot be excluded, as attested over time in the Predesert. The largest proportions suggested by the square plan of Asnam D and E (respectively m. 6.00/6.10 and 6.50 square at base) (Figg. 23, 25) point to the existence of bigger temple tombs, as the Ghirza Tomb North A [46], or even real pyramid tombs, distinctive of the Garamantic area [47]. For this reason, the 3D reconstructive image of Fig. 32, aimed to give a plausible view of the south-west necropolis of Ghadames, refers only to Asnam A and B and, at the bottom, Asnam C. Only their ruins, in fact, conserve sufficient data to be regarded as aedicule tombs with either three (B) or four (A and probably C) arched portico on each side.

Since the decorative apparatus has completely disappeared from the site and the ruins are now totally bare, any architectural proposal can be based, as for the reconstructive elevations, in comparison with better preserved sites. Moreover the study on the *spolia* reused in religious and public urban spaces (less in private houses) goes together with the stones now recovered in the local Museum (Turkish Fort), where it was possible to identify some of the architectural elements seen and photographed by Rebuffat (Fig.33) and Cuneo (Fig. 34a-b) in the el-Asnam area in the 1970-80s [48].

Fig. 18 a, b - Ghirza Northern Necropolis: a) Tomb B (in the foreground) and C (in the background); b) Detail of the upper part of Tomb C (image of the author).

Fig. 19 - The Mausoleum of Bir Nesma (Wadi Sofeggin) (Gentilucci, I. (1933), fig. 13).

Fig. 20 - The Mausoleum of Khanafes (Wadi Shetaf) (Nikolaus, J. (2016), p. 207, fig. 15.3 C).

Fig. 21 - Wadi al-Mzi (Wadi Soffeggin) (Gentilucci, I. (1933), fig. 15).

Fig. 22 - Mezgura (Nalut) (Romanelli, P. (1930), pp. 63-65, fig. 14).



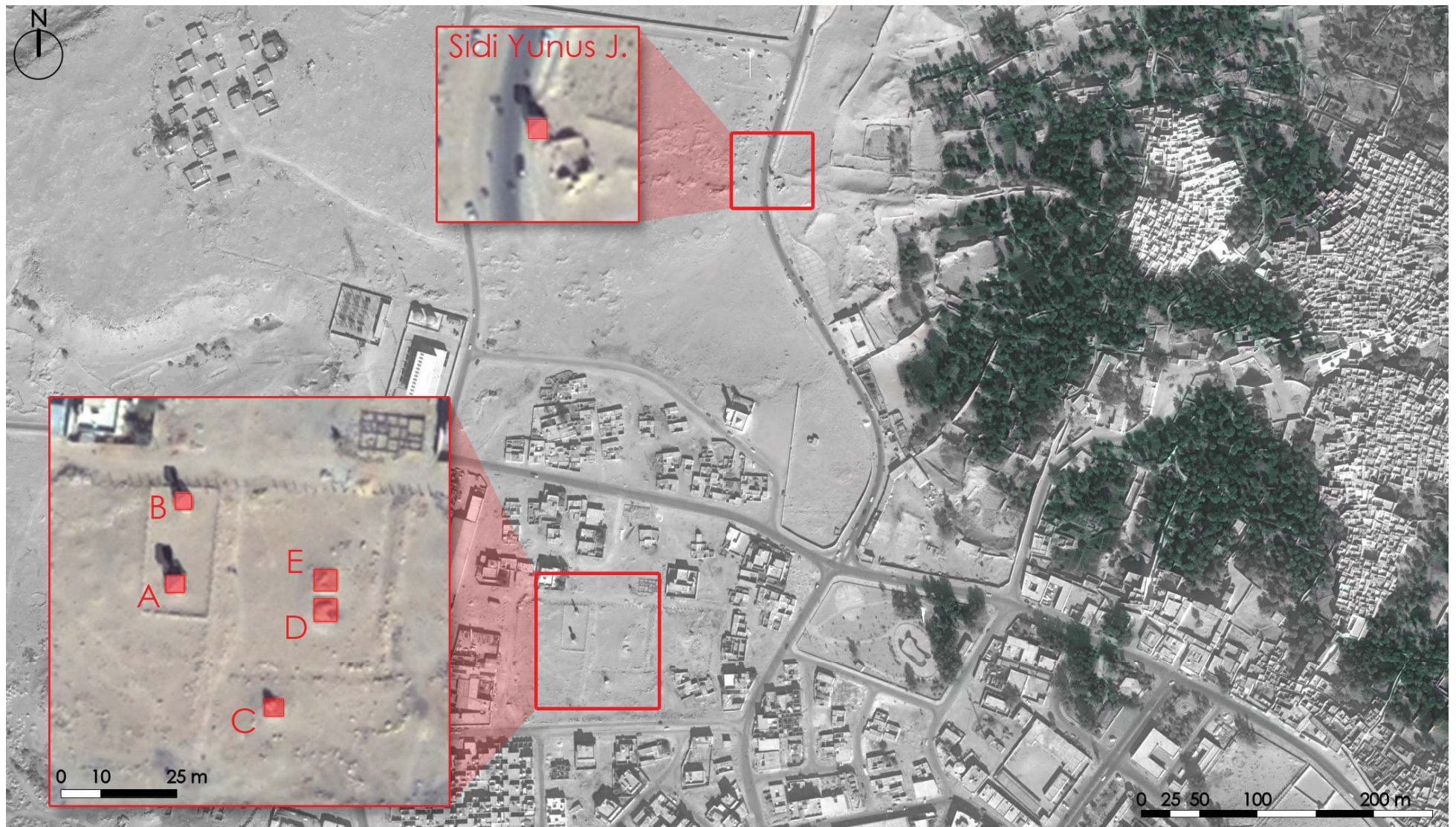


Fig. 23 - Plan of the el-Asnam site and of the monument annexed to the mosque Sidi Yunus al-Qadim on a satellite view (DigitalGLOBE, 2005, the complete image is in Micara, fig.1) (Elaboration: arch. Vittoria Cistulli).



Fig. 24 - el-Asnam plain: view of tomb C.

Fig. 25 - el-Asnam: general view of the tombs D and E from the west.

Of great interest is the information that Richardson received from the Rais of Ghadames about the good state of preservation of the monuments still thirty years before his visit. At that time it happens that the son of Yusuf Pascià (of Tripoli): "... to amuse himself and frighten the demons (the Jenoun that locals thought were bringers of misfortune) *blew up a large portion of the ruins with gunpowder. Previously the ruins were much more perfect and imposing*" [49]. As a result of this event, together with the continuous pillaging experienced over time at this site, there are no more traces of the square ashlar masonry that encased the solid mortared rubble core. As seen above, only few negative impressions are still visible on the concrete (Fig. 15c-d, 16c-d, 17a-b). On the other hand, also the dispersion and the almost complete destruction of the decorative apparatus occurred. Only a part of it has been reused and, therefore, it consists principally of capitals, shafts of columns, bases and, in smaller numbers, of frieze, arched lintels (or arch-heads) and angle-pilasters.

This is not the place to detail the architectural elements recorded during the field research in Ghadames among 1991-1995. Progressively professor Cuneo has identified on a plan of the town-oasis the different urban districts (A-K) [50], with their different religious buildings, public spaces and quarters, highlighting in yellow those provided with *spolia*: their higher concentration in the central district (E) and in the northern ones (A-F) (Fig. 35) rather than in the southern districts (G-K) (Fig. 36) is clearly evident. Unfortunately, the definitive number of the *spolia* is indefinable now, due to the chance of findings during renovation works and the constant use of white lime plaster in internal and external spaces: over 200 main specimens were recognized and more of them can be found in future detailed surveys. Some of them can also disappear from one year to the next or change completely their appearance, permitting better or worse reading (Fig. 43a-b, 46).

The analysis that follows, therefore, does not aim to be complete but only to give an overview of the most widespread architectural elements that can be useful to return the original decorative image

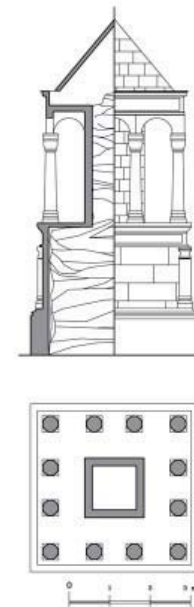
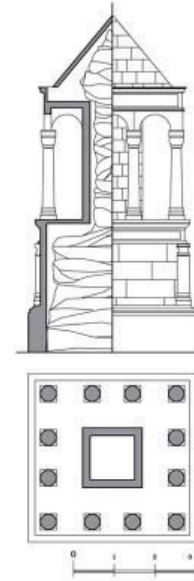
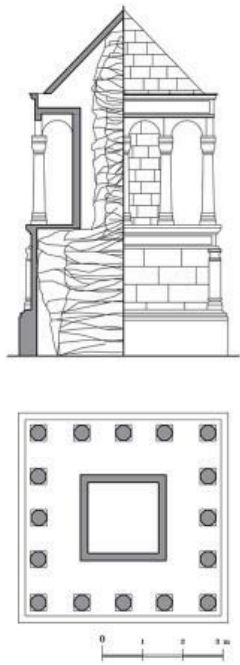


Fig. 26 - Ghadames, el-Asnam A: reconstructive plan and elevation of the ruin (AutoCAD work realized in 1994 by arch. Pietro Cicerchia and based on the measures taken on site); 3D Reconstructions: arch. Christian Nardini; Renderings: arch. Vittoria Cistulli.
Fig. 27 - Ghadames, el-Asnam B: reconstructive plan and elevation of the ruin (AutoCAD work realized in 1994 by arch. Pietro Cicerchia and based on the measures taken on site); 3D Reconstructions: arch. Christian Nardini; Renderings: arch. Vittoria Cistulli.
Fig. 28 - Ghadames, Yunus tomb: reconstructive plan and elevation of the ruin (AutoCAD work realized in 1994 by arch. Pietro Cicerchia and based on the measures taken on site); 3D Reconstructions: arch. Christian Nardini; Renderings: arch. Vittoria Cistulli.



Fig. 29 - Ghadames – Rectangular coffer stones with rectangular groove. Turkish Fort Museum (TKF).

of these tombs and their stylistic peculiarities. All the architectural elements are in local calcarenite and most of them seem locally made: it is interesting to note that the principal typologies were identified by comparing *spolia* in the urban centre and specimens conserved in the local Museum (Turkish Fort), coming mostly, as seen, from the area of el-Asnam.

The most characteristic group is formed by over 50 peculiar globular capitals with heavy square-ended abacuses supporting directly the portico arches: hence the technical definition of impost-capital. They all conserve a faint memory of the classic Corinthian model and distinguish themselves by the dense weave of stylized and flattened leaves arranged in a single row that envelop the entire *kalathos*, more or less marked in its globular shape. Each vertical leaf turns over at the top and has mid-ribs marked by lateral deep grooves and schematic fine-toothed folioles forming triangular eyelets by the meeting of the points of adjacent leaves. Their stiff vertical arrangement and the deeply carved cavities accented the surface by a strong light-and-shade effect. On the high square abacus, replacing the upper portion of the *kalathos* and its volutes, are one or more couples of rudimentary flattened scrolls rising from vertical stems, carved on neutral surface framed by a smooth ribbon: in rare cases, the latter is carved with dense geometric patterns. This homogeneous group of globular capitals, considered as a typical expression of the local art [51], can be distinguished by almost four principal subgroups according to the compositional variations of scrolls and rosettes on the heavy abacus. In the first three subgroups there can be only one central couple of volutes on four sides (Fig. 37), the central couple of volutes can be flanked by rosettes on four sides and two couples of volutes and four rosettes can decorate opposite sides (Fig. 38 a-b).

