

Dr Fawzi Zayadine

## Decorative Stucco at Petra and other Hellenistic Sites

The object of this paper is to draw to the attention of specialists a so far neglected element in the architectural decoration of Petra, e.g. the moulded and painted stucco revetment. European explorers of the last century<sup>1</sup> and pioneer archaeologists working on this site at the beginning of the 20th century had in fact noticed that the rock-cut monuments and buildings of Petra and surrounding areas preserved traces of painted plaster. Yet, except for the brief analysis of Kohl<sup>2</sup> in his monograph on the Qaṣr el Bint and the pertinent remarks of G. Horsfield,<sup>3</sup> regarding the rock-cut dwellings, no systematic study of this relevant feature has been undertaken. It is only in recent years that Cl. Vibert, has prepared, on behalf of the French Archaeological Institute (IFAPO), drawings of some architectural stucco revetments and frescoes at Petra and northern Jordan.<sup>4</sup> Mrs A. Barbet (CNRS, Paris) also has a volume in preparation on the Qweilbeh-Abila painted tombs. A few monuments will be examined in this paper to allow a comparative analysis with other Oriental and western Hellenised centres. Some conclusions will be reached concerning the chronology of the monuments and the Nabataean contribution to the Hellenistic *koinè*. The examples will be selected from the tombs, the dwellings and the constructed temples of the Nabataean Caravan City.

### Stucco Decoration in the Nabataean Tombs

It is indeed surprising for the modern visitor to learn that the ancient inhabitants of Petra were not particularly sensitive to the natural beauty of the colourful rocks which are today the main attraction of this city, and that they coated the sandstone with painted stucco. It is also noteworthy that a great many of the Nabataean tombs which belong to the Oriental crowstep or Hegra types were plastered, and that they exhibit added cornices, pediments or door frames in stucco. The most remarkable specimens are situated in the theatre mountain, at Mu'aisrah el Wusta, Khubtha and Naṣāra.

<sup>1</sup> See Laborde, *Journey through Arabia Petraea*, London (1936), p. 196.

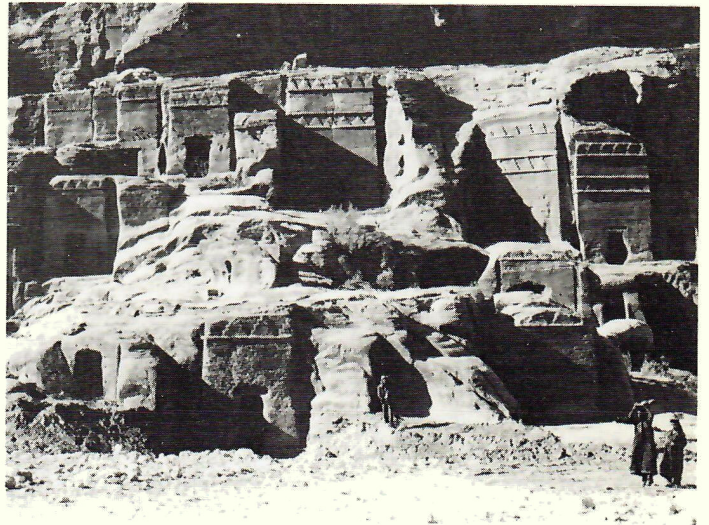
<sup>2</sup> *Kasr Firaun in Petra*, Leipzig (1910), 15–22.

<sup>3</sup> *QDAP*, 7 (1938), p. 15ff.

<sup>4</sup> *ADAJ*, 26 (1982), p. 67–84 and Pls I–XII.

On the eastern slope of the theatre mountain, modest tombs with a single or double crowstep band are carved in several tiers (FIG. 1). The façades show attachment holes and a deep

1. Nabataean Tombs in the Theatre Mountain. Notice the groove over the doors.



groove over each door (FIG. 2). Most probably, the holes are designed to hold stucco revetment and the groove was prepared to fit a stucco cornice as can be deduced from Tomb Br. 526, in Mu'aisrah el-Wusta ridge (FIG. 3). This façade is framed by a plain band and capped with a single crowstep frieze. In the groove, above the door, the fragment of stucco *in situ* is the remnant of a moulded cornice. There is also evidence of this architectural element over the doorway of Tomb Br. 808, in the western Khubtha cliff (FIG. 4). In another instance, such as in tomb Br. 575 of Mu'aisrah el-Wusta, the pediment and the cornice were of stucco (FIG. 5).

The best preserved example of added stucco cornices can be observed in the Farasa triclinium,<sup>5</sup> opposite the Soldier Tomb. In this colourful funeral banquet hall, niches are

<sup>5</sup> *QDAP*, 7 (1938), p. 40f.



2. Tomb Br. 117 in the Theatre Mountain.



3. Tomb Br. 526 in Mu'israh el Wuṣṭa. A fragment of a stucco cornice is *in situ* over the door.



flanked by engaged fluted columns. Over the niches, substantial remains of plaster coating and cornices can be examined (FIG. 6, 7). In some cases, a wooden plank to hold the imported element is still in place. The use of wooden dowels is also common at the Qaṣr el Bint. Because of the disengaged benches, the Wadi Farasa triclinium was compared by Horsfield<sup>6</sup> to the banquet hall of Kôm esh-Shuqafa in Alexandria, dated to the 2nd century AD, but the harmonious architectural decoration of the Petra triclinium with the fluted Doric columns and the plaster revetment is of an earlier date, probably in the second half of the 1st century AD.

Interior wall-plastering was common in the tombs of the Hegra type: during the excavation of Tomb Br. 813 by the author<sup>7</sup> and the Naturhistorisches Gesellschaft of Nürnberg, a stucco fragment, inscribed with Nabataean letters in dark brown (FIG. 8) was discovered in loculus 9. Dowel holes with traces of plastering around the doors of the loculi suggest that the tombs were closed by a stuccoed ashlar wall. Such a usage was intended to seal the burial and to inscribe the deceased's name. It is also possible, as is the case in the Qweilbeh-Abila<sup>8</sup>

<sup>6</sup> *Idem*, p. 40.

<sup>7</sup> *ADAJ*, 19 (1974), p. 145 and Pl. LXVI, 1, 3. See also, *Petra, Neue Ausgrabungen und Entdeckungen*, ed. M. Lindner, München (1986), p. 233 and FIG. 23.

<sup>8</sup> A. Barbet, *Syria*, 60 (1983), 3331–3, FIGS 1–4.

necropolis, that human, animal or architectural decoration covered the walls.

In other tombs, the outer façade was coated with plaster. Tomb Br. 676<sup>9</sup> of the Naṣara necropolis (FIG. 9) shows a repair in the right side of the façade which was concealed with a stucco revetment. The short pilasters in the attica of this tomb point to a date in the second half of the 1st century AD.

