

Iraq el Amir: Excavations at the Monumental Gateway

Introduction

Since 1976, the Qasr el Abd has been the object of an extensive investigation by E. Will, with a view to a definitive publication. It is the most complete and most spectacular building of the Iraq el Amir site¹. However, the entire site, with its original lay-out including the arrangement of caves, the construction of a dam and of an irrigation system, the establishment of agricultural terraces, as well as several monumental remains, is of exceptional interest, as the XIXth century travellers already noted. These installations, which appear to be the coherent components of a palatial estate, had already been enumerated by Flavius Josephus (*Ant. J.*, XII, 229–236) who turns out to be a remarkable help to our reading of the ancient landscape.

A general study of the site could not be undertaken without a certain number of soundings and limited excavations as, except for the Qasr, all remains are ruined and for the most part buried. This enterprise began with the excavations conducted by P. W. Lapp in 1961/62 in the area of the village and of the 'square building'. The monumental gateway situated at about 150 metres to the east–north east of the Qasr el Abd, was selected as the first objective. Its interest lies in its small dimensions and its state of preservation (four courses permanently remained visible) which permitted significant comparisons with the building techniques of the Qasr. It also offered the prospect that this less disturbed zone would help to furnish a more precise stratigraphically based chronology and to bring more light on the circumstances in which this building, clearly related to the Qasr el Abd, had been constructed. Finally because of its place and its function, this gateway could give a clue to the understanding of the relation between the area of the Qasr and the rest of the site.

Two digging campaigns in 1977 and 1978 provided sufficient information for a publication of the building², thanks to

the generous help and to the warm co-operation of the Department of Antiquities of Jordan which, in particular, provided us with machines strong enough to allow the handling of several big blocks.

We shall limit our report to a few conclusions which these excavations have provided in the fields of architecture, stratigraphy and chronology, and the relationship between the gateway and the whole estate.

Architecture

Plan

The two campaigns have provided all the evidence necessary to construct the gateway up to a height of more than 9 metres. On the ground, the building appears as a monumental set of two piers of 3.26 × 3.35 metres flanking an opening 3.70 metres wide, the height of which can be reconstructed at 6.35 metres. These piers were separated by a passage, a rectangular space of 3.35 × 4.40 metres, narrowed in the angles by the projection of the four doorposts. The resulting recess in the two piers was meant to receive each of the doors when opened. The piers were connected by a single façade at the level of the lintel and the courses above, and also by a series of flagstones covering the doorway. These were set lengthwise and, leaning on the lintels, were partly inserted into the rear of the blocks of the ionic cornice.

Techniques

In this building we can recognize the use of two noticeably different techniques:

—the most spectacular one is megalithic and is used for the façade³. It is characterized not only by the dimensions of the blocks (up to 3.20 metres long), but also by their being set on