The metric and, above all, the stylistic and decorative congruities have led to the creation of two exemplary models with the insertion of the best preserved between the capitals of the two categories identified among the *spolia* in the town-*oa-*



Fig. 30 - Carved stone from Ghadames with a tower-obelisk tomb found in a farm about 200 m. away from the Yunus tomb (now in the Turkish Fort Museum).

Fig. 31 - Fragment of an akroterion from Ghadames (unknown provenance, now in the Turkish Fort Museum).



Fig. 32 - Rendering and photomontage on the el-Asnam plain (elaboration arch. Vittoria Cistulli).



Fig. 34a - On the right, the area of el-Asnam in a photo by Paolo Cuneo, taken in the late eighties, with a huge number of architectural elements stocked up between the existing monuments A and B.
Fig. 34b - On the left, detail of a group of these architectural elements in another photo by Paolo Cuneo.

Fig. 33 - One of the two images chosen by R. Rebuffat for the item "Ghadames" in EAA, II Suppl. (1971 - 1994, pp. 765, fig. 879) with the detail of the stocked elements in the el-Asnam area.



sis and the specimens in the Museum (Fig. 39a-b, subgroups 1-2). The fourth subgroup consists of a good number of capitals, although very damaged, with three couples of volutes on four sides of the abacus (Fig. 40a). Other similar capitals show a square-shape *kalathos* (Fig. 40b) or a less accentuated globular shape of the *kalathos* itself (Fig.41a) unlike a few other specimens, which display a slightly concave surface covered by fine-toothed leaves and accurately carved eyelets (Fig.41b). The profile becomes even slightly convex in only one capital, now conserved in the Museum: it shows a higher standard of craftsmanship that prevents the total loss of naturalistic folioles, which are nevertheless

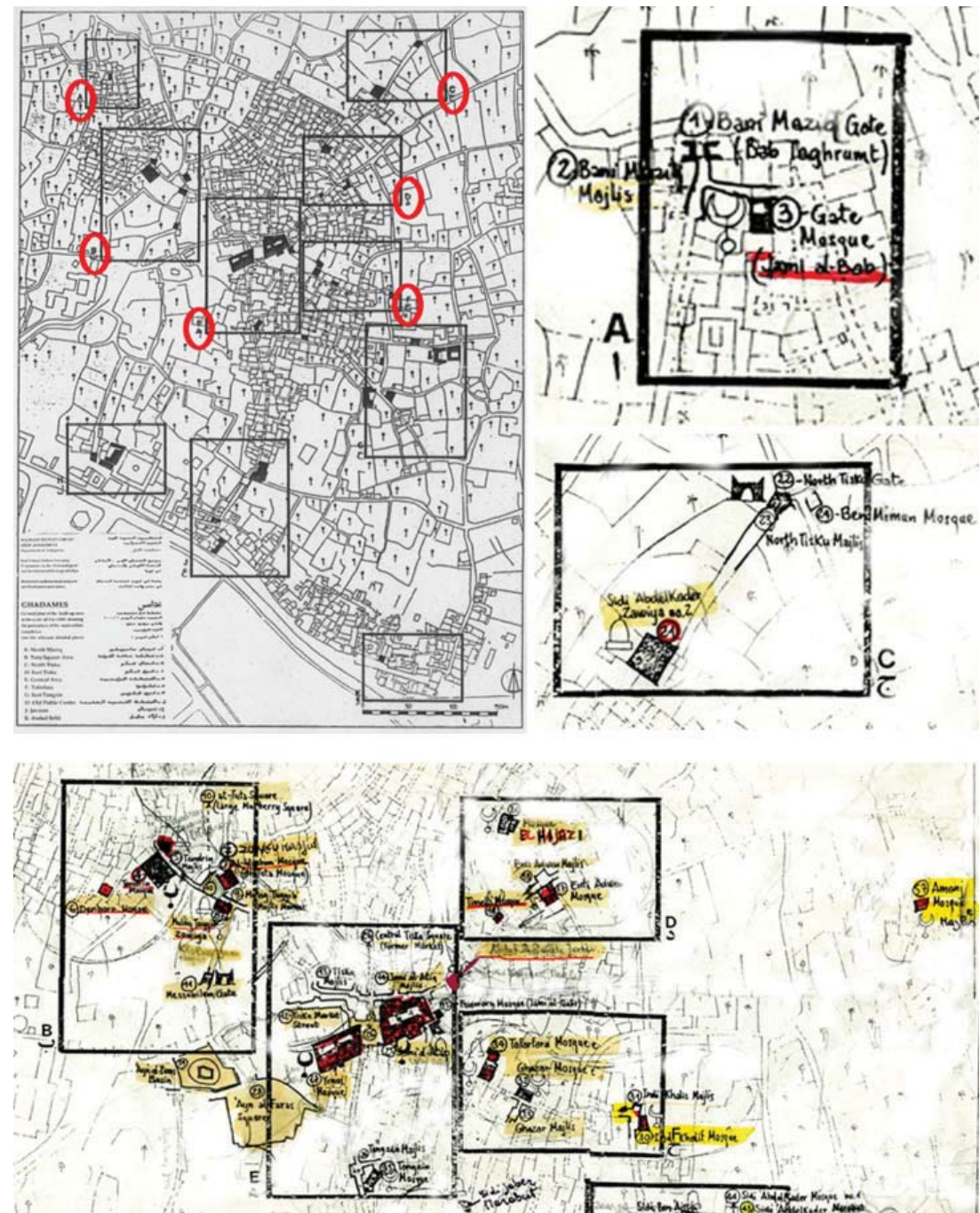
pointed and light by a strong chiaro-scuro contrast (Fig. 41b, TkF n.46). This phenomenon increases in another group of capitals, where the surface has again a concave profile, a reduced multi scrolled abacus and sunken leaves arising from delicate mid-ribs (Fig.41c). The good legibility of these specimens, allows us to propose their probable inclusion in a hypothetic prospect of an ideal tomb of Ghadames that can be imagined characterized by less globular capitals, such as those widespread in Ghirza (Fig. 39c). Accurate features, but on a convex profile, are present also on the square capital enwalled in one of the pilasters of the right nave of the Yunus Jami (Fig.42a.E). Other two *spolia*, walled in the bench

running around the Amran square, hinder any curvilinear *kalathos* in favour of a rigid trapezoidal shape and hard-pointed folioles: the abacuses are decorated with a well-executed double cable pattern, and with a central and corner scrolls (Fig. 42a.J n.2 and n.8). Two other capitals distinguish themselves by minimizing strongly their vegetal apparatus on a rigid conical *kalathos* with an impost-abacus (Fig.42b): definitely later examples compared to the previous ones that still prevent the total loss of traditional forms? It is quite impossible to define this question except on the basis of typological criteria, due to the high proportion of missing elements and the complete decontextualization of surviving examples.

More or less globular capitals, generally with square-ended abacuses, are associated (often in the same stone) with plain or spirally fluted shafts, each of a single stone with no edging at top or bottom. It is presently impossible to match them with any specific type of capitals or buildings: they are both found in the el-Asnam site (Figg. 33-34) and, in larger numbers, as *spolia* sustaining, mostly with globular capitals, the vault or the arches of *Jami* and *Zawiyat*, diving the cella of the annexed baths or decorating *majlis* (Figg. 43a-b; 42,J n. 2). Their percentage ratio, at present, is little higher for the fluted shafts: 36 out of 30 but their count, as mentioned, is susceptible to too many variables. The same goes for the numerous bases, found in numbers just over 20, often reused as capitals and sometimes worked together with the bottom edge of shafts. The classic Attic model is revisited raising the squared plinth (sometimes ending in a trapezoidal form) (Fig. 44a) and replacing the canonical sequence with one projecting ribbon or, more frequently, with a couple of them (Fig. 44b). Rarely this couple can be interspaced with other rounded mouldings and can have high squared plint (Fig. 44c). Their measurements vary slightly in order to reach the requested height and, as for the capitals, not one is really identical to the other.

Capitals with heavy square-ended abacuses on plain columns are less usual in Ghirza although in Tombs South C and E [52] there are capitals with similar stiff carved leaves and spirals and rosettes

Fig. 35 - Professor Paolo Cuneo work-plan of Ghadames during the on going surveys (1991-1995): in each district he wrote the names of the most important religious and public buildings. Details of the North Districts A-B-C-D-E-F.



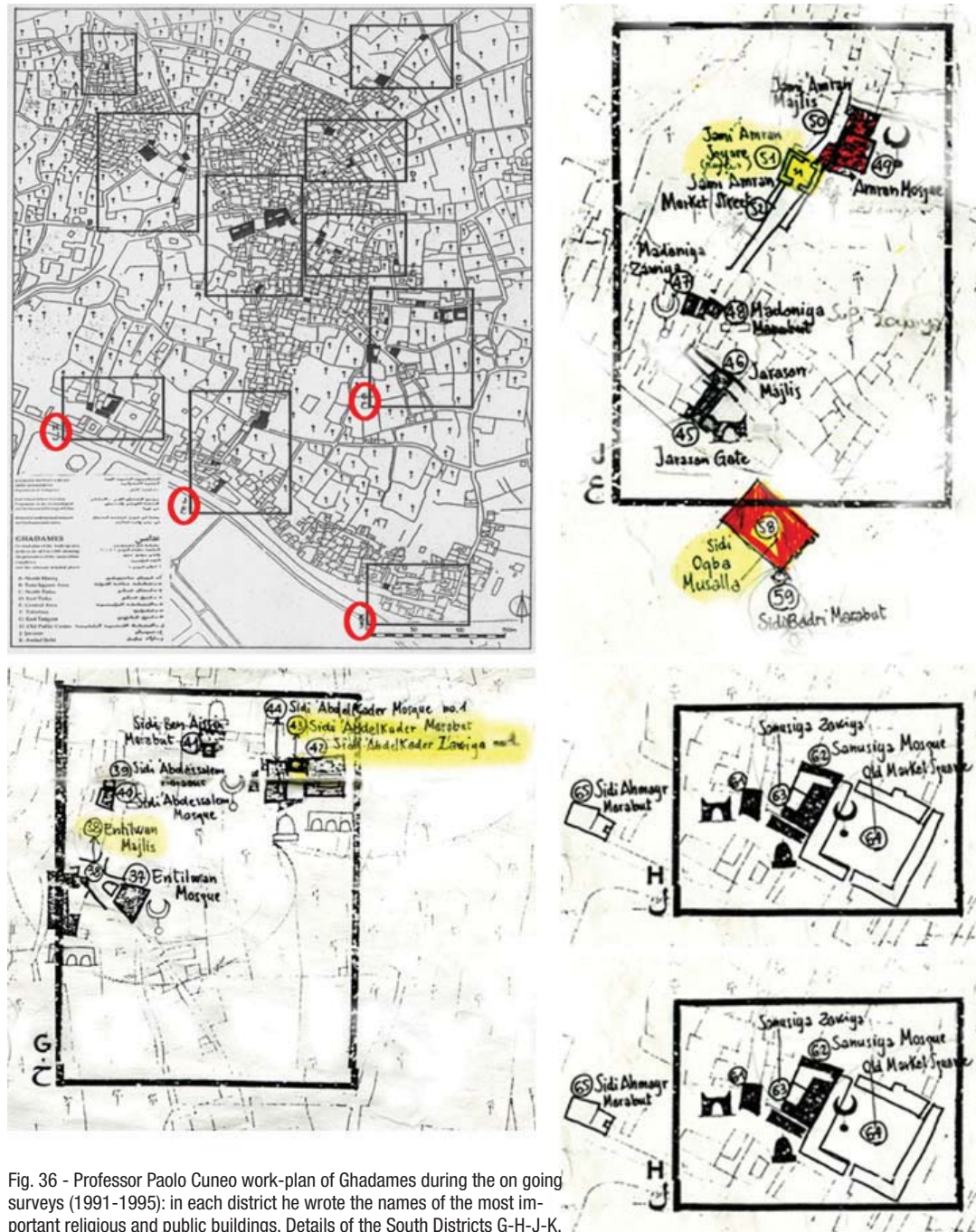


Fig. 36 - Professor Paolo Cuneo work-plan of Ghadames during the on going surveys (1991-1995): in each district he wrote the names of the most important religious and public buildings. Details of the South Districts G-H-J-K.

