1980s, much has been gained by the use of the interdisciplinary historical method, even with anthropological and psychoanalytic approaches. The amphitheatre itself as an architectural type received its first comprehensive treatment only in 1988 by J.-C. Golvin.

The author tackles its origins, monumentalization, the canonization of the building type and its dissemination in the early Empire. She analyses sensitively its development against the social and political background, and cultural circumstances in their historical setting. This is not an easy task, as the origins of the gladiatorial games were debated already in antiquity. Livy's suggestions of gladiatorial games being popular in South Italy, at least in the late fourth century BC, accords with the archaeological evidence; the indications of their connections to funerary rituals have traditionally been accepted. The first known gladiatorial show in Rome was given in the Forum Boarium in 264, and since 214 in the Forum Romanum, which seems to have been the physical setting of gladiatorial games to the end of the republican period. The beginning of regular gladiatorial combat in the middle of the third century BC coincides with the beginning of Rome's active military expansion, and was more frequent than has been supposed. Also the venationes extended much further back, as unusual animals began to be displayed in military triumphal contexts in the third century BC. Damnatio ad bestias, later the basic ingredient of amphitheatre entertainment, was known since 167 BC. The connection between the army and arena activities is indeed a strong one.

The discussion on *maeniana*, wooden balconies for extra viewing space, is fascinating reading. In the northern sector of the Forum Romanum they may date back to 338 BC, and were originally cantilevered from the upper parts of the facades of private houses, later reached out over the columns of the upper floors of the basilicas that lined the Forum. The author minutely traces the emergence of elements of later established amphitheatres, such as hypogea, stretched awnings, the oblong, or rather oval, space, and (temporary wooden) seating, that is, spectacula. The wooden structures in the Forum Romanum seem to have constituted the canonical type for other amphitheatres during the second century BC. Roman builders mastered wooden buildings of high technical virtuosity, long before Pompey's permanent theatre of stone was built in 55 BC. (The same carpenters were also the unsung heroes so deeply indispensable for creating the Imperial architecture in the opus caementicium technique).

Every chapter of this excellent and most interesting book begins with a presentation of the subject, followed by careful argumentation, supported with useful drawings, photos and reconstructions, and ends with concluding remarks. It is to be lamented that some twenty early amphitheatres are for the most part unexcavated and have not received thorough published treatment. The author presents both a list of the geographical distribution of these early stone amphitheatres, and a more detailed catalogue of republican amphitheatres in and outside Italy.

Leena Pietilä-Castrén

*Pompeii. Art, Industry and Infrastructure*. Edited by Kevin Cole – Miko Flohr – Eric Poehler. Oxbow Books, Oxford 2011. ISBN 978-1-84217-984-0. XVII, 181 pp. GBP 35.

The past two decades in Pompeii have witnessed unprecedented research activity both in the field and in libraries and archives. The results are beginning to appear in volumes of field reports, research monographs and – as in this case – collections of papers on various themes. This

slim volume, edited by Eric Poehler, Miko Flohr and Kevin Cole, features three themes: art, industry and infrastructure. The authors represent a new generation of scholars and they manage to take different perspectives on old and new themes. The topics of the chapters are almost always somewhat related to one another and the editors make a claim towards taking a more holistic point of view on their respective subject matters.

The book is divided into ten chapters with the first four discussing topics concerning art. The next section is dedicated to industry with three chapters, and, lastly, three papers discuss infrastructure. The original papers have almost all been presented in various conferences and seminars and they also maintain the concise character of a 20-minute talk. The importance of photographs, drawings and maps has not been underestimated and they are large and legible. The texts could have been edited a little further so that references to various places and buildings in Pompeii and sources would have been similar in all the chapters. The papers are clear and easily understandable, but repeated references to "beads of glass pastry" in one chapter did raise an eyebrow.

In the art section, three papers discuss Pompeian evidence, but the fourth topic moves outside the walls of the city handling the architecture of rural luxury villas. The section is started by Jessica Powers's chapter on wall ornaments usually made of stone or glass and inserted into wall paintings. Not very many are known, but by carefully analysing their types and contexts Powers shows a desire to display antiques and imported goods in prominent places. The probable planned effect of the usually three-dimensional elements in an otherwise two-dimensional decoration was surprise. Francesca C. Tronchin's chapter is on the sculptures in the Casa di Octavius Quartio, which she also analyses in their contexts. The garden with its water features, painting decoration and sculptures – not forgetting the inevitable plantings – formed an eclectic combination, which was intended to display the house owner's intellectual interests as well as his/her belonging to the Roman upper classes. The third Pompeii topic concerns the famous cupids in the wall paintings of the Casa dei Vettii and is written by Francesco de Angelis. He argues that, when the corpus of known cupid friezes is taken into consideration, the images of labour conducted by the cupids are not references to the libertine status of the house owners. Contextualizing the finds is also important in this paper.

