MACEDONIA, ALEXANDRIA, PETRA: TOMB ARCHITECTURE

When I was writing my dissertation on the doors and windows in Hellenistic and Roman architecture in Greece, I had the opportunity of becoming familiar with the architecture of the period, especially the architecture of Macedonian tombs; this was also due to my participation as a specialized scientific collaborator in excavations carried out in the prefectures of Emathia and Pella.

Familiarity with the subject and teaching at the University initiated my involvement in the study of tomb architecture of that period, with the aim of uncovering features which exemplify the close relationship, or better, the influence of the Macedonian spirit on the development of local architecture.

Presenting the initial results of this study, I would like to begin with the main characteristics of Hellenistic architecture as summarized by Roland Martin in his book Greek Architecture, at the beginning of the chapter on “Architecture of Hellenistic Greece”:

a) Luxuriance and diversity of themes.

b) The development of vaults and arcades.

c) The primary use of engaged orders in decorative and painting compositions.

Among all the architectural finds of the period, Macedonian tombs are those which appear to sum up the spirit of Hellenistic architecture perfectly. Personally, I believe they become the perfect expression of proportion, size and scale. Mainly, they are the sole surviving constructions, not only of the period, but also of all ancient Greek architecture. They provide us with priceless material and evidence not only for the development of form and construction, but also for the means of processing complex features such as plaster, colour, wood and marble constructions. The architecture of the Macedonian tombs with their imposing openings should not only be examined as a phenomenon of tomb architecture but as a main component of Hellenistic architecture as a whole.

It is evident that the architectural use of “engaged orders” began as a decorative, not

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1 R. Martin, Greek Architecture (New York 1988), 158.
constructive, solution of architects of the period. Thus, meaning initially, it is applied to the interior and, consequently, transferred and developed in the outer appearance of the building. This phenomenon can also be observed in the architecture of the ancient tomb of Eurydike in Vergina (340 B.C., Fig. 1), which has such shaping on the back interior wall of the chamber, whereas the facade has no trace of alternate formation, except the necessary functional “door opening”. In less than five years, this feature became the prime characteristic of the external face of the Macedonian tombs, as revealed, also, by the facade of the tomb of Philip in Vergina (336 B.C., Fig. 2), which became an original sample for the subsequent facades of Macedonian tombs.

This non-functional use of engaged orders and door posts, mainly for decorative purposes, which was greatly implemented in the Macedonian tombs, and especially in the early tombs of the period, was actually the beginning of the separation and disconnection from the grand Classical tradition and the prototypes which signalled the forms becoming independent from function. The result was the creation of a new expression-direction and architectural spirit, which was fully adopted by early Hellenistic architecture and especially the Macedonian tombs, which completed its model.

Thus, began the application of a “vaulted” functional construction, totally independent, which was covered by a purely morphologically formed facade, focusing on the indispensable centre opening. The so-called “engaged style” used in the architecture of the Macedonian tombs was, as stated by Martin, “one of the most important aspects of Hellenistic architecture, which produced its pictorial effects and its close connections with painting”\(^2\).

At the same time, a rapid development is observed which is proved by the use of the vault, as in the ancient Macedonian tomb of Eurydike in Vergina, where one can clearly see the first attempts of early Hellenistic architects in the construction of the vault, but also fear and insecurity in the use of the semi-cylindrical dome. Thus, the side walls of the tomb, which support the vault (an opening just 4.50 m) are 1.50 m deep, whereas the walls of the gates with the marble doors are just 0.65 m, in other words, the breadth of a dome. Several years later at the same site, Vergina, the side walls were constructed with a breadth of 1 m at Philip’s tomb, but were later decreased to 0.55-0.60 m, at the neighbouring tomb of the “Prince” (last quarter of the fourth century B.C.).