on the impost-abacus. These typological similarities allow a chronological frame around the late fourth or early fifth century that fits with the typological characteristics of other decorations on friezes and head-arches. On the contrary, the spirally fluted shafts find no parallels in Ghirza or in other similar tombs and their attribution to the Asnam funerary monument could be therefore considered doubtful despite their presence in the plain of el-Asnam (Fig. 33-34b) [53]. For this reason the insertion of elements of both types in the 3D model of Fig. 45 displays these two hypothetical proposals: the left half derives from the individuation of a rare specimen of one elongated capital (cf. Fig. 41b. J) worked together with a good portion of the plain shaft: it constitutes the central *spolium* in the principal *Mirhab* of Sidi Oqba Musalla (Fig. 43a.J). This capital can be stylistically and metrically associated with the adjacent one that has been reused to divide two cella in the al-Hisham Jami bath (Fig. 41b.B; 43b.B). A good metric compatibility is also to be found in the base, now conserved in the Museum and made up of the same quality red limestone (Fig. 44c, TkF, n. 37b). The recomposition on the right part of Fig.45 uses only compatible elements coming from the plain of el-Asnam (Fig. 33, 34b) and identified in the Museum as the capital n. 35b (Fig. 41a.TkF) and base n.37a (Fig. 44c.TkF) in addition to the spirally shaft placed at the entrance of the Museum: this should ensure, as far as possible, the contextualization of these specimens on the el-Asnam monuments. The architectural mark of the intermediate storey of these funerary monuments was the arcade portico formed by arches consisting of a single block of stone resting directly on the capitals. The two best-preserved specimens fit with the numerous ones still conserved in Ghirza or in Wadi Nesma [54], showing the same flat and simplified carving of geometric and phytomorphic patterns. One is walled in the external elevation of the bath facing the court of the al-Atiq Jami and the other is conserved in the Museum. The arches were framed by a band of lancet fluted leaves in zigzag sequence or by chip-carving consisting in zigzag lines or triangles that, in turn, enclose in squares floral whirling

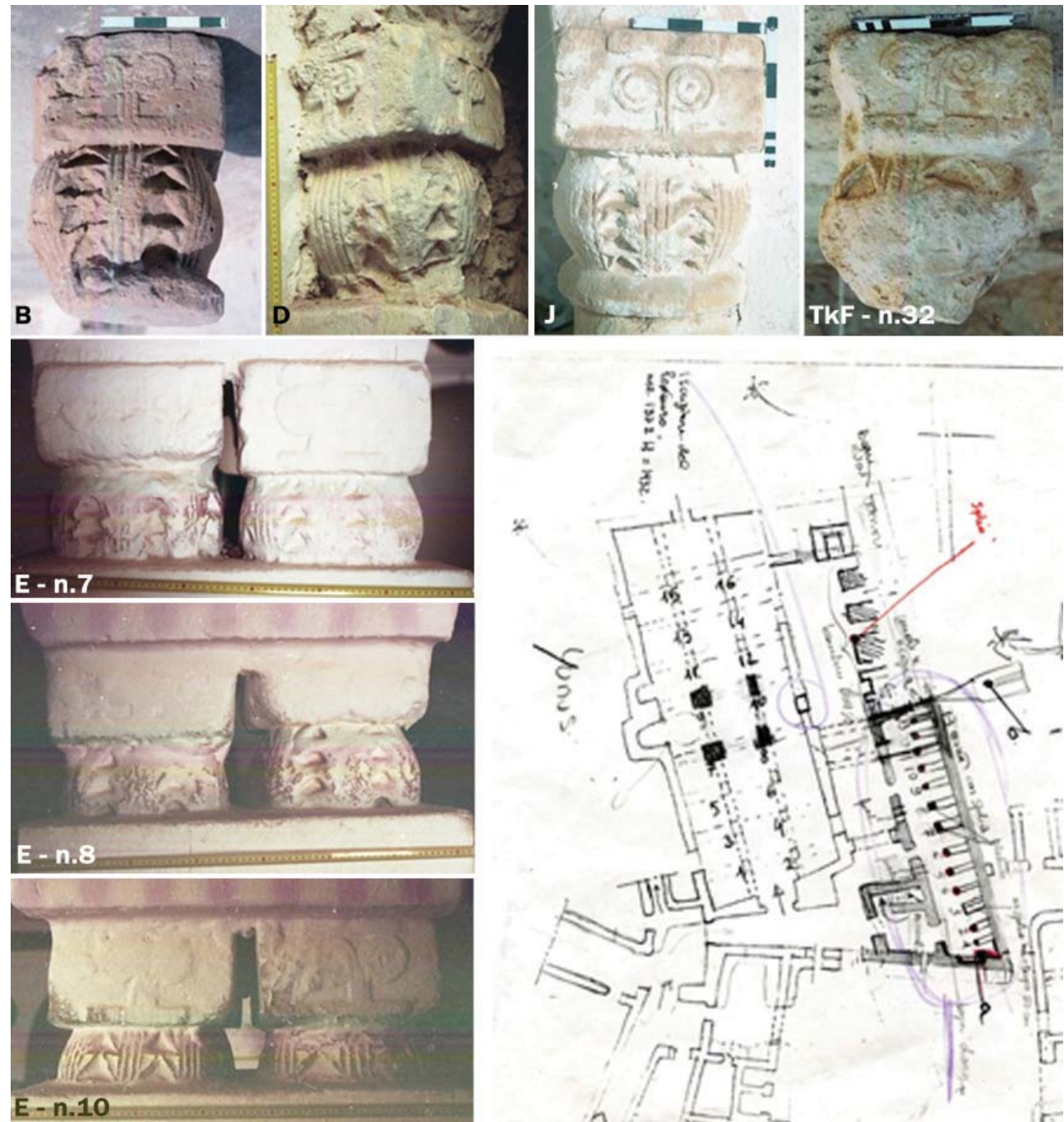


Fig. 37 - Ghadames, Corinthian globular capitals with impost-abacus. Subgroup 1: Abacus with one central couple of volutes on four sides. Location (top left): urban districts B) Demboro House: terrace; D) Timelli Jami: entrance; J) Sidi Oqba Musalla: little mirhab; E) Sidi Yunus Jami: group of four capitals in front of the mirhab heavily plastered in white: nn.7-8,10. One specimen is conserved in the court of the Turkish Fort Museum TkF) n. 32. Measures (cm.): total H.42; square abacus 30x30 x H.17; *kalathos* H.14; astragal H.11, DIA.27/29. Bottom right, the work-plan of the Mosque Sidi Yunus with the numbered columns of the three naves (sketched by Paolo Cuneo).



Fig. 38a - Ghadames, Corinthian globular capitals with impost-abacus. Subgroup 2: Abacus with one central couple of volutes flanked by rosettes on four sides and framed by a carved flat ribbon pattern. Location (from left): urban districts E) Al-Atiq Jami, entrance of the Zijianda (left side); J) Amran Square, n.5. Turkish Fort Museum (TkF n.1 right side of the entrance). Measures (cm.): total H.41; square abacus 32x32 x H.15; *kalathos* H.21; astragal H.5, DIA. 31/32.

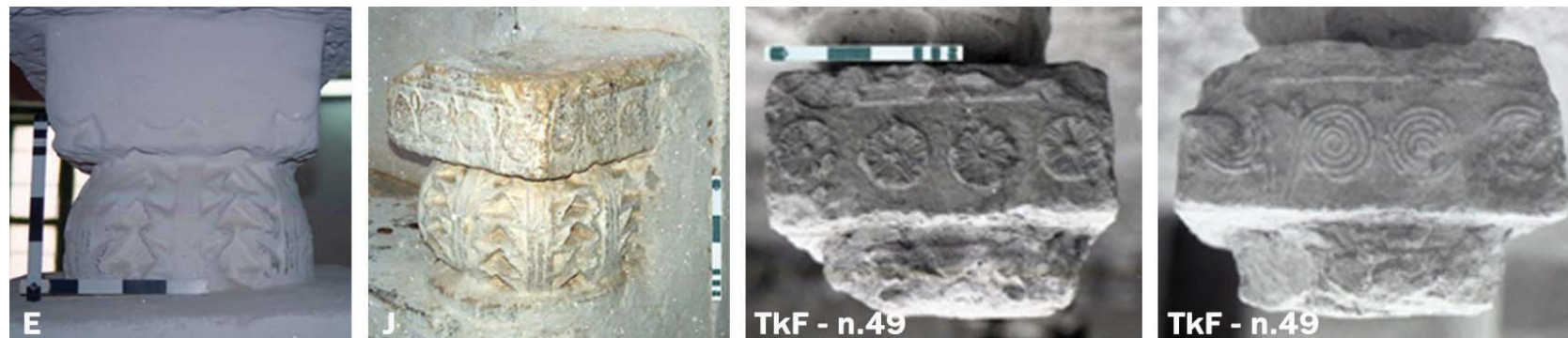


Fig. 38b - Ghadames, Corinthian globular capitals with impost-abacus. Subgroup 3: Abacus with two couple of volutes opposite four rosettes. Location: urban districts E) Sidi Yunus Jami n.2 (cf. plan on fig.37); J) Amran Square, n.4. One specimen is conserved in the Turkish Fort Museum (TkF n.49). Measures (cm.): total H. 37; square abacus 33x33 x H.15; *kalathos* H.17; astragal H.4, DIA. 33.

rosettes and with multiple leaves. There are no other distinctive patterns except for a less conserved fragment, always reused in the external wall of the al-Atiq bath, that shows the peculiar motive known as "Ghadamsian window", already drawn by Pavoni and represented also in other stones hardly identifiable (Fig. 46a-d) [55].

The arches supported a frieze that ran the whole way around the exterior of the tomb, encasing frontally the roof mortared rubble of the portico, as the coffer slabs do below (Fig. 29). According to the few remains, now in the local Museum (but others unfortunately are missing), there were no representations of miscellaneous flattened

geometrical ornaments (rosette and scrolls) or portraits. Only agricultural, ceremonial, hunting scenes as well as domestic and wild animals can be identified (Fig. 47a-d). As in Ghirza, in all the Predesert and in the Gefara as well [56], the sections of the frieze are not fitted together to form a single continuous pattern, but different "episodes" are told with touching realism mixed with naivety. The most common life activities represent, at the same time, the principal source of wealth of the commissioning elite and their will to affirm their control on local resources and on the population, still in the late Roman period. The social and economic dynamics of these desert regions has been

underlined several times and in particular, the role played by the powerful local elite, rich landholders and trade-controllers up until the first half of the fifth century [57].