To complete this group of funeral monuments, an architectural stucco decoration covers the rear wall of the Sextus Florentinus Tomb, above the three loculi. A Syrian arch in stucco, actually covered by soot, is noticeable. Since this monument is dated to around 130 AD, the imported decoration is a good example of the Roman technique at Petra, contrasting with the refined and delicate models in the rock-cut houses and the Qaṣr el-Bint Temple.

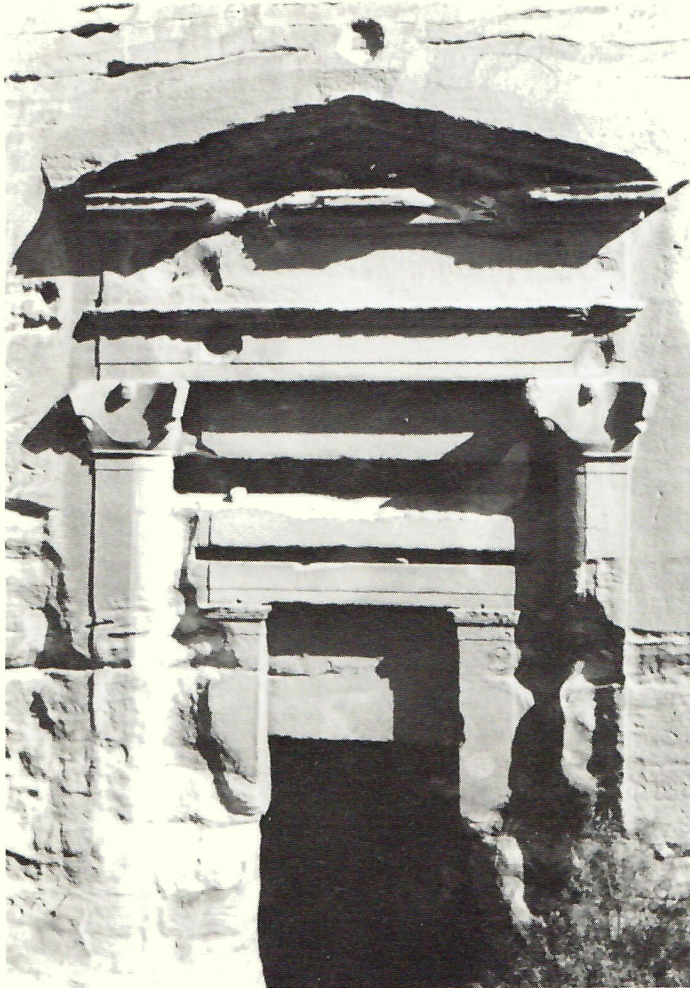
#### Plastered dwellings

It should be remembered that the coating of floors and walls with plaster had been well known in Jordan since the Chalcolithic period, as is evidenced by the Tuleilat el Ghassul fres-

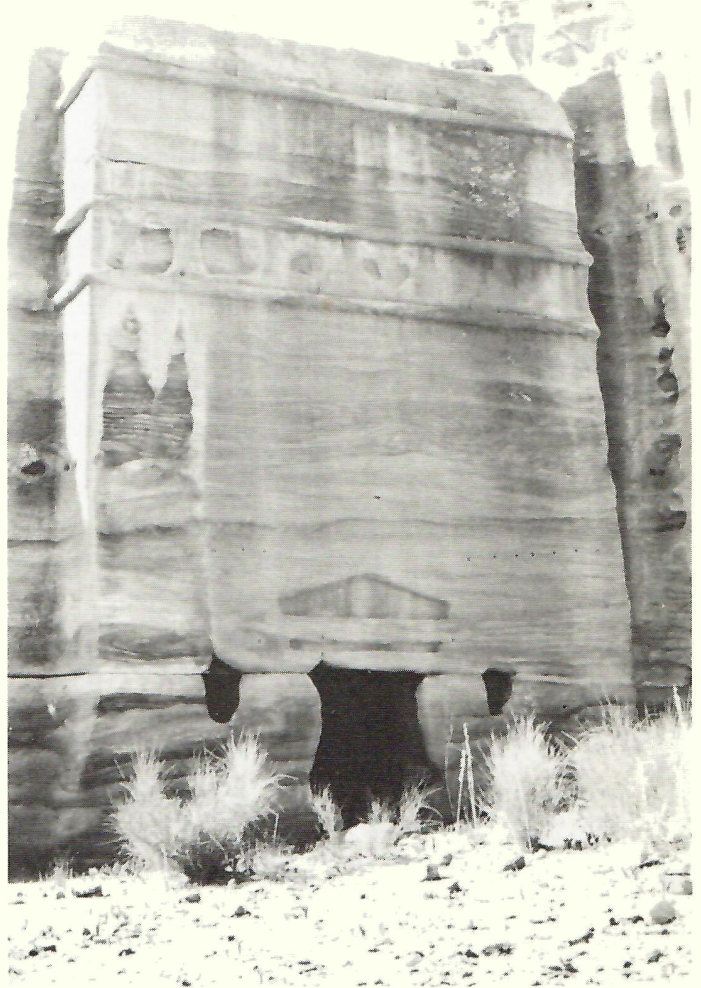
<sup>9</sup> A. Schmidt-Colinet, in *Die Nabatäer, Exhibition Rheinisches Landmuseum Bonn* (1981), p. 66 and FIG. 7.



4. Doorway of Tomb Br. 808 with grooves to hold stucco cornices.



5. Tomb Br. 775. The cornice and pediment were added in stucco.



coes.<sup>10</sup> In the Iron Age period (8–7th century BC), the floors and walls of temples and houses were plastered, as evidenced by the Tell Deir ‘Alla inscribed fresco,<sup>11</sup> the Buṣeirah,<sup>12</sup> Amman Citadel<sup>13</sup> and Tel Ṣafut dwellings.<sup>14</sup> The best example of this technique in the early Hellenistic period was discovered at Araḡ el Amir, in the vicinity of Amman. In this country estate of the Tobiads, P. Lapp<sup>15</sup> excavated a ‘plaster building’, covering an area of 19 × 22 m, enclosed in a wall ‘with two thin coats of white plaster on its inner face’.<sup>16</sup> A second inner wall surrounds an area of 10 × 15 m. It is revetted with plaster on the outer face ‘but on its inner face it has a much thicker

plaster—beautiful dark red with bevelled edges and white borders’.<sup>17</sup> Horizontal and vertical scoring decorate the plastered face of a corridor around the central court. The pottery evidence indicates a date at the beginning of the 2nd century BC for this monument. Moulded stucco revetment was also found at the Qaṣr el ‘Abd, a residential monument dated to the same period.<sup>18</sup>

At Petra, architectural stucco decoration has been noticed in the eastern cliff of the rock mass of el Ḥabis,<sup>19</sup> below the Crusader fort and west of the Qaṣr el Bint temple. High up in the mount the remains of two plastered houses are visible. These were part of a three-storeyed dwelling above the columbarium which underwent several phases of occupation. A cave destroyed part of the south house which was decorated with a large plastered panel, to the left of isodomic courses (FIG. 10). In the north house, more elaborate stucco is preserved

<sup>10</sup> B. Hennessy, *Studies in the History & Archaeology of Jordan*, 1, ed. A. Hadidi, Department of Antiquities (1982), p. 56.