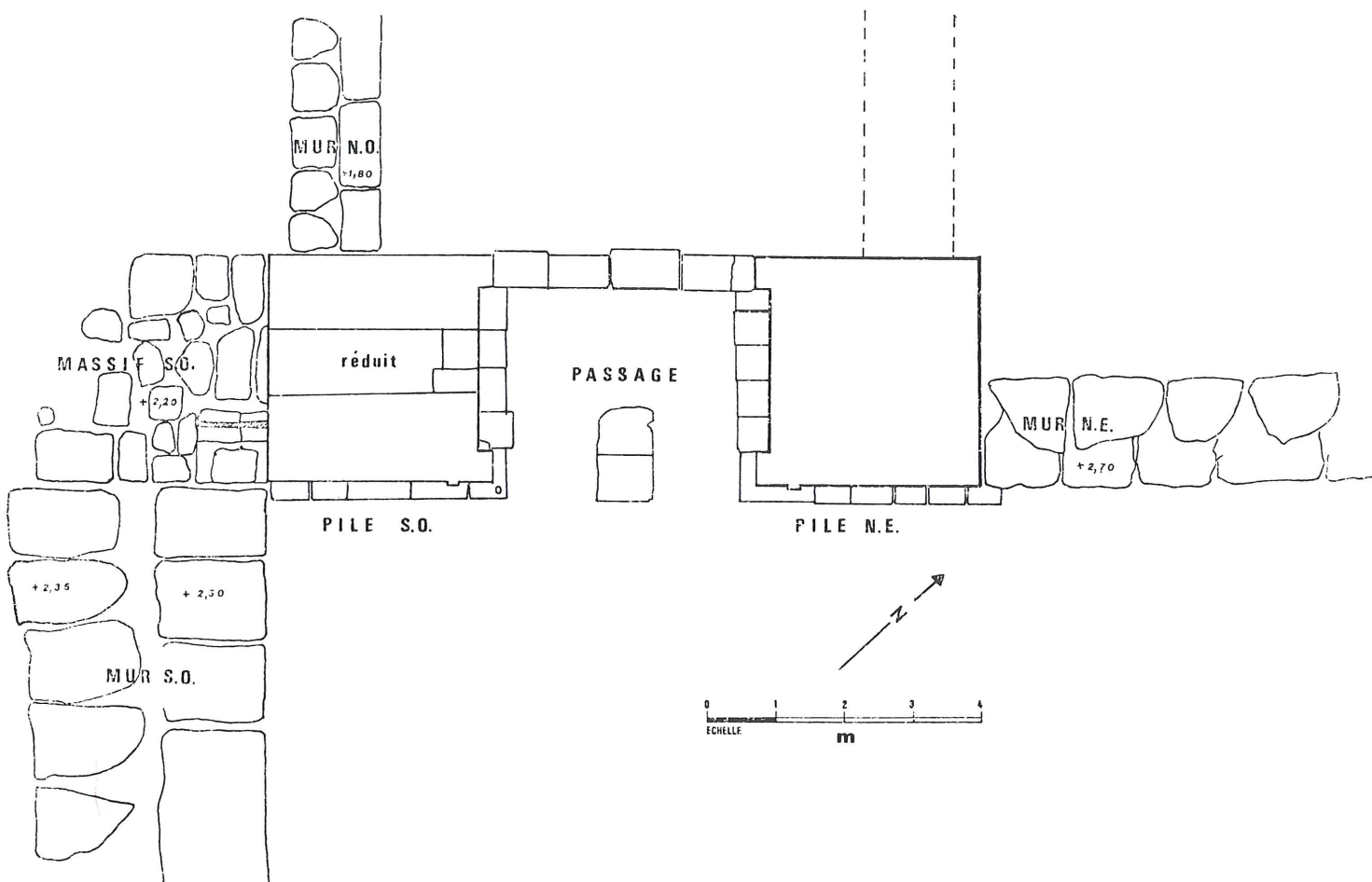
Publication Princeton University Archaeological Expedition to Syria, Div. II, sect. A, part 1, p. 19–20, fig. 9; J.-M. Etchemendy, *Le site d'Araq el Emir en Transjordanie*, Jerusalem, 1960 (Mémoire dactylographié à l'Institut de France, Académie des Inscriptions et Belles-Lettres), p. 75–76.

¹ See above p. 197.

² Cf. *Annual of the Department of Antiquities Jordan*, xxii, 1977/78, p. 102–107, pl. 63–64; xxvi, 1982 (in the press). The final report will soon give all the references and full particulars about the questions summarized here. This gateway has been mentioned by: M. de Saulcy, *Mémoires sur les monuments d'Aârâq el Emyr*, Mémoires de l'Institut de France, Académie des Inscriptions et Belles-Lettres, 26, 1870, p. 87, 103, 196, pl. v; C. R. Conder, *The Survey of Eastern Palestine*, Londres, I, 1889, figure p. 84; H. C. Butler,

³ Cf. E. Will, *Du trilithon de Baalbek et d'autres appareils colossaux*, Mélanges K. Michalowski, Varsovie, 1966, p. 725–729; L. H. Vincent, P. Steve, *Jérusalem de l'Ancien Testament*, Paris, 1954–56, p. 456; G. Contenau, *Civilisation phénicienne*, p. 163, 170; M. Dunand, in *The Role of the Phoenicians in the Interaction of Mediterranean Civilisation* (W. Ward), Beyrouth, 1966, p. 43; Bull. Mus. Beyrouth, 22, 1969, p. 103–107; A. von Gerkan, *Corolla L. Curtius*, p. 55–59.

1. Plan of the monumental gateway, Iraq el Amir



the edge, an arrangement which makes the greatest impression although it is eventually detrimental to the security of the building. The archaic way of bonding the courses, with tenons and mortises carved in the stones themselves is used for the façade only. The regular alternation of high courses (blocks set on edge) and of low courses (blocks set flat as dug from their quarry bed and stuck deeply in the pier), makes it different from the Qasrs bond. It corresponds to the alternating header/stretcher on edge known in Greek architecture, where its most characteristic forms seem to exist in the zones which are influenced by oriental building methods⁴. Here this typical laying must probably be interpreted as a sign of Phoenician influence.