The most representative of these interactive scenes is a man carrying on his shoulder a long handle basket (Fig. 47a, TkF n. 14: harvesting scene). Nikolaus underlines his particular clothing made up of a tunic and a skirt-like undergarment: this was the typical dress-style in Ghadames for people involved in agriculture, as it was represented also in a scene of harvesting, now lost but photographed in Ghadames by Brogan (Fig. 47a) [58]. Another figurative relief (Fig. 47b, TkF n.15: cer-



Fig. 39 a,b,c- Exemplary 3D models with the insertion of the best preserved among stylistically and metrically homogeneous capitals.

Fig. 39a - Exemplary 3D model with specimens of the subgroup 1 (Abacus with one central couple of volutes on four sides, cf. Fig. 37). Top left: B) Demboro Hause; TkF n. 32; D) Timelli Jami; E) Sidi Yunus Jami, n. 10; J) Sidi Oqba Musalla.



Fig. 39b - Exemplary 3D model with capitals of the subgroup 2 (Abacus with one central couple of volutes flanked by rosettes on four side in a ribbon frame, cf. Fig.38a). From left: TkF n.1; J) Amran Saha n.5, E) al-Atiq Jami, Zijianda (Elaboration arch. Vittoria Cistulli).

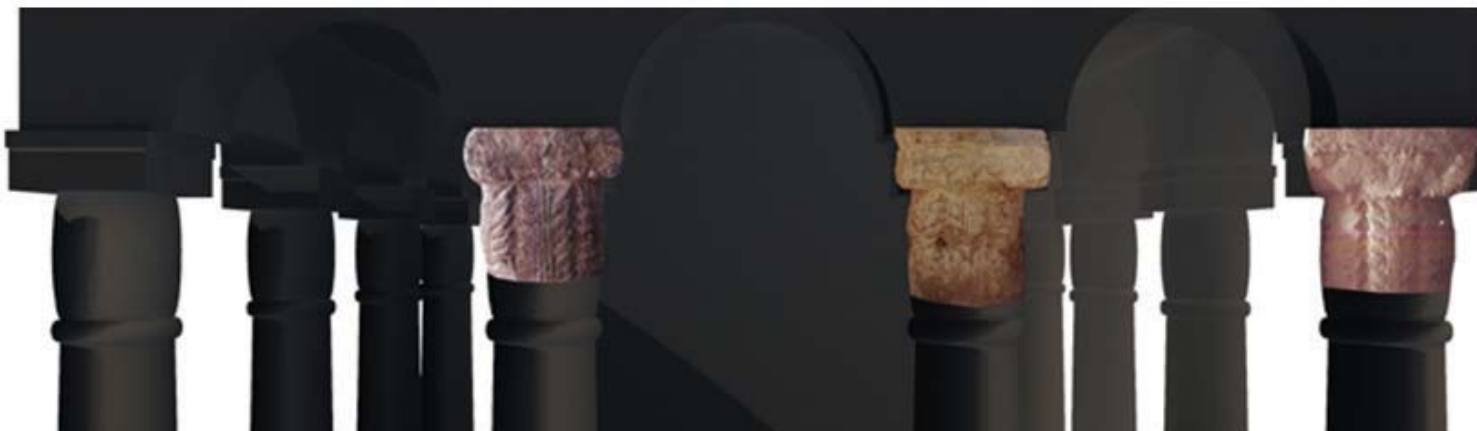


Fig. 39c - Exemplary 3D model with Corinthian capitals with slightly concave *kalathos* and scrolled reduced abacus (cf. Fig. 41c). From left: E) Abdul Rahman Masjid; J) Amran Saha, n.1; E) Sidi Yunis Jami n.7. (Elaboration arch. Christian Nardini).



Fig. 40a - Ghadames, Corinthian globular capitels with impost-abacus.
 Subgroup 4: abacus with three couples of volutes on four sides.
 Location (top left): urban districts: A) Dendohamar private house: terrace; B) Mulay Tayyib Zawiya, central column; B) Mulay Tayyib Zawiya: walled near a lateral bench; B) Zungu Masjid Bath: walled in a bath cella.
 (Row below) urban districts: E) Al-Atiq Jami, entrance of the Zijianda (right side); E) Abdul Rahman Masjid: walled in column n.1; E) Abdul Rahman Masjid: walled in column n. 4; G) Sidi Abdal Kadr Zawiya1: walled in a pilaster.
 Measures (cm.): total H.41 (estimated); square abacus 30x30 x H.17/18; *kalathos* and astragal H.25, DIA.29/30.

Fig. 40b - Ghadames, Corinthian globular capitels with impost-abacus.
 Variant of the Subgroup 4: same decoration on the abacus (cf. Fig. 40a) and squareshape globular *kalathos*.
 Location (from left): urban districts D) Timelli Jami: inside on the floor; E) Sidi Junus Jami: n.9 group of four capitals in front of the mirhab (cf. plan on fig.37). Turkish Fort Museum (TkF n.33 court, before in el-Asnam plain: Figg.33-34b).
 Measures (cm.): total H.41; square abacus 30x30 x H.17; *kalathos* H.21; astragal H.3, DIA.27/29.

Fig. 41a- Ghadames, Corinthian capitals with less globular *kalathos* and abacus with two couple of scrolls. Location (from left): TkF n.35b (now in the court of the Turkish Fort Museum, before in the el-Asnam plain: Figg.33-34b). Urban district: E) Sidi Yunus Jami: nn. 5 and 11 (cf. plan on fig.37). Measures (cm.): total H.40; square abacus 30x30 x H.15; *kalathos* H.21; astragal H.4,DIA. 31/32.

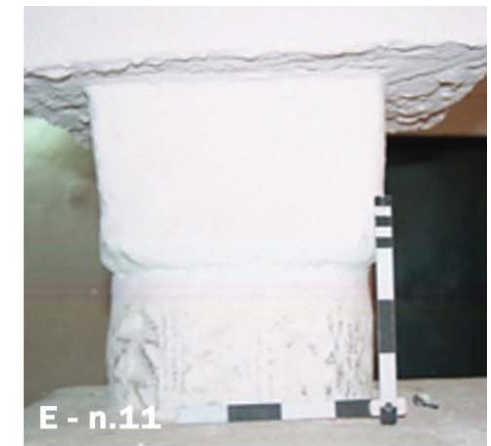
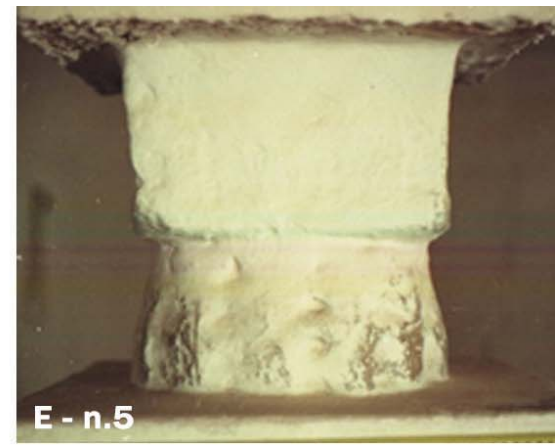
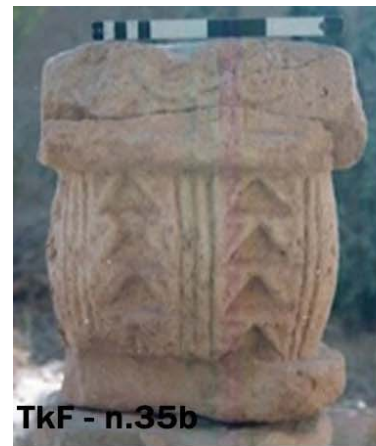


Fig. 41b - Corinthian capitals with slightly concave *kalathos* (Abacus lost). Location (from left): urban districts B) al-Asham Jami: bath; F) Tfarfara Jami: bath; J) Sidi Oqba Musalla: central Mirhab. In the court of the Turkish Fort Museum (TkF n. 46). Measures (cm.): H. 35/36; astragal H. 2.00/3.00, DIA.26/27.



Fig. 41c - Group of Corinthian capitals with slightly concave *kalathos* and scrolled reduced abacus. Location (from left): urban districts E) Abdul Rahman Masjid: walled in column n.3; J) Amran Saha: n.1, walled on the bench running around the square; E) Sidi Yunus Jami: n. 7, group of four capitals in front of the mirhab (cf. plan on fig.37). Measures (cm.): total H 39; square abacus 33x33, H. 13; DIA.24.



Fig. 42a - Ghadames, Corinthian capitals with trapezoidal *kalathos*. Location (from left): urban districts E) Sidi Yunus Jami: n. 6 (cf. plan on fig.37) (measures: (cm.) H.25; square abacus 35x35, H.12); J) Amran Saha: on the bench running around the square, n. 8 (measures (cm.) H.30; square abacus 30x30, H.13) and n. 2 (measures (cm.): H.47; DIA.24; square abacus 30x30, H.11).

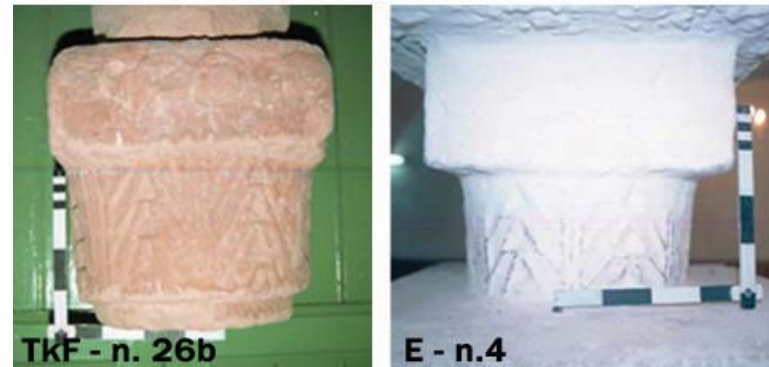


Fig. 42b - Corinthian capitals with conical *kalathos*. Location (from left): Turkish Fort Museum, TKF) n.26b (measures (cm.): total H.31; square abacus 30x30, H.12, *kalathos* H.15 and inside starting shaft: H.3, DIA.25). Urban district E) Sidi Yunus Jami n.4 (cf. plan on fig.37) (measures (cm.): H.25; square abacus 35x35, H.12).

emonial scene, unpublished) can be interpreted as three people in a ritual action, moving to the right and holding offers to what seems to be the main character (a man or a cult statue?) standing in front of them and only partially conserved in the fractured right edge of the slab. Regarding the two first figures, one is dressed according to the workers style in Ghadames (an attendant?) and the second wears a long tunic, a short wrap and perhaps a turban. Of great interest, is the third figure with a long flared dress and a swollen edged short dress-cover, who has an elaborate head-dress that can be compared to the one on a stone drawn by Duveyrier and now lost (Fig. 47b) [59]. All the details are closely engraved on the flattened figures standing out from the neutral surface of the smooth framed slab. They have a schematic and strongly archaizing appearance, out of proportion, with small heads and large almond-shaped

eyes creating amusing facial expressions that avoid any realistic intention. At the same time, the details of this kind of ceremonial scene, as the solemn march of the bidders, their rich garments and head-dresses made up of feathers or cloths hanging down behind, must have involved the local viewer in the ancestral tradition of indigenous rituals connecting the chieftains and the divine. Domestic and wild animals were recorded only on a ruined slab walled in the central Scombali Majlis (District E) with a bovine (Fig.47d E; 43b) [60] and probably on another, now in the Museum, with the horns of a wild ungulate, as those hunted in the region (Fig. 47d, TkF n.30) [61]. Unfortunately the relief of a deer chased by a lion, discovered by Pavoni, had disappeared in 1915 (Fig. 47c) [62]. It is interesting, therefore, to observe the elegant and attractive hunting scene representing an ungulate attacked by dogs, carved on a framed stone:



Fig. 43a- Ghadames, View of some Islamic buildings with *spolia* in the following districts: J) Sidi Oqba Musalla: general view and details of the central Mirhab and the lateral one; B) Mulay Tayyib Zawiya; B) Tandrin Zawiya; E) Abdul Rahman Jami.

