This is an important book, the appearance of which is indeed a major event. There are few ancient architectural monuments that have been the subject of so many learned efforts as the Mausoleum at Halikarnassos. The Mausoleum not only ranked among the Seven Wonders of the World and was described in some detail by Pliny (NH 36.30–31). Scholarly interest has been stimulated both by the confusion caused by the inconsistencies in Pliny’s description, and by the scantiness of the architectural remains. Before the mid-19th century, restorations could be based only on Pliny’s text. After Newton’s excavations in the 1850’s for the British Museum there was for the first time evidence available not only to identify the site of the Mausoleum, but also to make possible an archaeologically based reconstruction. During the years that followed several reconstructions were published, based on a combination of the literary and the archaeological evidence. Eventually the one published by Krischen in 1927 appeared to most scholars to be as correct as could possibly be asked for. The amount of studies on the subject since then shows, however, that the finds from Newton’s excavations were not sufficient for a satisfactory reconstruction in the minds of several scholars. One of them was Kristian Jeppesen, who started his Mausoleum studies already in 1953 and published his first reconstruction in 1958. He there pointed out that the reconstruction of the Mausoleum would remain a matter of dispute until additional evidence could be produced, and that we must rest in the hope that some day excavations at Halikarnassos would be resumed with modern methods. Such excavations came to be undertaken by himself between 1966 and 1977. All the seven planned volumes of the excavation report have now been published, two of them after the appearance of the volume under review.

The book contains not only a selection of the new architectural finds from the Mausoleum, many of them already known from preliminary and interim reports, but also an analysis of both the literary sources and the new and old architectural and sculptural finds. It is divided into 29 chapters, many of them consisting of only a few pages. After three introductory chapters (‘Previous research’, ‘The Danish excavations 1970–77’, and ‘Materials and technicalities’) follow three chapters on Pliny’s text and its archaeological implications, the foot unit, and ‘The interior of the Maussolleion’. Ch. 7 is a list of the most important recent finds bearing on the reconstruction, followed by 17 chapters (chs. 8–24), where the architectural and sculptural remains are discussed, beginning at the top of the monument and ending at the bottom. Ch. 25, ‘Epilogue’, contains a summary of the results, and is followed by the notes, a bibliography, a catalogue of fragments of the free-standing sculptures found in the Danish excavations (ch. 28, by Geoffrey Waywell) and a list of the alphabetic codes of the different ar-

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chitectural members and sculptures that are incorporated in the proposed reconstruction.

This is a nicely produced and well-illustrated book with excellent photographs and drawings, and the misprints are few. The editing is, however, not entirely satisfactory. Several headings fail to describe the contents of the chapter or section that follows, e.g. ch. 2 and the section headed 'Capitals' (137f). Not only for this reason but also since data on architectural members are not always found where one would expect to find them, the lack of an index is a disappointment. For example, the heights of the entablature parts are not given in ch. 13 'The entablature' but in ch. 5 'The foot unit used in the construction of the Mausoleion, and its metrological background'. It is also a disappointment that no catalogue of architectural members is included but only a selection of the most important blocks, presented in their architectural contexts. Descriptions are only given of pieces considered to be of basic importance for the reconstruction and then often without measurements of all preserved dimensions, and many of the block drawings and their measurements (if entered at all) are reproduced at a very small scale. No column capitals or fragments of capitals are presented at all (138). A complete catalogue was planned for the present volume (7); hopefully it is forthcoming.

Even after the Danish excavations the problem remains that a reconstruction cannot be based only on the archaeological finds but has to rely also on Pliny. Most scholars agree that his figures concerning the measurements of the Mausoleum are inconsistent. J., however, believes that the original text was indeed consistent and that it can be restored to its original shape. Before entering the issue of the new architectural evidence J. therefore feels obliged to make a new analysis of Pliny's text, different from the one he presented in a previous volume of the series (Mausoleion 2, 1986). He then presented a very useful collection of 57 facsimile manuscripts of the text on the Mausoleum and made a thorough analysis with a number of far-reaching emendations.

J. concentrates especially on five details of crucial importance for the reconstruction, viz. the periphery (411 or 440 ft), the length of the longer sides (63 ft), the figure 25 cubits for the height of the building, the height of the pyramid, said to equal the lower structure (?), and the height of the entire monument (140 ft).