—the techniques used in the rest of the building consist of courses of lesser height (no more than 0.58 metres). The alternation of blocks laid flat and on edge is also used here but the limited height of the stretchers makes it less unstable. The blocks are always assembled with sharp joints and without metallic sealings.

For these two different techniques, two different materials are used:

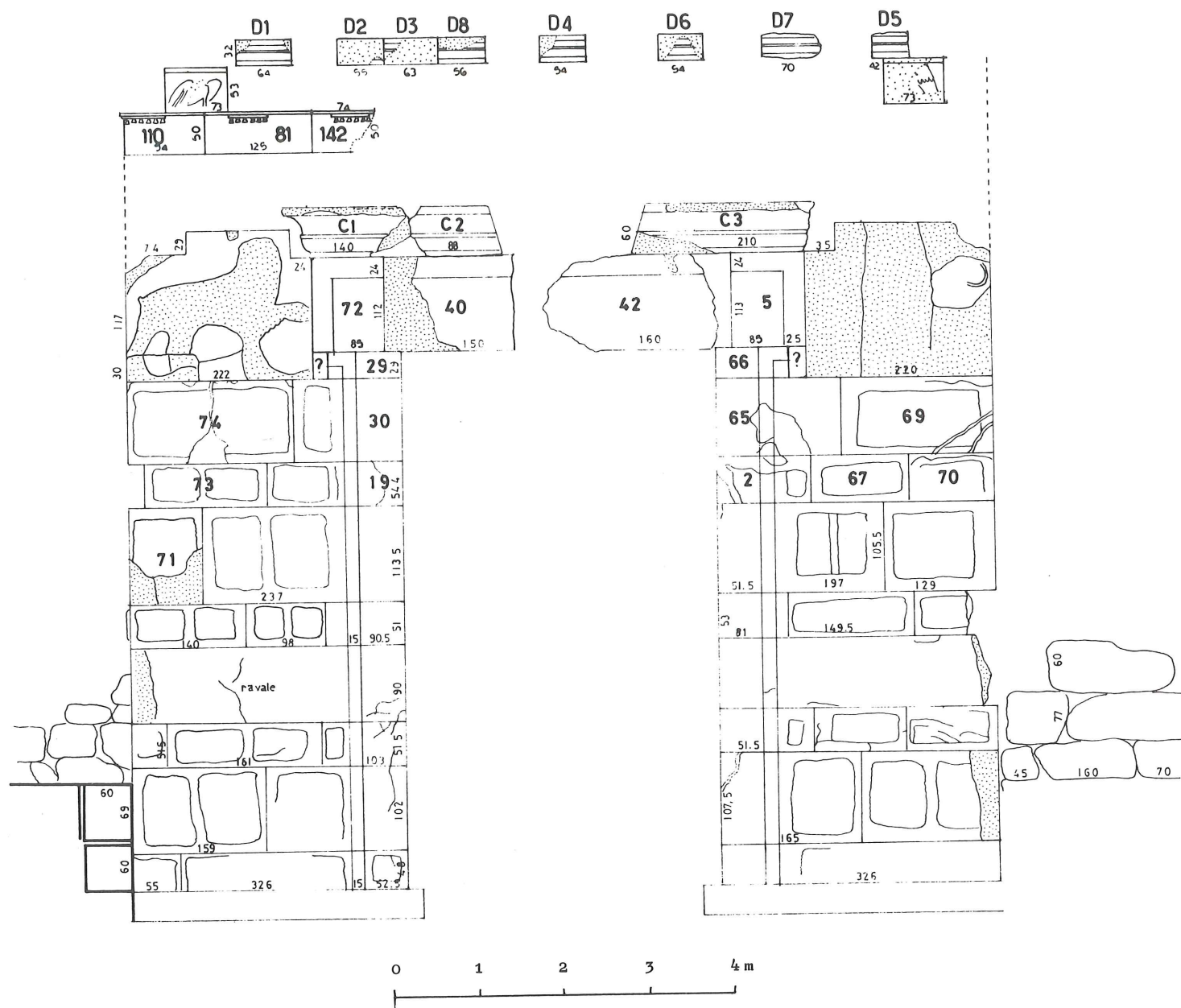
⁴R. Martin, *Manuel d'architecture grecque*, 1, Paris, 1965, p. 406-409.

1) dolomite, hard and quite white, looking very much like marble (cf. ἐκ λίθου λευκοῦ, Fl. Josephus, XII, 230) is used mainly for the façade, in the rest of the building, it is used only for a few elements requiring a special resistance, such as the lintel of the hollow space in the south-west pier; 2) the other blocks being of soft, chalky and greyish limestone. This difference in the materials leads to different techniques of carving. The finishing of the dolomite blocks is achieved by very acute pegging, whereas the blocks of soft limestone bear curved oblique incisions which seem to reveal bush hammering (a method of obtaining an even rough texture).