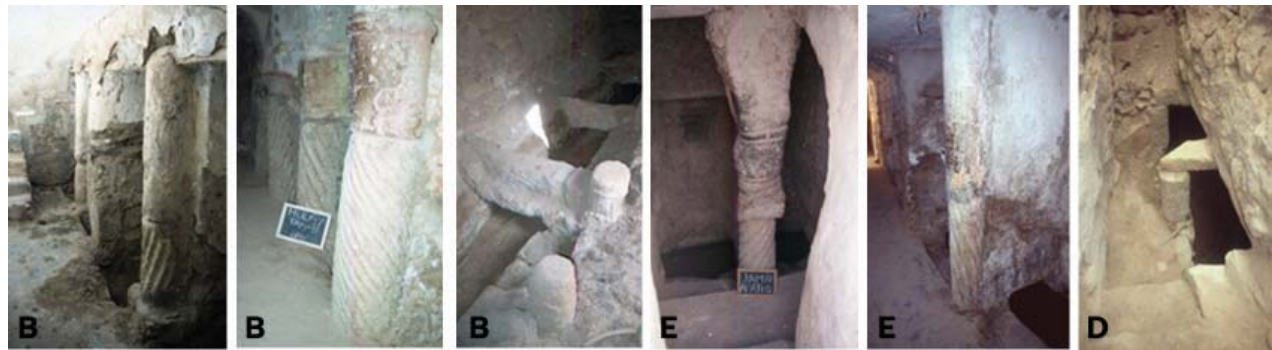


Fig. 43b - Ghadames, View of some baths annexed to *Jami* or *Zawiyas* and *Majlis* in the central area. Urban districts: B) al-Hisham Jami; B) Khulwa Masjid; B) Tfarfara Masjid; E) al-Atiq Jami; E) Yunus Jami; D) Timelli Jami; E) Tisku Majlis; E) Scombali Majlis. Bottom right, two images with *spolia* published by Pavoni and Duveyrier (Pavoni, A. (1913), fig.6, p. 311; Duveyrier H. (1864), Pl.X, fig.2.

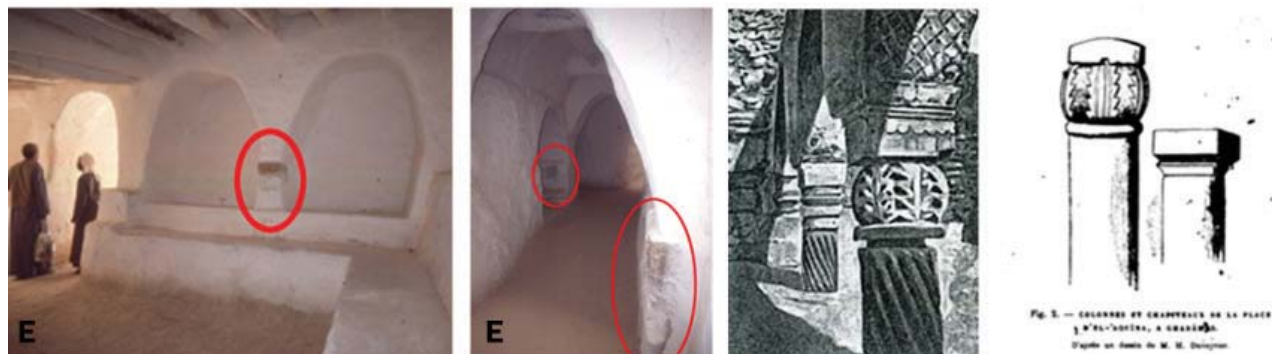


Fig. 44a - Ghadames, Bases with one projecting ribbon. From the left: two specimens with square base ending in trapezoidal shape. Location: Turkish Fort Museum, TkF n.27a and district J) Sidi Oqba Musalla: little mirhab. Measures (cm.): H.42; plint 30X30; H.15/18; ribbon H.5/6; shaft edge H.6/7, DIA 28. On the right: Group with simple square base plint: Total H 30; ribbon H.7. In particular: TkF court (before in el-Asnam plain: Fig. 15b); TkF court. From the right: two specimens with slightly trapezoidal plint conserved in the court of Turkish Fort Museum : TkF) 34b and TkF) n. 35a (before in the el-Asnam plain: cf. Fig. 34a). Measures (cm.): Total H 30; ribbon H.7).

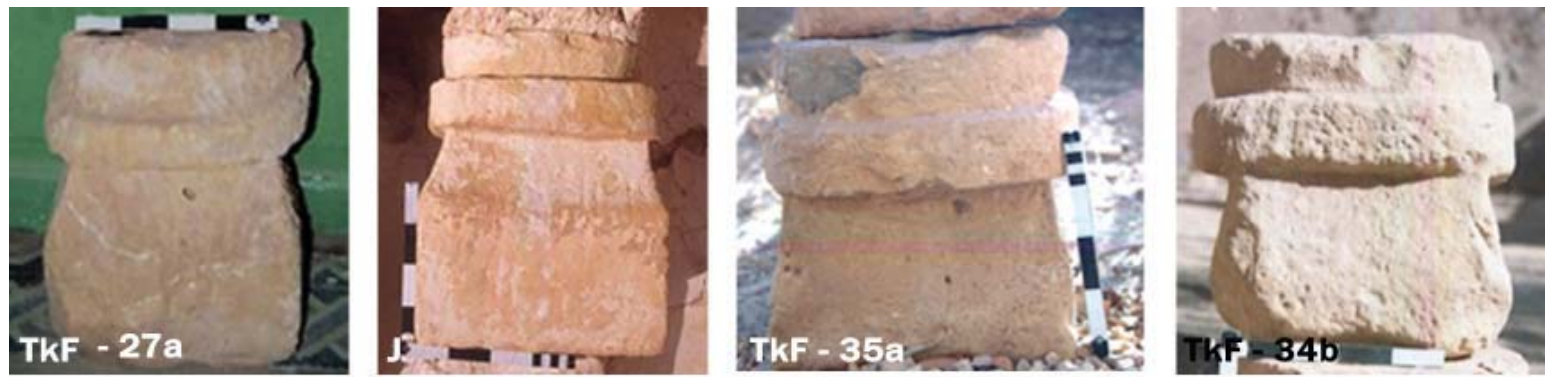


Fig. 44b - Ghadames, bases with two projecting ribbon. Location (from the left): urban districts E) Yunus Jami n.12 and n.13; E) al-Atiq Jami: entrance of the Zijianda (right side); J) Amaran Saha n.6 in the bench running around the square. Turkish Fort Museum, TkF) n.23, n.43, n.42, n.34a, n.38, n.25. Measures (cm.): total H.36/42; plint 26x26/34X34; H. 17/18; ribbons H.13/15; shaft bottom edge H.4/7, DIA 30.



Fig. 44c - Ghadames, bases with two projecting ribbon and others mouldings. Location (from the left): Turkish Fort Museum, TkF) n.27, n.37a (before in el- Asnam plain: cf. Fig. 34b), n.37c. Measures (cm.): Total H.40; square plint 32x32, H.10/14; mouldings 26/30; DIA 28. Bases with high squared plint and mouldings. Location (below from right): in the court of the Turkish Fort Museum, TkF) n.37b and in urban district B) al Hisham Masjid: bath.





Fig. 45 - 3d model of an ideal tomb of Ghadames divided in two halves in order to display two reconstructive options (Elaboration arch. Christian Nardini).

it is unlikely that this stone was part of a funerary frieze (Fig. 47c TkF n.12).

As in Ghirza, the podium of the monumental tombs of Ghadames had base mouldings (the based mortar of Asnam Yunus proves this point, Figg. 17a-b, 28), cornice and angle-pilasters supporting a frieze: there are few remains of the latter two. The pilaster capitals are flatterer than those of the columns, in advanced schematization, and worked together with the superior edge of the shaft (Fig. 48a-b). The shafts are carved with vertical lozenge-shaped sequence (memory of bead and roundel of the classic astragal) (Fig. 49a) or zigzag lancet leaves in paired row or circular composition (Fig. 49b). All of them are associated again with geometric patterns and rosettes, in a dense ornamental ensemble recalling that of the head-arches (Fig. 46c-d), as the stone walled in the Sidi Junus al-Qadim attests (Fig. 17d).

There seems to be no more attestations of false-door or doorjambs decorating the central pier that could have similar patterns.

Very little fragments are doubtfully attributable to the podium frieze: flattered carved leaves and ivy scrolls (Fig. 50) slightly resembles those in Ghirza and even more those in Christian churches in the eastern Gebel, as Breviglieri (el-Kadra), and in the western Gebel, as Henshir Tiglissi and el-Asbaa [63]. Their architectural solutions and decorative apparatus must have influenced this original form of funerary architecture, as Merighi has already observed "*...rappresentano un tentativo originale di architettura funeraria*". He pointed out, as H. Saladin and De Mathuisieulx did before him, the similarities with the *ciboria* of the early eastern and western churches. The definition as "*mausoleo a edicola*" underlines, however, the derivation of these tombs from the classic Roman *mausolea*, as a late and original interpretation of their architecture [64]. The symbols of fertility and abundance (vine or ivy scrolls), the capitals with the typical progressive atrophy of their vegetal elements and the impost-abacus, as well as the spirally fluted shafts, have much in common with the decorative apparatus of these Early Byzantine churches of the late fourth - sixth centuries [65].

Fig. 46a - District E) Al-Atiq Jami – The wall of the bath of the mosque facing the court in a picture of 1991, while discovering the head- arch, and in 1995, after a strong lime plastering work.

Fig. 46b (on the right) - The court in a image by Perugini (Perugini, I. (1929), p.68).



Fig. 46a-d - Ghadames, head-arches reused in the court of the Al-Atiq Jami (urban district E) and conserved in the Turkish Fort Museum (TkF).

Fig. 46c - The head-arch and an other fragment over it, both walled up in the bath of the Al-Atiq mosque in 1991, 1995 and 1997.

In the row below, details of the head-arch (cm.: H. 42,W 84, D.15) and of the second fragment (cm.:W.57,H.20), whose decoration with "Ghadamsian windows" can be compared to a drawing by Pavoni (Pavoni, A. (1913), fig. 310) and to two other pilaster-shaped stones, patterned with the same motif and now conserved in the Turkish Fort.



Fig 46d - Fragments of head-arches conserved in the Turkish Fort Museum, TkF n. 39 (measures (cm.): H. 42, W 84, D.15) and other two little fragments TkF n.7. The specimen on the right was in a private house in the Gerasan quartier, near Tingzin Jami (district E) (measures (cm.): W.70,H.50,D.20).