<sup>11</sup> J. Hoftizer and G. van der Kooij, *Aramaic Texts from Deir ‘Alla*, Leiden (1976).

<sup>12</sup> C.-M. Bennett, *Levant* 7 (1975), 1–19 with bibliography.

<sup>13</sup> F. Zayadine, *ADAJ*, 18 (1973), p. 27 and Pl. xv, 1.

<sup>14</sup> Excavated by D. Wimmer. To my knowledge, no report has been published yet.

<sup>15</sup> *BASOR*, 171 (1963), 17–20, FIG. 17–20.

<sup>16</sup> *Idem.*, p. 17. For a recent report, see J. Groot in N. L. Lapp, ed., *The Excavations at Araḡ el-Amir*, *AASOR*, vol. 47, 1983., p. 75–86.

<sup>17</sup> *Idem.*, p. 17.

<sup>18</sup> For a preliminary report, see E. Will, *ADAJ*, 23 (1979), 139–149. *SHAJ*, 1, 197–200.

<sup>19</sup> First reported by G. and A. Horsfield, *QDAP*, 7 (1938), p. 16. See also, F. Zayadine, in *Petra*, ed. M. Lindner, *op. cit.*, p. 247 and FIG. 48, p. 246.



6–7. The Farasa Triclinium. Traces of plaster can be seen over the niches.



8. A stucco fragment found in Tomb Br. 813 with traces of a Nabataean inscription.



in three tiers. At the bottom, a low plinth supports large drafted orthostats (FIG. 10 left). This zone is topped by a moulded cornice which supports fluted columns and a storey of blind niches or windows. Above this order appears a plain string course and probably isodomic panels. The last tier consists of a blind gallery decorated with pilasters, spanned by an architrave and a frieze of triglyphs and metopes.

A similar revetment, related to the First Style of Pompeii, was reconstructed in the House of Dionysos in Delos<sup>20</sup> (FIG. 11) and was dated around 125 BC. Other parallels in the Houses of the Faun and Sallust have been recently re-examined by A. Laidlaw.<sup>21</sup> In Room 15 of the House of Sallust,<sup>22</sup> there is a relief plaster decoration of fluted colonnettes and isodomic panels topped by a Doric frieze. The author, who dates the House of the Faun to around 100 BC, is cautious about the chronology of the House of Sallust.

This 'Structural Style' is derived, no doubt, from real architecture and can be compared, for example, to the elevation of the Qasr el 'Abd at Iraq el Amir, mentioned above. In this famous mansion of the Tobiads, the foundation course supports large drafted orthostats, then a zone with seven open windows follows, crowned by a cornice. A string course decorated at the angles by relief lionesses and lions supports a gallery

<sup>20</sup> A. Bulard, *Monuments et Mémoires Piot*, 14 (1907), p. 110f. and Pl. VI A.

<sup>21</sup> For the House of the Faun, see *Neue Forschungen in Pompeiji*, ed. B. Andreae and H. Kyrieleis, Recklinghausen (1975), 39–45, FIGS 44–55.

<sup>22</sup> For the House of Sallust, see *Essays in Archaeology and the Humanities In Memoriam Otto J. Brendel*, Mainz (1976), 105–113 and Pl. 22.



9. Tomb 676 at Naşara. Notice stucco revetment on the right side.



of colonnettes (FIG. 12). A plain attic follows, with eagles at the angles, then comes an architrave crowned by a frieze of triglyphs and metopes. Although of different style, the Tomb of Levcadia in Macedonia,<sup>23</sup> dated to the 3rd century BC, and the recently discovered mausoleum of Vergina<sup>24</sup> exhibit the same elevation, coated with relief plaster.

The dating of the el Ḥabis dwellings is conjectural. To the north, a Nabataean inscription reads: 'Peace to Pasaël, queen of the Nabataeans'.<sup>25</sup> She is to be identified most probably with a daughter of Aretas IV (9 BC–40 AD). This dedication is engraved on a projecting square rock which has been isolated in the carving of an unfinished monument. This monument was started in the lower tier of the dwellings and is chronologically later than the upper dwellings. Compared to the House

of Dionysos in Delos and the Tell Anafa<sup>26</sup> structural stucco, dated around 80 BC, the el Ḥabis plaster seems to belong to the same style and could be dated in the early 1st century BC.

The multi-storeyed architectural stucco of el Ḥabis can be better compared to the Qasr el Bint inner and outer revetments.<sup>27</sup> This free-standing temple, at the western end of a large paved temenos, at the meeting of several caravan roads, is standing on a podium to a total height of 23 m. Since the monograph of Kohl,<sup>28</sup> a systematic re-examination of the plaster reliefs was undertaken in recent times with the assistance of the detailed drawings of architect Fr. Larché, made during the excavation of the monument. Substantial moulded stucco decorations are extant on the outer walls. But strangely, the inner plastering can be reconstructed only from dowel holes. This fact is understandable if we keep in mind that the outer structural reliefs, which are subject to bad weathering, had to be remodelled.

On the east wall of the central compartment, an elaborate architectural scheme was reconstructed by Kohl<sup>29</sup> from attachment holes. It reproduces a tetrastyle façade in three storeys. The oculus in the second tier corresponds to a blind niche in the third one. A comparable oculus may be noticed over the doors of the south and north side chambers of the Khazneh. The relationship between this stucco composition and the rock-cut monuments of Petra has already been pointed out by Kohl,<sup>30</sup> as we shall see below.

Remains of stucco reliefs are still evident on the outer walls. A register of pilasters develops on the northern wall of the pronaos to a height of 3 m and continues along the eastern façade. On this part of the monument, a socle 1.59 m in height supports large orthostat blocks of 1.70 m. This serves as a stand for a register of stucco pilasters 2.65 m high, which are crowned by figured panels and a dentelled cornice on a protruding apron-string (FIG. 13). On the southern wall, the register of pilasters continues, but in the central part, corresponding to the central compartment, the decoration reproduces a shrine façade: six pilasters (or colonnettes) are spanned by an entablature consisting of an architrave and a frieze of cupids holding garlands between figured panels (FIG. 14). The whole composition is crowned by a cornice. This order is topped by a central segmental pediment, flanked by two half pediments. There is no trace of stucco or attachment holes in the upper plain attica to indicate the reconstruction of an upper storey, as was assumed by Kohl and others. This restored storey would make the comparison with the Corinthian Tomb or the Khazneh more acceptable. However, it is more reasonable to compare the rock-cut façades of Petra to the 'structural' stucco

<sup>23</sup> A. Petsas, *La Tombe de Levcadia*, Athènes (1966).