Pliny's text (NH 36.30–31) reads as follows (after the Loeb edition, 1962 [Eichholz], which here follows the Bamberg ms; the passages in bold type are those under discussion):

Scopas habuit aemulos eadem aetate Bryaxis et Timotheum et Leocharen, de quibus simul dicendum est, quoniam pariter caelavere Mausoleum. sepulchrum hoc est ab uxore Artemisa factum Mausolo, Cariae regulo, qui obiit olympiadis CVII anno secundo. opus id ut esset inter septem miracula, hi maxime fecere artifices. patet ab austro et septentrione sexagenos ternos pedes, brevius a frontibus, toto circumitu pedes CCCXXXX, attollitur in altitudinem XXV cubitis, cingitur columnis XXXVI. pteron vocavere circumitum. ab oriente caelavit Scopas, a septentrione Bryaxis, a meridie Timotheus, ab occasu Leochares, priusque quam peragerent, regina obiit. non tamen recesserunt nisi absoluto, iam id gloriae ipsorum artisque monumentum iudicantes; hodi eque certant manus. accessit et quintus ar-tifex. namque supra pteron pyramis altitudinem inferiorem aequat, viginti quattuor gradibus in metae cacumen se contrahens, in summo est quadriga marmorea, quam fecit Pythis. haec adiecta CXXXX pedum altitudine totum opus includit.

Translation (Eichholz): «The contemporaries and rivals of Scopas were Bryaxis, Timotheus and Leochares, whom we must discuss along with him because together with
him they worked on the carvings of the Mausoleum. This is the tomb that was built by Artemisia for her husband Mausolus, the viceroy of Caria, who died in the second year of the 107th Olympiad. These artists were chiefly responsible for making the structure one of the seven wonders of the world. **On the north and south sides it extends for 63 feet, but the length of the façades is less, the total length of the façades and sides being 440 feet.**

The building rises to a height of 25 cubits and is enclosed by 36 columns. The Greek word for the surrounding colonnade is ‘pteron’, ‘a wing’. The east side was carved by Scopas, the north by Bryaxis, the south by Timotheus and the west by Leochares; and before they completed their task, the queen died. However, they refused to abandon the work without finishing it, since they were already of the opinion that it would be a memorial to their own glory and that of their profession; and even to-day they are considered to rival each other in skill. With them was associated a fifth artist, **For above the colonnade there is a pyramid as high again as the lower structure and tapering in 24 stages to the top of its peak. At the summit there is a four-horse chariot of marble, and this was made by Pythis. The addition of this chariot rounds off the whole work and brings it to a height of 140 feet.**

J.’s analysis runs as follows:

1. **The circumference is given as 440 ft in the Bamberg ms (which is of the 9th c., one of the oldest mss), believed to be one of the best; but in three other 9th century mss the figure 411 is given.** J. suggests that 411 (written CCCCXI) is a corruption of 440 (written CCCCXL). Since the 411 feet periphery according to J. could not have been reached by adding up lengths of integral feet of the four sides, the figure 440 is more likely to be correct, which also agrees with the foot unit deducible from dimensions of architectural fragments (32).

2. **A problematic figure in Pliny’s text is the length of the north and south sides. Many solutions have been suggested for the figure 63 ft for the longer sides, which is obviously incompatible with a circumference of 440 (or 411) ft.** J. suggests that the sentence should be emended to *patet ab austro et septentrione latus, paulo brevius a frontibus* (32f). He suggests that the confusion was first created by the word *paulo*, which, abbreviated to *p*, was misunderstood to be short for *pedes*, «thus implying that the preceding part of the sentence should be interpreted as a numeral». We are not told how this came about, but in the previous volume (Maussolleion 4, 175 note 20) J. suggested that *latus* was misread as *lxs tius* and transcribed to *sexagens us ternus*, which form is found in mss nos. 3, 5, and 8 of Group A (in Maussolleion 2), no. 8 being the earliest ms surviving (8/9 century), while all the later mss including the Bamberg codex (no. 1) have the form *sexagens us ternos*. J. admits (33) that this interpretation «may be found too complicated to carry conviction». However, he thinks that the sentence was intended to give the relative extent of the sides and the complete circumference they constituted. The length of the flanks would have added no important information.

3. **The main reason why the architecture of the Mausoleum was severely misunderstood before the British Museum excavations is that Pliny gives a height of 25 cubits (ca. 12 m) for the lower part of the tomb, at the same time as he indicates that the total height was 140 feet (ca. 45 m). Since the roof pyramid is known to have had a height of ca. 7 m, and since the quadriga with its base cannot have been more than ca. 6–7 m high, there is a discrepancy of ca. 19 m. J. understands *opus* as the subject of the sentence, and claims that this word signifies the entire monument excluding the roof structure (33). In consequence the figure 25 has to be corrupt. J. proposes that 25 (XXV) should be emended to 75 (LXXV), a suggestion supported by the archaeological remains.