Elevation

Courses 1 to 6 are *in situ* and remained partly visible above the ground. The style of the building—alternation of the courses, slight differences in size between the two door-posts, presence of a fascia underlining the opening—makes it possible without any hesitation to position most of the blocks scattered near the walls and to restore the whole elevation up to the level of the top of the ionic cornice which surmounted the lintel. All the blocks necessary to the restoration of 8 courses have been found and, since there were no other

2. Elevation of the monumental gateway, Iraq el Amir



similar blocks, we can limit to this figure the number of the standard courses. On top of the upper courses, above the door-posts, two smaller blocks (29 and 66) were set, on which the fascia turns at a straight angle towards the outer side of the gateway. We can thus recognize the frame of a doric gate where the underlining of the jambs turns away so as to frame the lintel. Several pieces of the lintel (in three elements) have been found (72, 40, 42, 5). The course of the lintel is completed at each end by a block in which we can guess the shape of a feline. The notch made at the higher right angle of the block was probably to receive the block carrying the left end of the ionic cornice (C1).

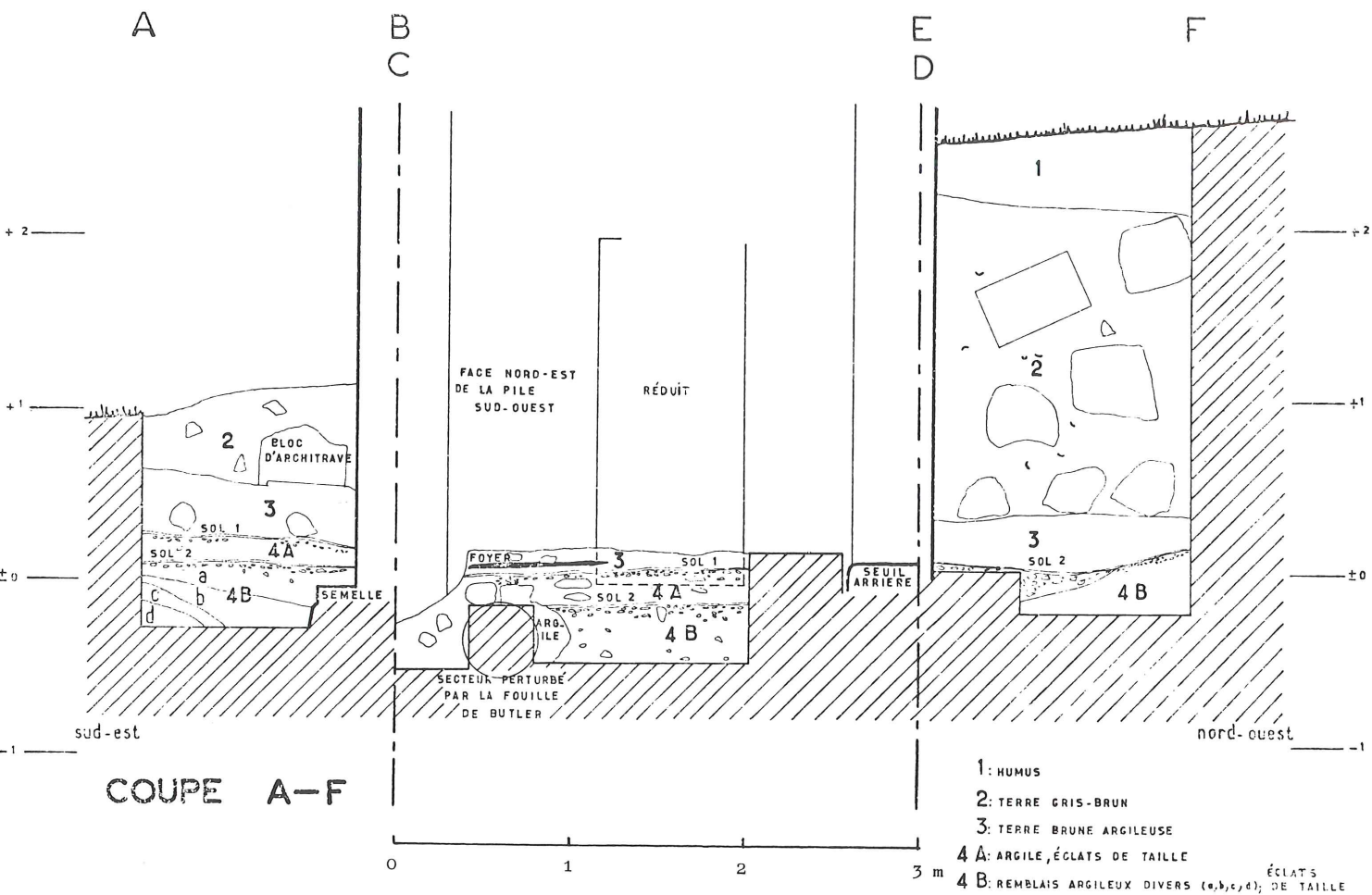
A series of blocks of a noticeably smaller size has also been

