

TOWNS AND TOMBS: THREE-DIMENSIONAL DOCUMENTATION OF ARCHAEOLOGICAL SITES IN THE KINGDOM OF NAPLES IN THE LATE EIGHTEENTH AND EARLY NINETEENTH CENTURIES

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INTRODUCTION

MODELS of ruins and of graves have not been objects of importance for either archaeology or art history for a long time. At first glance, they look like children's toys, small-scale imitations of grand originals. Yet their value around the year 1800, when they were first produced, was assessed somewhat differently. The aim of this essay is to restore these models to their rightful position as distinguished records of ancient monuments. As reproductions, they also demonstrate that in their own time the original monuments were perceived in a different light to today. By studying them, therefore, we can increase greatly our understanding of the history of archaeology.¹

To excavate means to destroy, a well-known fact acknowledged by all archaeologists. Firstly, when searching for even earlier layers, the destruction of later archaeological finds is unavoidable. Secondly, once exposed, ancient remains are robbed of their subterranean protection. The latter problem is nowhere more apparent than in the ruins of Pompeii. Without the layers of pumice stone and the original covering roofs, the fragile architecture and wall-paintings soon begin to suffer, simply because of exposure to sun and rain.² For this reason, the 250-year history of the excavations of Pompeii is also the history of great losses of archaeological material. It is estimated that less than ten per cent of all the wall-paintings that were uncovered have survived. But the history of those excavations also tells the story of countless efforts made to preserve and document such a unique monument as Pompeii.

Complaints that excavations were not carried out and documented effectively, that publications were too thin and produced too slowly, and that there was not enough emphasis on the conservation of areas around Vesuvius, are all issues that are fully documented in both travel accounts and the academic literature of the eighteenth and early nineteenth centuries.³ Since then, we have gradually come to realize that these 'accusations' are only partly true, or that they apply to specific periods. In 1763, when Pompeii had begun to be viewed as a homogeneous whole whose function was not just to provide the Museo Reale in Portici with new objects but also to attract visitors, attention turned to the conservation of the exposed ruins.⁴ Protective roofing was built to cover either individual paintings and rooms or entire buildings, such as the Temple of Isis.⁵ But even then the most beautiful wall-paintings were still removed and taken to Portici. Karl Weber, who was responsible for excavations until his death in 1764, had already envisaged a comprehensive publication in which architectural remains, paintings and finds would be presented together.⁶ Francesco La Vega, director of excavations from 1764 to 1807, took care to write comprehensive reports on the Temple of Isis and the so-called Villa of Diomedes.⁷ From 1782, the condition of the most important wall-paintings at the time of their discovery, that is to say, before their central panels were removed, was systematically documented. After 1787, the documentation was available also in colour. The on-site artists who recorded the paintings to scale were always named in La Vega's weekly reports.⁸ The final step would have been the publication of complete houses with their plans, sections and wall-paintings;⁹ evidence for this is provided by the large number of engravings preserved at the Museo Archeologico Nazionale in Naples. This kind of publication, illustrated with coloured engravings of

the discoveries, would have been, in a sense, similar to recent academic works such as *Häuser in Pompeji*.¹⁰ Apparently those publication schemes failed because of the different opinions held by the various members of the Accademia Ercolanese and, particularly, the hostility of the Minister, Bernardo Tanucci, who appears to have been interested only in the actual finds, not in their excavation context.¹¹

ALTIERI'S TEMPLE OF ISIS

The question of whether La Vega's lavish graphic documentation would culminate in a suitable publication was still unresolved when the King of Sweden presented him with a different project. This must have come at a rather inconvenient moment.¹² Gustav III visited Pompeii in 1784 and was given permission by his host, Ferdinand IV, to have models made of the two most important buildings that had been excavated by that date, the Temple of Isis and the Villa of Diomedes.¹³ We do not know whether this idea was conceived by the King himself, or if it came from one of his travelling companions. His artistic adviser, Francesco Piranesi, obviously comes to mind.¹⁴ In any case, Gustav III had already come into contact with the model-maker Giovanni Altieri in Naples and had acquired numerous cork models of Roman architecture from him, including the Acropolis of Tivoli.¹⁵ Together with Antonio Chichi and Rosa, Altieri belonged to the first generation of model-makers in Rome. Thanks to a close collaboration with the art dealer and excavator Thomas Jenkins and the architect Thomas Hardwick, Altieri had become a craftsman appreciated for his great precision. Since his return to his home town of Naples in 1783, Altieri had not found new employment. The commission from Gustav III opened up new opportunities for him; he enthusiastically undertook the construction of a model of the Temple of Isis on a scale of 1:18 (Figs 1–2). The model is a remarkably detailed and accurate reproduction of the temple complex. Altieri did not confine himself to measuring the building; he also documented the condition of the wall-paintings and stuccoes at that time with the utmost care. A comparison with the 'official' documentation of the temple reveals that many pictures and vignettes had already been removed, and Altieri marked the gaps at the appropriate points on his model.¹⁶

In many respects, Altieri's Temple of Isis presents a new approach to the reproduction of antique architec-

ture. In comparison to models of ruins in Rome, this model depicts the ancient temple not as a solitary monument but in relation to its surroundings. The large scale permitted detailed reproductions of the paintings and the state of conservation of the building. It is, without exaggeration, a three-dimensional record of the entire complex and, as such, it far surpasses any other architectural model made before that date. This was the common feeling even at the time, and it can be seen in the correspondence between members of the Neapolitan authorities concerned with antiquities dating from 1790.¹⁷ Altieri had asked for permission to produce and sell copies of the model. La Vega, who was still hoping that his drawings of the temple would be published, rejected his request for two reasons: firstly, that the model was not accurate enough, and, secondly, that by offering the model for sale, Altieri would be publishing the temple, which he had no authorization to do. The second reason was, in fact, a contradiction of the first.

PADIGLIONE'S POMPEII

The first attempt to produce a three-dimensional record of Pompeii failed because the Neapolitan authorities claimed that the quality of the model was unconvincing. The deciding factor had probably been the fact that the model reproduced an unpublished building, rather than one well known from *vedute* and plans. Fifteen years later, when an *Officina per la costruzione di modelli in sughero* was officially established at Naples, there may still have been some memory of this event.¹⁸ Felice Nicolas, who was the director both of the Real Fabbrica (the royal porcelain factory) and of the authorities concerned with antiquities, took the model-maker Domenico Padiglione and other artists with him to Paestum, and undertook there excavations and restorations. It was here that Padiglione began producing models of the temples, the city gate and other parts of the town at various scales. Indeed, in Paestum excavations and three-dimensional models went hand in hand. Except for the so-called Temple of Neptune, these models have either been lost or have been handed down to us in very poor condition.¹⁹ However, we know them through copies, which are numerous and of good quality. Moreover, these copies are on a scale that enables the onlooker to imagine the actual extent of the buildings and their original dimensions. Padiglione, who had been working as a maker of cork models in the Real Fabbrica since 1802,

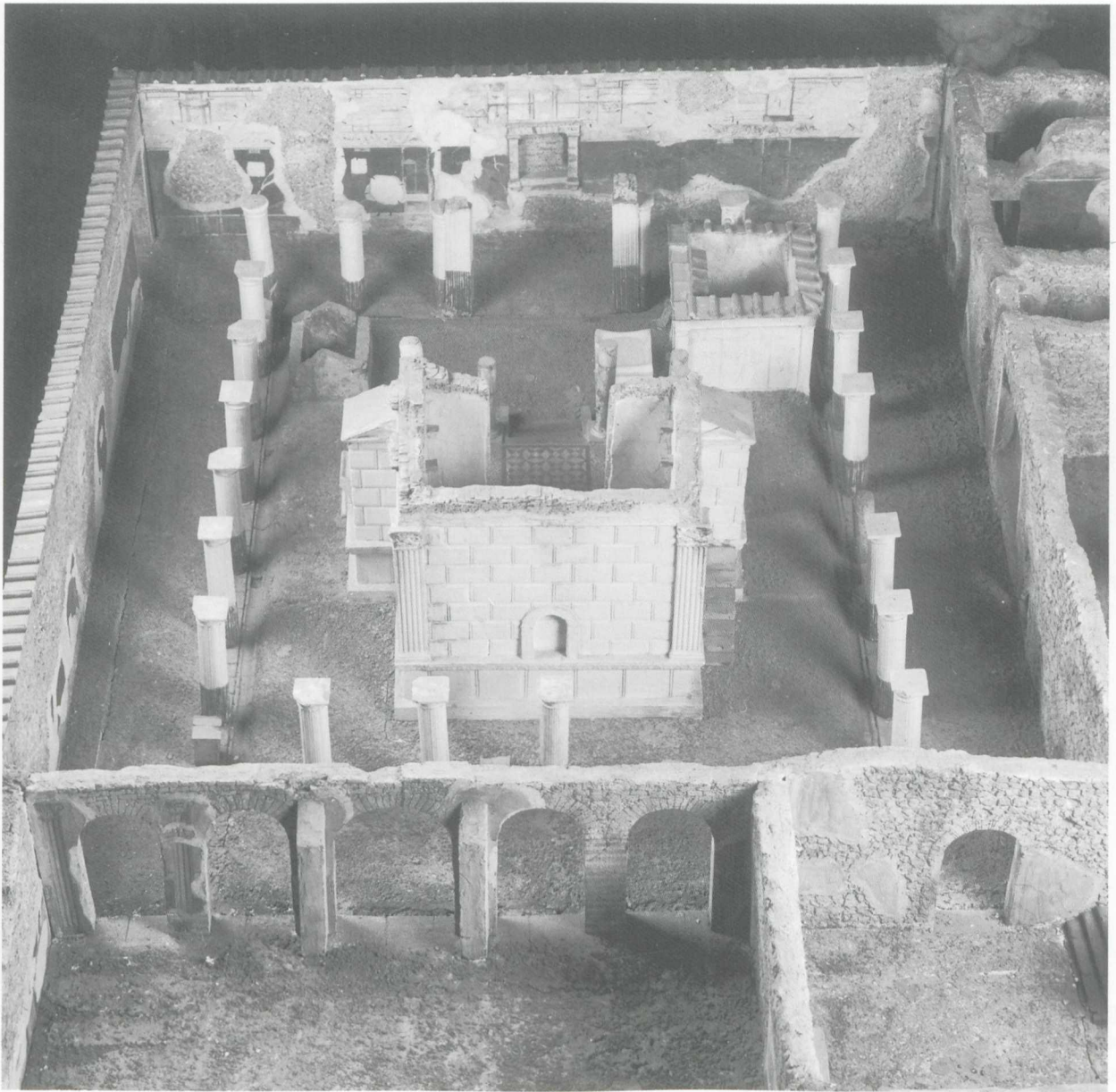


FIG. 1. Giovanni Altieri, Model of the Temple of Isis in Pompeii, 1784/5. Medelhavsmuseet, Stockholm. (Reproduced courtesy of the Statens Konstmuseer, Stockholm.)

joined the Museo Reale in 1806 to continue his work in the newly-created 'Gallerie dei Modelli'.²⁰ The very fact that a whole section in the museum had been set up solely for models of ancient architecture shows the great importance that was placed on three-dimensional replicas.²¹

As we know from numerous unpublished documents preserved in the Soprintendenza Archeologica di Napoli and the Archivio di Stato in Naples, Padiglione made models of ancient buildings in the Kingdom of the Two Sicilies until his death in 1832.²² By the end of his life, about twenty models of Greek and Roman architecture could be admired in the

museum's two model rooms, the favourite rooms of the visitors. The Greek temples of Sicily, however, were missing, and, apart from the temple of Paestum and the theatre of Herculaneum, all his models are now lost.²³

The same applies to the most demanding project Padiglione was commissioned to undertake, the model of the whole city of Pompeii. By 1810 he had already made a model of the Temple of Isis and one of the theatre quarter.²⁴ This was followed by other models, including the Odeion by 1819, part of the amphitheatre in 1818–22, and the Villa of Diomedes in 1821/2. We know a great deal about the latter model;



FIG. 2. Giovanni Altieri, Detail of the east portico from the model of the Temple of Isis in Pompeii, 1784/5. Medelhavsmuseet, Stockholm. (Reproduced courtesy of the Statens Konstmuseer, Stockholm.)