4. **A fourth enigmatic passage in Pliny’s description runs *namque supra pteron pyramis altitudinem inferiorem aequat, cogniti quatuor gradibus in metea cacumen se contrabens.* To make the first half of this sentence understandable J. suggests (34b) that it should be emended to read *namque supra pteron pyramis altitudinem inferiorem aequat*. This emendation makes sense archeologically. In this way the sentence becomes meaningful, indicating that the lowest step of the pyramid is as wide as the colonnade underneath.
Pliny’s description ends with information on the height of the tomb. All four early mss studied by J. agree about the figure 140, but there is little agreement between the mss on other details in the second part of the passage. For instance, the ms Leiden 7 reads CXL pedum altitudinem totum pedum opus includit. The original text no doubt appears to have been misunderstood. J. wants to show that the quadriga, assumed to have had a height of 11 ft or ca. 4.8 m (36), was not included in the height of 140 ft. He argues (35–37) for the emendation haec adiecta CXL pedum altitudini tot operum opus includit, meaning «This, when added to the height of 140 feet, rounds off a work of such a multitude of works». This is evidently important for J., since with the quadriga included in the 140-ft height, his emendation to 75 cubits (112.5 ft) for the height of the lower part of the monument is impossible. With a total height of 140 ft, including the ca. 15 ft high quadriga and its ca. 5 ft high pedestal, there is not room enough for the 7.2 m high pyramid. If the quadriga has to be included in the height of 140 ft, the 75 cubits (LXXV) for the height below the pyramid have to be changed to 65 (LXV). This would lower the podium by 10 cubits. However, this issue is more far-reaching than so. It concerns Pliny’s sources. Part of his information came from tourist guides, possibly through his contemporary Mucianus (40). J.’s standpoint (41f) is that Pliny’s description of the Mausoleum was based on the treatise by the architects Pytheos and Satyros, mentioned by Vitruvius (48). If this was the case, it is not to be expected that the quadriga on top was actually included in the 140-feet height of the Mausoleum. As J. points out (36), the architects’ treatise would probably not have included the marble quadriga in the height of the architectural monument.

By these emendations J. succeeds in presenting an attractive text, which may very well be close to the original one. Pliny never visited Halikarnassos, however, and he does not mention the source or sources for his description of the Mausoleum. Even if the original text can be established, it does not follow that the description must be trustworthy as far as the height and extension of the monument are concerned. The reliability must lie with Pliny’s sources, and as long as it can be suspected that Pliny had a source like C. Licinius Mucianus for only a single measurement, the usefulness of the description is severely diminished.¹

The chapter on Pliny’s text ends by the statement (42) that the investigation of the architecture in the chapters to follow will be based on the results reached in the analysis of Pliny’s text. The point of departure is therefore that the foot measure was 32 cm (since the periphery of the foundations is 140.8 m, equivalent to 440 ft), that the podium and the colonnade had a height of 75 cubits (or 36.00 m), that the pyramid had the same width as the peristyle, and that the total height of the monument was 140 ft (or 44.80 m) including the pedestal for the quadriga but not the marble quadriga itself.

In ch. 5 (43–44) the foot-unit discussion continues. The periphery 140.8 m, divided by Pliny’s figure of 440 ft, gives as an indisputable result a foot length of 32 cm (47). However, since both in plan and elevation a unit of ca. 30 cm seems to have been used (with a range from 29.3 to 30.3 cm), the foot length may have been either 30 or 32 cm. A 32-cm ft is found to be the more probable alternative; the 30-cm unit may have been 1 ½ dactyls of the same foot, which would indicate the use of a kind of semi-decimal system.

The periphery of 440 ft of 32-cm length is, however, not the sum of an addition of entire feet such as one would have expected. In the ideal case the width and length of the foundation would have been 100 by 120 ft, giving a ratio between the sides of 5:6 and

a periphery of 440 ft. However, with a 32-cm foot the 38.0-m length of the flank equals 118.75 ft and the 32.4 m width 101.25 ft (ratio 6:3:12). I find it hard to see that such uneven figures could originate from an architects’ treatise, which is furthermore a source where one would expect information about length and width rather than circumference. The most important detail of the layout appears rather to have been the axial rectangle of the colonnade, which now shows a ratio of 5:6 (96: case B: 24 x 28.8 m), whereas the size of the podium seems to be secondary. This might in turn indicate that the figure 440 ft for the periphery came from a late source, in which case it cannot even be taken for granted that it was measured with the same foot unit as the height. The figure 440 ft can indeed be suspected to be part of Mucianus’ description and thus to originate from what was told by local guides at Halikarnassos in Pliny’s own time.

J. argues well, but I am not convinced by the arguments for the unusual 32.0-cm foot, also because it is outside the range of the three usually undisputed foot lengths used in Greek architecture (the so-called Attic of ca. 0.294–0.295 m, the Doric of ca. 0.26–0.268 m, and the Samian of ca. 0.349–0.350 m). It is no doubt conceivable that there existed a local Carian foot, but then it remains to show that it was also used in other Hekatomnid buildings.