Fig. 47a-d - Ghadames, Friezes fragments conserved in the Turkish Fort Museum (TkF). One is reused in the central urban district E.

Fig. 47a - Harvesting scene: fragment conserved in the Turkish Fort Museum, TkF 14 (measures (cm.): H.40,W.24,D.5, Frame W.3).

On the right, lost frieze from Ghadames (Nikolaus, J. (2016), fig. 15-4-b p.209).



Fig. 47b - Cerimonial scene: fragment conserved in the Turkish Fort Museum, TkF 15 (measures (cm.): H.39,W.53,D.4, frame W.3).

On the right, lost frieze from Ghadames drawn by Duveyrier (Duveyrier, H. (1864), Pl. X, fig.1).



Fig. 47c - Hunting scene: stone (stele?) conserved in the Turkish Fort Museum, TkF n.12 (measures (cm.): H. 56, W. 28, D.15, inside field: 37x23).

On the right: lost frieze from Ghadames published by Pavoni (Pavoni, A. (1913), fig.7, p.311).

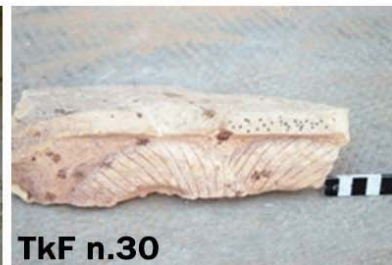


Fig. 47d - Wild and domestic animals: fragment of frieze with a bovine, walled in a bench in the central Scombali Majlis (district E) (measures (cm.) H. 45, W. 30).

On the right, fragment with horns of an ungulate, conserved in the Museum, TkF 30 (measures (cm.): W. 23, H.7; frame H.3).

In this framework, it is worth mentioning the possible existence of a Justinian basilica in Ghadames, perhaps in the old urban centre where the al-Atiq Jami was later erected (E in Fig.35). The Arab geographer Abdulfea would have seen this building and many scholars have discussed the question of its existence [66]. Do perhaps some of these typical Byzantine ornamental stones belong to this last construction? Nevertheless, the previous presence of this kind of architectural elements in the site of el-Asnam (Figg. 33-34) [67] would not permit to exclude their attribution to the decorative apparatus of the tombs of the ancient *Cydamus*, as suggested in Fig. 45.

One can observe therefore, that in Ghadames the echo of common artistic models of the Mediterranean area are reflected: as in the past, the same happened going beyond the late Roman age and early Byzantine and Vandal times, at least until the Arab and the Banu Hilal tribe conquest [68].

Therefore, in terms of stylistic definition, the ensemble of flat and carved geometric and phyto-morphic patterns in varying forms, together with the peculiar sculptural and architectural repertoire, interlaced with the creative art movements of North Africa between the fourth and the early sixth century, dominate by the strong artistic influences from the East [69]. These artistic currents reached the Fezzan from the workshops of coastal Tripolitania by the movements of craftsmen and stonecutters summoned there too for the construction of these numerous funerary monuments and confirms the central role played by this region in reception, elaboration and retransmission of the influences coming principally from the coastal Tripolitania. Dynamics and processes of transmission of models made their way through the main communication routes still actively connecting the Gefara to the deep South [70].

The problem of dating the Idols of Ghadames became therefore less dependent on guesswork.

Their massive size, the fine construction in square ashlar masonry and their rich decorative ensemble show that they belong to a period of prosperity: that can be considered a long-term phenomenon dating from the first century AD onwards, up to

Fig. 48 - Ghadames. Pilaster capitals worked together with the superior edge of the shaft. Location (top left): Turkish Fort Museum, TkF n. 3, on the left of the entrance (measures (cm.): total H.44; capital W.27,5; pilaster shaft H. 16.5,W.24, D.3); in the court of the Museum, TkF n. 45 (measures (cm.): total H.34; capital W.24; pilaster shaft H.7,W.23, D.4); TkF n. 40 (measures (cm.): total H.39; abacus, H.10,W.28; *kalathos* H, 17, W.24-20,D.5; pilaster shaft H.11,W.23, D.3). Top right: Lost pilaster capital from Ghadames published by Pavoni (Pavoni, A. (1913), fig. 3, p.310). (Row below from left) Urban districts: E) Scombali Majlis (cf. Fig. 43b), (measures (cm.): total H.40; *kalathos* H.27, DIA 24-18; half-column shaft h. 10,DIA 18); E) Tissidin Majlis (17.80 m. from the door of Indi Kalif Jami (measures (cm.): total H.34; abacus: H.5.5,W.23; *kalathos* W.9; pilaster shaft h. 6.5); B) Dumboro Hause: on the upper terrace (measures (cm.): total H. 41; abacus H.13,W.27; *kalathos* H.20,W.27-21; pilaster shaft h.9); E) Abdul Rahman Masjid: column n.5 (measures (cm.): total H.41; abacus: H.13,W.27; *kalathos* H.20,W.27-21; pilaster shaft h.9).



Fig. 49a - Ghadames. Pilaster shafts carved with lozenge and roundel sequence and zigzag lines. Location (from left): in the court of the Turkish Fort Museum, TkF n. 28 (two sides) (measures (cm.) 25x25,H,78-80) and urban districts E) Sidi Yunus Jami: bath n.7 and n. 8 (measures (cm.) 25X25, H.59-38); D) Al-Hijazi Jami, entrance (measures (cm.): 19x19, H.42).

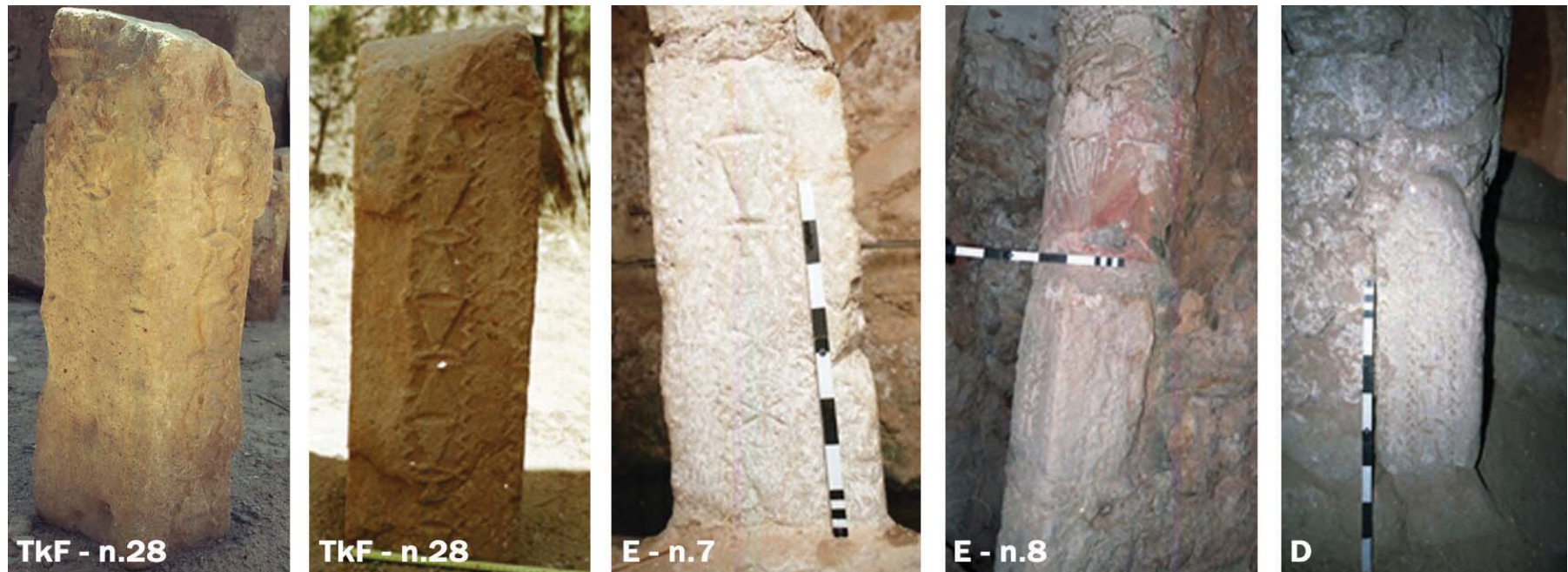




Fig. 49b - Ghadames. Pilaster shafts patterned with zigzag lancet leaves in paired row or circular composition together with lateral zigzag lines. Location (from left): Turkish Fort Museum, TkF n. 19 (measures (cm.): total H.40; W.12.5,D.14). Urban district E) Tisku Majlis: walled near a bench (cf. Fig. 43b) (measures (cm.): H.14, W.28). Turkish Fort Museum, TkF18, before in el-Asnam plain, cf. Fig.34b (measures (cm.): total H.30; W.25, D.18). On the right: lost frieze from Ghadames published by Pavoni (Pavoni, A. (1913), fig. 5, p.310).



Fig. 50 - Ghadames Patterned architectural elements: fragments of podium frieze (?) now conserved in the Turkish Fort Museum: TkF n.50, before in el-Asnam plain, cf. Fig. 34b (measures (cm.). H.21, W.51,D.16); TkF n. 7 (measures (cm.) H.17,W.28,D. 3,5-9); TkF n.11 (measures (cm.) H.17.5,W.31,D. 3-4).

the late imperial age and therefore the architectural and decorative comparisons come necessarily into play. The question of the Roman occupation of Fezzan has always been a much discussed topic, with its historical and social-economic implications, including the revisited role of the "Romanized" local Libyan elite. Unfortunately Ghadames did not conserve so many funerary inscriptions as Ghirza, where they were set above the doorway cornice of Tomb North A, B, C [71]. The panorama of the local chieftains is reduced to one name, Macarcum Varivara aged 35, as carefully engraved

on a *tabula ansata* with the usual funerary formula (Fig. 51, TkF n.10) [72].

The architectural history of these tombs fits therefore with the wider cultural, social and economic dynamics of late Roman Tripolitania. The reconstructive 3D image on Fig. 52 must be considered as an ideal proposal carried out on the basis of the most representative specimens still preserved and their metrical and typological compatibility, aimed at giving a plausible idea of the decorative apparatus of these funeral monuments erected in Ghadames in late Roman times

Fig. 51 - Ghadames, funeral inscription conserved in the Turkish Fort Museum.



by the members of the local elite in the fashion of self-representing and displaying wealth and status: in a word, their power.

ACKNOWLEDGMENTS

I want to thank the architect Pietro Cicerchia for his precious help in returning in autoCAD the plan and the elevation metrical data taken in Ghadames among 1991-1994s. Thanks to his work it was possible to proceed to the further 3D elaborations and renderings presented here, for which I am grateful to the architects Christian Nardini and Vittoria Cistulli. Finally I join Ludovico Micara (note 18 in his article here) in thanking the Libyan colleagues with whom we have shared the researches in Ghadames.



Fig. 52 - 3d model of a Ghadamsian tomb with the most significant stones conserved in Ghadames aimed at giving a plausible idea of the architectural apparatus of these aedicule Tombs (Elaboration arch. Christian Nardini).