Padiglione's calculations and weekly reports allow us to reconstruct the working process exactly.²⁵ It was envisaged that the reproduction of the villa would be on a scale of 1:48. The plan, probably the one produced by La Vega, was copied on to a large board. Slots were then sawn, into which wooden planks were inserted for the walls. Then, onto these, cork was stuck. The model was transported to Pompeii three times, for a total of 47 days, to record the height and condition of the walls and paintings. The recording of the more important parts of the wall-paintings may have been completed with the help of the extensive graphic documentation from the eighteenth century. The subordinate rooms, on the other hand, had to be examined and recorded on site. Padiglione worked on the model with his son for more than a year.²⁶ Further tasks, on the same scale, followed this one, up to 1838. From documents we know that models were made of the area around the Forum and Basilica (1822–5), the east section of the Forum (1826/7) and, after

Domenico Padiglione's death, the House of the Faun (1835), the House of Actaeon (now of Sallust) (1833), and finally the House of the Tragic Poet (1837/8), which were produced by Padiglione's son and assistant, Agostino.²⁷

Those models are no longer extant. Luckily, however, two copies have survived, which give an idea of the high quality and excellence of Padiglione's Pompeii models. In 1840, Ludwig I of Bavaria was able to have a copy of the House of Sallust made, which was intended for display in his Pompeiian house at Aschaffenburg am Main, where it is presently preserved (Figs 3–4).²⁸ It was made by Agostino Padiglione and by the painter Giuseppe Abbate, and was rather expensive, costing 500 ducats. The model shows not only the house itself but also large parts of the insula (IV,1) in which it is situated. Building techniques such as *opus reticulatum* and *opus vittatum* are depicted in it. The exact documentation of plaster work and wall-paintings is of particular interest to

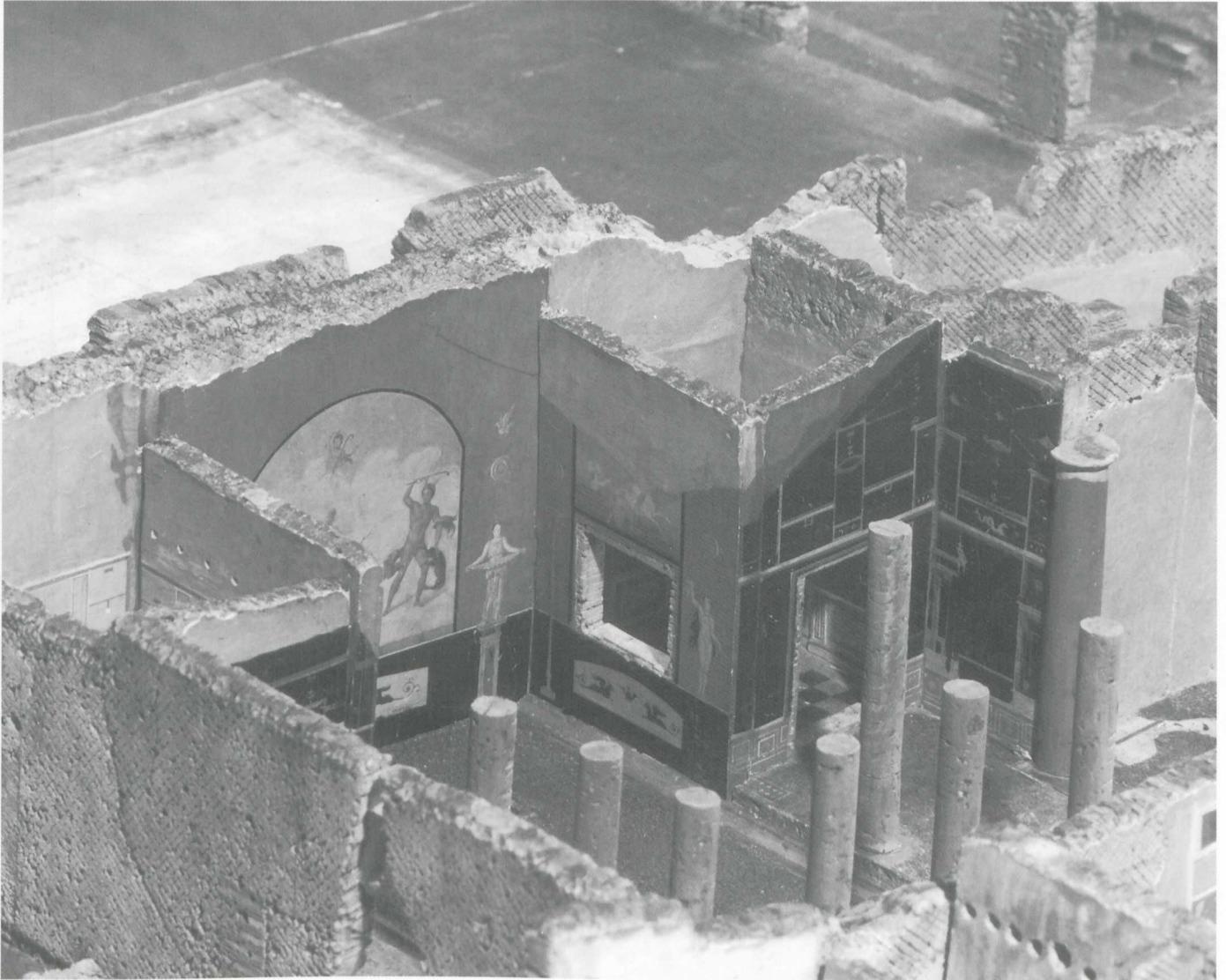


FIG. 3. Agostino Padiglione and Giuseppe Abbate, View of the small peristyle from the model of the House of Sallust in Pompeii, 1840. Schloßmuseum, Aschaffenburg am Main. (Reproduced courtesy of the Bayerische Verwaltung der Staatlichen Schlösser, Gärten und Seen.)

archaeologists, since the house has suffered not only due to natural causes, but from damage caused by American bombs during the Second World War. The condition of each room, particularly the side rooms, is recorded meticulously. This becomes clearer when one focuses on a room in which fragments of wall-painting of the third Pompeiian style are preserved on the upper third of the wall (Fig. 4); the lower section had been newly distempered during a phase of reconstruction and the rest of the old decoration disappears behind a ceiling that was added at that time. The holes for the ceiling beams can still be made out in the model (Fig. 4). This redecoration and structural change cannot be seen today in the actual archaeological record; the model is the only documentation we have of the remodelling of the house.

One plan and numerous watercolours could have been consulted for the making of the model of the House of Sallust.²⁹ The decoration of each room, the condition of each floor and the state of individual walls, all had to be examined and recorded at the excavation site. In this way, a completely three-dimensional description of the condition of the house was produced, which was remarkably accurate and whose architectural value was priceless. A careful study of the model is still, today, a precondition for any publication relating to this house. It is also worth noting that, unlike other publications of that period, strict attention was paid to documenting the condition of the ruins of Pompeii, rather than presenting a reconstruction of them.

The model at Aschaffenburg, which is not only a

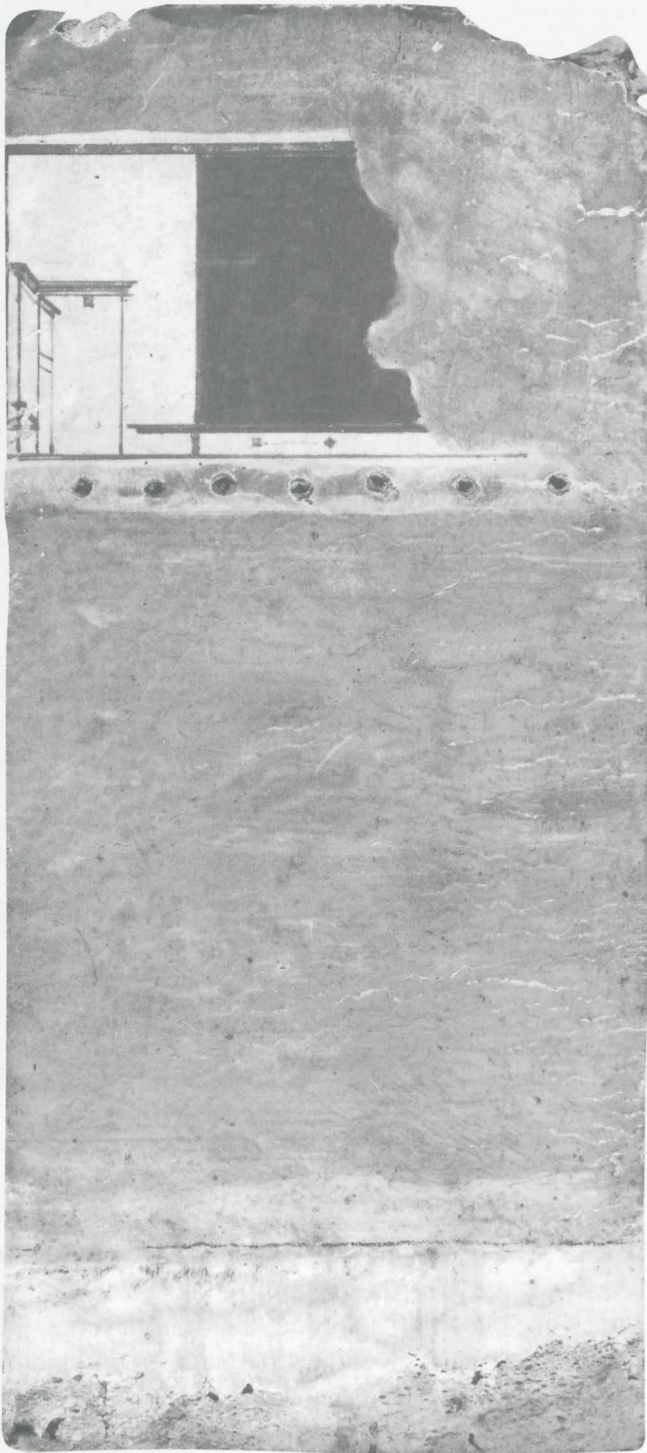


FIG. 4. Agostino Padiglione and Giuseppe Abbate, East wall of room 30 from the model of the House of Sallust in Pompeii, 1840. The third Pompeian style has been left only in the upper part, invisible above a later lower ceiling, marked by beam-holes. Schloßmuseum, Aschaffenburg am Main. (Reproduced courtesy of the Bayerische Verwaltung der Staatlichen Schlösser, Gärten und Seen.)

reproduction of a house but of half an insula, leads us to think that models of other houses also reproduced their surrounding areas as well as the actual houses themselves.³⁰ Thus, it seems that the whole city, not just its individual buildings, was depicted. This idea appears to have developed gradually. It is documented in a letter of 1822, and it was only then that the whole city was divided into five areas that were meant to form the individual units of a model of the city.³¹ The suggested scales were 1:48 or 1:96.