An archaeological reconstruction has of course to be based primarily on the physical remains. The size and proportions of the foundation, in combination with Pliny’s figures for the number of columns and the height of the monument, 140 feet, have indicated to most scholars since Newton’s excavations that the lower part of the Mausoleum was a high podium (which is not mentioned at all by Pliny but was apparently copied in later tombs such as those at Belevi and Mylasa) and that the podium carried a peristyle of 9 by 11 columns. This part of the reconstruction can hardly be contested and would have been concluded even without Pliny’s text. Readers who have not been completely convinced by J.’s emendations and analysis of Pliny in ch. 4, will probably focus on what can be deduced from the new archaeological finds. In ch. 7 (60f) the 18 most important recent finds and discoveries bearing on the reconstruction are enumerated. Detailed presentations and discussions follow in chs. 8 to 24. During the study of those chapters I advise the reader to keep an eye on the useful list of architectural members and their alphabetic codes, illustrated by a fold-out, at the end of the book (264f).

The reconstruction starts with the peristyle and the pyramid. The interaxial of the peristyle has been recovered thanks to two wall architraves found in Bodrum Castle (77 and fig. 9.4). Their lengths combined with a cross-beam in the British Museum indicate a column interaxial of ca. 300 cm. This reconstructed interaxial finds further support in pieces of coffer frames from the peristyle, which add up to a length of 298 cm (87 and fig. 9.17) and by the new find of a fragmentary cross-beam with the same width as the one in the British Museum (fig. 9.4.4). Since, however, masonry pillars built along the northern and southern sides of the foundation have been identified as evidence for an interaxial of 285 cm on the flanks, it is concluded that the interaxials to the north and south were 15 cm shorter than those on the eastern and western fronts.

The evidence for the shorter flank interaxials was presented in the previous volume (Maussoleion 4. 53). There were apparently originally six pillars, built of soft bedrock ashlars at regular distances, along each side. The 570 cm interaxial distance between their centers is suggested to equal two flank column interaxials. J. adds, however, that the pillars were not necessarily built primarily to indicate the position of column axes. At the corners
300 cm long interaxials are now restored on all sides, since with different interaxials, the corner coffers would not be square; the alternative, 285 cm at all corners, is rejected on good grounds (91f). The resulting axial spacing of the colonnade is 28.80 m x 24.00 m, which gives a proportion of 6:5. It has previously been commonly assumed that all interaxials were equal and that the same kind of grid plan as at the temples at Priene and Labraunda was used at the Mausoleum. Equal 300-cm long interaxials are in fact conceivable, but not likely. The positions and widths of the masonry pillars are not compatible with flank interaxials of 300 cm, and the result would be 60 cm less width for sculpture bases at the fronts. Another alternative would be 295 cm long spans, against which the argument from the pillars cannot be used. This would, however, require a reinterpretation of the evidence for the 300-cm interaxial. It is not unusual that joins between architraves are not perfectly centered on the columns. Architraves can therefore vary in length, even when interaxials are uniform. If the two architraves and the two cross-beams were not from the same interaxial spans, a shorter interaxial than 300 cm could perhaps be considered.

There is no analysis of the ratios between columns and interaxials. With a lower column diameter on the fillets of ca. 108 cm (145) and column interaxials of 300 and 285 cm, the ratios between column diameter and intercolumniations are 108:192 = 1:1.778 (between 4:7 and 5:9) and 108:177 = 1:1.639 (approx. 3:5). I note that with an interaxial of 293 cm on all sides, the axial rectangle would measure 29.3 x 23.6 m (instead of the suggested 28.8 x 24.00 m) resulting in 35 cm less space for sculpture ledges at each front (or one krepis step less) and a ratio between column diameter and intercolumniation close to 4:7 (108:187).

Continuing with the roof pyramid, J. establishes in ch. 8 (62–76) ‘The quadriga and its pedestal’ that the top course of the pedestal, i.e. the base of the quadriga, measured 5.40 x 6.30 m; the sides of the pedestal were in all probability surrounded by the 88.6 cm high Centaur frieze. The pedestal may have had a full height of 160 cm, but the member between the foot moulding and the frieze has not been identified.