found, belonging to a doric entablature: architrave blocks with *regulae* and *guttae* and cornice blocks with mutules. Two blocks decorated with an eagle could have been used as metopes. On the other hand, no triglyph has been found. Whereas there is no doubt this coherent group was set above the ionic cornice, we can wonder if it lay directly on the course with the cornice or if it was separated from it by one or several standard courses.

Decoration

The discovery of a rich architectural decoration, comparable to the Qasr decoration, was the unexpected event of the first campaign in 1977. Beyond the doric frame of the gateway

3. Stratigraphy of the monumental gateway, Iraq el Amir



crowned with an ionic cornice, a doric entablature has been found. This combination of orders we also see in the Qasr, where a block on a staircase door is carved with a doric frame joined to a cornice with palmettes. It is well attested in the Hellenistic period, for example on the façades of the rock cut tombs in Petra and in Jerusalem. C. Watzinger, who might be tempted to see in this combination the influence of Alexandrine art, more precisely compares the style of the palmettes alternating with araceae stems on the ionic cornice with the style of a sima block in the *Hieron* of Samothrace (around the beginning of the 2nd century BC)⁵.

Stratigraphy and chronology

Stratigraphy

(See section a, SE/NW oriented, and section b at the back of the gateway, SW-NE oriented.)

Six stratigraphic soundings which were finally all connected together, make it possible to understand how the site was occupied and what the architectural plans were. In the

following exposé, the levels are given in reference to a level 0 which coincides with the footing of the SW pier's south eastern face, which must be considered as the probable Hellenistic basic level, where the threshold of this gate should have been, if there had been one.

Like the Qasr el Abd, the gateway, i.e. the passage and the surroundings of the piers, was buried before the excavations in a mass of architectural blocks, stones and rather powdery earth which resulted from the earthquake that destroyed both monuments. The level, before digging was +1.50 to 2.70 metres high.

At the back of the gateway the stratum of humus (stratum 1) was particularly thick (40 cm.) because of a lemon tree plantation. *Stratum 2* consisting of collapsed elements and typically composed of many blocks of the gateway thrown down by the earthquake and of mixed pottery (Hellenistic to late Byzantine) was unevenly thick: more than 1.50 metres behind and in the passage, only 1 metre in front of the piers. One may note that the room in the SW pier was almost completely filled up with this stratum (only the big blocks were missing).

The first blocks that fell from the gateway, i.e. the elements

⁵ *Denkmäler Palästinas*, II, Leipzig, 1935, p. 15-16; cf. P. W. Lehmann, *Excavations at Samothrace*, *The Hieron*, I, 1969, p. 77, 178, 224; fig. 55, 131, 172.

of the crowning, came down on a level situated at +0.30/0.40 metres in most of the sectors. This level was not a floor.

Stratum 3 appears below this one. Generally less than 0.30 metres thick, its aspect varying from place to place, a brown compact clayed earth throughout, but more or less stony. Essentially this stratum shows a phase of abandonment preliminary to the earthquake. In the passage the lower part of this stratum is characterized by clear traces of burning, also visible in the lower part of the small room. So far we hesitate to date precisely the corresponding temporary occupation, the best clue being the edge of a cooking pot which seems to be of an early Roman period.

We shall now study the levels related to the gateway structure. An important point is the fact that there are two superimposed floors, both Hellenistic, neither of which is the actual floor that the builders intended for this gateway; when the work was suddenly stopped, neither the flagstone pavement meant to be related to the sole running at the foot of the piers in the passage, nor the front threshold symmetrical with the back threshold brought to light by the digging, had been laid. What is left consists only of levels of hasty work or utilization, not quite even and trodden earth characterized by rather fragmentary but well dated material and by numerous chips resulting from the stone cutting.