The great novelty about this plan was the idea of documenting absolutely everything, not just the most beautiful buildings and paintings. The model, therefore, would be markedly different to both the drawings and watercolours of paintings and to the cork models of ancient temple architecture. It was aimed at giving the visitors to the museum in Naples a vivid picture of the discoveries. Moreover, the model included the faithful reproduction of buildings that, as far as the authorities were concerned, had not yet been published, a privilege that only the king could possibly grant via the Accademia Ercolanese. For this reason, it was out of the question to make copies and sell them to Grand Tour travellers, which was the usual practice with temple models. In 1820, Domenico Padiglione was explicitly forbidden to sell copies without express authorization.³² The existence of the model of the House of Sallust at Aschaffenburg can only be explained by a king (Ludwig I), who was also a lover of the antique, expressing the desire to have such a model made to a royal colleague. Another copy of the theatre quarter, reduced to half the size, is in Sir John Soane's Museum in London, but it is unclear when and for whom it was made (Fig. 5).³³ On the other hand, a drawing executed by the architect Alfred Guesdon in 1849 can be regarded as yet another consequence of this first model of Pompeii; he portrayed Pompeii from a birds' eye view, giving his drawing the appearance of a photograph, which may suggest that he used the model in the Museum.³⁴

Padiglione's model probably was destroyed sometime in the 1860s, when his second son, Felice, was commissioned to make a smaller model of the town (which can still be seen in the Museo Nazionale) by the new director of the excavations, Giuseppe Fiorelli.³⁵ Its scale, 1:100, is not suited particularly well to reproduce such detailed paintings, but even these miniature portrayals document several walls that were lost to rain and frost a long time ago. The value of this model as a valid archaeological document has

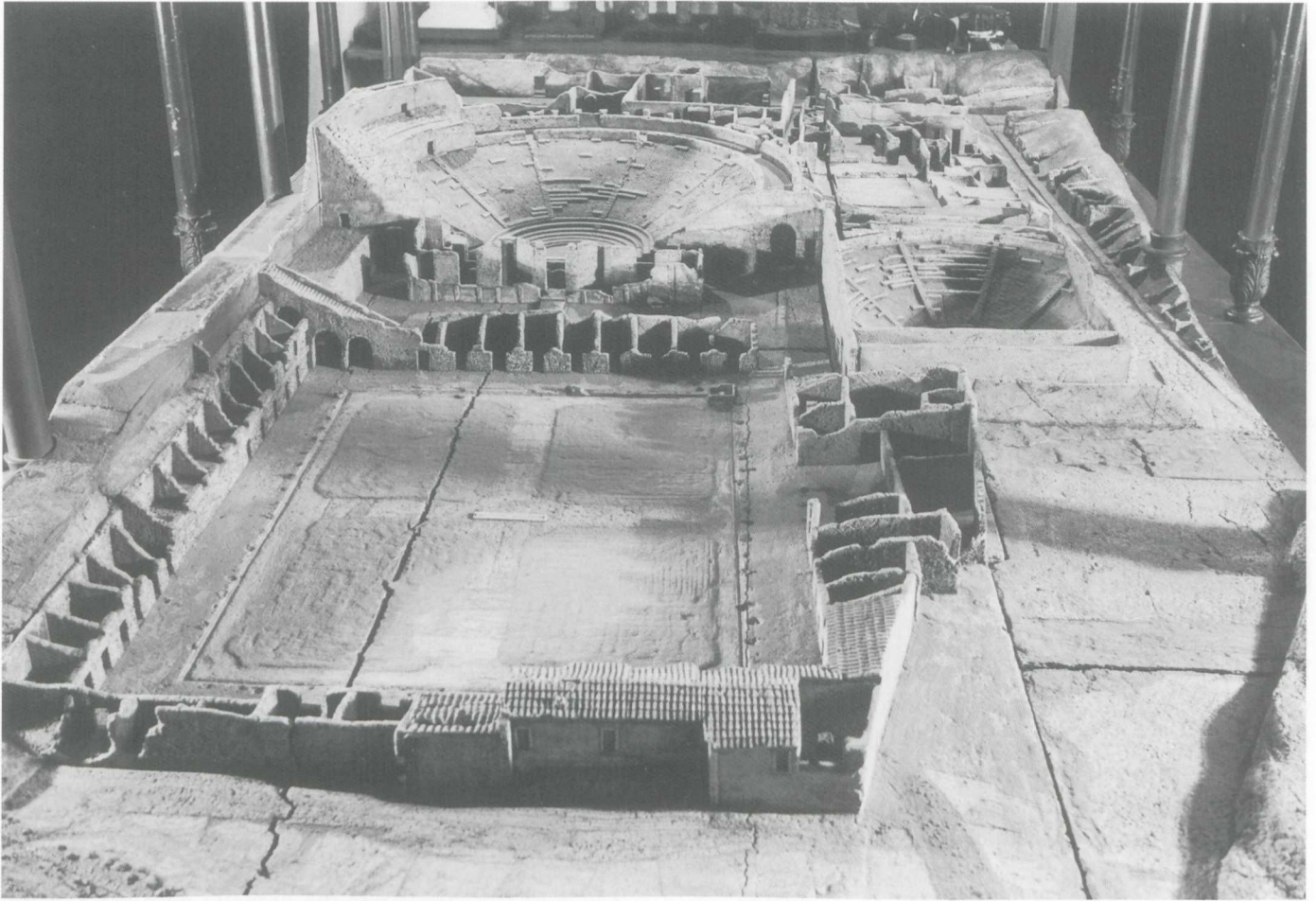


FIG. 5. Domenico Padiglione (?), Model of the theatre quarter in Pompeii, c. 1820. Sir John Soane's Museum, London. (Photo: Jeremy Butler by courtesy of the Trustees of Sir John Soane's Museum.)

been recognized only recently and has not yet, by any means, been exhausted. Johannes Overbeck praised this model in his 1866 book on Pompeii:

[The model is one of the] most praiseworthy enterprises of the new era [namely Fiorelli's directorship] that anyone who knows the extent to which ruins are faced with decline will admit. That is why the production of a model depicting every structure as it really is, or as it was when excavated, is not only desirable but essential. In addition, when looking at the model as opposed to the original, it is easier to gain an insight into the context and location of all the individual rooms and buildings in relation to each other, into the layout of the streets and the differences of level and other such things; and finally this model of cork, plaster and paper, produced with the greatest accuracy and exactness, where even the paintings on the walls and the mosaics on the floors are of the

finest artistry, is a highly delightful and admirable work of art.³⁶

One can hardly think of a better way to describe the quality of those models.

TOMB MODELS

The thorough documentation of the decay threatening archaeological sites was not the only purpose of the city models: vividness was a fundamental goal. With a series of small models produced in Naples at this time, the principal aim was to attain a high standard of didactic vividness. Such were the models of ancient tombs.

In the crypt at Sir John Soane's Museum (an appropriate place, indeed), there are three models of ancient tombs that recently have been returned to display from the museum storerooms (Fig. 6).³⁷ Soane owned them



FIG. 6. Domenico Padiglione (?), Three models of tombs at Nola, Canosa and Paestum, before 1825. Before restoration. Sir John Soane's Museum, London. (Photo: V. Kockel by courtesy of the Trustees of Sir John Soane's Museum.)

by 1825, but their provenance is still uncertain.³⁸ These cork cases, which are somewhat inconspicuous from the outside, reveal interesting treasures when they are opened. Next to a skeleton there are vases and weapons serving as burial gifts; the vases themselves are painted with detailed art-work. The three tombs differ in their furnishings. Only ceramics are found in the first tomb, the second is painted and contains a wealth of weapons, while the third is equipped with an antechamber, a *cline* in the main chamber and reliefs on the walls.

These models represent a tomb in Nola, one in Paestum and the Monterisi-Rossignoli tomb in Canosa. These tombs were quite famous between 1800 and 1820, and were often illustrated in appropriate publications (Fig. 7).³⁹ So far, I have discovered seventeen copies of the models (eight of Paestum, seven of Nola and two of Canosa). The specimens in Soane's Museum, despite being the best preserved of all, are not the prototypes.⁴⁰ Their history is rather complex but it can be reconstructed on the basis of various sources, though only certain critical points will be dealt with here, namely the question of the models' authenticity, of their purpose and, finally, what they represent as far as documentation is concerned.

As a consequence of the peace treaty of Tolentino (1801), the victorious First Consul Bonaparte was given a number of Pompeian finds, as well as 34 ancient vases, by the King of Naples.⁴¹ They arrived in Paris in the autumn of 1802, and later entered the collection of the Empress Josephine at Malmaison.⁴²

Along with the vases, she also owned a model depicting a tomb in Nola at the time of its discovery. It was based upon Heinrich Kniep's famous illustration in Heinrich Tischbein's publication on vases from 1795 (Fig. 8).⁴³ The tomb was also illustrated when the first substantial discourse on ancient vases, dedicated to the Empress, appeared in French.⁴⁴ Its author, Aubin Louis Millin, explained the vignette with the following words: 'You see in the vignette of this introduction the depiction of an ordinary tomb found at Nola. In the gallery of Malmaison there is an old model of these tombs'.⁴⁵ The model, which was made by Domenico Padiglione in 1802, is now lost. It was produced in the Real Fabbrica, where ancient vases were also restored, under the directorship of Nicolas.⁴⁶ The specimen in London (Fig. 9) can be regarded as a faithful replica. Unlike Kniep's illustration, the model of the tomb was taken completely out of context. It depicted the stone case alone, as it normally would not have been seen. The miniature vases that were placed inside do not correspond with those in the picture. The themes of the paintings on the vases are, admittedly, all taken from the Sir William Hamilton's collection of vases (Figs 10–11), but this collection had sunk at sea, along with the ship *Colossus*, long before the model was made.⁴⁷ So Padiglione not only took all his information about the tomb from the drawing, but also the shapes and paintings of the vases came from the same publication. Kniep already had created a fictitious situation. His drawing does not represent the tomb at Nola, but 'un tombeau ordinaire', an ordinary tomb, and illustrates the excavation context in which ancient

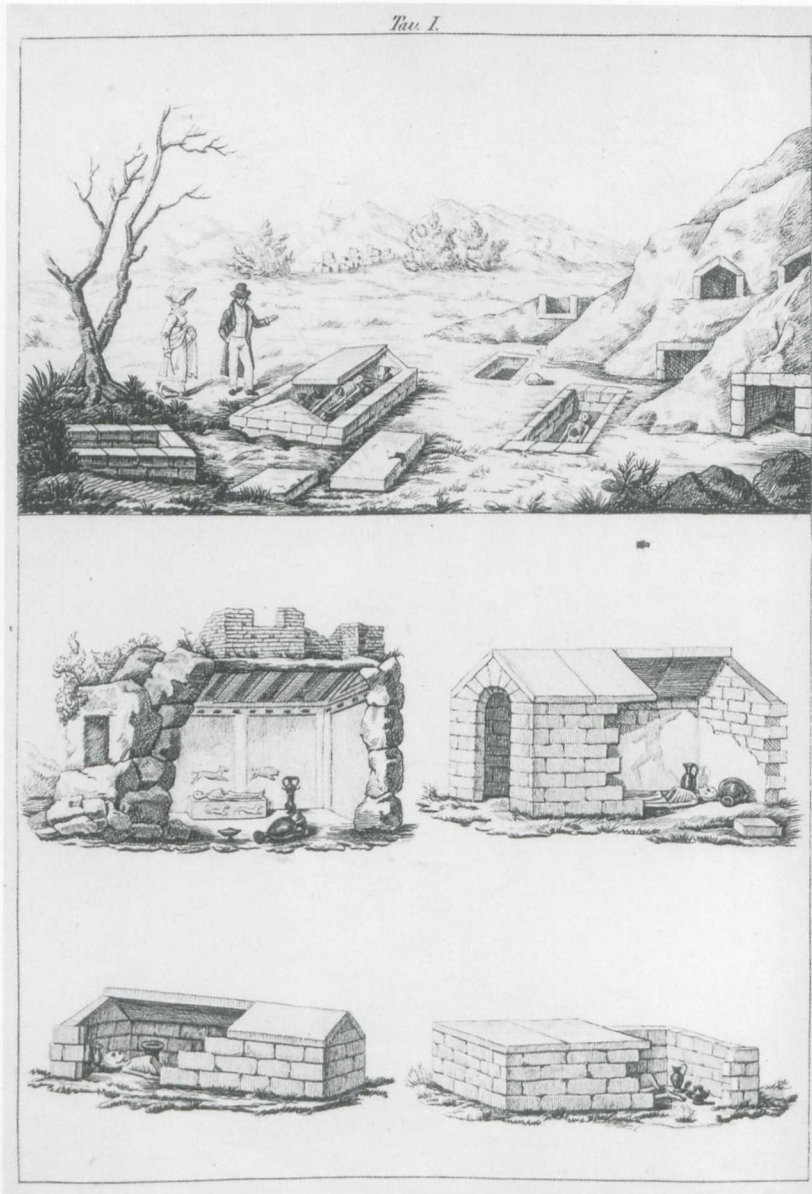


FIG. 7. Different types of Greek tombs in Campania and southern Italy: the 'Nola-Tomb' (upper row), the 'Canosa-Tomb' (middle row, left) and the 'Paestum-Tomb' (middle row, right). From R. Gargiulo, *Cenni sulla maniera di rinvenire i vasi fittili italo-greci* (Naples, 1831), pl. I. (Photo: V. Kockel.)

vases usually were discovered. The model is even more abstract. It is taken out of context and represents a typical, rather than specific, tomb, with typical, rather than specific, vases.