One important new discovery for the pyramid is that erosion traces on sima fragments show that the first step was placed ca. 45 cm behind the back of the sima parapet (126 and fig. 13.1). It is conjectured on good grounds that the tread of the first step was 24 cm wide, and that it was followed by a 60-cm wide step with cuttings for lion sculptures (98–105). These tread widths were probably the same on all four sides. For the following 19 steps upwards two tread widths have been identified (97f), one ca. 43 cm wide (range 41–45 cm; average 42.79 cm), the other ca. 34 cm (range 33.0–36.0 cm; average 33.75 cm). Two corner blocks combining these standard widths show that the steps on the flanks had one width (ca. 43 cm) and those on the fronts the other (ca. 34 cm). At the corners of the roof J. restores acroterion groups; two fragments of a large marble slab have been identified as belonging to an acroterion base (109–111), which is reconstructed as ca. 150 x 180 cm in size. Since such bases would interfere with the space available for lion sculptures on step no 2, the result may be that there are fragments of too many lions for one single pyramid step (118–120). It is therefore suggested that there was a second 60-cm wide step (with the same width on all sides) higher up the pyramid, possibly as step no. 8 (108, 120 and fig. 10.10, 211). Assuming that the reconstruction so far is correct and that there were 24 steps in all, as recorded by Pliny, the result is that the tread widths of the last three steps at the top, viz. nos. 22–24, were not of standard size. A width of 100 cm on all sides remains for

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1 As suggested by B. Wesenberg (Beiträge zur Rekonstruktion griechischer Architektur nach literarischen Quellen, Berlin 1983, 76f), quoting measurements from the Parthenon.
them (107f and fig. 8.15b), which means that step no. 22 may have been wider than the standardized steps and nos. 23–24 much shorter and serving as a kind of krepis for the quadriga pedestal. No slabs with tread widths suitable for steps 22–24 have, however, been identified. The height of all steps is 30 cm. This makes the pyramid 7.2 m high, a figure based on the number of steps in Pliny.

J. argues convincingly for the presence of corner acroteria (109–117), and suggests an Apolline subject, which seems possible. I am a little concerned, however, about a structural detail of the assumed acroterion base, viz. that the sculpture base blocks were joined by clamps in visible, dovetailed clamp cuttings (109 figs. 11, 11.2). To my knowledge such ornamental cuttings, which are common in Hekatomnid architecture (Labraunda I:1, 24; Pedersen, IstMitt 54, 2004, 423f) have not been found on blocks in unavailable positions. The pyramid steps do not have dovetailed clamp cuttings (99–101 figs. 10, 1–4), whereas they occur at ground level, on the probable krepis (200 fig. 23.1). Even if there were an interior staircase leading up to the roof to make maintenance work possible, this would not explain why there are ornamental clamp cuttings at the acroterion base but not at the pyramid steps.

After the roof pyramid the turn comes to the entablature (ch. 13) and the columns (ch. 14). The column height has to be calculated from a small percentage of preserved column drums. In the new excavations 44 column drums were found with the complete height preserved, to be added to the three in the British Museum (138). Each column consisted of 6 drums on average. The positions of the only top drum and 14 bottom drums are known thanks to the apophyge curve at top and bottom, and the diameter measurements reveal that 15 other drums belong to the position above the bottom drums. The positions in the shaft of the remaining drums, of which only 17 have been found (of originally ca. 108), can only be established by their diameters. For each drum all twelve diameters between the bottoms of opposite flutes have been measured, when possible, a useful source for further study when they are all published. The twelve measurements that should be identical from any single column drum show an interesting but disconcerting variation of 4–9 mm in 35 cases and 10–17 mm in 7 cases (139). A calculation of possible combinations of drums leads to a suggested column height, including the 63.8 cm high base and 36.2 cm high capital, of 8,339–9,203 m. In spite of this calculated column height, a height of 9.30 m is suggested (143). J. notes the possibility of an entasis (143); it would be a surprise if the columns of the Mausoleum had no entasis, when it appears to be present both at Labraunda and Priene.7 The lower column diameter between fillets is not reported by J., who claims that the fillets are too battered to be properly recorded. He refers, however, to Marinus Andersen, who in 1922 measured the lower diameter of the bottom drum in the British Museum as ca. 108 cm (143).

No documentation or analysis of the column capitals are included in this book. Descriptions by H. Büsing of 82 capital fragments found in the new excavations are reserved for a forthcoming complete catalogue (138). In the meantime H. Drerup’s figures from his study of a capital in the British Museum can be used (JdI 69, 1954, 1–31).

For the column height the following figures are reported:
Stylobate, 29.9 cm (147).
Column base (plinth+disc+torus), 63.8 cm (144)
Plinth, 23.5–24.2 cm, average 23.85 cm (49), 23.8–24.2 cm (50), 23.7–24.2 cm (146)
Disc, 23.4–23.7 cm, average 23.55 cm (49) 23.4 cm (50)
Torus, 15.7–16.0 cm, average 15.85 cm (49f)
Column shaft, 7.539–8.293 m (144f)
Capital, 36.2 cm (144)
Column, 8.139–9.203 m (144f)

The suggested column height of 930 cm is a conjecture based on an expected column height of 30 feet of 32.0-cm length, including the 30-cm high stylobate. Given a diameter of 108 cm, this column height corresponds to 8.61 lower diameters, which seems to be a more reasonable figure than the lower alternatives (8.3–9.2 m), when compared to the column heights at Hekatomnid Labraunda, where a height of 8.86 diameters has been suggested for the temple (Labraunda I:3, 27f, 50) and 9.0 diameters for the south propylon (Labraunda I:1, 15–17); at Andron B the column height was in all probability ca. 8.9 diameters (diam 87 cm, height 7.70–8.0 m). At Priene a column height of 9 diameters is now suggested by W. Koenigs (in: Appearance and essence, 1999, 152).