NOTE

- [1] Pervinquière, L. & Donau, E. (1912), pp. 496-499, pl. VIII. For the excavation that allowed to discover the funeral chamber: Pavoni, A. (1913), pp. 313-314, figg. 12, 14 ; Pavoni, A. (typewritten report 1913), pp. 71-75; Largeau, V. (1877), pp. 345-346, pl. between pp.344-345; Largeau, V. (1881), pp. 241-242; Perugini, I. (1929), p.70; Corò, F. (1956), pp. 12-14; Corò, F. (1957), p.4.
- [2] Pervinquière, L. & Donau, E. (1912), p.500, pl. I, fig. 2.
- [3] This aspect is underlined in Rebuffat, R. (1972), p. 322; Rebuffat, R. (1976-77), p. 90; Crevato Selvaggi, B. (2016), p.193.
- [4] Richardson, J. (1848), Vol. I, Chapter XII, p.356 with the view on p.357.
- [5] Rohlfs, G. (1874), p.68.
- [6] Bernet, E. (1912), cap.VI, pp.129-153, in particular p. 138 and the photograph in following plate. He supports his opinion regarding the defensive function of the el-Asnam by the comparison with the fortresses in the Jebel Nefusa.
- [7] Vatonne, F. (1863), p. 270.
- [8] Vatonne, F. (1863), pp. 268,270.
- [9] Vatonne, F. (1863), p.270, fig. XIX. Vatonne speaks about *la tour en ruines du nord-est* (fig.19) that should be put in relation to the mosque. Instead, Pervinquière interprets this geographical reference as the city northeast area. He is therefore forced to underline that *...le renvoi à la fig. 19 est faux*: Pervinquière, L. & Donau, E. (1912), p.500 note 2.
- [10] Duveyrier, H. (1864), p. 251, pl. XI, fig.2 ; Reclus, E. (1876-1894), p.89.
- [11] Largeau, V. (1881), pp.238, 241; Mercier, M. (1953), p.20. About the Egyptian influence Largeau points out: *Des chapiteaux et des fûts de colonnes, que j'ai vus plantés à l'entrée d'une mosquée, indiquent en effet que le peuple de la Phezanie ont eu des rapports avec les anciens Egyptiens, auxquels ils ont emprunté, en outre, quelques notions d'architecture* (Largeau, V. (1877), pp. 344-345).
- [12] Pervinquière, L. & Donau, E. (1912), p.496, pl. VII. See also Pervinquière, L. (1912), p.130-131, pl.19. The view is reproduced in Ghisleri, A. (1912), p. 174. On p.160 Ghisleri gives also the view engraved by H.T. Taylor for *Le Sahara Algérien, 1874-1878* republished by Largeau in *Le Tour du Monde, Nouveau Journal des Voyages* (XLII, Livraison 1072), V, 1881, pp. 49-54.
- [13] Del Boca, A. (1986).
- [14] Corò, F. (1956), p. 8.
- [15] Perhaps it deals with the same funerary chamber already investigated: Largeau, V. (1881), pp.237-238. Pavoni found again human remains and 24 skulls as well as ceramics, glass, lamps and a little engraved copper plate with traces of silver: Pavoni, A. (1913), p. 311, fig 11; Pavoni, A. (typewritten report 1913), pp. 68-71; see also Corò, F. (1956), p.9. These materials went missing after the departure of the Italians in 1942: Corò, F. (1956), pp. 19. Also a Roman inscription, reused as a step in a private house, disappeared such as the one found by Duveyrier: Pavoni, A. (1913), p. 315, fig.16; Pavoni, A. (typewritten report 1913), pp. 77; Duveyrier, H. (1864), p.253, pl. XII.
- [16] Pavoni, A. (1913), pp. 310-311, figg. 2-7; Pavoni, A. (typewritten report 1913), pp. 66-68.
- [17] Perugini, I. (1929), p.68. The description of the three Idols follows on pp. 69-70 and reports what Pavoni wrote. In the attached map the area is indicated as *Idoli* (ibid. Fig. 2).
- [18] Bilotti drafted two reports in Italian conserved in the military archives of Ghadames (20 giugno 1935 and undated), as Father Lanfray, who was there around ten years later, refers (Mercier, M. (1953), p. 36). The *Relazione del Capitano Bilotti, Archivio del Ministero dell'Africa Italiana 1936* remained unpublished (Corò, F. (1956), pp. 20-22). These reports, translated in French, are in the appendix to the article of Mercier, M. (1953) as two notes: *Les Idoles de Ghadamès "1^{re} Note"* pp. 22-28 (texts shown on pp. 23 and 27) and *"2^e Note"*, pp. 28 – 30 (text shown on p.30). The work of Bilotti is analysed in Corò, F. (1956), pp. 20-21. Corò informs us that the findings made by Bilotti were recovered and catalogued in the local Turkish Fort, in addition to those found by Pavoni. Most of them went missing after 1942, see also note 15.
- [19] For the work of Father J. Lanfray: Mercier, M. (1953), pp. 31 – 40, pls. 1-2.
- [20] Corò, F. (1956), pp. 22-28. Several publications attested his great interest on Ghadames and the Desert.
- [21] Stucchi, S. (1987), pp. 281-2, fig.67. In Rebuffat, R. (1972), p. 322 (note 2) is cited the work of *relevé topographique et reconstruction des élévations* made by M.A. Carriere-Guillomet.
- [22] Cuneo, P. (1995), pp. 172 – 173. After 1995, the survey-project was carried on by his friend and colleague prof. Ludovico Micara (see here his article).
- [23] Brogan, O. & Smith, D. J. (1984), pp. 208-209. Already in Rebuffat, R. (1976-77), p.90.
- [24] Gentilucci, I. (1933), p.180, figg. 12-13; Mattingly, D.J. (1996), p.287 (Sf92); Nikolaus, J. (2016), p. 207.
- [25] Brogan, O. & Smith, D. J. (1984), p. 212, nota 19; Mattingly, D.J. (1996), pp.152-153 (Kn5); Nikolaus, J. (2016), p. 207, fig.15.3.C.
- [26] Gentilucci, I. (1933), pp. 183-184, fig.15.
- [27] Romanelli, P. (1930), pp.63-65, figg.13-14.
- [28] See also the North Group of tombs in Ghirza where, however, the funerary chamber is often entered from the South (Brogan, O. & Smith, D. J. (1984), fig.36).
- [29] Asnam A: measures (m.) square podium 4 at base, H. max 3,30; central pier H.4.80, composed by a rectangular section (1.45x1.55x1.60x1.60, H. 2.90) and a pyramid on the top (H.1.90). The projecting base of the pyramid is the rest of the mortared rubble that covered the portico area, large between 1.10-1.20.
- [30] In Ghirza the funerary vaulted chambers are well conserved under the podium. In Ghadames, they all collapsed and filled up with rubble therefore, the few measurements taken cannot be indicative.
- [31] Brogan, O. & Smith, D. J. (1984), pp.134-150; 170-177.
- [32] The Ghirza Tombs North B and F appear debased: the podium is high respectively 2.62 m. and 95 cm. (Brogan, O. & Smith, D. J. (1984), pp.204, 205).
- [33] This reconstructed measures of Asnam A place the tomb between the real measures of the ashlar faced podium of Ghirza Tomb North B (5,40m) and F (4,50m) (Brogan, O. & Smith, D. J. (1984), pp.204, 205).
- [34] Asnam B: measures (m.) square podium 3.20 at base, H. 3; central pier H.5.00, composed by a square section (1.40x140 - H.3.10) and a pyramid on the top (H.1.90). Asnam Yunus: measures (m.) square podium 3.20 (and 3.40 at base); H.3.10; squared section of the central pier 1.20x1.20, H 3.40.
- [35] Brogan, O. & Smith, D. J. (1984), pp. 151-159.
- [36] Ghirza Tombs North C: ashlar faced podium base 3,87x3,87; H 2.10m. (Brogan, O. & Smith, D. J. (1984), p.205).
- [37] Brogan, O. & Smith, D. J. (1984), p.209.
- [38] The evolution of the tower and obelisk-tombs architecture is analysed in Stucchi, S. (1987), pp. 249-315; Brogan, O. & Smith, D. J. (1984), pp.207-208. For the numerous examples conserved principally (but not only) in the Tripolitania pre-desert, around Beni Ulid, Mizda and the southernmost Ghirza: Bartoccini, R. (1926), pp. 36-45; Gentilucci, I. (1933), pp.172-187; Merighi, A. (1940), vol.II, pp.147-183; Bauer, A. (1935), pp. 61-78; Brogan, O. & Smith, D. J. (1966-1967), pp. 139-142; Mattingly, D.J. with Dore, J. (1996), pp. 144-147; Nikolaus, J. (2016), pp. 200-205.
- [39] Brogan, O. & Smith, D. J. (1984), pp.208-209. Merighi regarding the Ghirza roofing system says: *"non pare che il coronamento della maggior parte dei mausolei di questa specie fosse la consueta piramide o altro elemento architettonico...un coronamento diverso avrebbe conferito un aspetto piuttosto goffo e grottesco che non si*
- riscontra in questi monumenti...".* But in his note 1 he admits: *"... diversamente sembra opinare il Bartoccini. Può darsi tuttavia, che qualcuno fosse sormontato da piramide"* (Merighi, A. (1940), vol. II, p.171; Bartoccini, R. (1926), pp. 38-39).
- [40] Brogan, O. & Smith, D. J. (1984), figg.42-43, pls.56-57.
- [41] The fragment, now conserved in the Turkish Fort, has only one lateral side conserved over the decorated one (cm.: h.76, larg.20, th.17/29).
- [42] The slender pyramid (Tomb South A) was surmounted by a large Corinthian capital and an apical pine-cone, as partially visible still in the early nineteen: Merighi, A. (1940), vol. II, fig. 25; Bauer, A. (1935), fig. 14. The Tomb South A is considered as *"...the earliest of the Ghirza monumental tombs"* and dated around the middle of the third century, coming therefore late in the obelisk series of Tripolitania (Brogan, O. & Smith, D. J. (1984), pp. 182-189, 207-208, pls.96-104).
- [43] The fragment, now conserved in the Turkish Fort, is a corner akroterion due to the triangular shape of its base, measuring now cm. 9 x 13 per side. It consist of an acanthus leaf surmounted by volutes. The total high corresponds to cm.38, where the leave measures cm. 25 and the volutes protrude by 9. The meeting of the leaves formed teardrop eyelets and the style is still "classic" in form.
- [44] Brogan, O. & Smith, D. J. (1984), Tombs North B-C-D-E-F and Tombs South C-D-E-F-G; Bartoccini, R. (1926), pp. 42-43, figg.61-43.
- [45] Largeau individuated three types of tombs in the el-Asnam

plain: "obélisque parfait... grosse colonne carrée avec saie en forme de couronnement sur le sommet" and "en forme de croix: le bras qui regardait le sud a disparu" (Largeau, V. (1877), pp. 342-343; Largeau, V. (1881), pp.237-238; Mercier, M. (1953), pp. 20-21). Bilotti, speaks again about basements surmounted by "une colonne d'environ 7 m de hauteur, très irrégulière" and about "une sorte de pyramide" (Mercier, M. (1953), *Les Idoles de Ghadamès* "1^{re} Note", p.23). Although there are attested in the third and fourth centuries column mausoleums in the Pre-desert, as in Bir ed Dreder near Mizda (Mattingly, D.J. with Dore, J. (1996), p.147, fig.5.36e), these descriptions of irregular columns can be interpreted as the different forms assumed in time by the rubble and concrete core of the Idols. On the contrary, a "pyramidal mausoleum" raises questions, especially when connected with views and photographs of the past (Fig. 6-8).