<sup>24</sup> M. Andronicos, *Vergina, The Royal Tombs, and Ancient City*, Athens (1984), Pl. 56 and 160.

<sup>25</sup> J. T. Milik and J. Starcky *ADAJ*, 20 (1975), 112–115 and Pl. xxxvii, 2.

<sup>26</sup> R. Gordon, Ph.D. Thesis, University of Missouri microfilm, p. 230 and FIG. 24.

<sup>27</sup> For a recent preliminary report, see F. Zayadine, *ADAJ*, 29 (1985), 239–249 and FIGS 1–8, Pls LV–LXV.

<sup>28</sup> *Kasr Firaun*, *op. cit.*, p. 22 and FIG. 18.

<sup>29</sup> *Op. cit.*, p. 26ff.

<sup>30</sup> *Idem.*, FIG. 16.



10. Plastered houses in the eastern el Habis rock.



of el Habis or to the scheme on the eastern wall of the central compartment.

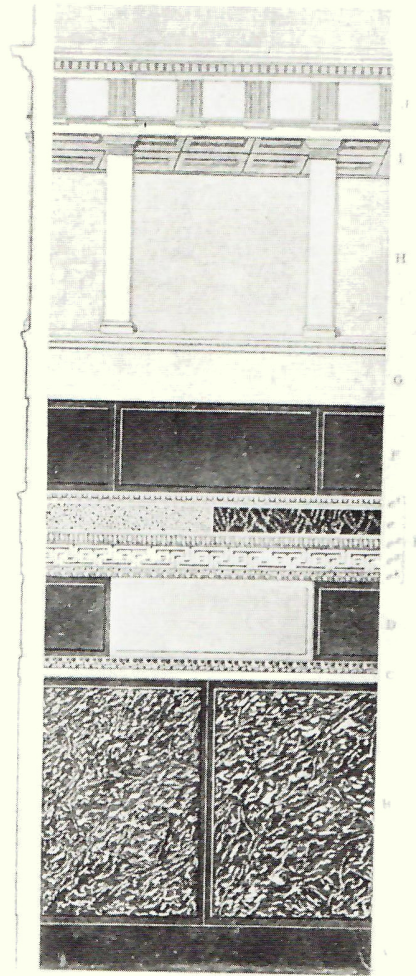
The architectural stucco of the south wall of Qasr el Bint has been compared to the decoration of Trajan's Market in Rome (FIG. 15). On the curved façade of this monument, a composition of colonnettes topped by an entablature of segmental and broken pediments is preserved in brick. M. Lyttleton suggests that 'it was perhaps also covered with stucco',<sup>31</sup> although there is no trace of plastering. At any rate, it is traditionally known that Apollodoros of Damascus<sup>32</sup> was the architect of this monumental ensemble. Lyttleton thinks 'that he exported this motif to Rome, rather than the example in Petra is a provincial imitation of the architecture of the capital.'<sup>33</sup> She is probably right, for the brick decorations of Trajan's Market are but a pale image of the delicate and refined architectural reliefs of Qasr el Bint. It is clear that the Roman historical tradition concerning the involvement of Apollodoros in the Forum of Trajan points to the Oriental influence on the 2nd century monuments of Rome. This assumption can be proved by the earlier date of the Nabataean and Syrian monuments. A Nabataean dedication to Aretas IV built into the temenos wall of the Qasr el Bint together with the soundings

<sup>31</sup> M. Lyttleton, *Baroque Architecture in Classical Antiquity*, London (1974), p. 68.

<sup>32</sup> Dio Cassius, *Roman History*, 69, 4.

<sup>33</sup> *Baroque Architecture*, *op. cit.*, p. 69.

11. Delos, House of Dionysos. Reconstruction of the Stucco decoration, after Bulard, *Monuments Piot*, XIV, Pl. VIA (photo A. Barbet).



he made, convinced P. Parr<sup>34</sup> that this temple may date back to Obodas III (30–9 BC). The decorative stucco architecture and the relief figures are comparable to the plaster revetment in the House of Sallust and to the vault of the Villa near the Farnesine<sup>35</sup> in Rome, dated to around 10 BC. The Qasr el Bint temple could be assigned to the end of the 1st century BC. During the 1985 excavation, a Nabataean sherd of the 1st century BC–AD was found in a groove, prepared to fit a supporting beam in the east wall of the east compartment. But when the northeastern *anta* was dismantled for restoration, drafted stones with stucco were found in the core of the wall.<sup>36</sup> Thus, a monument of certain importance, probably a temple, preceded the Qasr el Bint. The date of this earlier monument

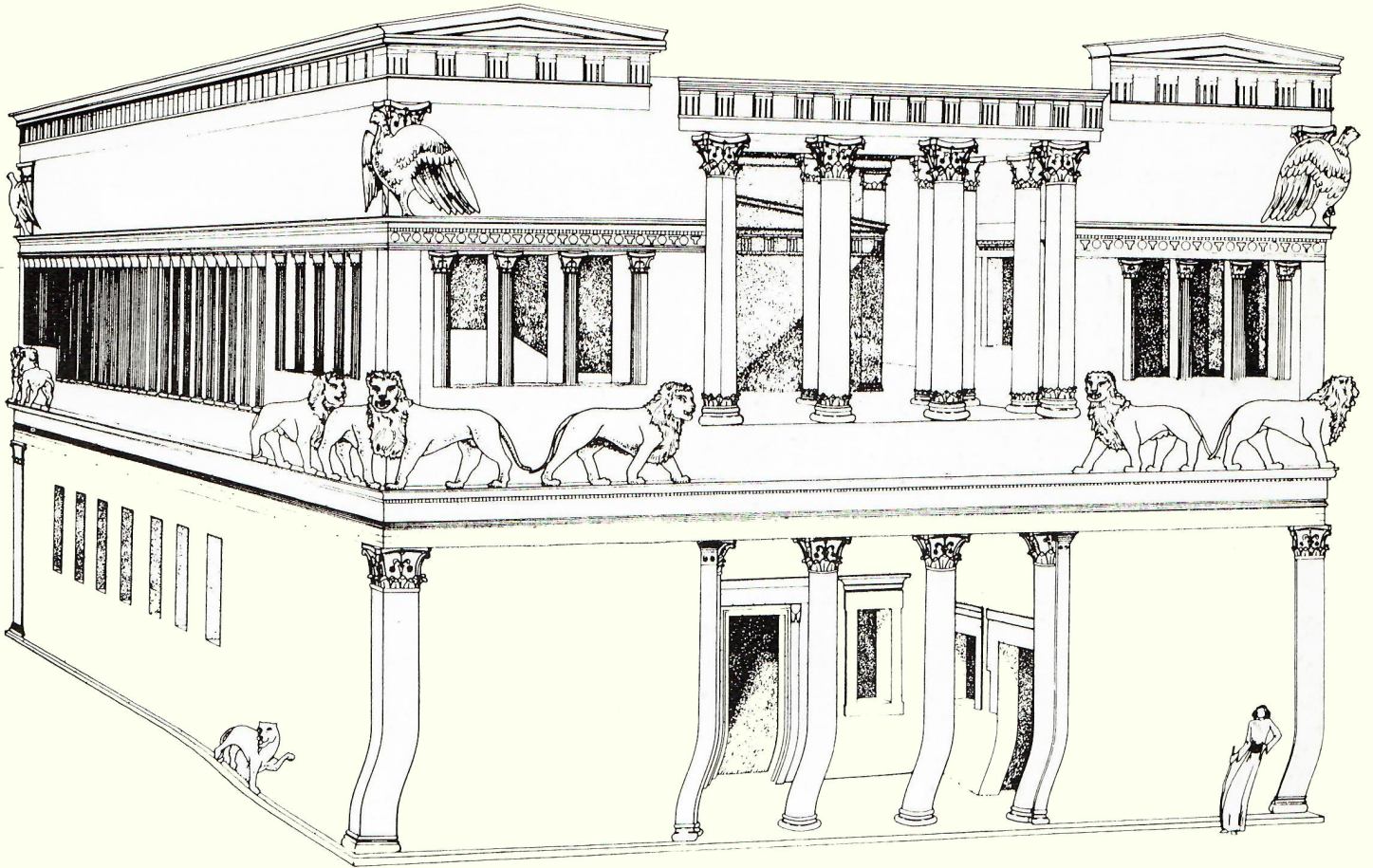
<sup>34</sup> *ADAJ*, 12–13 (1967–8), p. 17.

