

As emphasized by Grewe, we have only few descriptions of tunnels and their construction surviving from ancient times, and so the main source for the study of their making is the tunnel itself. For this type of study, it is paramount to enter a tunnel, to go through it, and simultaneously document different features of test tunnels, test shafts, mistaken tunnel directions, etc. in the walls and roofs of the tunnel. Grewe himself has done the detailed documentation for many of the tunnels – often previous researchers have not paid attention to small details. This is probably behind the selection of tunnels featured in the book. In some cases it is clear that Grewe has very little to say on the actual remains, but they have nevertheless been included, for example the few meagre paragraphs treating the tunnels of Rome's aqueduct system. He does, however, include reference literature where the interested reader can find more information. Sometimes it is slightly difficult to see the relationship between Grewe's and previous researchers' results.

The geographical range of sites is impressive, reaching from Central Europe to the Near East. Most attention is given to some of the more famous ancient tunnels: Eupalinos' tunnel on the island of Samos and the drainage of the Fucine lake by the emperor Claudius. Less known, but very interesting tunnels include the drainage of a lake at Fontvieille in France or the Saldae aqueduct in modern Algeria, where additional information is provided by a long inscription.

Many questions still remain open, in some cases even the actual function of the tunnels. Such is the case, for example, with the Etruscan *cuniculi* in the areas around Rome: drainage, irrigation, or both? Dating the tunnels is also an interesting question which remains mostly outside Grewe's treatment, although in some cases he is able to provide a relative dating of the working process in individual tunnels, such as the *emissarium* of Lake Nemi near Rome.

On the whole, the book provides an interesting insight into one aspect of ancient tunnel making. The catalogue of tunnels is comprehensive enough for other researchers interested in various regions to find reference points for their own work.

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*Deliciae Fictiles II. Proceedings of the Second International Conference on Archaic Architectural Terracottas from Italy held at the Netherlands Institute in Rome, 12-13 June 1996.* Edited by PATRICIA S. LULOF and ERIC M. MOORMANN. Scrinium 12. Thesis Publishers Amsterdam, Amsterdam 1997. ISBN 90-5170-441-0. 274 pp., 199 photographs. NLG 170.

PETER DANNER: *Westgriechische Akrotere*. Salzburger Studien zur Archäologie. Verlag Philipp von Zabern, Mainz am Rhein 1997. ISBN 3-8053-2002-7. 163 S., 40 Taf. DEM 148.

PATRIZIO PENSABENE: *Terracotte del Museo Nazionale Romano I. Gocciolatoi e protomi da sime*. Studia Archaeologica 101. "L'Erma" di Bretschneider, Roma 1998. 469 pp., 47 ill., 145 tavole. ITL 400.000.

CARLO RESCIGNO: *Tetti Campani, età arcaica: Cuma, Pitecusa e gli altri contesti*. Pubblicazioni scientifiche del Centro di Studi della Magna Grecia dell'Università degli

Studi di Napoli "Federico II", 3. ser., vol. 4. Giorgio Bretschneider Editore, Roma 1998. ISBN 88-7689-137-4. 414 pp., 37 plates, 205 figures. ITL 300.000.

Roofs are, for most archaeologists, things that can only be dreamed of: organic materials do not usually survive. For the classical archaeologist, the situation is much easier. Tiled roofs and wooden roofs decorated with terracotta plaques are common for most areas and time periods. When surveying an area pieces of roof tiles are often the most visible part of a site. Given the large quantity of material it is surprising how little attention is given to roofs at all. These four mighty volumes all deal with roofs and their decorations but each has its own unique take on the matter.

The first *Deliciae Fictiles* conference was held in Rome in 1990 and its purpose was to promote the study of Archaic architectural terracottas. Special emphasis was given to technical, functional and regional features as well as to the study of whole roof assemblies instead of the traditional stylistic and iconographic studies. The current volume consists of an introduction by Riemer R. Knoop and 23 papers given at the second conference with two additional papers by Bruno D'Agostino and Lucia Scatozza.

The articles have been arranged alphabetically (and the editors make no excuses for it) by the author's name instead of thematically, which is slightly confusing when reading the book. Some articles, for example the ones by D'Agostino and Scatozza which deal with the archaic temples of Pompei, would benefit from being placed one after the other so that easy comparison of the materials would be possible. The abstracts at the end of the book have been arranged thematically. Some comments made during the conference have also been included. The many photographs and drawings are of good quality and add to the texts in a meaningful way.

The main topics are publication or re-examination of terracottas from various sites and iconography based on finds from one or more sites. The papers by Francesco Maria Cifarelli on Segni, Concetta Ciurcina on Syracuse, Elena Epifanio Vanni on Himera, Maria C. Lentini on Naxos, and Anna Maria Moretti Sgubini (with Maristella Pandolfini) on Vulci represent the traditional publication of finds from single sites. The vast collections of the world's museums still hide many old and new pieces and these "scavi di magazzino" are represented by the articles of Mariëlle De Reuver on the materials at the Ashmolean Museum in Oxford, Giovanna Greco on Poseidonia and Cumae (strangely, with different titles in the table of contents and at the beginning of the article), and Patricia S. Lulof on a new piece from the collections of Princeton University. Carlo Rescigno's paper is based on his studies of the Campanian roofs in general.

Iconographic themes are varied. Giorgio Aversa examines the historical and iconographical development of depicting rams in Etruscan architecture, an important and probably domestic decorative motif in Italy beginning at least from the 6th century BC. Simonetta Stopponi's paper is on a similar theme, based on a ram protome from the sanctuary of Cannicella in Orvieto. The Etruscan theme is continued by Volker Kästner in his paper on the ends of the decorated simas. Margit von Mehren has studied composite motifs on Etruscan frieze plaques, especially those of cavalry, chariot races, and Heracles. She traces the beginnings of the cavalry theme to its Assyrian origins and cites Greek influences as well emphasizing the pan-Mediterranean character of the

decoration scheme.

