

K.'s book is a crucial contribution to our understanding of that loose amalgam of practice and imagery that we continue, for the sake of convenience, to label 'imperial cult'. He examines a vitally important element of that amalgam with a degree of subtlety and sophistication that I, at least, have not hitherto encountered. Anyone interested in the problems of divine and human representation in the ancient world or in imperial cult more broadly would be well advised to read this book with care.

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MONUMENTAL FOUNTAINS

RICHARD (J.) *Water for the City, Fountains for the People. Monumental Fountains in the Roman East. An Archaeological Study of Water Management.* (Studies in Eastern Mediterranean Archaeology 9.) Pp. xvi + 307, ills, maps. Turnhout: Brepols, 2012. Paper. ISBN: 978-2-503-53449-7.

doi:10.1017/S0009840X14001929

In this eight-chapter monograph, a revised and translated version of R.'s 2008 doctoral dissertation, he points out that the large-scale fountain has been given relatively short shrift as a research focus (p. 11). In attempting to fill that gap, he argues that these points of public water access should be considered a vital part of the urban hydraulic network, focusing on the extensive remains in the eastern part of the Empire. Assessing the archaeological remains and other scholars' conclusions critically, R. also approaches the material from diachronic and multidisciplinary viewpoints to consider it from a utilitarian point of view (pp. 63–80).

After presenting a 'functional definition' for the Roman monumental fountain (in R.'s preferred terminology, pp. 28–31) he reviews the ancient evidence. In the second chapter, with caveats about previous scholars' typological categorisation in mind, R. gives a chronological summary of public water access points from the Archaic Greek through Roman Imperial periods. While not wanting to let typological categories overpower the archaeological evidence, this summary of types is necessary to understand fully the context of Roman monumental fountains.

R. enters the meat of his study in the third and fourth chapters by analysing the evidence for the functional and chronological relationships between monumental fountains and the larger context of which each was a part, emphasising the supply aqueduct. He then breaks down how the water flowed through the sections of the fountains themselves. R. concludes that most often monumental fountains were added to already extant hydraulic systems rather than being conceived as part of an initial construction phase. This revelation has ramifications for our understanding of the flexibility of these networks. He also suggests that the sequence of fountain and aqueduct building might help to clarify what the archaeological remains cannot by giving a relative chronology to the pieces of the system. R. proceeds to apply a 'systems engineering' (p. 63) methodology, proposing three '[m]odels of spatial affiliation' (pp. 69–71) that attempt to describe the relationship between members of hierarchical distribution systems. R. applies these models diachronically to the preserved evidence in the eastern Empire, as well as considering comparisons with western examples. He concludes that such reasoning is helpful in understanding the

parts of an urban distribution network as well as clarifying the practical aspects of these 'subsystems' (p. 63). R. admits that the great variety of solutions to public water distribution preserved in the archaeological record makes using these models in practice 'arduous' (p. 80), and while considering these theories can be enlightening, there are a number of additional issues regarding Roman monumental fountains that remain to be addressed. Chapter 4 focuses on the functionality of the fountains and R. considers how the size of the fountain and its supply mechanism, storage or 'buffer' (p. 103) facilities, access points, display features and drainage systems affected the overall quantity and quality of the water. R. questions the concept of water storage as a whole, given the continuously running nature of the water supply system (p. 106) and differentiating between *castella divisoria*, reservoirs and open-air basins, assigning the latter the roles of storage/buffer. He then underscores the necessity of fully examining parapets to understand the functional utility of the fountain. Water removal and recycling, display effects and later modifications of the fountains complete the chapter.

Next, R. further applies the systems approach to how the actual working of monumental fountains would have affected the entire distribution apparatus as well as the quality of the available water. He again proposes theoretical models to describe variations in rate of water flow and applies these models to produce flow estimates for 63 of the 78 fountains under consideration. While arguing that 'reasoning at the level of the *subsystem* can prove very helpful in understanding and illustrating the *system*' (p. 182), in Chapter 5 R. rightly admits that scholars must not fall into the trap of circular reasoning possible by imposing preconceived notions of functionality on any particular set of archaeological remains.