<sup>35</sup> The ceilings of this Villa are decorated with relief figures similar to the Qasr el-Bint stucco. See N. Blanc, *Rev. Arch.* 1 (1983), 51–77. For Roman stucco reliefs see also H. Mielsch, *Römische Stuckreliefs*, Heidelberg (1975).

<sup>36</sup> *ADAJ*, 29 (1985), p. 246 and Pl. LXIV, 1.



12. Qasr el 'Abd at 'Iraq el Amir, reconstruction after J-P. Lange.



is still conjectural but it is of interest to notice the use of stucco in this earlier building phase.

In the Temple of the Winged Lions, excavated by Ph. Hammond,<sup>37</sup> moulded and painted stucco revetment was found in profusion but so far very little has been published. Column shafts were covered with fluted plaster. The dentelled cornices I have been able to examine show traces of red paint and are similar in form to the stucco cornices of the Qasr el Bint south wall. A marble slab found in the marble workshop, below the stairway leading to the houses adjacent to the temple, is engraved with a Nabataean inscription dating to 27/28<sup>38</sup> AD and refers to offerings presented to the sanctuary, but the temple was probably in service as early as the second half of the 1st century BC. A stucco border fragment discovered in the *cella* is painted with a Second-Style cultic scene.<sup>39</sup>

#### Moulded and painted stucco south of the Arched Gate

Significant painted and architectural stucco was discovered in the building complex, south of the Arched Gate in 1968

<sup>37</sup> *ADAJ*, 22 (1977–8), p. 98ff. and Pls LXII, 1–4.

<sup>38</sup> Hammond *et al.*, *BASOR*, 263 (1986), 77–80.

<sup>39</sup> *ADAJ*, 22 (1977–78), Pl. LXI, 1.

by Muhammed Murshed from the Department of Antiquities.<sup>40</sup> In this area, connected to the temenos wall of Qasr el Bint, a square tower functioned as a vestibule to a large dwelling complex. A good many Nabataean capitals, together with relief panels, were stored in this tower, probably in the Byzantine period. There is a second rectangular vestibule to the south ornamented with Doric columns. Unfortunately, the excavations in this area were not completed and the structure is complicated by later walls. Immediately to the south, another complex includes a monumental stairway and two adjacent rooms (FIG. 16). The stairway turns around a central square post. Stucco orthostats and isodomic panels decorate the west wall of the stairwell, while the central post is coated with dark-red and ochre panels with white borders (FIG. 17).

To the west of the stairway but without any apparent connection with it, two rooms have been excavated by the Department of Antiquities. The southern room is square and is covered by a vault on pendentives, while the northern one is circular with a domed roof. This was described by Wiegand<sup>41</sup> as a *caldarium* but no traces of hypocausts or water pipes

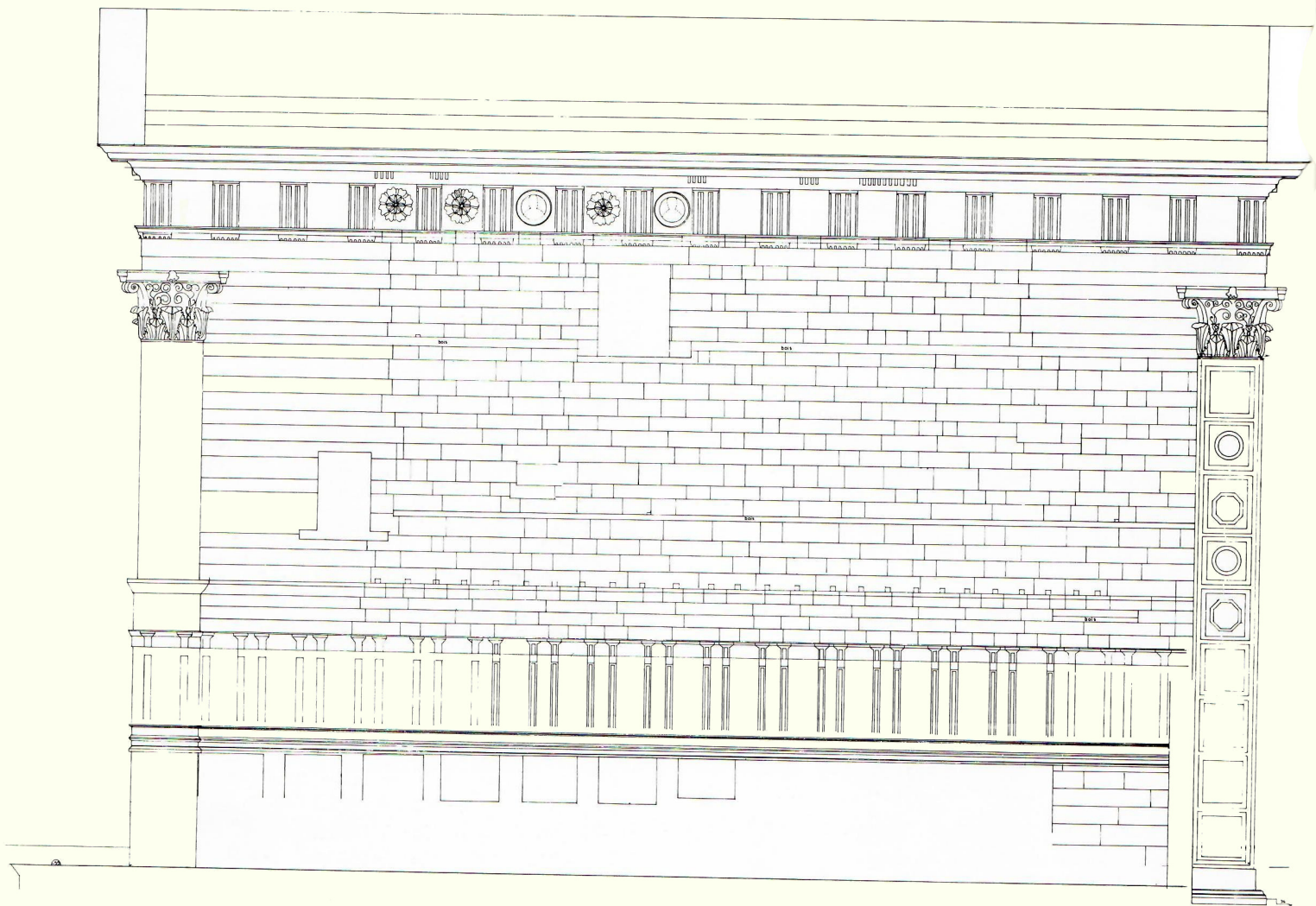
<sup>40</sup> For a site plan, see *ADAJ*, 12–13 (1967–68), FIG. 18.