In 1805, excavation work in Paestum was not just confined to the temples. A necropolis was uncovered at the city gate, which revealed several tomb chambers dating from the fourth century BC.⁴⁸ Two were painted, and the others were richly furnished with burial gifts. Nicolas, the excavator and director of the Real Fabbrica, had Domenico Padiglione with him at the excavation site as a model-maker, and the model

could very well be an authentic record. The paintings, weapons and vases that are reproduced in Soane's model also originate from the excavations of 1805 (Figs 12–16).⁴⁹ At that time, however, emphasis was placed on ordering the tombs according to their material genre, rather than on the arrangement of the individual tombs, and they were published according to this priority. This procedure can be traced in the model; it does not reproduce a specific excavated context, but portrays all the finds in order to give an overall impression.⁵⁰

The third model represents a tomb chamber that

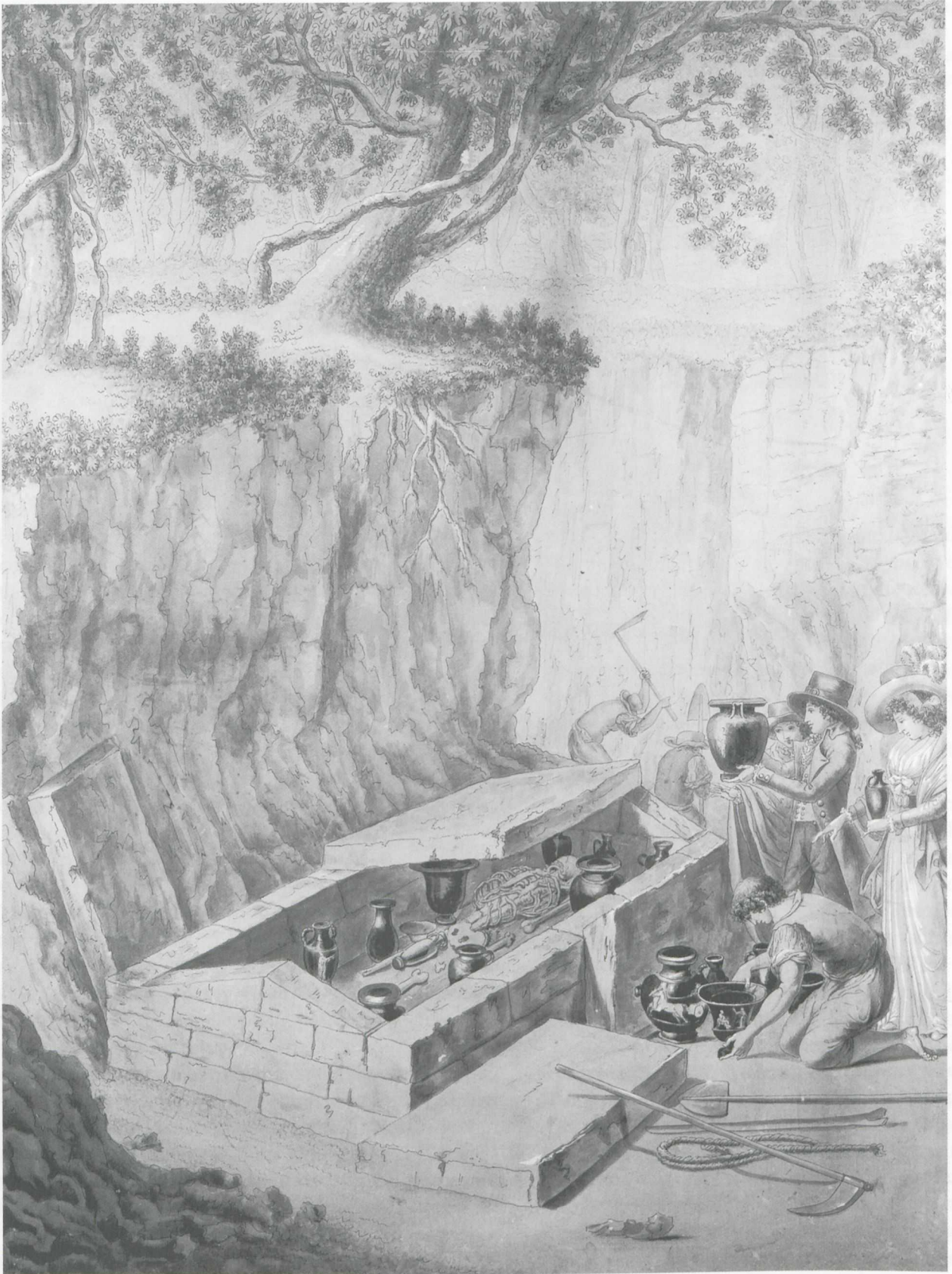


FIG. 8. C. Heinrich Kniep, *Sir William and Lady Hamilton observing the finds from a newly-discovered tomb in the forest of Nola*. Drawing. Art market, Rome, 1938. Deutsches Archäologisches Institut, Rome, neg. no. 38.149. (Reproduced courtesy of the Deutsches Archäologisches Institut, Rome.)

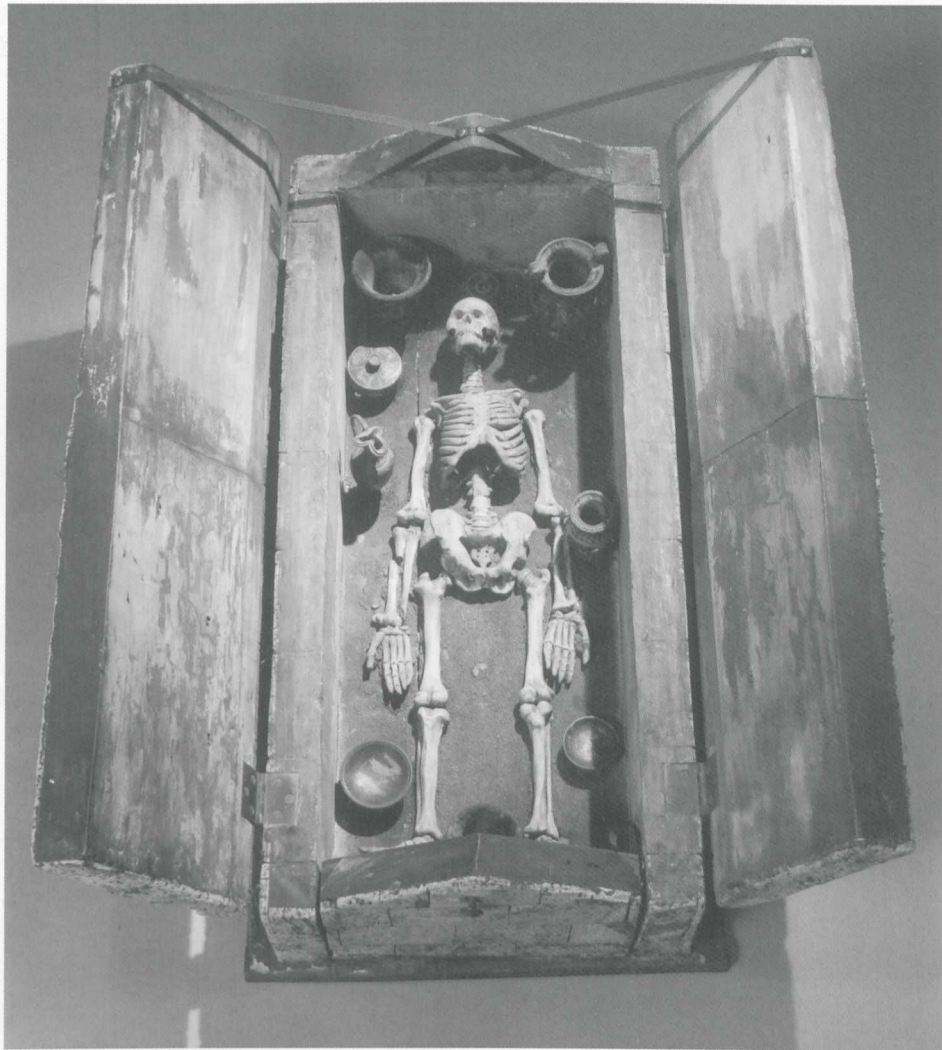


FIG. 9. Domenico Padiglione (?), Model of a tomb at Nola, after C. Heinrich Kniep. Sir John Soane's Museum, London. (Photo: Ole Woldby, by courtesy of the Trustees of Sir John Soane's Museum.)

was discovered near Canosa in 1813 (Figs 15, 17–20).⁵¹ From the outside, the form of the tomb is an even less convincing reproduction than the other models. Padiglione was certainly not at the excavation site on this occasion, and some of the details that were given by Millin in his first publication of the tomb are misinterpreted. The large Apulian vases, which are presently preserved in Munich, were correctly reproduced as far as the scale of reduction allowed (Figs 19–20).⁵² The original finds were no longer in Naples when work was being done on the model, which meant that only the printed copies were available for reference. In the case of the Canosa tomb, for the very first time a very specific monument was reproduced, but here again we are not dealing with an authentic record as we would understand it today.⁵³

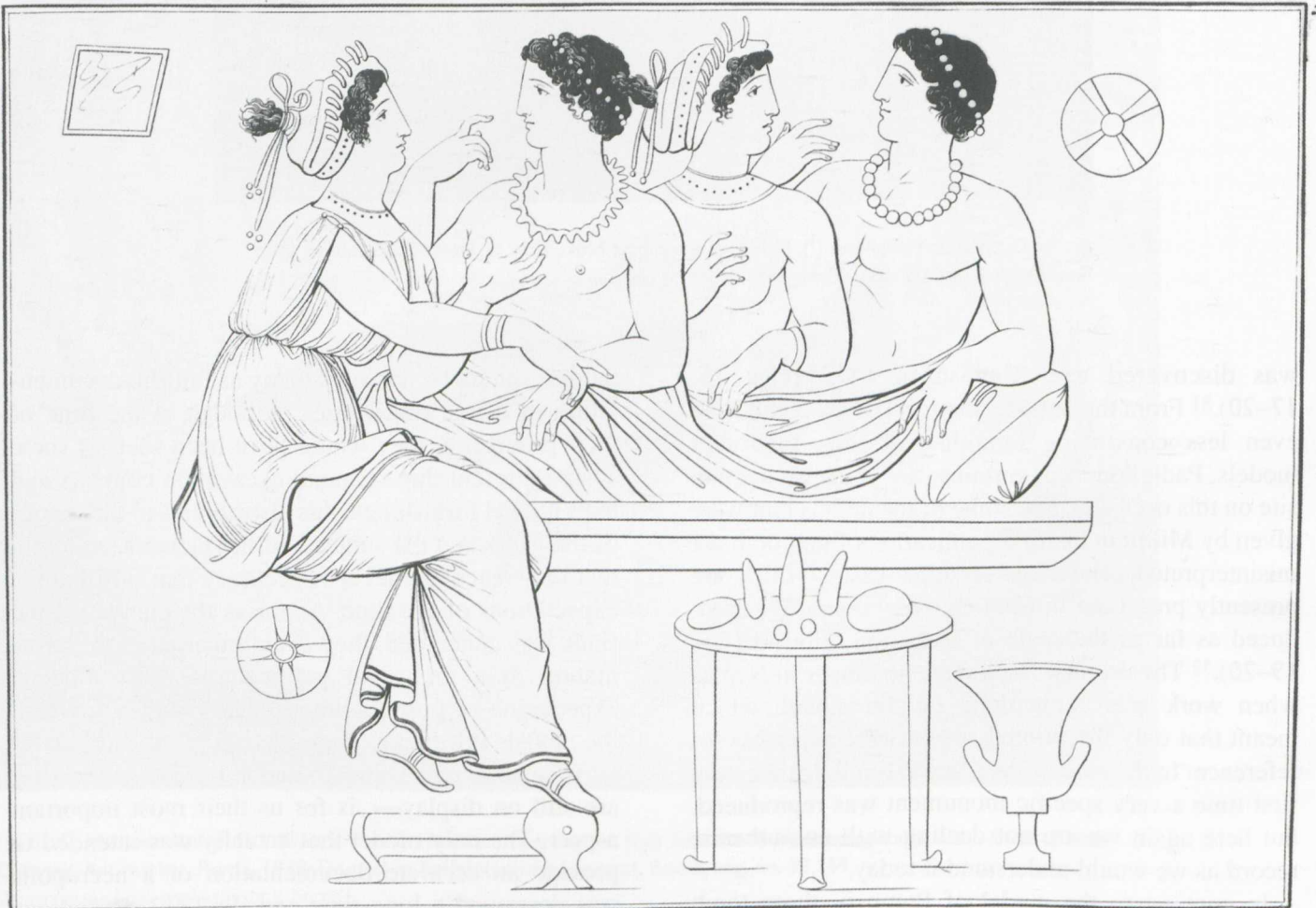
In contrast to the model of Pompeii, these tomb

models cannot be regarded today as faithful documentation of actual discoveries, although at the time of their production they would have been seen as such. They represent three general excavation contexts and their typical furnishings; this also applies to the shapes of the vases and the subjects of the pictures, and with that they reached a level of accuracy that fulfilled the expectations of the time. As far as the context of the finds was concerned, they even imparted more information than the usual publications. This didactic expectation of a three-dimensional visual aid, which the models fulfilled at that time, and partly still do — as, for example, in Oxford⁵⁴ and in Leiden, where they are still on display — is for us their most important aspect. The only model that actually was intended to provide an accurate documentation of a necropolis was destroyed a long time ago. In 1812, Padiglione



FIG. 10. Miniature copy of a vase from Nola, after J.H.W. Tischbein. London, Sir John Soane's Museum. (Photo: V. Kockel by courtesy of the Trustees of Sir John Soane's Museum.)