\(^2\) Martin (supra n. 1), 166.
From the end of the fourth century B.C. onwards, it is observed in all examples of Macedonian tombs, that all the walls, together with the vault, were 0.50-0.60 m thick. Therefore, the main problem in the architecture of these built tombs was the connection of the functional vault with the symbolic basic facade. Moreover, systematic attempts to conceal the vault with the addition of a parapet, as on the tomb of Philip (Fig. 2) and of the “Prince” in Vergina, can be seen. Only after the end of the fourth century B.C. did the concealing of the vault cause no concern for the architect and the triangular pediment was adopted as a new feature, despite the projection of the vault from behind it, as in Tomb A at Pella (Plan 1). A prime characteristic feature of all these tombs, including the early ones, is that the space between the two columns is larger in the central section in relation to the sides, so as to be adopted and foreshadow the imposing central gate as a main feature of the facade. Thus, in subsequent examples of the third and second centuries B.C., it is observed that the central opening gathers around its architectural features of the facade, as do the main developments of the facades of these tombs, focusing exactly on this opening. This definite development of the facades of Macedonian tombs focuses on two main points:

a) the gathering of architectural features of sides (door posts and engaged orders) towards the gate openings, which aim at a horizontal confrontation and

b) the parallel and excellent perpendicular confrontation which causes a gradual lowering of the upper architectural features towards the gate, regardless of the appearance of the vault.

It is excellently expressed with the creation and wide application of the pedimental gate (late third - early second century B.C.) in the sculptured tombs of Macedonia, which become an advanced form of expensively built ancient tombs.

This development, however, must not be regarded as just a result of the constant trend to simplify old buildings, but also as a new trend searching for artistic subtraction and exaggeration of classical prototypes, which aimed at the creation of new architectural forms and combinations as in the underground sculptured tombs of Ptolemaic Alexandria in Egypt, but clearer, the facades of “Tomb Architecture of Anogeia” in Petra, Jordan.

This self-existent architectural feature of the pedimental gate, which symbolized a whole building, was to be assimilated into the underground sculptured tomb architecture of Ptolemaic Alexandria as a ready Macedonian Hellenistic architectural feature, as also seen by the wall painting of the tomb of Shatby in chamber “e” of underground A (Fig. 3), which is dated, on the basis of Hellenic lettering on the top side, at the beginning of the second century B.C. –a date which corresponds to the development of the pedimental gate of

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Macedonian tombs. It is a pity that, up to the present time, no monument from the era of the Ptolemies, except tomb architecture and a few architectural parts, such as pillars, capitals of pillars, broken pediments, segmental pediments etc., has been saved, yet in the same way we realize that the meaning of the pedimental gate as an architectural feature was especially significant in that period.

Later, the triangular pedimental gate emerges in two parallel-evolutionary forms:

a) The one which appears in Italy, as expressed by the second Roman style wall painting (80-20 B.C.).

b) The one we observe in Petra, Jordan, in the peculiar rocky nature of the region, where sculptured architecture was a necessity; it is especially noticeable in instances of Anogeian facades sculptured in the rock, where dome architecture binds prototypes and becomes still more lax. As a result, the general appearance plays the role of sculpture rather than an architectural work.

It is of significance to emphasize that in both the aforementioned forms, the perspective treatment of both drawing and sculpture was a main feature of the general joining of the architectural combination. This perspective treatment was already obvious in the Macedonian tombs as much as in the underground tombs of Alexandria.

Later, after the first century B.C., the cornice was added to this triangular pedimental gate, exactly below the pediment, in the subsequent facades of the sculptured tombs of Petra, thus leading to their completion and perfection. The pedimental opening was considered one of the first revived features in the formation of the facades.

It must be made clear that there was an extreme architectural problem in the connection of the vaulted ground plan with the symbolic front which was surpassed (despite public disapproval), through the use of sculptured or decorative architecture in the best possible way.

Today, having at our disposal material from approximately ninety Macedonian tombs, we can safely support the influence of Hellenistic architecture (a creation of Macedonian spirit) on the architectural formation of funerary monuments of Petra, Jordan, through the spread of the influence of Ptolemaic Alexandria, the cosmopolis of Hellenistic times.