<sup>41</sup> Bachmann, Watzinger, Wiegand, *Petra*, Leipzig (1921), 45–48.

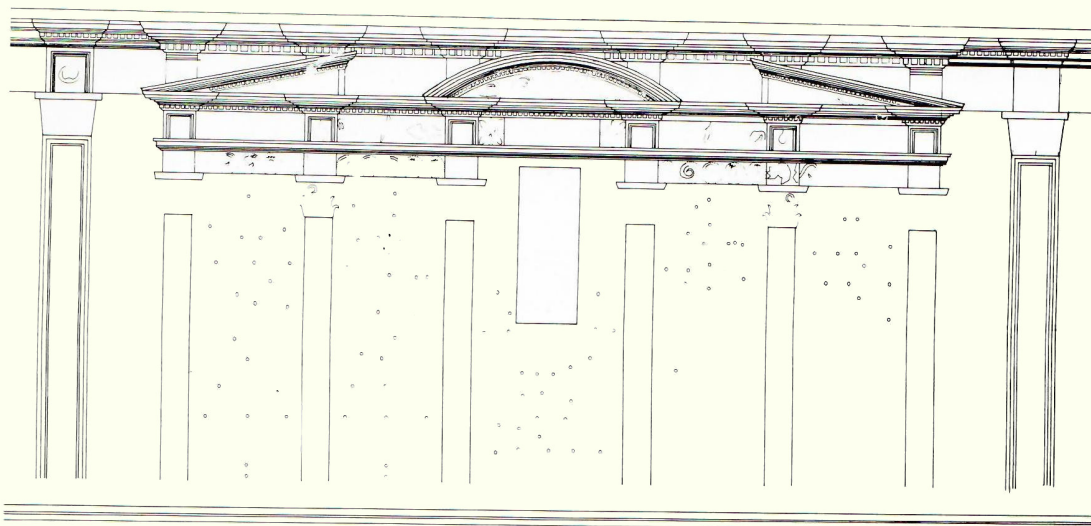


FAWZI ZAYADINE

13. Reconstruction of the stucco decoration on Qasr el Bint, east façade (after F. Larché).

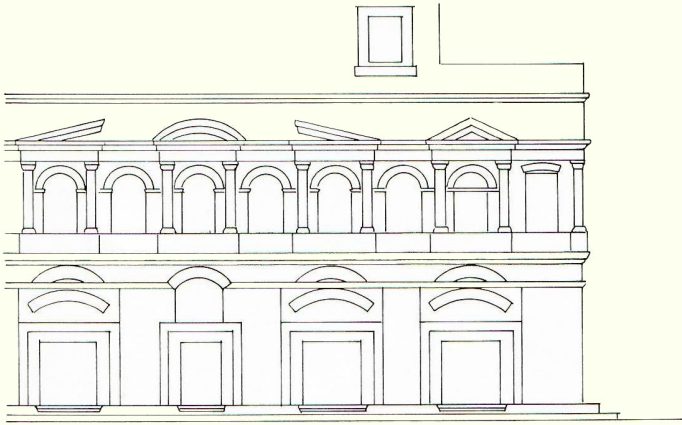


14. Architectural stucco on the Qasr el Bint south wall (after F. Larché).

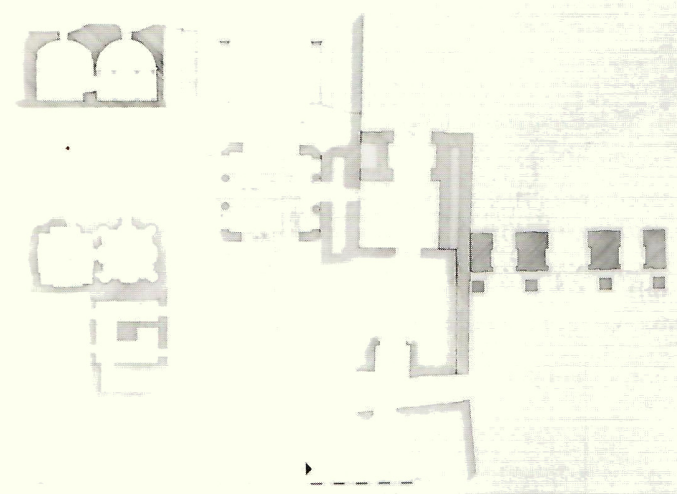




15. Brick decoration of Trajan's Market in Rome (after G. Picard).



16. Plan of the residential area, south of the Arched Gate (after J. Rougetet).



17. Plastered and painted stairway post, south of the Arched Gate.



were found during the excavation. It is more likely that this room, richly decorated with colonnettes and painted architectural stucco, was part of a palatial residence. To a height of 2.80 m engaged Corinthian colonnettes flank seven concave shallow niches. The florid Corinthian capitals which show traces of plastering have an astragal decorated with rosettes. This technique of coating the capitals with plaster suggests that the plain Nabataean capitals were decorated with added stucco vegetal scrolls, as can be evidenced by a capital discovered in the above-mentioned tower, south of the Arched Gate (FIG. 18). A large number of stucco cornices were collected

18. Pilaster capital with added plaster scrolls, found at Petra.



during the clearance and stored in the Petra Museum (FIG. 19). The dentels are narrow and elongated and are comparable to dentelled cornices retrieved in the necropolis of Alexandria (FIG. 20). It is noteworthy that the egg-and-dart motif is painted in ochre and black, a technique used in the Alexandria necropolis.<sup>42</sup> Of special interest are the ceiling coffers which are marked by a groove in red (FIG. 21). Similar coffers were found in the House of the Griffins in Rome,<sup>43</sup> dated between 100 BC and 60 BC. Unfortunately, there is no conclusive dating evidence for the residential complex of Petra except that it is most probably earlier than the temenos wall, built in the reign of Aretas IV (9 BC–40 AD). It is comparable to the residential quarter on the southern part of the lower terrace at Masada, which dates back to the reign of Herod the Great (37–4 BC). A date in the first half of the 1st century BC can be assumed for the Petra complex.

