Ogni gruppo di materiali è suddiviso in classi per tipologia di oggetti, con un'ampia introduzione alle problematiche alla classe, a cui segue il vero e proprio catalogo. Una maggiore attenzione, rispetto ad altri reperti, è data agli alabastra, già oggetto – come detto – di studi da parte dell'autore; essi sono organizzati per materiale e tipo. Oltre agli alabastra ed altri tipi di contenitori per unguenti la sezione dedicata al materiale lapideo prevede altri tipi di vasi potori o elementi di kline.

Il capitolo dedicato al vetro prevede un'ampia ed accurata disamina delle tecniche di produzione, con particolare attenzione per i prodotti attestati a Tarquinia; sono presenti sia vetri a nucleo, sia a stampo – esclusivamente coppe – sia a soffiatura libera (essenzialmente balsamari ed una sola olla) o entro stampo, a cui vanno aggiunti inserti decorativi o pedine da gioco. A margine sono pubblicati anche due calici post-antichi.

Il capitolo dedicato agli oggetti in avorio e osso prevede una distinzione funzionale dei reperti, partendo dalle placchette ed elementi di cornice di cofanetti, agli intarsi ed alle appliques. Un'ampia sezione è dedicata ad oggetti funzionali quali le cerniere forate, di epoca tardo ellenistica e romana, relative ad elementi di arredo. Oltre a questi il catalogo comprende anche manici di specchio, borchie, conocchie, aghi crinali, stili, strumenti musicali e dadi.

L'ultima parte è dedicata alle uova di struzzo, costituite da cinque esemplari, riutilizzati come coppe, verniciati all'interno e decorati esternamente.

I materiali presentati abbracciano un periodo molto ampio, che va dal villanoviano, con pochissime attestazioni, all'età giulio-claudia, con una progressiva riduzione nella presenza degli oggetti di lusso a partire dal primo quarto del III secolo a.C., momento in cui si assiste alla sottomissione di Tarquinia da parte di Roma (281 a.C.).

Fatta eccezione per i pezzi di maggior pregio gli altri reperti hanno una scheda di catalogo molto semplice, in cui si forniscono dati metrici, sullo stato di conservazione, sul materiale, corredata da una semplice descrizione morfologica, senza alcun dato cronologico o di confronto.

Il volume, sicuramente ben curato e con un'attenta edizione dei reperti, risente fortemente della genesi della collezione; l'impossibilità, in molti casi, di associare gli oggetti tra di loro non consente di avere dati sul contesto di rinvenimento, sull'associazione di particolari oggetti all'interno del corredo. Se da un lato è sempre di fondamentale importanza giungere all'edizione sistematica delle nostre collezioni museali e quindi è da apprezzare quanto fatto per Tarquinia, dall'altro la decontestualizzazione di tali oggetti ne rende poco utile un uso nello studio storico-archeologico della società tarquiniese, fatta eccezione per una visione generale, come, del resto, viene ben ricostruita nelle conclusioni del volume.

Marco Giglio

ALESSANDRO LAUNARO: *Peasants and Slaves: The Rural Population of Roman Italy (200 BC to AD 100)*. Cambridge University Press, Cambridge – New York 2011. ISBN 978-1-107-00479-5. XIV, 349 pp. GBP 65, USD 110.

Archaeology has always been considered an auxiliary discipline for ancient history that can shed light on the material conditions during the past and potentially reveal new towns, villages, building structures, inscriptions and other interesting objects offering themselves to be interpreted. However, archaeologists have relatively rarely attempted to participate in historical discussions. In this extraordinary book Launaro argues that archaeological evidence can be used to solve historical problems. He shows that historical and archaeological materials provide independent sources for exploring the same questions and ultimately testing the same hypotheses.

As a landscape archaeologist myself, I appreciate Launaro's grasp of the current historical and archaeological academic discussions and his sharp eye for pragmatic, but theoretically and methodologically soundly founded solutions for epistemological problems arising from the character of archaeological evidence. He confidently builds on both Roman landscape¹ and historical² studies and can ultimately choose between three different competing theories on the interpretations of Late Republic and Early Imperial census figures. Here archaeological material helps to answer historical question historians have tried to solve.

This book is not an introduction to the archaeology of rural Italy between 200 BC to AD 100, but a polemical book that aims at showing, as Launaro states on page xiii, "how landscape archaeology could have made a significant contribution to 'core' issues within ancient archaeology". Launaro discusses a specific historical problem, very central to the understanding of the agrarian history of Roman Italy and proves his point by using selected archaeological evidence. At the core are the historical interpretations of the comparison of the census figures from 28 BC, 8 BC and AD 14 as presented in the Res Gestae Divi Augusti (4 063 000, 4 233 000 and 4 937 000 respectively, Mon. Ancyr. 8,1-4) and the known census figures from 70/69 BC (910 000, Phlegon, FGrHist 257 F 12,6). From Beloch onwards, historians have been puzzled by the huge increase in the number of adult free male citizens this comparison shows and have tried to explain this increase in different ways. The long-standing Beloch - Brunt argument³ suggested that there was a fundamental change in the way the census was carried out and that the Augustan figures included free women and children. The assumption was that while free peasants were fighting expansive wars outside Italy, rural Italy was becoming deserted and the agricultural production was provided increasingly by villas ran with slave labour, slaves being easily available due to successful wars abroad.