[46] The podium of the peripteral temple A in Ghirza (flight of steps excluded) has a square plan of m.7.40 per side. The tomb could be dated to the third century (Brogan, O. & Smith, D. J. (1984), pp.121-133, note 1, fig.41). The flat roof that distinguishes this type of tomb, if present in Ghadames, could find a collocation for the above mentioned akroterion, cf. fig. 31).

[47] The Garamantic mausoleums in el-Hatir and Charaig show imposing pyramids on heavy cubic basements (Ruprechtsberger, E.W. (1989), p.47, figg. 52, 63-64 (cf. note 45).

[48] Unfortunately only the specimens in Figg.33 and 34b have been identified, but they are very few in number compared to the large quantity in Fig. 34a, illegible in detail for the distance.

[49] Richardson, J. (1848), p.355.

[50] See Micara, L. in this publication, fig.3.

[51] Duveyrier, H. (1864), pp.250-251, fig.2 at p. 250; Pervinquièrre, L. & Donau, E. (1912), pl. X; Pavoni, A. (1913), figg.6,16; Corò, F. (1956), pp.22-27. Similar capitals are in Ghirza but they have not detailed photographs (Brogan, O. & Smith, D. J. (1984), p.212, pls.82c; 88a).

[52] Brogan, O. & Smith, D. J. (1984), pp. 152, 166, pls.82c; 88a.

[53] Corò, in consideration of the probable presence of a Christian basilica in *Cydamus* in the seventh century writes: "...alcune colonne delle navate (of the mosques), di puro stile bizantino, sono a «spirale». Esse appartennero certamente all'antico tempio Cristiano che pare esistesse là ove sorge la più vecchia moschea gadamsina: El Atik (l'Antica). Questa, oltre le colonne, ha altri importanti resti della basilica imperiale, come decorazioni marmoree del Matroneo, capitelli, fregi e lastre di pietra finemente scolpite." (Corò, F.(1957), p.4). Nothing is now visible in the total lime plastered interior space of the Al-Atiq Jami (cf. also notes 66-67).

[54] Gentilucci, I. (1933), fig.13 (Fig.16); Brogan, O. & Smith, D. J. (1984), p.166, pls.82c,88a.

[55] Pavoni, A. (1913), p. 319, fig. 2; Corò, F. (1956), p.18 (13°).

[56] The theme has an extensive bibliography. Most recently: Nikolaus, J. (2016), pp. 199-200. Specifically: Romanelli, P. (1930), pp.61-69, figg. 5-14; Gentilucci, I. (1933), p.180, fig. 13; Bauer, A. (1935), p. 75, fig.22; Brogan, O. (1967), pp.48-52, pl. XIV.

[57] Di Vita, A. (1964); Rebuffat, R. (1982); Mattingly, D.J. (1987);

Rebuffat, R. (1988); Laronde, A. (1989); Mattingly, D. J. (1989); Fontana, S. (1997); Mattingly, D.J. (2003); Zanker, P. (2008); Mattingly, D.J. (2011); Nikolaus, J. (2016).

[58] Nikolaus, J. (2016), p.209, figg. 15.4. B, D. For different garments in the Pre-desert: Romanelli, P. (1930), pp.5-6, 8; Brogan, O. & Smith, D. J. (1984), pls. 125-126 and in particular p. 220, pl. 66.a-b to compare the man carrying off the barley with a basket in a reaping scene from Tomb North B in Ghirza.

[59] Duveyrier, H. (1864), fig.1, p.250; 223-224, fig. 68; Corò, F. (1956), p.26; Fontana, S. (1997), p. 157 (with previous bibliography); Brogan, O. & Smith, D. J. (1984), pp. 223.224, fig. 68.

[60] A good comparison is in Brogan, O. & Smith, D. J. (1984), fig.46b, pl. 130.c.

[61] van der Veen, M., Grand, A. & Barker, G. (1996), pp. 249-253, fig.8.11; Brogan, O. & Smith, D. J. (1984), pp.221-222.

[62] Pavoni, A. (1913), p.311, fig.6; Corò, F. (1956), pp.18-19 (14°).

[63] Goodchild, R.G. & Ward Perkins, J.B. (1953), pp.35-47, pls. XV, XVII-XIX; De Angelis D'Ossat, G. & Farioli, R. (1975), pp. 67-102, 108-113, figg. 42-49, 56-57, 64-65; Brogan, O. & Smith, D. J. (1984), p.218, pl.22d.

[64] Merighi, A. (1940), vol. II, pp. 171-172. For the broad topic: Brogan, O. & Smith, D. J. (1984), pp. 208-209. A four-arcade ciborium, with heavy impost-abacuses and pyramid roof, is in the church of S. Maria Maggiore in Sovana (GR): Valenti, D. (1912), Persistenze dei motivi decorativi altomedievali nella scultura romanica del Montefeltro. Studi Montefeltrini, 33, serie III, 103-104.

[65] Goodchild, R.G. & Ward Perkins, J.B. (1953), pp. 37, 46-47; De Angelis D'Ossat, G. & Farioli, R. (1975), pp. 33-34, 77-83, 98-102; Di Vita, A. (1967), pp.121-142. See also the capitals in the basilica of Ain Beida, near Tebessa: Picard, M. (1950), *Chapiteaux Byzantins de Numidie*, Cahiers de Byrsa I, pp.231-239, pls. IV-XI) and in the Kairouan Mosque: Harrazi, N. (1982), *Chapiteaux de la Grande Mosquée de Kairouan*, Tunis: Ministère des Affaires Culturelles - Institut National d'Archéologie et d'Art. Vol. I, pp.190-1; Vol. II, fig.424.

[66] Corò deduces the presence in *Cydamus* of a basilica dedicated to the Virgin from a passage of the *De aedificis* of Procopius (VI, 3), as well as bishops from the Liber Episcopalis: Corò, F. (1957), pp. 4-7. Pervinquièrre underlines that Procopius does not mention at all a basilica but only the Christianization of the population in Justinian times, after 548. Regarding the possible presence of a basilica in Ghadames he says: "l'emplacement de cette basilique nous est inconnu: nous n'en avons pas trouvé de traces. Elle a été démolie au moment de la conquête islamique, puisque ces matériaux ont été employés pour la mosquée élevée en l'honneur du conquérant qui était venu mourir à Ghadamès" (Pervinquièrre, L. & Donau, E. (1912), pp. 503-4). See also: Di Vita, A. (1967), pp.122,131.

[67] Again Corò underlines: "Qualche studioso mette anche, fra le opere cristiane, i mausolei conosciuti col nome di «Esnam» e l'ipogeo chiamato «torre romana» ma la cosa è ancora «sub iudice», per quanto alcuni ritrovamenti fatti nei pressi di detti mausolei ci facciano convinti che ci troviamo di fronte a monumenti di età giustiniana." (Corò, F. (1957), p.4). Still Pervinquièrre about the *spolia*

of Ghadames says: "...ces colonne et ces chapiteaux viennent d'un édifice chrétien, et il est permis de penser que celui-ci date du VI^e siècle." (Pervinquièrre, L. & Donau, E. (1912), p.503) (cf. note 53).

[68] Corò, F. (1957), pp. 4-6; Dall'Arche, M.(1967), *Scomparsa del Cristianesimo ed espansione dell'Islam nell'Africa settentrionale*. Roma: Ed. Fiamma Nova, pp. 44, 67-68, 102, 170-171; Di Vita, A. (1964), pp.86-7; Rebuffat, R. (1972), p.323; Rebuffat, R. (1976-77), p. 90; Mattingly, D.J. (1995), pp. 214-217. For the persistence of models and patterns in the local Berber tradition on stone and wooden art crafts: Marçais, G. (1949), *Art chrétien d'Afrique et art berbère*. *Annali dell'Istituto Orientale di Napoli*, vol.III (N.S.), 63-75.

[69] Rebuffat notes that: "...divers details permettent d'admettre qu'ils" (the Idols) "forment un ensemble de même date approximative" (Rebuffat, R. (1972), p.322). The original construction of the capitals and decorative patterns of Ghadames reconnects to the Me-greb area and to Early Byzantine models from the Syro-Anatolian, Armenian and Egyptian centers, principally Alexandria: Krautheimer, R. (1986), *Architettura paleocristiana e bizantina* (1^a ed.1955), Torino: Einaudi, pp. 120-194; R. Kautzsch (1936), *Kapitellstudien, Beiträge zu einer Geschichte des Spätantiken Kapitells im Osten vom vierten bis ins siebente Jahrhundert*. In *Studien zur Spätantiken Kunstgeschichte*, 9, Leipzig - Berlin: Verlag von Walter de Gruyter & Co, pp.152-164; Pensabene, P. (1993), *Elementi architettonici di Alessandria e di altri siti Egiziani, Repertorio d'arte dell'Egitto greco-romano*, serie C, vol. III, Roma: L'Erma di Bretschneider, pp. 161-177, tavv.70-79; Barsanti, C. & Paribeni, A. (2018), *La scultura in funzione architet-*

tonica a Costantinopoli tra il V e il VI secolo: aspetti tecnici, tipologici e stilistici, in Sande, S., Prescott, C. & Michelloni, M. (eds) (2018), *Acta ad archaeologiam et artium historiam pertinentia*, XXX (n.s.16) (Norwegian Institute in Rome: Scienze e Lettere s.r.l), pp.23-72, figg.21-23,39. For the developments in Visigoth and Mozarabic art: Cressier, P. (1985), *Les chapiteaux de la grande mosquée de Cordoue et la sculpture des chapiteaux à l'époque émirale*, Sonderdruck aus den Madrider Mitteilungen, 26, Mainz: Ph.von Zabern. Vol. II, pp.308-310, pls.68, 70,72; Hauschild, T. (1990) *Copias y derivados del capitel romano en epoca visigota*, pp. 27-36 and Noak Haley, S. (1990), *Capiteles Mozarabes*, pp. 37-52 in *Coloquio Internacional de Capiteles Corintios Preromanicos e Islamicos*, Madrid: Ministerio de Cultura - Direccion General de Bellas Artes y Archivos. For Early Christian and Ostrogothic art: De Angelis D'Ossat, G. & Farioli, R. (1975), p.91, fig.83; Raspi Serra, J. (1993), *Le chapiteau d'acanthé en Italie entre le V^e et le X^e siècle*. In *L'acanthé dans la sculpture monumentale de l'antiquité à la renaissance*. Actes du colloque tenu du 1^{er} au 5 octobre à la Sorbonne. Paris: Publication de la Sorbonne, pp. 175-188; Pensabene, P. (2014), *Il reimpiego a S. Agata de' Goti: San Menna, il Duomo e Sant'Angelo de Munculanis*, in Iannotta, F. (2014), *La Chiesa di San Menna a S. Angelo de' Goti*. Atti del Convegno di Studi 19 Giugno 2010, Sant'Agata de' Goti. Salerno: Industria Grafica Campana, pp. 193-256, figg.11-30-57.

[70] Di Vita, A. (1964), pp. 77-79; Rebuffat, R. (1972), p.323; Rebuffat, R. (1976-77), pp.85-86; Mattingly, D.J. (1995), pp. 202-209; Fontana, S. (1997), pp. 152-153; Nikolaus, J. (2016), pp. 200-205.

[71] Brogan, O. & Smith, D. J. (1984), pp. 260-263.

- [72] Now in the Museum (Turkish Fort), the local rectangular stone measures (cm.): L. 50 x H. 27, D. 0.9/0.7; *tabula*: 30x18.5; letters: H.2/2.50.
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