FIG. 11. Drawing after a Greek vase from Nola, then in the collection of Sir William Hamilton. From J.H.W. Tischbein, *Collection of Engravings from Ancient Vases ... in the Possession of Sir W. Hamilton II* (Naples, 1796), pl. 53. (Photo: V. Kockel.)



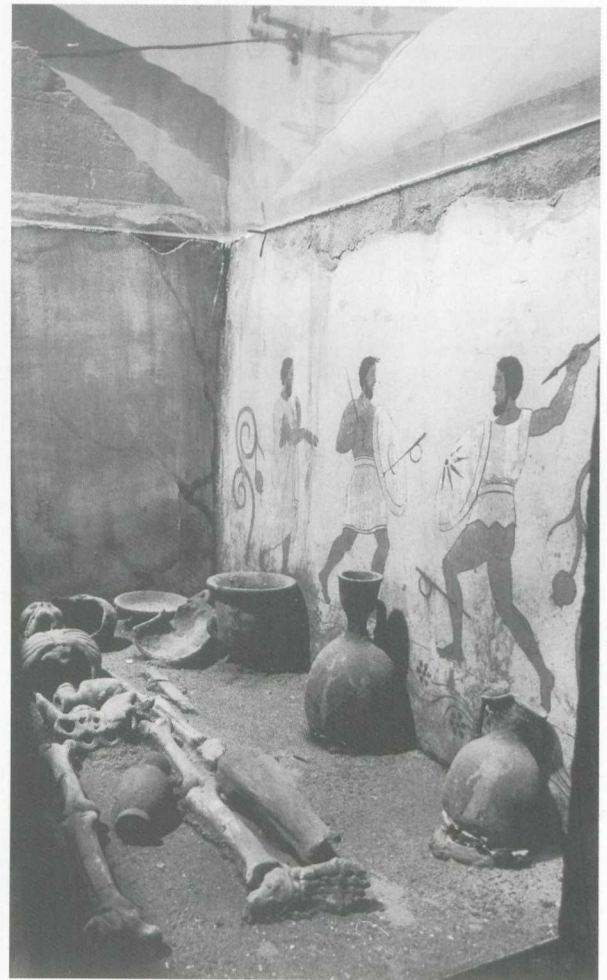
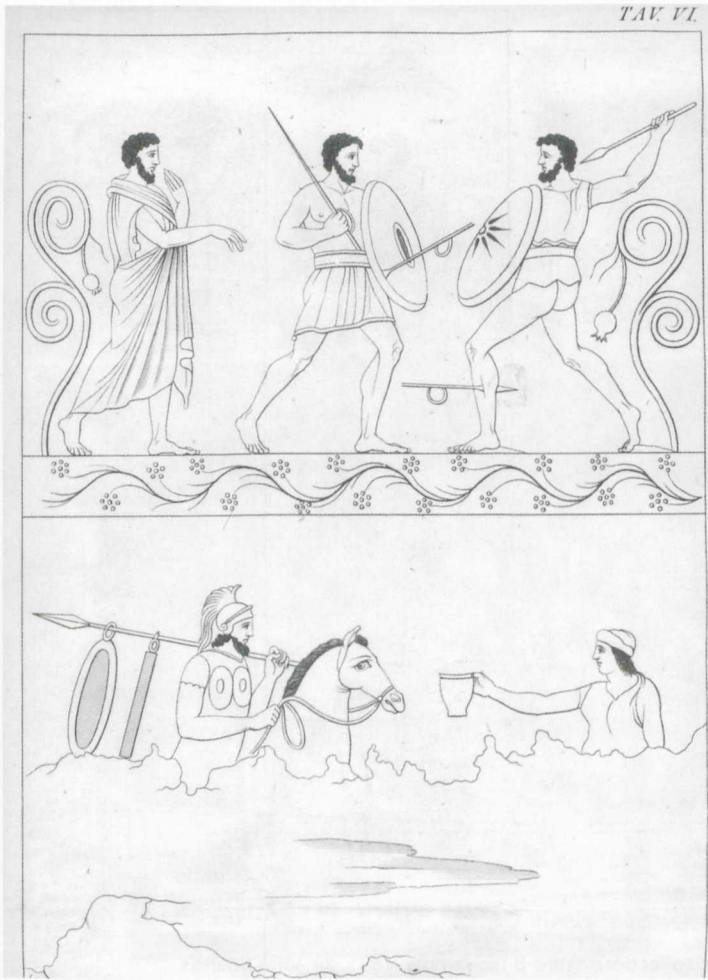


FIG. 12. Wall-paintings in Paestan tombs excavated in 1805. From R. Paolini, *Memorie sui monumenti di antichità ch'esistono in Miseno ... ed in Pesto* (Naples, 1812), pl. VI. (Photo: V. Kockel.)

FIG. 13. Domenico Padiglione (?), Model of a tomb at Paestum excavated in 1805. Sir John Soane's Museum. (Photo: Jeremy Butler by courtesy of the Trustees of Sir John Soane's Museum.)

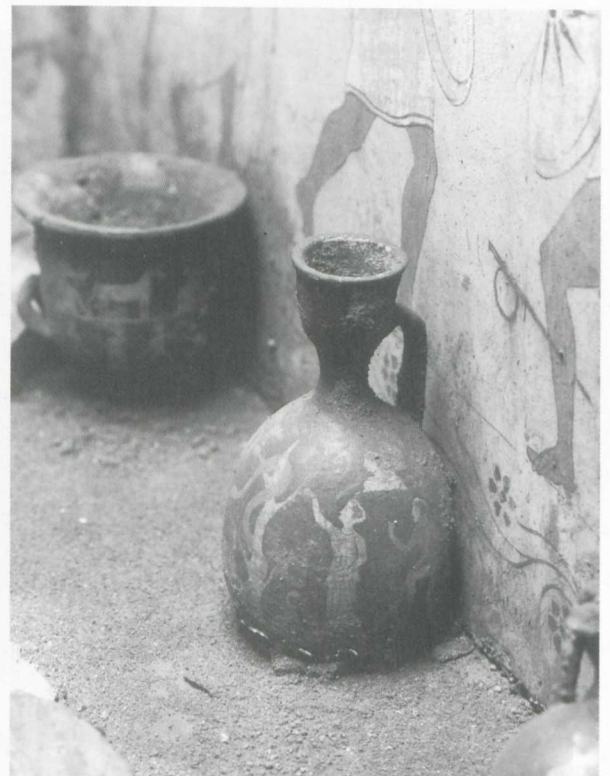


FIG. 14. Miniature copy of the Asteeas-Lekythos found at Paestum in 1805. Sir John Soane's Museum, London. (Photo: Jeremy Butler by courtesy of the Trustees of Sir John Soane's Museum.)

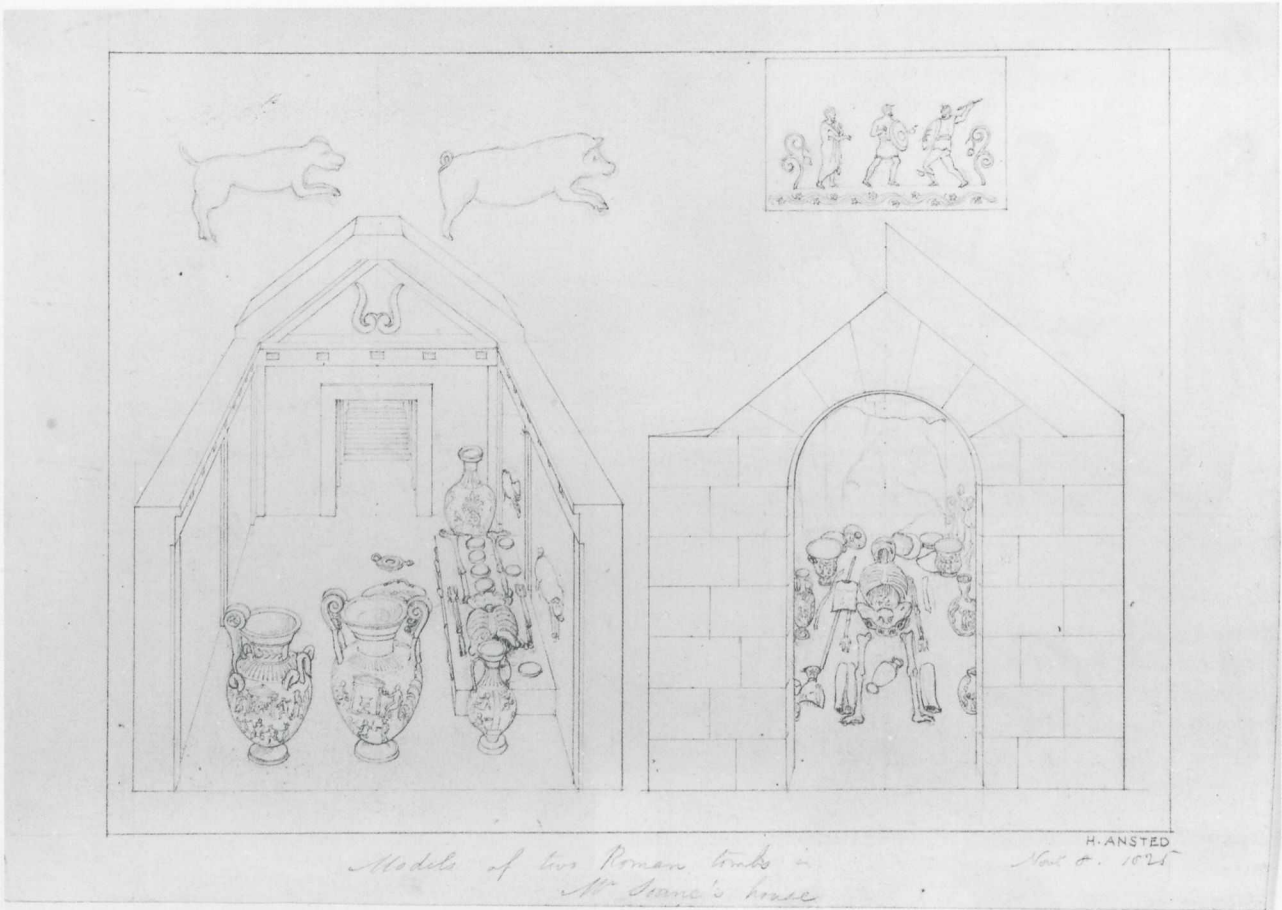


FIG. 15. H. Ansted, Drawing of two tomb models in Sir John Soane's collection, dated 8 November 1825. Sir John Soane's Museum, London. (Photo: Jeremy Butler by courtesy of the Trustees of Sir John Soane's Museum.)