Since the exact column height remains uncertain, the height of the order cannot be finally established. All separate elements of the Ionic order of the Mausoleum are now known, however, thanks to J.’s important identification of fragments of the column plinth of blue limestone (146), of the stylobate (147), of the moulded member between the dentil and the geison (131f), and of the back part of the sima (126).

The architrave was composed of two courses, a lower one with two fasciae on the front, and an upper one with the top fascia and a rebate for the crown moulding (116). In the 96 cm wide soffit of the lower block there is a plain recessed panel, 19 cm wide.

From a convincing analysis of the cuttings in the top surfaces of two capitals in the British Museum, a standard one and the corner capital, J. is able to show that the architraves at the corners were cut in single, huge, monolithic blocks, one at each corner. The corner architraves were no doubt treated in this unique way. J. suggests that to secure the stability of the roof pyramid these four corner blocks did not only contain the two lower fasciae of the architrave but also the upper fascia, the crown moulding, the dentils, the geison, and the rear part that supported the first 2–3 pyramid steps (137f, 141 fig. 14.4).

The dentils (126–131) had a height of ca. 25 cm (49). Most of the fragments come from units consisting of one dentil (ca. 18 cm wide) and one interval. The unit appears to have an average length of ca. 30.5–31.0 cm, but the positions of dowel holes on architrave tops indicate a variation between 29 and 32 cm for the individual units.

It has been possible to identify three fragments found in the recent excavations as belonging to the course between the dentils and the geison. This is a 15.1–15.4 cm thick slab with a rebate at the top for the insertion of the bed-moulding of the geison (131f). Thanks to this identification, 101 new fragments and 14 in the British Museum have found their place as part of this bed-moulding (22, 127 fig. 13:1 Fd).

The 30 mm high crown moulding of the geison (132–136) was originally painted with an ovolo. Erosion traces of a leaf-and-dart on the underside of the geison, show that the soffit was ca. 25 cm wide (figs. 13.1, 13.9). The sima was
decorated with a carved lotus-and-palmette frieze (125f). The standard block appears to have been ca. 104 cm long, and to have carried four palmettes, of which the two in the middle were partly hidden by a centrally placed lion’s head; lotus buds separated the palmettes and there were half lotus buds at the block ends (131ff figs. 13.5–7). A corner fragment in the British Museum preserves part of a spout, and since the spouts probably were uniformly distributed, it can be assumed that they were spaced regardless of the column axes (125, 132 fig. 13.8). This is in accordance with the situation at the Labraunda temple, as J. pointed out in the last interim report (PDIA 1998, 212). The height of the block was ca. 13 cm at the rear part (49) and at the front ca. 24 cm (PDIA 1998, 225 note 105).

The heights of the entablature and its parts are as follows:

- Entablature to bottom of step, 138.3–161.4 cm (49); 157.5–162.1 cm, average 159.8 cm (PDIA 1998, note 105)
- Entablature to top of sima, 168.8–172.9 cm, average 170.8 cm (PDIA 1998, note 105)
- Architrave, 88.0–88.6 cm (50), 87.5–89.1 cm (PDIA 1998, note 105)
- Lower architrave course Fh, 46.0–46.6 cm (49)
- Upper architrave course Ff, 42.0 cm (49, 135 fig. 13.13), 41.5–42.5 cm (PDIA 1998, note 105)
- Lower fascia, 21.2 cm (135 fig. 13.13)
- Middle fascia, 25.4 cm (135 fig. 13.13)
- Upper fascia, ca. 29.5 cm (42 cm (49, 135 fig. 13.13), or 41.5–42.5 cm (PDIA 1998, note 105), less 12.0–13.0 cm high crown moulding Fg (20, 127 fig. 13.1))
- Architrave crown Fg, 12.0–13.0 cm (20, 127 fig. 13.1)
- Dentils Fe, 24.3–25.8 cm (49)
- Member Fc (above the dentils) with inset bed-moulding, 15.1–15.5 cm (49), 15.1–15.4 (131)
- Bed-moulding inset Fd under the geison, 8.0–8.9 cm (22)
- Geison Fb, 17.9–18.5 cm (49)
- Sima Fa, from bed surface to bottom of step, ca. 13 cm (49), 12.7–13.2 cm (PDIA 1998, note 105)
- Sima, total height ca. 24 cm (PDIA 1998, note 105)