#### Painted stucco

The painted plaster walls of the Winged Lions Temple and the above-mentioned decoration of the residential quarter, south of the Arched Gate, are part of a widespread technique used in the Nabataean monuments of Petra. In the rock-cut

<sup>42</sup> A. Adriani, *Annuaire du Musée gréco-romain* (1935–9), Pl. xix.

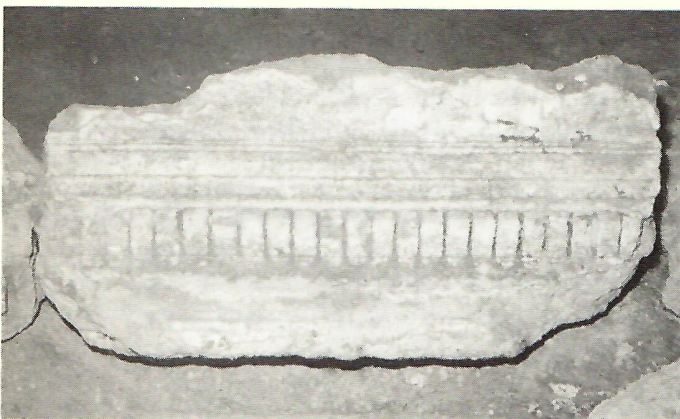
<sup>43</sup> A. Barbet, *La peinture murale romaine*, Paris (1985), p. 37. See also, R. Bianchi Bandinelli, *Rome, le Centre du Pouvoir*, Univers des Formes, Paris (1969), p. 118 and FIG. 120.



19. Architectural stucco fragments excavated in the domed chamber, south of the Arched Gate.



20. Stucco dentelled cornice in the Greco–Roman Museum of Alexandria (photo C. Vibert).



house, opposite the main theatre of Petra, Horsfield<sup>44</sup> described a room (F on his plan), revetted with white plaster and painted with red and black arches. He was also the first archaeologist to notice the painted dwellings of Wadi Siyyagh, on the way to the spring. In this same area, Nabil el Qadi,

<sup>44</sup> *QDAP*, 7 (1983), p. 19f. and FIG. 3.

21. Ceiling coffer and cornice found in the domed chamber, south of the Arched Gate.



Inspector of Petra, and Cl. Vibert discovered in 1979 an important fresco in an inaccessible cave.<sup>45</sup> This is a 3 by 3 m chamber, extended by a rectangular recess (2 m by 2.50 m) in the west wall. The fresco is preserved to a height of 1.10 m on the east and south wall but covers the total west and north walls. On the south wall, to the left of the entrance, two blind doorways are depicted, one of them being topped by a sphinx with spread wings (FIG. 22). The doorways are framed by pale-blue bands which appear on an orange or dark-red background, while the door flaps are alternately red or yellow. On the east wall, the blind doorways are topped by a moulded cornice or a cornice and pediment, alternately. Although the clearing of the west wall has not been completed by the team of the Instituto del Restauero in Madrid, a rhombus pattern can be distinguished in the upper zone (FIG. 23). A similar pattern can be examined in the House of the Griffins in Rome.<sup>46</sup> In the same House, large panels in red, framed in a blue border, are common. Similar panels are also well known in the Second Style Houses of Pompeii and Oplontis.<sup>47</sup> But the frescoes of Wadi Siyyagh are of a different tradition since they exhibit but little perspective. They rather belong to the known Alexandrian blind doorways depicted in the necropolis of Hadra and Mustapha Pacha.<sup>48</sup> Recent discoveries in the Mausolea of Ver-

<sup>45</sup> *ADAJ*, 25 (1981), p. 355 and Pl. CIII, 2. F. Zayadine, *Petra*, *op. cit.*, p. 246, FIG. 49.

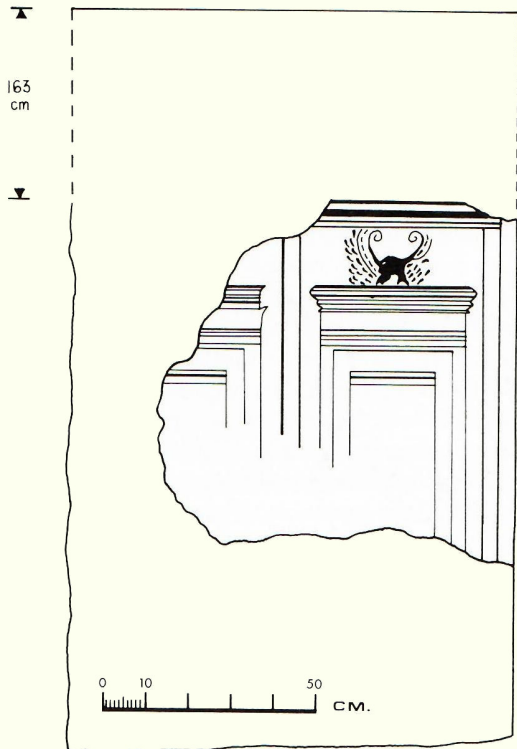
<sup>46</sup> R. Bianchi Bandinelli, *Rome*, *op. cit.*, p. 118 and FIG. 120.

<sup>47</sup> A. de Franciscis, *Die Pompejanischen Wandmalereien in der Villa von Oplontis*, Recklinghausen (1975). Pl. 28, 29.