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4 N.A. Haddad, Θύρες και παράθυρα στην ελληνιστική και ρωμαϊκή αρχιτεκτονική του ελληνικού χώρου (Doors and Windows in Hellenistic and Roman Greece, Thessalonike 1995), 34-35, fig. 31.
The simple ground plans of the Macedonian tombs (Plan 1), one or two chambers which developed in an axial relation to the façade at the entrance, find suitable ground for application in ancient Egyptian tomb tradition and especially in the underground tombs of Alexandria, where the characteristic courtyard has been added in front of the chambers of the dead. This replaces the usual dromos of the Macedonian tombs, which was not used after the burial rite, in contrast with the courtyard, which was to be the centre of a group of tombs. The architectural formation of the courtyard surrounded by pillars as seen in the tomb assemblage of Moustapha Pasha (Plan 2), although it had already been tried out on the tomb at Dion (Plan 3), is dated to the late fourth century B.C. (especially the use of double pillars in corners).
Nevertheless, the use of the vault in the Macedonian tombs continued to be a binding feature in contrast to the sculpture of underground tombs of Alexandria, where it was to be turned into a pure morphological feature, as the Shatby (hall e), Sidi Gaber, Moustapha Pasha, Gabbari and Anfoushy (Plan 4) tombs prove; in all the above instances, a low sculptured vault is used. The aforementioned vault in the tombs of Alexandria was to cause the final replacement of the Macedonian triangular pediment of the gates with a low segmental pediment and this was for purely morphological purposes, as proved by the example of the tomb of Anfoushy, in underground hall “j”, as well as the in tomb 8 of Ras el Tine (Fig. 4).6

Similar problems in the encountering of the triangular pediment, had already been tested on the built tomb of Pydna (Plan 5) in the first chamber on the side of the road, which dates back to the end of the fourth century B.C. and the early part of the third century B.C.; both low-curved and triangular pediments were to become later characteristic features of the openings, which were to be used as stable units in the formation of the facades, together with side support from door posts and engaged orders, as observed to a great degree in sculptured tomb architecture of Petra. This style was unlimited to a much greater extent than the old classical usage in ancient Greece.

The use of the vault as a morphological feature of older Macedonian tombs appears as a reflection of Hellenistic architectural reactions in a group of tomb monuments of Petra (over thirty) known as tombs with bows (arches) on their fronts, as in tomb No. 125 (Fig. 5) from the second century B.C. In this position, the pediment (exactly where the epistyle was to be found) has a semi-circular bow, looking just like the vault in several tombs at the end of the third century B.C. In these architecturally

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5 Mackenzie (supra n. 3), pls. 175c, 180b, 183b, 190b, 191c, 192b, 216b.
6 Ibid., pl. 194c.
sculptured facades of Petra, the invasion of art is obvious (sculpture in this instance) so as to replace the harmony between construction and form, which differently would have been in discordance. This new feature which developed in the facades of the monuments of Petra was the result of the later Hellenistic morphology which boldly attempted --extremely successfully-- new architectural combinations.

The architecture of the facades of Petra basically became the artistic expression of the development of the facades of the Macedonian tombs; it is not related to the rest of the
building and allows free execution of the work of the architect as "sculptor" rather than architect. Maintaining only approximately the same construction of the facade, there is the potential to lavish the rich artistic imagination of the East on a combination with the rich artistic imagination of Hellenistic Macedonia. These features are displayed in the facade of the tomb "Sextius Florentinus" (Fig. 6), where the movement and creation of a perspective feeling in the modelling of the features is apparent, just as in most of the monuments of Petra. In the upper section of this two-floored tomb, a low-lying bow erases a curve up to a section of the memorial vault of the Macedonian tombs, while slightly above the gate (a small distance away) lies a sculptured triangular pediment.

A magnificent combination of triangular and low-lying curves in a three-floor development is met in the palace tomb (first century B.C., Fig. 7) corresponding to that on the facade of the Macedonian two-floored tomb of Lefkadia (end of fourth century B.C., Fig. 8), the facade of which obviously imitates, in the same way, that of a Macedonian palace.