Behind the columns J. restores a 5-m high base, called the ‘pteron base’, with a ledge for sculptures at the top (164–169). ‘Pteron’ is the term used by J. for the peristyle, including the corridor behind the columns, a term taken from Pliny’s phrases pteron vocavere circumitum (‘they called the colonnade ‘pteron’), and namque supra pteron pyramis (‘for above the ‘pteron’ is a pyramid’). Below the colonnade the Mausoleum mainly consisted of a massive core of green lava ashlarS. This solid core continued up to the pyramid roof behind the columns. The core’s facing consisted of ashlars, some of which were of white marble and others of blue limestone. The blue ashlars are of two types, one with an almost vertical front, whereas the other is slightly inclined (158–160). J. suggests that the ashlars with a vertical front were used as a facing for the ‘pteron base’ at the wall behind the columns. Some fragments of a blue limestone top course (135–158) with cuttings for sculptures may have belonged to the platform crowning the ‘pteron base’. The width of the platform is reconstructed as 105 cm, including a projecting moulding (169 fig 17.6). On this base J. places ancestral portraits (179 fig. 18.7), eight members of the Hekatomnid dynasty on the north side (including ‘Mausolus’, whom he identifies as Maussollos himself: 175f), one portrait behind
each intercolumniation. On the southern side portraits of eight members of the Lygdamid dynasty are suggested to have been placed (180). On the fronts to the east and west he assumes that there may have been portraits of heroes believed to have taken part in the foundation of Halikarnassos in mythical times (181). A staircase built into the core of the podium may have led up to the peristyle (41) making it possible for visitors to see and admire these works by the four famous Classical sculptors at the rear wall behind the columns (164 fig. 17.1). Less important statues of body-guards and ladies-in-waiting (182), assumed to have been standing between the columns, could only be seen from behind.

The Chariot frieze is placed by J. above the ‘pteron base’ and the assumed Halikarnassian heroes (79–84, 148–154). These frieze blocks have been found to fit into a rebate cut in the top of wall blocks decorated with a painted maeander (154). The Chariot frieze is composed of separate slabs, 1.7–1.8 m long (79), each showing one chariot racing to the right. The study of the fragments shows that there were at least 16 frieze blocks (B. F. Cook, Relief Sculpture of the Mausoleum at Halicarnassus, Oxford 2005, 32), but no complete slab survives. That they are only 9.6–15.5 cm thick, compared with 27–36 cm for the Amazon frieze (Cook, op.cit., 31), shows that the frieze was not placed at the podium under the Amazon frieze. Its lack of weathering points to a sheltered position such as the suggested one, which is convincing but remains hypothetical. An inner room, which cannot be totally excluded, although considered unlikely by J. (55), would make a conceivable alternative.

The last part of the reconstruction concerns the podium. The stylobate of the peristyle probably rested directly on the podium cornice without any intermediate krepis steps. The stylobate was presumably placed ca. 45 cm behind the edge of the cornice (183 fig. 19.1, 184 fig. 19.3, 186 fig. 19.6); it appears as if the exact position of the stylobate edge is unknown.

One of the most important results of the Danish excavations is the conclusive evidence for the position of the Amazon frieze at the top of the podium directly under the cornice (183–187). This is proved by ovolo insets, which not only were dowelled in a unique way to the top of the Amazon frieze blocks but also fit into a rebate in the underside of the podium cornice. That there were ledges or steps around the podium, forming platforms or bases for sculptures is another important new discovery. Pliny indicates that the Mausoleum was famous because of its sculptural decoration (opus id ut esset inter septem miracula, hi maxime fecerunt artifices). At the British Museum excavations many sculptures were found, of which the most well-preserved was the Amazon frieze. It was, however, not until G. Waywell’s catalogue appeared that it was fully realised that there was also a large number of fragmentary sculptures in the round from the Mausoleum. Waywell found it necessary to restore three bases for sculptures around the podium, but J., who suggests that some figures were placed in other positions, has no need for more than two ledges for sculptures.

The uppermost part of the podium beneath the Amazon frieze is believed to have had a facing of ashlars of white marble (188f), of which some fragments have been found. Those facing blocks of blue limestone (155–163, 190–193) that

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have a front with an inclination are assumed to belong to the middle part of the podium and to have made up a sculpture base crowned by a platform of the same blue stone with cuttings for statues. One such slab has a width of 82.5 cm (155 fig. 16.1), which would be suitable for the life-size battle groups of Greeks and Persians identified by Waywell. Another fragment comes from a corner block and shows that the sculpture base ran on both front and flank, but perhaps with different widths (155, 159).