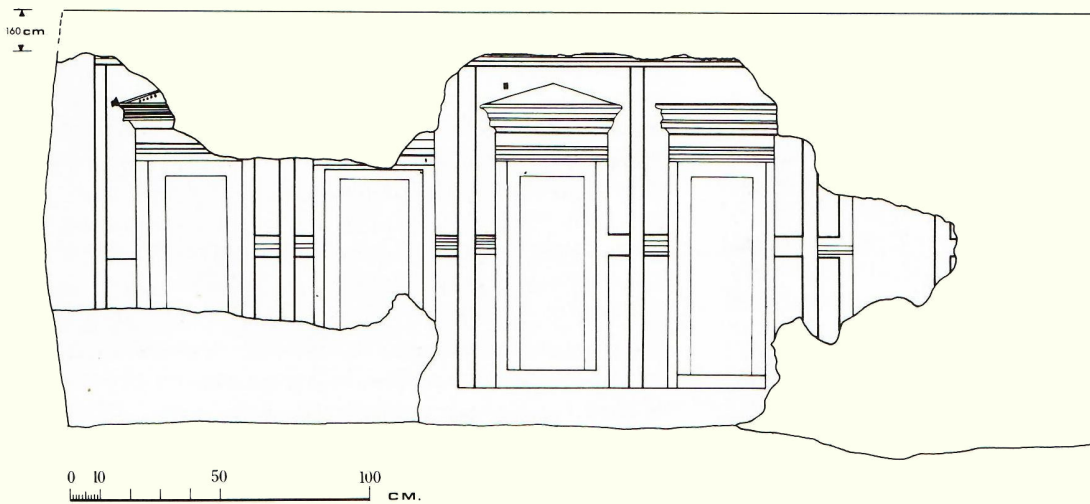
<sup>48</sup> See A. Adriani, *Annuaire* (1935–9), p. 118–120, FIG. 54 and Pl. XLIII. G. Ville, *Rev. Arch.* 2 (1969), 273–285 and FIGS 1–11.



22. Wadi Siyyagh cave, architectural fresco, south wall (after Z. Fiema).



23. Wadi Siyyagh cave, architectural fresco, west wall (after Z. Fiema).



gina in Macedonia indicate that this technique was probably brought to the Egyptian metropolis at the time of the conquest of Alexander the Great and diffused from there to the Oriental Hellenistic *koinè*.<sup>49</sup>

Another fresco of Alexandrian influence was brought to the attention of archaeologists in 1906 (FIG. 24) in *Sîq el*

<sup>49</sup> R. Martin, *Rayonnement grec, Hommage à Charles Delvoye*, Bruxelles (1982), p. 247ff.

Bared,<sup>50</sup> north of Petra. In this biclinium, the north wall is plastered with isodomic panels with a red draft. The vault of the alcove is decorated with an exquisite carpet of intersecting vine scrolls. They form medallions peopled with exotic colourful birds and hunting putti. Peopled scrolls are extant in Pompeii, Rome and Alexandria. A blue glass found at

<sup>50</sup> G. and A. Horsfield, *QDAP*, 7 (1938), 21–24. See also F. Zayadine, *Iconographie classique et identités régionales* éd. L. Kahil *et al.*, Paris (1986), 408–9 and FIGS 1–3.



## 24. Beida, Sîq el Bared fresco.



Pompeii<sup>51</sup> is painted with vines, animated by vintager putti. The House of Livia in Rome<sup>52</sup> is decorated with a garden embellished with trees and flowers and birds. This fresco is dated around 38–30 BC. In a tomb of Ascalon<sup>53</sup> on the Palestinian coast, near Gaza, a fresco very similar to the Sîq el Bared fresco is assigned to the 4th century AD, but this dating should be reconsidered. At any rate, the Sîq el Bared fresco is of a very delicate and refined workmanship and can be better compared with the vegetal decoration on the Hadra<sup>54</sup> vases in Alexandria, dated to the 3rd century BC. There is no dating evidence for the Sîq el Bared frescoes, but they are generally assigned to the first half of the 1st century BC.

### General conclusions

The decorative stuccoes of Petra surveyed in this paper are evidence of the wide cultural connections of the Nabataeans with Hellenistic Greece, Alexandria and Italy. Recent archaeological discoveries in northern Greece, especially at Vergina, dated to the 4th century BC, are closely related to the Alexandrian decoration in the Hellenistic necropolis. As stated by

<sup>51</sup> A. Adriani, *Una Coppa paesistica del Museo di Alexandria*, Rome (1959), p. 12 and FIG. 4.

<sup>52</sup> B. Andreae, *l'Art de l'ancienne Rome*, coll. Mazenod, Paris (1973), Pl. 45.

<sup>53</sup> M. Borda, *La pittura romana*, Milano (1958), FIG. p. 141, upper, and p. 142.

<sup>54</sup> A. Adriani, *Annuaire* (1933–5), FIGS 141–142 and FIGS 60–61.

R. Martin: 'Dans le détail même, les façades des hypogées de Mustafa Pacha puisent leur inspiration dans les tombes macédoniennes. Le panneau peint au-dessus de la porte centrale de l'hypogée I de Mustafa Pacha (cf. n. 9) emprunte son ordonnance à la tombe principale de Vergina.'<sup>55</sup>

As mentioned above, Alexandria played a major role in the development of stucco techniques and their handling in the Hellenised world. Because of its close commercial relationships with the Nabataeans, this city is believed to have exercised the strongest influence on the art of Petra. But Alexandria was certainly not the sole source of Nabataean artistic inspiration. Other Hellenistic centres in Asia Minor, such as Pergamon and Priene,<sup>56</sup> may have exercised their influence through Antioch and northern Syria. The structural stucco in the houses and public monuments of Priene has been already compared to the plaster architectural reliefs of Qaşr el Bint.<sup>57</sup> Palestine could be considered as the intermediary, since plastered tombs, dated to the 2nd century BC were discovered at Marissa<sup>58</sup> in the south. The Tell Anafa structural stuccoes referred to are also another important example from the early 1st century BC. In the last quarter of the same century, Herod the Great, a fervent client of Rome and Hellenism, embellished with plaster his palaces at Masada<sup>59</sup> and Jericho,<sup>60</sup> and his Fortress at the Herodium.<sup>61</sup> Recent discoveries in the Jewish quarter of Jerusalem<sup>62</sup> show that the technique of frescoes continued in the 1st century AD. At Petra, even if we admit the external influence on the stucco decoration, we have to consider the possibility of local internal evolution of the Nabataean moulded and painted plaster. The genuine and personal character of the Petra craftsmen can be easily identified through the delicate execution and the refined artistic sensibility of their work. In this way, it can be said without over-emphasis that they surpassed in some cases their Greek models.

<sup>55</sup> R. Martin, in *Rayonnement grec*, op. cit., p. 257.

<sup>56</sup> Wiegand and Schrader, *Priene*, Berlin (1904), 308–319.

<sup>57</sup> Kohl, op. cit., 28–29 and FIG. 24.

<sup>58</sup> See *Encyclopedia of the Holy Land*, Jerusalem (1977), ed. M. Avi-Yonah, s.v. Maresha.

<sup>59</sup> Y. Yadin, *Masada*, London (1966), p. 41ff.

<sup>60</sup> E. Netzer, *IEJ*, 25 (1975), 89–100, *BASOR*, 228 (1977), 1–13. See also from the same author *An architectural and archaeological analysis of building in the Herodian period at Herodium and Jericho*, Ph.D. Thesis, Jerusalem, Hebrew University (1977).

<sup>61</sup> V. C. Corbo, *Gli edifici della Reggia-Fortezza*, Jerusalem (1972).

<sup>62</sup> N. Avigad, *Jerusalem*, Nashville (1983), p. 95ff. and Pls 104–106.