Mythological themes of the archaic temple of S. Omobono in Rome are studied by Madeleine Mertens-Horn and Claudio Parisi Presicce. The acroterial group of Heracles and Athena has been interpreted as the scene of Heracles' apotheosis to Olympus. Mertens-Horn offers a new interpretation as Milo of Croton's (dressed as Heracles) triumph over Sybaris, thus connecting the statues to the friendship between Etruria and Sybaris, the Greek origins of the Tarquinii, and as symbols of the Roman hegemony at the end of the 6th century BC. The second topic she addresses is the reconstruction of two acroterial fragments generally interpreted as Eos holding Kephalos in her arms. Mertens-Horn's interpretation is Ino-Leukothea, the goddess of the sea and seamen, as well as the Greek equivalent of Mater Matuta, and in her arms, her son Palaimon-Melikertes, Portunus in the Roman sphere. Parisi Presicce interprets a vertical plait as a vine support and other fragments as a Dionysiac scene. The third mythological article is by Maria José Strazzulla on the late archaic temple of Segni and its terracottas.

Ninina Cuomo di Caprio's article examines the extent of technical studies in a sample of recent publications on architectural terracottas. Silvia Ciaghi and Ingrid E.M. Edlund-Berry write about the technical aspects of the study of terracottas. Ciaghi has used digital image processing, i. e. correlation of digital images, in comparing similar motifs on terracotta reliefs and tries to determine the differences in the production of the plaques. Edlund-Berry presents methods of documenting and analyzing the profiles of terracotta (and other) moldings, also based on digital and statistical techniques. Charlotte Wikander emphasizes the importance of proper comparative studies of large groups of material in her article about the raking simas in Central Italy. The techniques of terracotta production in Morgantina have also been studied by John F. Kenfield. Two different techniques have been found, a Greek and an Italic, and through these, to a certain extent, the hellenization of the area can be examined. Kenfield also proposes a cult of the nymph Kypara. Nancy A. Winter's short contribution is on the progress and themes of her work on a synthesis of Etruscan architectural terracottas.

The last article to mention is Knoop's paper on terracotta material from Satricum which clearly illustrates the problems of studying and publishing excavated finds. The quantity of the material is so huge that not all can be properly published. The paper also illustrates the number of methods applied to the study of terracottas ranging from petrographical to typological studies.

The three other volumes at hand can be described mostly as catalogues, but they are also studies of different types of entities. The most traditional catalogue is Patrizio Pensabene's work on the lion, canine, and other motif groups of waterspouts and protomes from lateral simas. The material comes from the formidable collections of the *Museo Nazionale Romano*. The catalogue is preceded by short historical and typological articles on each motif group. The typology is mostly based on stylistic analysis of the manes and fur of the animals. Most of the pieces come from unknown places and the only larger collections from known proveniences come from the Temple of Diana in Norba and from the villas of Livia and Q. Voconius Pollio in the vicinity of Rome. Each piece is presented in one or more photographs. For the most part, it seems that these pieces have not been published before as there are hardly any bibliographical references, but at least for the known sites, a reference to a general publication of other materials

could have been useful in connection with the individual pieces. In addition to the waterspouts and protomes, the volume includes 81 antefixes as an addition to the catalogue published in 1983 by P. Pensabene and R. Sanzi Di Mino (*Il Museo Nazionale Romano, Le Terrecotte III, 1: Le Antefisse.*)

Peter Danner has already studied Greek acroters (*Griechische Akrotere der archaischen und klassischen Zeit* [RdA Suppl. 5, 1989]) and now his attention is focused on the western Greek acroters. The book consists of a short introduction including the definition and problems of identifying acroters, which is followed by a catalogue of pieces arranged by decorative motifs (discs, volutes, animals, Nikes, groups of figures, female figures, and horsemen) and divided into certain and uncertain ones. He also describes the roof decorations of tombs, sculptures which are only partly at the roof's edge, pieces that have been falsely identified as acroters, as well as roof elements depicted in other arts. The entries are concise and often accompanied by a photograph or a drawing. The catalogue is then followed by a typological discussion for each group presenting most general types, their geographical distribution and dating. The types are also placed in wider contexts as their influences are traced back to Italic and Greek architectural models – it is interesting to note the probably very strong Italic influence in the early archaic styles and motifs. The book is delightful to read with its very clear style and very logical progress from one issue to another, and it offers good reference material for further studies.

In his introduction Carlo Rescigno confesses to have started with an idea of a cultural and social study on the Campanian revetment plaques, but noticed that a large number of technical and typological studies were necessary before even beginning other types of inquiry. H. Koch's studies on the Campanian roof at the beginning of the 20th century have been supplemented with a large amount of new excavation material. Rescigno aims at creating a new *corpus* with a special emphasis on the Cuman and Pithecusan materials. The main part of the volume consists of two catalogues. The first is the typological one preceded by an explanation of the rather complicated typological system based on function, compositional and decorative elements. The other catalogue is geographical, listing finds from various cities and pulling together the separate pieces in order to see the whole decoration schemes even in separate buildings (as with the Pompeian temples). In the conclusions, Rescigno discusses the decorative systems and the workshops which produced them. His appendix on the mounting marks found on some pieces is also interesting.

For anyone interested in roofs and their decorative systems, these books offer important material collections as well as studies and ideas. Their bibliographies certainly cover most of the literature in this field. The emphasis is on earlier periods, but at least Pensabene's catalogue, material of which is mostly from the 1st century BC and 1st century AD, shows that later periods offer material for study as well.

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