Exemplified by the aforementioned tomb, it is clear that the sculptured upper-floor tomb architecture of Petra has to display original features of the prevalence of Hellenistic morphological conception in architecture, as now proved by the painting in frescoes of the Macedonian tombs. The main influence of Hellenistic architecture of the Macedonian tombs is also exemplified by architectural stucco decoration. The diligent, and normally, coloured decoration plasters, gave the final form to the walls, as clarified by the rescued Macedonian

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7 For a discussion on dating of the tomb see Stella G. Miller, "Macedonian Tombs: Their Architecture and Architectural Decoration", StHA 10 (1982), 153, n. 10.
Fig. 7. Petra, palatial tomb.

Fig. 8. Macedonian tomb 1 at Lefkadia.

Fig. 9. Petra, Qaser el Bint (detail).
tombs in excellent condition, as well as the architecture of Alexandrian tombs.

At the beginning of the 20th century, when archaeologists noticed traces of painted decoration plasters on sculptured monuments and many buildings in Petra and the surrounding areas, they paid no attention to them. For this reason, as Dr. Fawzi Zayadin notes, did the image of pink stone remain with the public. It is significant to recognize that the ancient inhabitants of Petra did not particularly value the aesthetic image of the natural beauty of the colours of the rocks. The sand-like rocks were coated and normally painted, as shown by a number of tomb monuments, and whole eaves, pediments, and gate sides in the interiors and exteriors of the tombs, which are similar to the Macedonian tombs, as well as the funerary monuments of Ptolemaic Alexandria.

The Nabataeans of Petra seem to have readily re-adapted this technique, since it was already familiar to them as seen by walls and floors covered in decorative plaster rescued from the Bronze and Stone Ages in Jordan (4000-3200 B.C.) It is no coincidence, however, that the best examples of this technique belong to the Hellenistic era (second century B.C.) as that of Qaser el Bint, in Petra itself (Plan 6, Fig. 9); a technique which in Alexandria is taken to be at least a century earlier (third century B.C.), even earlier than that of Hellenistic Delos, as met in the House of Dionysos (second century B.C.).

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The whole architectural formation of the facades of the tomb monuments of Petra, as well as their plaster decoration, clearly show the close cultural contact between the Nabataeans and the Hellenic spirit of Macedonia, with a love for the East. Thus, this new Hellenistic concept of architecture will urge the new development of the Roman equivalent, as proved by the architecture and paintings of Macedonian tombs themselves, as well as by the funerary monuments of Alexandria and Petra. Of course, the influence of the Macedonian spirit in tomb architecture is only one variance about which I, in my position, can speak.

The architectural influence of Hellenistic times is generally attested (at least from what I am aware of) in approximately 115 Hellenistic sites, which up to now have been discovered just in northern Jordan, such as in Pella, Gadara, Capitolias, Abila, Dium, Philadelphia, and Gerasa, a total of seven Hellenistic towns out of ten; yet, further places such as Tell-Al-Sodiehe, Tell-Al-Shounhe, Tell-Al-Mazar, Tell-Al-Foukhan and Al-Xasilliehe, exemplify Hellenic settlement already from early Hellenistic times. Recent studies show that Greek settlement just in northern Jordan is mainly made up of the beginning of the flourishing of the later Roman and Byzantine ages of the area\(^\text{10}\). Nevertheless, the Hellenistic presence and influence should be regarded as being researched now, since most of these sites demand excavation research. Taking architecture as a yardstick, we can reasonably reach conclusions about many other influences in the culture of the people of the Middle East, marks of which identify them as these of the godlike and heroic identity of Alexander the Great (which is common ground in their verbal tradition, yet in written reports, particularly honorary—as we conclude—perhaps even in the Koran). All these show how Alexander the Great obtained the respect, appreciation and love of this people, just as he himself gave it to them attired in their garments and embracing their customs.

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\textbf{FURTHER REFERENCES}