The sculptures of the 'colossal scale', which seem to form hunting and sacrificial groups, were probably placed on a second, wider sculpture base below the life-size groups (194–199). No remains have been found of this second sculpture base, which is presumed to have been of white marble, nor of the presumably white ashlars of the podium face below it. Fragments of the euthynteria and of the krepis steps have, however, been identified by J. who suggests that above the 11 cm wide euthynteria (with a block height of 30 cm) there may have been two krepis steps, 30 cm high and 45 cm wide (2001).

These blocks, which in the front part of the top surface have dovetailed clamp cuttings, are according to J. unlikely to have been used under the stylobate of the columns, since their lengths are not compatible with the restored interaxials of the colonnade. Slight evidence of a horizontal curvature (possibly indicating ca. 38 mm for the entire length of the flank) has been observed on a long euthynteria block in the British Museum (201), but J. remains cautious. A curvature can, however, be expected at the Mausoleum, since it has been established both for the Labraunda and the Priene temples (Labraunda I: 49f; Koenigs, Appearance and essence, 143).

The podium was surrounded by ledges for sculptures, and the combined widths of them and of the krepis are important for the reconstruction. In the first chapter of the present book, ‘Previous research’ (15–18), J. criticizes Waywell for not having realised that there is insufficient space for more than two sculpture bases. It is, however, not until much later in the book that one meets the relevant data one by one and is able to form one's own opinion after having made the necessary calculations.

The following figures, some of them hypothetical, may be useful in this connection.

- Upper base of blue limestone, width (without moulding) ca. 73.5 cm (155, fig. 16.1)
- Lower base of white marble, suggested width 140 cm on fronts, 100 on flanks (194)
- Axial rectangle of colonnade, 24.00 m x 28.80 m (38f fig. 6.3; 99f fig. 9.21)
- Rectangle of corner column plinths, 25.45 x 30.25m (146: plinth)
- Stylobate rectangle, 25.50 x 30.30 m (figs. 14.7, 19.3; plinth – stylobate ca. 2.5 cm)
- Rectangle of Podium cornice, 26.40 x 31.20 m (figs. 19.1, 19.6)
- Rectangle on front face of Amazon frieze, 26.52 x 30.82 m (fig. 19.1)
- Foundation rectangle (= euthynteria rectangle), 32.4 x 38.0 m [63]

The difference between the measurements of the Amazon frieze rectangle and the euthynteria rectangle indicates that the maximum available space for krepis, sculpture bases and inclination is ca. 319 cm on each front and ca. 319 cm on each flank. An inclination of 16 mm/m for the upper podium with white marble facing (188) and of 20 mm/m (164) for the middle part of the podium with blue facing, would need ca 32 cm. There remains at the front a space of ca 327 cm, which is enough for the two bases, two krepis steps of 45 cm each and an euthynteria of 11 cm (= 315 cm). Apparently the space is, however, not sufficient for both a third base and a krepis with two steps.
In the final chapter (‘Epilogue’, 207–218) J. sums up his results and his suggested restoration. The heights of the separate parts give very neat proportions on a network of 2 ½ ft or 80 cm squares (212 fig. 25,3).

Quadriga pedestal, 2 sqs = 5 ft (48, 76, 207, 211) 160 cm
Pyramid, 9 sqs = 22.5 ft (97, 207) 720 cm
Order (including stylobate), 14 sqs = 35 ft 1120 cm
(147, 145, 49: 30 + 930 +160 cm)
Podium, 31 sqs = 77.5 ft (212: 17.5 + 22.5 + 37.5) 2480 cm
Total height, 56 sqs = 140 ft 4480 cm

Even after this thorough study, some uncertainties remain, however. The individual heights of the three suggested sections of the podium are hypothetical and based only on aesthetic considerations (188), and there is no tangible evidence for the succession of the sculpture bases. Both the podium height and the total height of the Mausoleum are based on the figures of Pliny in combination with the 32-cm foot unit and could not otherwise have been known. J.’s reconstruction of the order and the pyramid is anyhow as a whole convincing. We are now standing on much firmer ground regarding the reconstruction of the Mausoleum. That the height of the podium and its parts can still only be established as an hypothesis does not diminish J.’s achievement. It is only natural that the final solution to every question cannot be found, considering that the Mausoleum was a unique monument and that so little is preserved. Just as an example, only one single stylobate fragment from a length of over 110 m has been identified. Future research may bring new insights but those will probably mostly cause minor changes to the appearance of the Mausoleum as it is presented in this book. In conclusion, Kristian Jeppesen is indeed to be congratulated for his many important new finds, for his patient work, his sharp observations and persuasive interpretations and for having brought his long project of creating a well-argued reconstruction of the Mausoleum to a happy end.

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