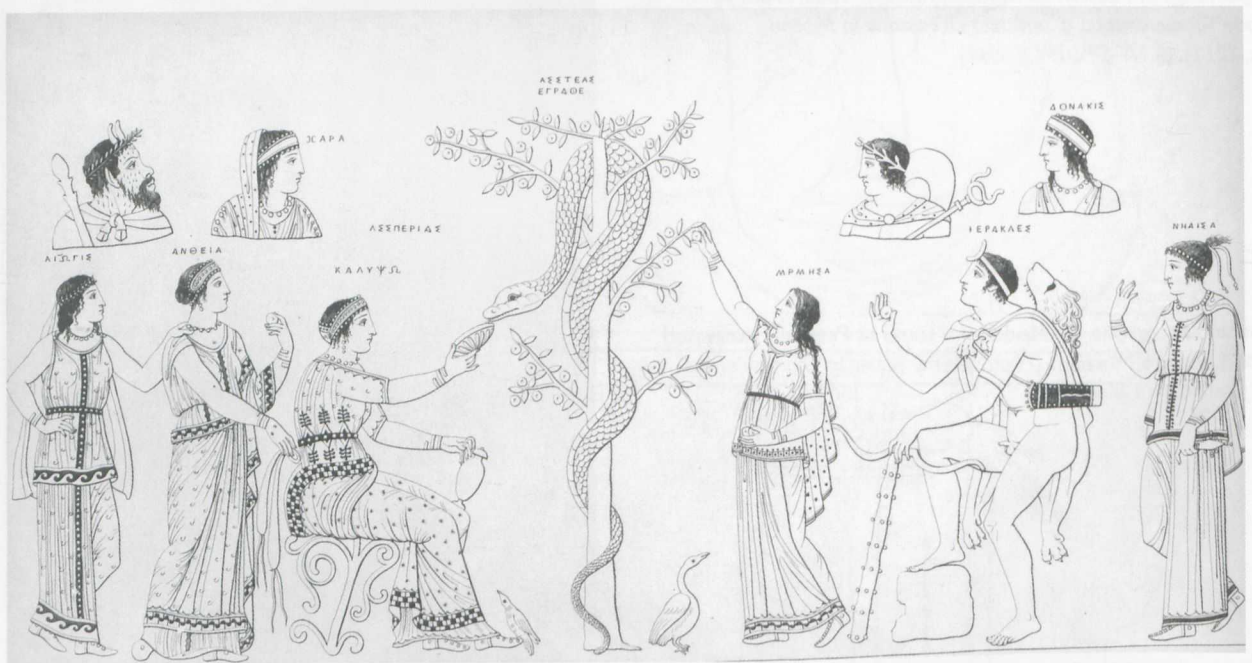


FIG. 16. Drawing after the Asteas-Lekythos: Herakles in the gardens of the Hesperides. From A.L. Millin, *Peintures des vases antiques vulgairement appelés étrusques* (Paris, 1808), pl. 3. (Photo: V. Kockel.)

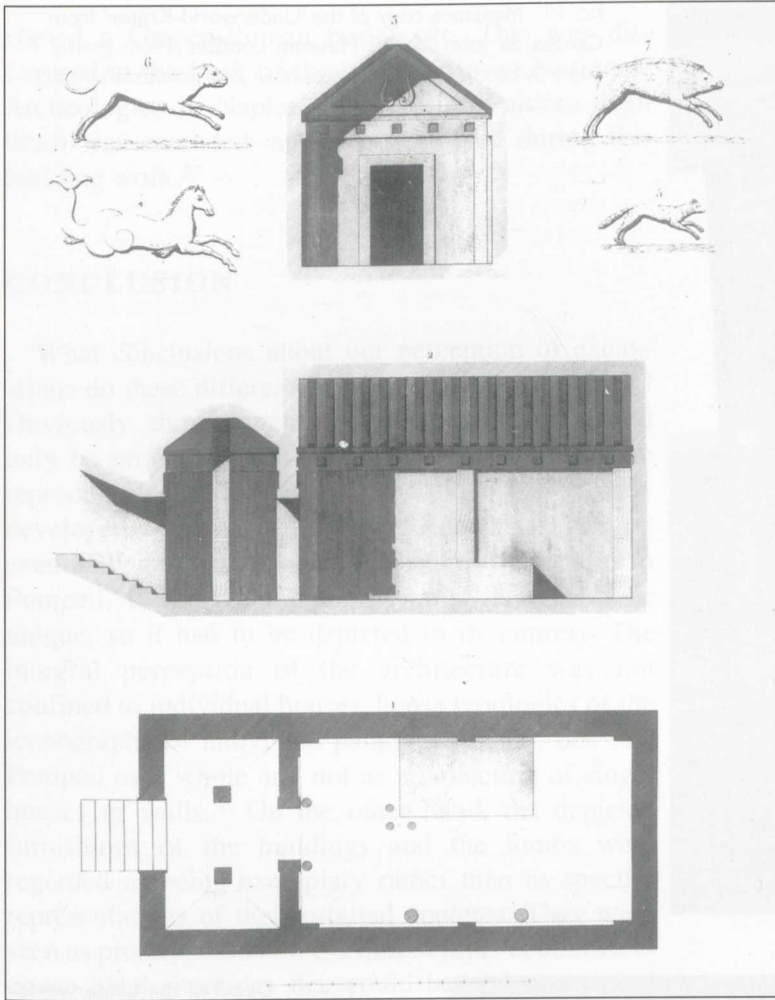


FIG. 17. Plan and sections of the Monterisi-Rossignoli tomb in Canosa excavated in 1813. From A.L. Millin, *Déscription des tombeaux de Canosa* (Paris, 1816), pl. I. (Photo: V. Kockel.)

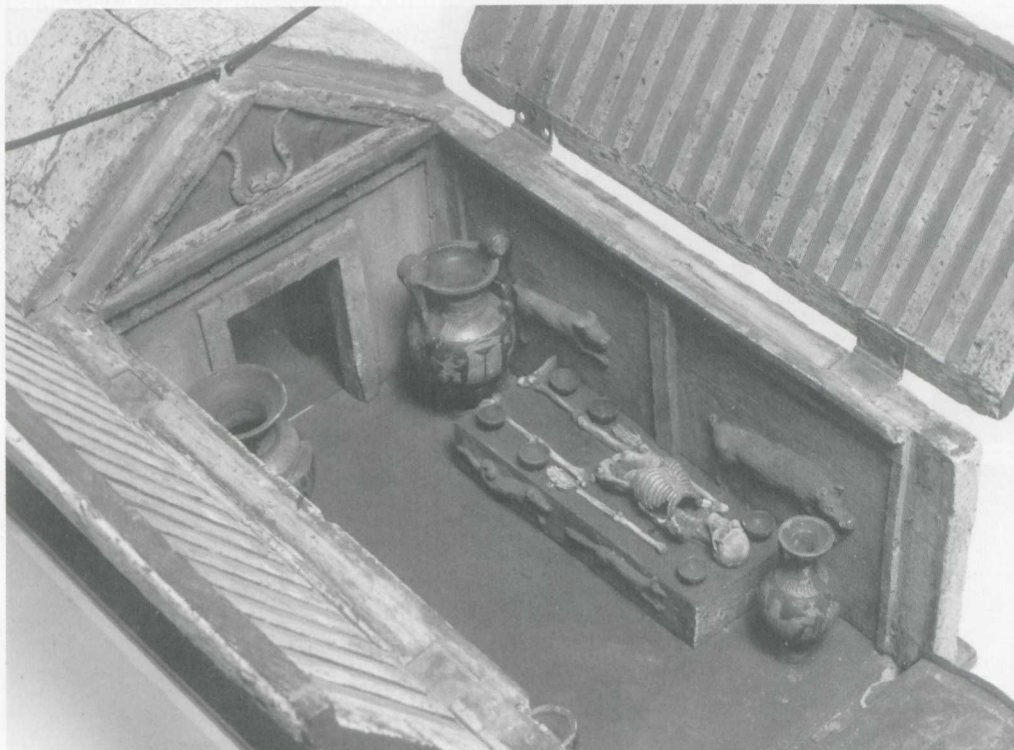


FIG. 18. Domenico Padiglione (?), Model of the 'Canosa-Tomb'. Sir John Soane's Museum, London. (Photo: Jeremy Butler by courtesy of the Trustees of Sir John Soane's Museum.)

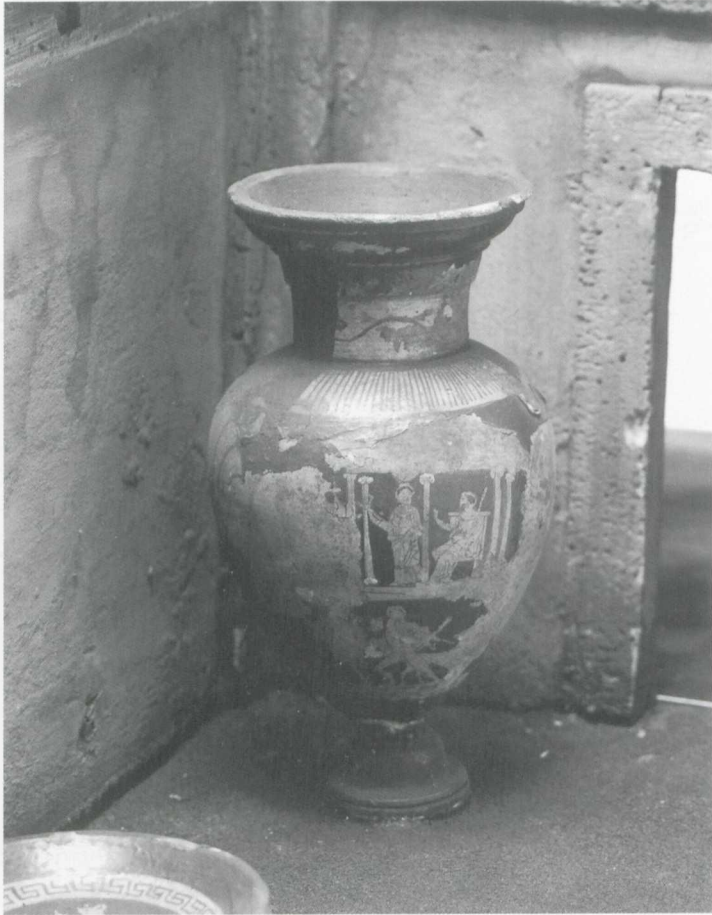


FIG. 19. Miniature copy of the 'Underworld-Krater' from Canosa. Sir John Soane's Museum, London. (Photo: Jeremy Butler by courtesy of the Trustees of Sir John Soane's Museum.)

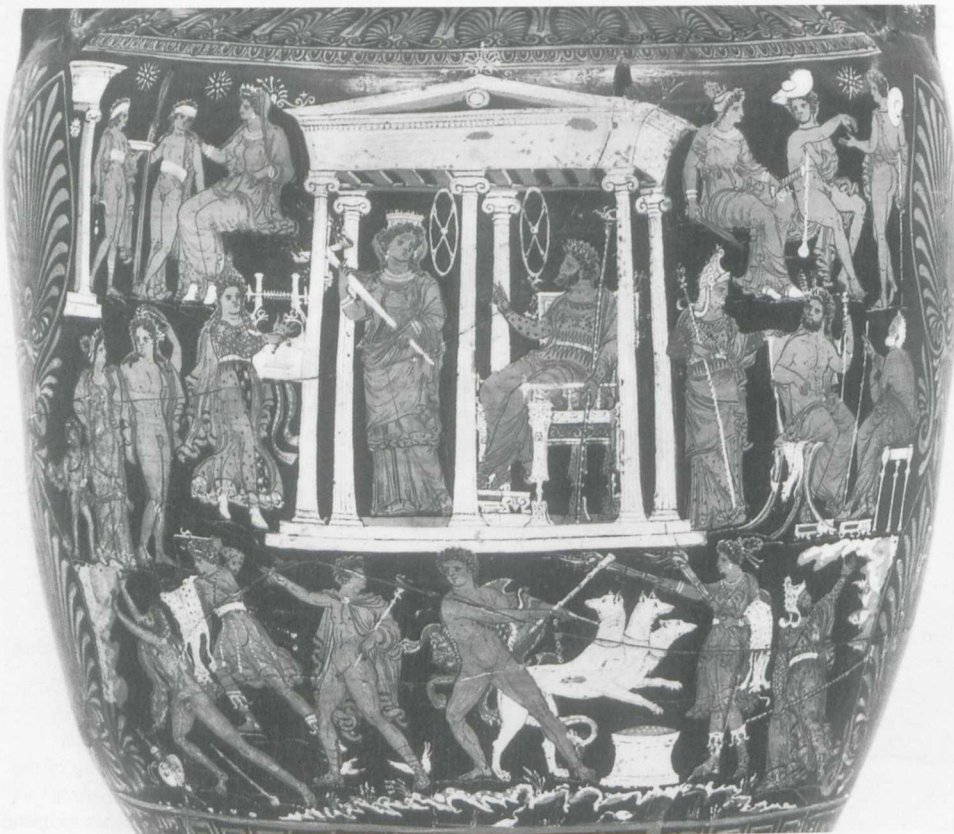


FIG. 20. Detail of the 'Underworld-Krater' from Canosa. Staatliche Antikensammlung, Munich. inv. no. 3297 VAS, neg. no. K81. (Reproduced courtesy of the Staatliche Antikensammlungen und Glyptothek München.)

