

porto della propria famiglia, in particolare da quello dei parenti di sesso maschile. È interessante notare con l'autrice che l'arrivo dell'influenza romana comportò la graduale scomparsa della relativa autonomia della donna in favore della più marcata presenza della coppia o della famiglia. Con questo sviluppo sembrerebbe coincidere la riemergenza della tradizionale figura femminile come madre e coniuge amorevole.

I materiali sono studiati con meticolosa attenzione e rigore analitico, e lo stesso vale per la documentazione delle fonti, epigrafiche e letterarie, che vengono presentate in maniera esemplare. Purtroppo la bibliografia non è aggiornata rispetto a ciò che è stato pubblicato dopo il 2002.

*Mika Kajava*

*Quantifying the Roman Economy. Methods and Problems.* Edited by ALAN BOWMAN – ANDREW WILSON. Oxford University Press, Oxford 2009. ISBN 978-0-19-956259-6. XVIII, 256 pp. GBP 68, USD 120.

The Roman economy was discussed heatedly in the 1970's followed by a phase of low interest, but in the last decade a renewed interest has emerged – perhaps inspired by our own world more and more revolving around the economy? New discoveries and new approaches have been sought out in a project at Oxford University directed by the two editors of this volume, Alan Bowman and Andrew Wilson. The idea is to try to identify and compare quantifiable bodies of archaeological and documentary evidence and analyze some major areas of ancient economy such as population, urbanization, agriculture, trade, commerce, mining and coinage. It is hoped that variation in time and space could be observed and that common indicators with economies of other periods and cultures could be found and that the Roman economy could be compared to economies of other societies in other times and places.

The book at hand is the first publication by the project and records the papers and discussions of the project's first conference held in 2006. The main topics of the project – urbanization, demography in the rural areas, agriculture, trade, coinage and standard of living – are discussed in six sections of the volume following a lengthy introduction by Bowman and Wilson. For each topic, a point of view is presented by one distinguished researcher in the field and this is followed by a response or two by other, equally distinguished, scholars. In the first two parts, Elio Lo Cascio and Roger Bagnall discuss the degree of urbanization in the Roman world and Willem Jongman, Elizabeth Fentress and David Mattingly try to estimate the number of inhabitants in the countryside. Fentress makes a comparison of demographical calculations from two survey projects; Albegna valley in Tuscany and the island of Jerba off the coast of Tunisia. Egyptian agriculture is dealt by Alan Bowman and Roger Bagnall. Andrew Wilson discusses trade based on shipwrecks, marble, amphorae and other pottery. The responses are written by Michael Fulford and William Harris. Matthew Ponting writes about methods for the study of Roman silver coinage as well as gives some preliminary results of his project. The other two scholars to discuss coinage are Bruce Hitchner and Christopher Howgego. In the last part, Dominic Rathbone, Robert C. Allen and Walter Scheidel discuss earnings, prices and standard of living in the Roman world.

Most of the chapters jump right into the middle of the topic with very little introduc-

tion and this book is certainly not intended for beginners. But for those already familiar with the main topics will find relatively little new data or ideas. Personally, the most interesting part was the last section on the standard of living and particularly the chapter by Allen whose comparison of wages and prices in Diocletian's Price Edict to early modern cities around the world is thought-provoking. It is hopefully also indicative of the kind of cross-cultural comparisons that Bowman and Wilson call for in their introduction and which will be the final results of the project.

The progress of the project can be followed on their website (<http://oxrep.classics.ox.ac.uk/new/index.php>). One of the aims of the project is to collect data and try and encourage other scholars to contribute to these collections with their own work. The beginnings of three databases on Roman mines, wine and olive presses and Karanis tax records can be browsed online. The fourth database on Roman shipwrecks is not yet public. The problems of data collection and representation are apparent – a lot of work hours and preferably professionals to do the job are necessary for the end result to be understandable and reliable. In addition, creating a working database structure is not easy. It is to be hoped that the embryos available now will grow into functioning entities that would persuade other scholars to submit their data in order to create the data collections envisioned by the project directors.

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ALFRED MICHAEL HIRT: *Imperial Mines and Quarries in the Roman World. Organizational Aspects 27 BC–AD 235*. Oxford University Press, Oxford 2010. ISBN 978-0-19-957287-8. XIV, 551 pp. GBP 80, USD 120.

Mining and quarrying metals and stone were important activities in the Roman world and we know amazingly little of them. Plenty of extraction sites are known archaeologically from all over the Roman Empire. Extraction processes, trade and use of the raw materials have also been explored to a certain extent. The ownership and administration of the mines and quarries are, however, not so well known. They are usually discussed regionally regarding particular geographical areas, but a synthetic view of the whole empire has not been attempted. One of the reasons for this lack of synthetic work is probably the staggering amount of material and the huge geographical range, which makes handling the whole very challenging. Hirt has admirably attacked the topic in the doctoral dissertation from which this book has been developed.

The rather thick volume is organized into seven main chapters. After the brief introduction, Chapter 2 gives a short overview of the imperial quarries and mines, and their geological and geographical peculiarities. Then Hirt turns to outlining the extent and ownership of various regional, imperial mining/quarrying districts. The fourth and fifth chapters respectively discuss the evidence for the imperial officials responsible for extractive operations and the involvement of the Roman army in them. Chapter 6 delves deeper into the responsibilities and tasks of all officials involved. Before concluding the book with the discussion of the role of the emperor and possible imperial bureaus governing extractive operations, Hirt takes a look at the role and activities of private partners in imperial mines and quarries. The book ends in a long appendix listing 1283 quarry inscriptions. Hirt has managed to write most of the chapters in such a way