The upper floor (floor 1) is dated by seven coins (M 1–7) of which the six identifiable ones are from the reign of Antiochos III. Thus the last years of the third century BC are a *terminus post quem* for this floor. Due to the lack of later material on this floor and in the subsequent stratum it does not seem too audacious to adopt the chronology of Josephus (§228–236) and to consider that the building works of the gateway, as well as of the Qasr, took place at the end of the reign of Seleucus IV (187–175) and were interrupted in 175 BC.

This floor does not correspond to the visible architectural levels of the gateway: for example, it is too high, considering the footing underlining the base of the pier's SW façade. On the other hand it is associated with a hasty fixture allowing the closing of the gateway in its unfinished state: small slabs with metallic sockets set against the groove of the gateway on the soles of the piers and a block with a rabbet possibly used horizontally as an abutment and as a fastening for the scanty gateway doors. This is most probably the block that Butler (PPUAES, II A 1, p. 19), with a quite surprising hastiness, mistook for a threshold. In addition, it has somewhat disturbed the stratigraphy of the passage entrance and it has become impossible to know if the hasty closing and floor 1 correspond to the last phase of the construction or to a re-utilization shortly after 175 BC.

Under floor 1, we found Hellenistic strata contemporary to the building of the gateway. This contemporaneity is better established by the nature of these strata, especially of stratum 4A (chips of stone, greenish to brown clayish fill and even, behind the rear threshold, an architectural block left because it was spoilt and submerged in the clayish ground) than by the

very fragmentary material finds. Floor 2 which is unquestionably a work floor (whereas floor 1 may be a very neglected utilization level) reveals definite Hellenistic material, but only in the shape of debris; only a very common cooking pot could be restored.

Below this stratum 4 B, a clayish filling of the foundation trenches, was almost without any material. The absence of floor 1 and of stratum 4 A at the rear of the gateway, behind the SW pier should be noted. It seems to be a proof in favour of the interpretation of floor 1 as a utilization level only laid at the front and in the passage.

On the whole the stratigraphy shows that this gateway has been only briefly used after the interruption of its construction. Neither was it really used later, except for the evidence of the ashy layer of stratum 3. There was no Byzantine re-occupation here as there was in the Qasr. The gateway area may, however, have been used at that time as an extensive dump, which explains the presence of pottery in stratum resulting from a collapse.

Concerning the date of the building itself, the lack of Byzantine disturbance and the lucky discovery of Antiochos III coins, added to a small amount of Hellenistic sherds, *in situ* and at the level of the fall, confirm the testimony of Josephus both for the date and for the existence of events in 175 BC important enough to cause the incompleteness of this gateway lacking as it does a threshold and a pavement, and simply provided with a derisively weak closing.

Coins

Christian Augé who kindly agreed to examine the coins found in the excavation suggests the following:

A few clues are given by the 13 coins brought to light in the digging of the gateway, although wear and corrosion make 3 of them unreadable, a coin and a fragment found under the sole of the small slab with a socket (78/M 8 and 9, see above, floor no. 1) and one of the seven small coins found together (see above, *ibid.*). The other coins could be recognized: we note a chance find coin 78/M 10, Roman of the Constantinian period, struck at Antioch. Stratum 1 in the passage has yielded two very worn out bronze coins, one of Agrippa I (77/M 2), the other of the Maccabean period (77 M 3) and also a corroded Seleucid 2nd century coin. We must mention in particular the homogeneous series of six small bronze coins (78/M 1–6). These *halves*, comparatively little worn and quite distinct, must be attributed to the Antioch mint during the reign of Antiochos III; one of them (78/M 2) has on the reverse an elephant, the five others Apollo standing. They all belong to the series III of Newell, a little before the year 200 BC.

This distribution confirms what is already known about the money in circulation in the Iraq el Amir area during the Hellenistic and Roman periods: lacking silver coins, it gives us an idea of the small bronze coins in use, which were coming, depending on the period, from the Palestinian or North Syrian mints. The Lagid bronzes, sporadically attested up to Ptolemy

III, are replaced by numerous Seleucid small bronzes (4 samples examined), chiefly units or half units of Antiochus III, all produced at Antioch around the year 200 BC (11 pieces), then a few small coins of the 2nd century, such as one of Demetrios II. Afterwards Maccabaeian coins appear (1 of Alexander Jannaeus).

After a long interruption during the Idumean dynasty, the use of Nabataean bronze coins, is attested in the 1st century BC (under Aretas IV), then episodically some coins of the Jewish revolt occur (one example of the year 67/68 AD). The later coins consist only of a few Roman *folles* of the 4th century struck at Antioch, coins very common all over the Near East; previously the neighbouring territories of Transjordan used, from the end of the 1st century until about the middle of the 3rd century, the bronze coins of several cities of the Decapolis or of the Provincia Arabia.