copied a Graeco-Roman burial site. This was discovered at the back of the present Museo Nazionale Archeologico in Naples when the old Palazzo degli Studi was extended, and was destroyed during this building work.⁵⁵

CONCLUSION

What conclusions about our perception of excavations do these different depictions allow us to draw? Obviously three-dimensional documentation could only be produced once older traditions of miniature reproductions of monuments and finds had already developed. Models of the ruins of Roman architecture eventually gave rise to adaptations of this technique in Pompeii. Every part of the city was thought to be unique, so it had to be depicted in its entirety. The integral perception of the architecture was not confined to individual houses, house typologies or the iconography of individual paintings; that is, one saw Pompeii as a whole and not as a collection of single houses or walls.⁵⁶ On the other hand, the depicted furnishings of the buildings and the tombs were regarded as being exemplary rather than as specific representations of their original contents. They were seen as prototypes, and the different finds combined to create ideal situations that could be understood and depicted as real. It was much easier to understand the context of ancient finds from looking at these models than at a display of vases organized typologically in the archaeological collections of the time.⁵⁷

NOTES

1. For cork models, see A. Büttner, 'Korkmodelle von Antonio Chichi', in *Kataloge der Staatlichen Kunstsammlungen Kassel VI* (Kassel, 1974); P. Gercke (ed.), *Antike Bauten in Modell und Zeichnung um 1800 (Kataloge der Staatlichen Kunstsammlungen Kassel 14)* (Kassel, 1986); P. Gercke (ed.), *Antike Bauten. Korkmodelle von Antonio Chichi, 1777–1782 (Kataloge der Staatlichen Museen Kassel 26)* (Kassel, 2001); W. Helmberger and V. Kockel (eds), *Rom über die Alpen Tragen* (Landshut, 1993); V. Kockel, *Phelloplastica. Modelli in sughero dell'architettura antica nel XVIII secolo nella collezione di Gustavo III di Svezia* (Rome, 1998).
2. For an early description and discussion of weather damage, see J. Overbeck and A. Mau, *Pompeji* (Leipzig, 1884⁺), 627–9.
3. The complaint by Johann Joachim Winckelmann (*Sendschreiben von den Herculanischen Entdeckungen* (Dresden, 1762), 20) that he saw only eight workers at Pompeii in 1762 is famous. See also S.G. Bruer and M. Kunze (eds), *J.J. Winckelmann. Herkulanische Schriften I* (Mainz, 1997), 79, and note on p. 161. In 1766, Sir William Hamilton, the British Resident at Naples, complained directly to the Minister, Bernardo Tanucci; see I. Jenkins and K. Sloan (eds), *Vases and Volcanoes* (London, 1996), 42–3. In 1769, the Emperor Joseph II blamed his brother-in-law, Ferdinand IV, within earshot of the excavation director, Francesco La Vega, for the fact that excavations were too slow, that too few workmen were employed and so on; see G. Fiorelli (ed.), *Pompeianorum Antiquitatum Historia* (Naples, 1860–2), I, 1, 230.
4. From 1763 the area around the Herculaneum Gate, and later also the Temple of Isis, was visible.
5. The protective roofing over the Temple of Isis was torn down in 1794. Frequently mentioned, it is documented in two drawings by Louis Jean Desprez of 1777/8 and an engraving by Jakob Philipp Hackert of 1793. See *Louis Jean Desprez. Tecknare, Teaterkonstnär, Arkitekt* (Stockholm, 1992), 53 no. 35; Kockel, *Phelloplastica* (above, n. 1), 43 fig. 23; W. Krönig and R. Wegner, *Jakob Philipp Hackert: der Landschaftsmaler der Goethezeit* (Cologne, 1994), fig. 108. For the roof, see also S. De Caro, in *Alla ricerca di Iside: analisi, studi e restauri dell'Iseo pompeiano nel Museo di Napoli* (Rome, 1992), 6.
6. C.C. Parslow, *Rediscovering Antiquity* (Cambridge (Mass.), 1995), 184–98 (with figs 55–9) and 296–319.
7. For reproductions of La Vega's drawings, see *Pompei. Pitture e mosaici. La documentazione nell'opera di disegnatori e pittori dei secoli XVIII e XIX* (Rome, 1995), 36–67 and 138–9 (Temple of Isis), 68–88 and 121–34 (Villa of Diomedes).
8. See I. Bragantini and M. de Vos, 'La documentazione della decorazione pompeiana nel Settecento e Ottocento', in *Pompei 1748–1980: i tempi della documentazione* (Rome, 1981), 34–41; I. Bragantini, V. Sampaolo and L. Martorelli, in *Pompei. Pitture e mosaici* (above, n. 7), 17–28 (for the artists Giovanni Battista Casanova, Filippo Morghen, Giuseppe Chiantarelli and Francesco Morelli); M. Pagano (ed.), *I diari*

- di scavo di Pompei, Ercolano e Stabiae di Francesco e Pietro La Vega (1764–1810)* (Rome, 1997), 93–4.
9. Actually formulated by La Vega on 20 October 1787; see Pagano, *Diari* (above, n. 8), 92.
 10. V.M. Strocka (ed.), *Häuser in Pompeji* (Tübingen/Munich, 1984–), eight volumes published to date.
 11. A. Allroggen-Bedel, 'Tanucci e la cultura antiquaria del suo tempo', in R. Ajello and M. d'Addio (eds), *Bernardo Tanucci. Statista, letterato, giurista* (Naples, 1986), 521–36; Parslow, *Rediscovering* (above, n. 6), 196–7 (the Accademia still arguing in favour in 1760), 232 (negative opinion).
 12. La Vega frequently reported that his plans appealed to important visitors, for example to Emperor Joseph II on 7 April 1769; see Fiorelli, *Pompeianarum* I, 1 (above, n. 3), 230. In 1778, the architect Thomas Hardwick described La Vega's plans as 'extremely well drawn'; see P. de la Ruffinière du Prey, in J. Lever (ed.), *Catalogue of the Drawings of the Royal Institute of British Architects, G–K* (London, 1973), 91 no. 2. Otherwise, La Vega kept his plans under lock and key. Gustav III was not able to see them on his visit to Pompeii because La Vega was not present and the royal visitor had not been introduced to him before; see Fiorelli, *Pompeianarum* I, 2 (above, n. 3), 165 (13 February 1784).
 13. Kockel, *Phelloplastica* (above, n. 1), 72–89.
 14. Francesco Piranesi's father, Giovanni Battista, worked with the cork model-maker Agostino Rosa in Paestum in 1777. See M. McCarthy, 'Documents on Greek revival in architecture', *Burlington Magazine* 114 (836) (November 1972), 760–9. Abate Ferdinando Galiani probably had the idea of producing these models; under his instructions, Altieri made a Vesuvius landscape, which Gustav III had seen in the Royal Palace at Portici before he visited Pompeii. See M. Olausson, 'I modelli', in Kockel, *Phelloplastica* (above, n. 1), 27, 41, 43, 48.
 15. Kockel, *Phelloplastica* (above, n. 1), 57–63 no. 1.
 16. V. Sampaolo, 'La decorazione pittorica', in *Alla ricerca di Iside* (above, n. 5), 23–39.
 17. Kockel, *Phelloplastica* (above, n. 1), 37–9.
 18. The last we hear of Altieri is in the letter of 1790 mentioned above, n. 17. One might assume that there is some connection with the Real Fabbrica, where he tried to work, but this has not been proved yet.
 19. P. Mascilli Migliorini, 'La diffusione di Paestum nei modelli', in J. Raspi Serra (ed.), *La fortuna di Paestum e la memoria moderna del dorico, 1750–1830 I* (Florence, 1986), 148–9; T. Lutz, *Die Wiederentdeckung der Tempel von Paestum* (Bamburg, 1991), 90ff.; V. Kockel, 'sog. Poseidontempel, Paestum', in Helmlberger and Kockel (eds), *Rom über die Alpen Tragen* (above, n. 1), 323–5 no. 54 (with a list of copies by Padiglione); E. Ruggiero, *Degli scavi di antichità nelle Province di Terraferma dell'antico Regno di Napoli* (Naples, 1888), 462ff.
 20. A. Carola Perrotti, *La porcellana della Real Fabbrica Ferdinanda* (Naples, 1978), 207–8.
 21. For the first mention of this department in the museum guides, see L. Giustiniani and F. De Licteriis, *Guida per lo Real Museo Borbonico Napoli / A Guide through the Royal Bourbonic Museum* (Naples, 1822), 54, 202–4.
 22. The files on the cork models are summarized in Archivio Storico della Soprintendenza Archeologica di Napoli, XIV, B 8. I am grateful to Enrica Pozzi Paolini, then the Soprintendente, for allowing me to see the documents, and also to Valeria Sampaolo and Andrea Milanese. See A. Milanese, 'Il Museo Reale di Napoli al tempo di Giuseppe Bonaparte e di Gioacchino Murat', *Rivista dell'Istituto Nazionale di Archeologia e Storia dell'Arte* s. III, 19–20 (1996–7), 345–405.
 23. Complementary to the Paestum buildings in the Naples museum were the theatre of Herculaneum (1808), the late antique church of Nocera Inferiore (before 1819), the *macellum* of Pozzuoli (before 1819, with changes 1823), the amphitheatre of Capua (from 1827) and a number of Roman buildings from Rome. The model of the theatre of Herculaneum is now preserved in the local museum. The only one in Padiglione's series, it shows a reconstructed building, not a ruin. For a recent illustration, see U. Pappalardo, 'Nuove testimonianze su Marco Nonio Balbo', *Mitteilungen des Deutschen Archäologischen Instituts. Römische Abteilung* 104 (1997), 418–19, fig. 1. Padiglione's work on this model is documented in 1808, but work for a different (?) model of the theatre is mentioned as early as 1764: Parslow, *Rediscovering* (above, n. 6), 255, 367 n. 70. In the 1790s this model was in the museum at Portici; see M. Starke, *Letters from Italy I* (London, 1800), 117.
 24. According to Milanese, 'Museo Reale' (above, n. 22), it was mentioned by Michele Arditi, the museum director, in 1810.
 25. Archivio Storico della Soprintendenza Archeologica di Napoli, XIV, B 8, 7 and XXI, D 8. For the graphic documentation, see above, n. 7.
 26. It is not known who copied the paintings. Francesco Morelli, who was responsible for documenting the wall-paintings in Pompeii until 1829, was named in connection with another model.
 27. Agostino Padiglione worked with his father from 1815; from 1818 he was paid as an *aiutante* (assistant) and from 1831 as a *custode* (custodian). He is still mentioned in 1849, but must have died before 1856.
 28. Kockel, 'Das Haus des Sallust in Pompeji', in Helmlberger and Kockel (eds), *Rom über die Alpen Tragen* (above, n. 1), 134–47, 321–2. A copy of this model was made for the Deutsches Museum in Munich but was destroyed during the War. Only a photo remains: neg. no. *03159. I am grateful to T. Kockel, who drew it to my attention.
 29. *Pompei. Pitture e mosaici* (above, n. 7), 92–5, 137.
 30. This is attested for the Casa di Campagna (= Villa di Diomede), 'colla prossima strada de' sepolcri ed altri edifici' ('with the next street of tombs and other buildings') and the Calcidico (= Eumachia building) 'con altri molti edifici adiacenti ... e il modello del Pantheon' ('with many other adjacent buildings ... and the model of the Pantheon') (= Macellum) '... con altri edifici' ('with other buildings'). See V. Sampaolo, 'La realizzazione del plastico di Pompei', *Il Museo. Rivista del*