The locations of individual fountains within the Roman city and an attempt at marking regional trends of positioning are then discussed. In Chapter 6 R. breaks new ground in addressing the probability that water from monumental fountains was used to supply nearby commercial establishments as well as private houses and the passerby. This facet emphasises the 'positive contribution' (p. 214) of water access points to the functionality of the public urban setting.

Chapter 7 is also a welcome addition to the literature on water supply, as it investigates changes to monumental fountains from the third to the seventh centuries A.D. R. documents both maintenance of earlier structures and new building in the late-antique period, signalling a change in purpose particularly in the physical area supplied by water distribution systems, as well as a continued emphasis on monumental display. He challenges the traditional notion of "'negative" evolution' (p. 236) in these networks, and the attendant theory that this points to a downturn in the later history of the eastern Roman city, arguing instead that the water supply system was rethought in terms of its functionality and spatial distribution. In his concluding chapter, R. reinserts the visual aspects of Roman monumental fountains into the discussion, emphasising that his focus on the utilitarian aspects of these mechanisms does not negate their function as bearers of meaning. Questions as to intent and innovation on the part of the buildings' benefactors should be explored at both the technical and representative levels to appreciate fully the complex modalities expressed in these functional monuments. The volume ends with a catalogue of 78 fountains, including descriptions, dimensions and bibliography, amassing great amounts of information in a usable manner.

There are a few questionable points. Some inconsistency and confusion of terminology results from R.'s definitions of 'function' vs 'task' (pp. 93–4), 'reservoir' (pp. 103–10) and 'open-air basin' (pp. 111–16). In the latter two categories his conclusions that the continuous flow of urban water distribution systems equalled the negation of a practical storage function because the water could never be shut off ignores the possibility of diverting the stream away from a particular element in the network for purposes of cleaning, or

should a shortage of supply occur. While R. acknowledges this possibility in the case of the heated portions of water in baths (p. 169), he argues that it would not be the case with fountains.

In terms of publication quality, not all tables and diagrams are numbered. The figures are quite small, rarely extending wider than the equivalent of one column of text. This makes details on many site plans difficult to discern, a particular problem with the extensive discussion of so many archaeological sites. Arrows would have been helpful additions to images that show a number of different cuttings, as the issues surrounding these cuttings are integral to R.'s argumentation, and it is sometimes unclear which feature he is referring to. The index is organised by site alone, with no subjects, making it unwieldy to find a particular topic quickly.

This book is directed towards the scholar rather than the student. It is not for quick reference as R.'s conclusions depend on experiencing his arguments across several chapters. However, the monograph is an extremely important addition to the study of ancient public fountains, and indeed to the study of water supply in general. R.'s control of the bibliography is excellent and while he acknowledges that further research may negate some of his theories, his overall methodology is a fine example of the application of recent advances in the study of ancient water supply. The work as a whole moves the field forward by suggesting a number of ways in which scholars studying fountains might expand their approaches to the subject.

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THE LATE ROMAN FARMHOUSE AT SAN BIAGIO

LAPADULA (E.) *The Chora of Metaponto 4. The Late Roman Farmhouse at San Biagio*. Edited by JOSEPH COLEMAN CARTER. Pp. xvi+263, colour figs, b/w & colour ill., colour maps. Austin: Institute of Classical Archaeology, Packard Humanities Institute, University of Texas Press, 2012. Cased, £52, US\$75. ISBN: 978-0-292-72877-6.

doi:10.1017/S0009840X14001784

The present volume is the fourth in the series *The Chora of Metaponto* edited by Joseph Coleman Carter, dedicated to publishing the results of the survey and excavation work conducted by Carter and his team in the territory of Metaponto since the 1970s. This was a research project of such extraordinary importance—for the methodology adopted, the data it generated and the scientific rigour of its analysis—that it constitutes an essential point of reference for whomever studies historical landscapes from a diachronic perspective.

This book is the result of five years of analysis of the archaeological evidence recovered following the excavation in 1980 at the site of the Imperial and Late Roman period farmhouse of San Biagio, located on the left bank of the Basento River, a few kilometres from the ancient city of Metaponto.

This is a volume of considerable interest and quality for a number of reasons. Methodologically, it is an excellent example of a critical inquiry and analysis of data from an excavation conducted more than 30 years ago, not using truly stratigraphic methods. Historically and archaeologically, the book represents a precious contribution to our