The chapter on villa architecture by Mantha Zarmakoupi examines the use of a porticus and a cryptoporticus. She considers the literary sources for the use of the terms and notes that cryptoporticus appears for the first time in Pliny the Younger's letters. A porticus is most commonly used when it is clearly a colonnade. A cryptoporticus is today usually used to mean an underground and/or vaulted passage, but from Pliny's description it emerges rather as an above-ground passageway, which is covered and has windows/doorways. Both elements were used in diverse ways in the villa plans.

The second section is on industry. The first chapter is by Michael Anderson and discusses the visibility of renovation and rebuilding evidence found in many Pompeian houses. These works are connected to the seismic activity preceding the eruption very close to A.D. 79. The renovations must have disrupted the daily life of the houses' inhabitants and Anderson uses viewshed analysis to examine how the piles of lime, pozzolana, building stone, salvaged items, etc., have been placed in comparison to the vista from the front door. In most cases these materials were placed out of sight from the front door showing that the house owners were keen to maintain an image of an unaffected house and that disruption to daily life in the house was kept to a minimum. In the second chapter, Miko Flohr explores the atrium house and its relationship

with productive and economic elements, particularly the *fullonicae*. Flohr argues that although the old atrium houses were converted to industrial use, in most cases some parts of the house retained their residential functions. The opportunistic combination of production and habitation seems to have been a more common occurrence in Pompeii than was previously thought. The last industry chapter is by Myles McCallum and discusses pottery production in Pompeii. Only two facilities can be recognized with certainty within the town walls and both are located near the gates and areas where clay was available and could be easily imported. McCallum also discusses the process of pottery production as well as its social and economic relationships.

The infrastructure section is led by Alan Kaiser's chapter on streets and particularly on the nomenclature of roads in literary sources and how they might be applied in Pompeii. Via/ platea is defined as a wide street with public and commercial amenities as well as large residential houses. As such they can also be recognized in Pompeii as its main streets. In the second chapter, Duncan Keenan-Jones, John Hellstrom and Russell Drysdale take a new look at the old question of lead contamination of water in the Roman world. They determined the lead content of the lime deposited by hard water in the walls of cisterns and water pipes by sampling a number of locations along the route of the aqueduct towards Pompeii, in the environs of the city and inside it. These figures were compared to the amount of lead found in human bones in Herculaneum as well as cross-culturally to previous studies on lead accumulation and its effects on humans. The results are still preliminary, but point towards a high content of lead in the water system. Lime deposits can diminish the amount of lead in the water flowing in the pipes, but the continuous renovations of the whole water system resulted in lead being present in the water in fairly large amounts. In the last chapter of the book, Eric Poehler looks at the last phase forum and how its infrastructure worked. The area was monumentalized and many accesses and drainages were affected by this building project – some of the old streets were intentionally turned into large gutters. The changes in the central area had repercussions for the whole of the city and these had to be dealt with.

The short chapters of the volume give a wonderful glimpse into what is being done in Pompeii at the moment. The variety of topics is astounding and the new insights into the various aspects of the daily life in Pompeii and its surroundings are fascinating. The reader is left wanting more.

Eeva-Maria Viitanen

Piano di Sorrento. Una storia di terra e di mare. Atti del I, II e III ciclo di conferenze (2010–2011) sulla storia del territorio di Piano di Sorrento e della Penisola Sorrentina. A cura di Carlo Pepe e Felice Senatore. Città di Piano di Sorrento, Scienze e Lettere, Roma 2012. ISBN 978-88-66870-13-5. 195 pp. EUR 40.

Il presente volume raccoglie i contributi presentati nei cicli di conferenze su vari aspetti sulla storia – storia nel senso ampio del termine – della Penisola Sorrentina negli anni 2010–2011. Il volume rappresenta, attraverso rigorosa divulgazione scientifica, una felice combinazione di contributi di varie discipline, umanistiche e di scienze naturali, e certamente contribuisce a diffondere l'interesse verso la conoscenza della storia patria dei cittadini del territorio in questione, ma anche uno studioso interessato a vari aspetti della storia campana può trarre profitto