- Sistema Museale Italiano* 3 (1993), 82–3.
31. Archivio Storico della Soprintendenza Archeologica di Napoli, XIV, B 8, 27. The idea of reproducing the whole city of Pompeii in model form is somewhat of an enigma. The handwriting of the letter is certainly not that of Domenico Padiglione. One might think of his son Agostino, or the head architect Antonio Bonucci. The actual distances are given approximately (the Villa of Diomedes to the town gate; the town gate to the House of Pansa; the House of Pansa to the Forum; the Forum to the theatre portico), and the surface area of the model. In the light of this, the planned scale must have been about 1:42/3. In the Neapolitan system of measurements (12 *once* = 1 *palm*), that would mean a ratio of 1 *uncia* to 3 1/2 *palmi*, not a very probable relation. The Aschaffenburg model was produced with the ratio 1:50, which, in turn, would leave us with a round scale of 1 *uncia* to 4 *palmi* = 1:48. Correspondingly, in a letter of 19 February 1823 (Archivio Storico della Soprintendenza Archeologica di Napoli, XIV, B 8, 23) a scale of 4 *palmi*, namely 1:48, was mentioned in connection with the model of the Basilica. Whether the author of the first letter miscalculated the scale or the plan was altered is not clear. More relevant is the closing sentence in that letter: 'Volendosi poi costruire l'intera città di già scavata, si potrà eseguire per metà della scala di pal. sudetta; allora tutti i pezzi sarebbero per metà' ('If one wished then to construct the whole of the city that has been excavated to date, it would be possible to execute it at half the above-mentioned scale of *palmi*; thus all the pieces would be half the size'). This is exactly the idea that Giuseppe Fiorelli took up in 1860, when the new model was made, not to the scale of duodecimal 1:96, but decimal 1:100. See below, n. 35.
 32. Archivio Storico della Soprintendenza Archeologica di Napoli, XIV, B 8, 23. There must have been an event that provoked this letter. As far as we know, Padiglione sold a model of the Temple of Poseidon in Paestum to Crown Prince Ludwig of Bavaria (later King Ludwig). This was perhaps the same occasion that the model of the theatre quarter, now in Sir John Soane's Museum, was made. See Kockel, 'sog. Poseidontempel, Paestum' (above, n. 19), 323–5, no. 54.
 33. Sir John Soane's Museum, inv. no. MR 1. See V. Kockel, 'Rom über die Alpen tragen. Korkmodelle antiker Architektur im 18. und 19. Jahrhundert', in Helmlberger and Kockel (eds), *Rom über die Alpen Tragen* (above, n. 1), 22, fig. 14. Finally, it appears that the Austrian General Koller, the commanding officer of the allied auxiliary troops in the area of Naples in the 1820s, also owned a Pompeii model: see G. Heres, 'Die Erwerbung der Sammlung Koller durch das Berliner Antikensabinet', *Listy Filologické* 100 (1977), 106. The stationing of these troops, which was necessary for the suppression of internal enemies, had one further consequence; the Engineer Captain Ludwig von Goro Agyagfalva published the first monograph on Pompeii in the German language, *Wanderungen durch Pompeji* (Vienna, 1825).
 34. Alfred Guesdon (1808–76) specialized in birds' eye views of cities and may, therefore, have made the design independently. See U. Thieme and F. Becker, *Allgemeines Lexikon der Bildenden Künstler* XV (Leipzig, 1922), 245. The illustration originates from H. Etiennez, *L'Italie à vol d'oiseau* (Paris, 1849–). See L. Fino, *Ercolano e Pompei. Vedute neoclassiche e romantiche* (Naples, 1988), 29; A. Ciarallo and E. De Carolis (eds), *Lungo le mura di Pompei* (Rome, 1998), cover.
 35. In 1860, the east and west sections of the model of the Forum were described as unfinished. At first a model with a ratio of 1:200 was envisaged, but the idea was discarded in 1862. For the Padiglione family and this model in particular, including numerous documents, see Sampaolo, 'Realizzazione' (above, n. 30), 79–95.
 36. J. Overbeck, *Pompeji in seinen Gebäuden, Alterthümern und Kunstwerken* I (Leipzig, 1866²), 47 (my translation). A lithograph showing a detail of the Forum model taken from a photograph is reproduced on a fold-out plate. The model-maker is not named. In the fourth edition, with A. Mau (Leipzig, 1884, p. 40), there is a mistake (by Mau?) in the corresponding footnote, whereby the model is attributed to Vincenzo Bramante instead of Felice Padiglione. The older model, superior in quality, was apparently unknown to both authors.
 37. I am grateful to Peter Thornton, Margaret Richardson and Helen Dorey for their help with archival material and for allowing me to study and photograph the models.
 38. Soane owned four grave models. Three of these (inv. nos. M 1078, 1085, 1088) first appear in drawings dating from 1825. A fourth ('Nola-Grave', inv. no. M 1276) was acquired from the Lord Berwick's Bequest at an auction sale in 1827. All that remains of it today is the covering stone. See P. Thornton and H. Dorey, *A Miscellany of Objects from Sir John Soane's Museum* (London, 1992), 66 no. 64.
 39. These types of models of ancient tombs are mostly unpublished. The present writer is preparing an in-depth study of them. Figure 7 shows the first plate of the somewhat obscure booklet by R. Gargiulo, *Cenni sulla maniera di rinvenire i vasi fittili italo-greci* (Naples, 1831). Raffaele Gargiulo, an art dealer, restored vases in the Museo Borbonico. He also manufactured the small copies of vases for the models, and sold them. For Gargiulo, see R. Donceel and A. Lezzi-Hafter, *Auf Classischem Boden Gesammelt* (*Antike Welt* 10, special issue, 1980).
 40. The prototypes of all these models were in the Real Museo Borbonico in Naples and were invariably mentioned in travel guides of the nineteenth century, though often with the wrong names. They were first mentioned in Giustiniani and De Lictieriis, *Guida* (above, n. 21), 202–5. The only surviving fragments are of the Nola and Paestum tombs. In addition to those in Soane's Museum, there are copies of the models also in Bern (Donceel and Lezzi-Hafter, *Classischem Boden* (above, n. 39), 32, 73–4), in Cambridge (H.A. Chapman, *Handbook to the Collections of Antiquities and Other Objects Exhibited in the Fitzwilliam Museum* (Cambridge, 1904²), 66), in Leiden (unpublished), at the British Museum (Jenkins and Sloan, *Vases and Volcanoes* (above, n. 3), 145 no. 27), at Malmaison (see below, n. 42) and Oxford (below, n. 53), today partly destroyed.

41. List of gifts (with no mention of the model) in A.L. Millin, 'Monumens', in *Magasin Encyclopédique* 8 tome 3 (Paris, 1802), 535.
42. S. Grandjean, *Inventaire après décès de l'Impératrice Joséphine à Malmaison* (Paris, 1964), 37, 206 no. 1604.
43. J.H.W. Tischbein, *Collection of Engravings from Ancient Vases ... in the Possession of Sir W. Hamilton I* (Naples, 1791), front plate. For the identification of the graves, see Hamilton's preface, p. 24; also Jenkins and Sloan, *Vases and Volcanoes* (above, n. 3), 144, no. 26.
44. A.L. Millin, *Peintures des vases antiques vulgairement appelés étrusques I* (Paris, 1808), p. I (drawing after Tischbein/ Kneip) and p. VI n. 39 (quotation).
45. 'Voyez dans la vignette de cette introduction, la figure d'un tombeau ordinaire trouvé à Nola. Il y a dans la Galerie de Malmaison un modèle antique de ces tombeaux.'
46. Caróla Perrotti, *Porcellana* (above, n. 20), 207–8.
47. Sir John Soane's Museum, inv. no. M 1078 (length 0.72 m; breadth 0.35 m; height 0.21 m). The prototype of four out of the six larger vases in Soane's model can be identified in Tischbein's *Collection* (above, n. 43), pl. 53, here Fig. 11.
48. First published in F. Nicolas, *Illustrazione di due vasi fittili ed altri monumenti recentemente trovati in Paestum* (Naples, 1809); most recently in A. Pontrandolfo, 'La conoscenza di Paestum nella storia dell'archeologia', in Raspi Serra (ed.), *La fortuna di Paestum* (above, n. 19), 119–38. See also A. Pontrandolfo and A. Rouveret, *Le tombe dipinte di Paestum* (Modena, 1992), 13–14 fig. 234.
49. Inv. no. M 1088 (length 0.48 m; breadth 0.35 m; height 0.36 m). The wall-painting was first reproduced in R. Paolini, *Memorie sui monumenti di antichità ch'essistono in Miseno ... ed in Paestum* (Naples, 1812), pl. 6. The book was published posthumously by Nicolas, who was probably the author of the long chapter on Paestum. It has been reproduced most recently in Pontrandolfo and Rouveret, *Tombe dipinte* (above, n. 48), 129 fig. 17. See also A. Pontrandolfo, 'Paestum', in *I greci in occidente. La Magna Grecia nelle collezioni del Museo Archeologico di Napoli* (Venice, 1996), 15–16, 22–8. For the identification of the vases from Nicolas's excavations, see A.D. Trendall, *The Red-figured Vases of Paestum* (London, 1987), 4. They are illustrated here as Figs 14 and 16: Lekythos signed by Asteas with Heracles in the gardens of the Hesperides. See Nicolas, *Illustrazione* (above, n. 48), pls 2–3; Trendall, *Red-figured Vases*, 86, 99–103, no. 135 pl. 57; Pontrandolfo, 'Paestum', 22 nos. 1–2, 34 colour pl. The weapons lying in the model are also reproductions of grave finds. See Nicolas, *Illustrazione* (above, n. 48), 398–408; Pontrandolfo, 'Paestum', 25–6, nos 1,11–1,20. Our Fig. 15 shows two of the Soane tomb models (Paestum and Canosa). It was drawn by one of his pupils, H. Ansted, in 1825 and is one of the first documents that demonstrates the existence of such models.
50. The vases were encrusted with lime sinter and were cleaned in Naples. For this reason it is impossible to reconstruct a grave complex with only the first descriptions, written in Paestum, at hand.
51. Inv. no. M 1085 (length 0.66 m; breadth 0.34 m; height 0.32 m). The weapons found at Canosa are missing in the model. It was first published by A.L. Millin, *Description des tombeaux de Canosa* (Paris, 1816), and most recently reproduced in M. Mazzei, 'L'ipogeo Monterisi Rossignoli di Canosa', *Istituto Universitario Orientale. Annali Dipartimento di Studi del Mondo Classico e del Mediterraneo Antico. Sezione di Archeologia e Storia Antica* 12 (1990), 125–30 and 161–5; M. Mazzei, 'L'ipogeo Monterisi Rossignoli di Canosa', in R. Cassano (ed.), *Principi — imperatori — vescovi. Duemila anni di storia a Canosa* (Bari, 1992), II, 163–75; R. Cassano, 'Ruvo, Canosa, Egnazia e gli scavi dell'Ottocento', in *I greci* (above, n. 49), 108, 134, 148–50.
52. Queen Caroline Murat took the vases with her in 1815, when she went into exile. In 1826, she sold them to Ludwig I of Bavaria (at the time Crown Prince). Mazzei has written in great detail about this subject: see, Mazzei, 'L'ipogeo' (above, n. 51), 125–30, 161–5. The vases presently are in Munich (Staatliche Antikensammlung 3296 VAS (*Volutenkrater of the Dareios-Painter*); 3297 VAS (*Volutenkrater of the Underworld-Painter*); 3300 VAS (*Loutrophoros*)) and Naples (Museo Nazionale, inv. no. 82383 (Amphora)). All the vases and their drawings were reproduced by Millin, *Description* (above, n. 51). See here Figs 19–20.
53. The model-maker certainly had not seen the tomb, and repeated the same mistakes as in Millin's publication. The most serious is that the reliefs, which in reality are on two walls, are only shown on one side, above the *cline*, on the model, as in Millin's sketch (Figs 17–18).
54. In one of the vase rooms in the Ashmolean Museum there are two small copies of the Nola and Paestum tombs: inv. 1888, 1140 (length 0.265 m; breadth 0.158 m; height 0.09 m); inv. 1888, 1139 (length 0.27 m; breadth 0.16 m; height 0.157 m). The provenance of these models is unknown. I am grateful to Michael Vickers and Arthur MacGregor for the opportunity to study them.
55. M.R. Boriello, A. Greco-Pontrandolfo, M. Lista and G. Prisco, 'La necropolis di Via Santa Teresa', in *Napoli antica* (Naples, 1985–6), 279–82. The model is also mentioned in Giustiniani and De Licteriis, *Guida* (above, n. 21), 56 n. 1.
56. Cf. the comment in *Pompei. Pitture e mosaici* (above, n. 7), 24, where it was stated that the reproduction of paintings alone, not entire walls, was the primary concern during the 1830s and 1840s.
57. For example, the Lamberg collection in Vienna; see A. Laborde, *Collection des vases grecs de M. le Comte de Lamberg I* (Paris, 1813), frontispiece. Similar displays are often seen today in archaeological museums.