In contrast to the rarity and the sporadic repetition of these various coins, we must emphasize, among the local discoveries, the number of small Seleucid coins of Antiochus III, hardly worn and only about twenty years older than the settlement of Hyrcan.

The gateway and the estate

Function of the gateway and the walls

Thanks to P. Gentelle who has undertaken a study of ancient landscape and of its agricultural management, the campaign of 1978 has made it possible to clarify the relation between the monumental ensemble at the centre of which stands the Qasr, and to which the gateway belong, and the rest of the site. The gateway opens on to an enclosure, its walls forming on the outer side a right angled bend. A first wall, oriented south-east/north-west, abuts against the south angle of the SW pier, whereas a second wall extends the façade of the north-east pier towards the NE. The orientation of the gateway has nothing to do with the orientation of the Qasr, nor with the road relating the Qasr to the area of the caves, but it corresponds to the axis of a road, rectilinear for about a hundred metres, following down the dike which contained an artificial lake around the Qasr. Therefore the gateway was a part of the settlement programme that entirely remodelled this area, its climax being the construction of the Qasr. This programme can thus be dated about 175 BC and imputed to Hyrcan.

The southwest wall set into a notch made at the south angle of the pier did not stand higher than the upper bed of course 4. The angular blocks of courses 5 and 6 reveal an embossment of the same type as those of the façade on their southwest side which, therefore, must have been visible. The three blocks, however, which were set on edge behind the stretcher of course 4 are roughly squared and were probably to remain hidden. This very thick (nearly 3 metres) and not very high (2.91 metres) wall had a limited defensive efficiency, considering the height of the gateway. It was essentially not used as a rampart, but as a supporting wall. The difference in the thickness of the southwest and of the northeast walls can

be explained by the fact that the latter is only a supporting wall, whereas the former is at the same time used as a dike in a zone where the embankments seem to have been considerably thicker. A sounding made in the back of the southwest pier revealed another supporting wall, oriented NW/SE along the road running on the axis of the gateway up to the road joining the Qasr to the caves area. A symmetrical wall abutting against the northeast pier can be restored. The architectural ensemble of the gateway was thus leaning from southwest to northeast on a heap of earth, the surface of which was more or less on the level of the top of course 4. The road probably ran through it between two supporting walls. The same conclusion can be drawn when we study the gateway structure. In the Middle East, a very skilful military architecture is known to have developed since the Bronze Age, in which there are numerous devices for protecting the approaches of the gates or for trapping assailants in the passage. It is surprising not to see any special process for reinforcing the protection of this main entrance. Even the piers are not projecting from the walls. We must emphasize the fact that Hyrcan had to settle in caves as shelter when he was threatened by his brothers' supporters. De Saulcy and his companion Captain Gélis were struck by the mediocre strategic efficiency of the Iraq-el-Amir site which is situated in a hollow⁶. The conclusions of De Saulcy that the Qasr could only have been a sanctuary were, however, overhasty.

The agricultural estate

In fact a careful examination of the site shows the predominant importance not of defence works, but of agricultural installations like terraces, supporting and enclosing walls, and trenches for irrigation. The choice of the site must be explained by the value and the attractiveness of a perennial stream, the Wadi Sir, in a zone where relatively level spaces could be used at the foot of cliffs with a vertical front of 20 to 25 metres. The designation of the site has always been related to the river whose name undoubtedly derives from the ancient name of the site, *Tyros*. We must redefine our site and its surroundings as an agricultural estate intensively cultivated, probably more with gardens than with fields.

P. Gentelle has studied the installation and the functioning of a coherent farming system covering more than 200 hectares. Inclined slopes and terraces supported by dry stone walls were provided with water by small irrigation drains of which some sections were cut in laid out limestone blocks. Two main canals tap the water upstream in the bed of the Wadi Sir. The present orchards and cultivation are evidence of the richness of the site in antiquity. A man like Hyrcan, whom Josephus shows as particularly greedy for gain, should have been interested in the economical value of this site. Such a richness had to be protected and we can consider the walls and the monumental gateway as the means for a limited protection. Their efficiency, naturally unsatisfactory against

⁶ loc. cit. note 1, p. 95.

organized numerous troops well equipped for a regular siege, as were the Hellenistic royal armies, could be adequate against robbers or nomads threatening the fields and the gardens with their cattle.

The princely residence

These installations cannot however be completely explained by a mere agricultural exploitation. The Josephus insists more on their attractiveness and their luxury. We can establish that the megalithic techniques and the choice of the materials of the gate prove the intention of adding a monumental appearance to the façade. Its dimensions cannot be really justified by strategic reasons: they were chiefly meant to give a high impression of the estate owner's power, borrowing some architectural forms and decoration from an oriental tradition which is found as often in sanctuaries as in royal palaces. The only figures of decoration are eagles and wild beasts which also occupy a predominant place on the Qasr walls. The felines were symmetrically set and turned towards the opening. From the silhouette of the left feline we can guess that its head was facing inwards. This detail puts the emphasis on their apotropaic role for protecting the passage. Even if the lion and the eagles are often represented in sanctuaries, they basically belong to the royal bestiary. They symbolize the human or divine royal power that shows its strength by destroying its antagonists.

Moreover the Iraq el Amir estate can be compared with a more specific form of oriental royal residence, the Iranian *paradeisos* which combines the luxurious buildings with the arrangement of natural surroundings as gardens and parks⁷. On a papyrus from the archives of Zenon we can see a letter sent by a certain Toubias to Apollonios, dioiketes of Ptolemy II, dated from the 29th year of the latter's reign⁸. It says that Toubias will send several animals as a gift to Ptolemy. Beside horses, camels and dogs, there are offsprings of hemionager and onager. The letter emphasizes that all these animals have been tamed. From the presence of animals reproduced in captivity by expert cross-breeding we can conclude that a real animal breeding centre did exist.

On another papyrus which records the sale of a young girl slave to Zenon, the same Toubias appears, a native chief who held a military command in the Birta of Ammanitis, which is generally identified with the Iraq el Amir zone⁹. Therefore the

⁷ K. G. Galling, s.v. *Paradeisos*, RE, 18, 3, c. 1131–1134; I. Kleemann, *Der Satrapensarkophag aus Sidon*, Berlin, 1958, p. 154, 160.

⁸ C. C. Edgar, *Ann. Serv. Ant. Egypte*, 18, 1919, p. 231, no. 13; L. H. Vincent, *Rev. Bibl.* 29, 1920, p. 186 sq.

⁹ C. C. Edgar, *Ann. Serv. Ant. Egypte*, 18, 1919, p. 164, no. 3; Vincent (*cit. note 3*, p. 465; L. H. Vincent, *Rev. Bibl.*, 29, 1920, p. 182 sq.

Toubias breeding centre must be placed here. It corresponds to one of the most characteristic functions of a Persian *paradeisos* and Josephus (§233) precisely uses the word *paradeisos* to name the Tyros gardens.

From the above papyrus we can suppose that the Iraq el Amir site had already been partially laid out for agricultural exploitation around 265 BC, long before the Hyrcan period. The Greeks mentioned as witnesses were soldiers settled on the site. They were probably given pieces of agricultural ground. The inscription Ṭwbyh engraved on the entrance of two caves could be dated from the 4th–3rd century BC according to paleographic evidence¹⁰.

The discovery of sherds of Iron Age II pottery on the site could indicate not only a previous occupation, but also very probably the beginning of an exploitation involving the Wadi Sîr's water. By pursuing the archaeological study of the site based on the systematic collection of ceramics and on soundings, we should be able to fix the chronology of these settlements. However, we can already conclude that in the first quarter of the 2nd century BC a new impulse was given to the arrangement of the site, especially in the Qasr area, coherently remodelled according to Josephus' statement (a new system of terraces and dike walls with a re-organization of the access roads, creation of the pool and the construction of the Qasr and of the monumental gateway). This work can be attributed to Hyrcan who most probably also completed the caves' installation. The fact that the installation and the equipment are incomplete seem to be due, as in the Qasr, to historical circumstances quoted by Plavius Josephus, to the short time Hyrcan was there and to his premature end by suicide.

We will not dwell here upon the traits which are borrowed from Hellenism. These are more decorative or technical than structural. Even if the lord of the estate depended on the more or less remote authority of a Hellenistic, Lagid or Seleucid king, his point of reference is the oriental dynast. Hyrcan tried to impose political authority and probably a tribute on his neighbours (Josephus, *Ant. J.* XII, 229, 236). The expression of this power very probably tried to conform to a Persian model, the ideal of the Great King or the Satrap. Note that Hyrcan had an Iranian name. It is not necessary to suppose that the influence came directly from Persia: the Satrap resident at Sidon, where a *paradeisos* is known to have existed, could have been a model nearer to home.

¹⁰ M. Cross, *Essays in Honor of W. F. Albright*, New York, 1961 p. 191, no. 13; 195, no. 75.