This narrative, summed up by Hopkins in his *Conquerors and Slaves* in 1981, was the result of the application of the low count model suggested by Beloch and Brunt. This view was opposed by the supporters of the high count who suggested that, as Augustus himself makes clear, the ancient ways were restored by Augustus and the figures gave the number of free adult male citizens. Thus, they suggested a steep increase in the number of free citizens between the two censuses before and after the beginning of Augustus' reign. Lo Cascio,⁴ who has

¹ E.g., T. W. Potter, *The Changing Landscape of South Etruria* (1979); the POPULUS project, especially J. Bintliff – K. Sbonias, *Reconstructing Past Population Trends in Mediterranean Europe (3000BC–AD1800)* (1999).

² E.g., J. Patterson, *Landscapes and Cities: Rural Settlement and Civic Transformation in Early Imperial Italy* (2006).

³ J. Beloch, *Die Bevölkerung der griechisch-römischen Welt* (1886); P. A. Brunt, *Italian Manpower*, *225 BC–AD 14* (1971).

⁴ E.g., E. Lo Cascio, "The Size of the Roman Population: Beloch and the Meaning of the Augustan Census Figures", *JRA* 84 (1994) 23–40.

promoted the use of archaeological material in demographic studies, has been the most vocal of the 'high-counters'. The third way, suggested recently by Hin,⁵ argues that the latter, higher figures included women and children *sui iuris*. This interpretation has resulted in the theory of intermediate – i.e., somewhere between the high and the low count – demographic figures for Early Imperial Italy.

These three different models paint two very different pictures of rural Italy between 100 BC and AD 100. Either the free population was decreasing, if the Augustan figures included women and children, or it was increasing or at least stable, depending on the intermediate or high counts. The archaeological implication is that the average rural settlement was either decreasing with the smaller farms settled by free peasants dying out in the Late Republican period, or the settlement was increasing with thriving rural farms existing alongside villas with large slave populations. Launaro aims at testing these scenarios against the cumulative results of archaeological surveys from different parts of Italy in order to examine regional variability and general trends.

The problems of archaeological material collected in surface surveys are well known.⁶ However, Launaro manages to avoid the worst pitfalls and to render data from different surveys comparable by observing trends and calibrating the figures to show relative decrease or increase in percentages instead of trying to compare 'raw' numbers. His methodology combines the ideas presented by Witcher, Fentress and Ikeguchi⁷ who all developed specific aspects of the argument. Witcher made a preliminary attempt in quantifying the population of the early Imperial *suburbium* (c. 27 BC – AD 100) by comparing six different surveys in central Italy. Fentress suggested using trends instead of settlement numbers when comparing agrarian settlement in different parts of the Roman Empire. She also suggested counting the residents of farms as free citizens and the permanent residents of villas as slaves; this hypothesis is accepted by Launaro and allows him to assess the make-up of the rural population in his analysis. Ikeguchi for his part made the first, if limited, attempt in calibrating rural settlement data.

Launaro's trend analysis requires internal coherence from different data sets and expects them to fulfil three assumptions on internal methodological coherence within the survey projects, the similar visibility of diagnostic pottery wares and the same likelihood of finding sites from the periods being compared. These requirements are comfortably fulfilled if one compares the results of the modern Roman Mediterranean surveys with easily recognisable fine wares. After having stated the data requirements, Launaro presents the results and the trends from 27 different surveys from Valli Grandi Veronesi in the north to Oria in the south. He also discusses a series of surveys he willingly or unwillingly omitted in the previous discussion. The most glaring absentee is the South Etruria Survey as restudied by the Tiber Valley

⁵ S. Hin, "Counting Romans", in L. De Ligt – S. Northwood (eds.), *People, Land and Politics* (2008), 187–238.

⁶ See Patterson (n. 2) 17–24 for a summary of the main problems.

⁷ Cf. R. E. Witcher, "The Extended Metropolis: Urbs, Suburbium and Population", *JRA* 18 (2005) 120–38; E. Fentress, "Peopling the Countryside: Roman Demography in the Albegna Valley and Jerba", in A. K. Bowman – A. Wilson (eds.), *Quantifying the Roman Economy: Methods and Problems* (2009), 127–61; M. Ikeguchi, "A Comparative Study of Settlement Patterns and Agricultural Structures in Ancient Italy: a Methodology for Interpreting Field Survey Evidence", *Kodai* 10 (1999–2000) 1–59.

Project, but since only the material from Veii has been published so far,⁸ Launaro was right to finish with his project without this data set. However, he was able to use unpublished site data from the Albegna survey that gave him new insights into the developments outside the colony of Cosa.

Launaro's comparisons show that, apart from central coastal Etruria and south-eastern Italy, the numbers of the rural free population were rising in Roman Italy. In the areas around Rome and most of northern and southern Italy the numbers of both 'villas' and 'farms' were increasing between 200 BC and AD 100. This suggests that the high count interpretation is supported by archaeological evidence, which means that the overall rural population of Roman Italy must have been on the rise during this period. Naturally, the reader senses from the start that this is what was to be expected, since the low count interpretations were based mainly on the inability to believe in any substantial growth in the number of free male citizens in the Late Republican period.

A full appreciation of the method and the conclusions of the author requires some knowledge of both the historical and the archaeological arguments applied to the discussion and of Mediterranean landscape studies in general. Nevertheless, this book is essential reading for both ancient historians and classical archaeologists as it presents the fundamental arguments concerning the demographic calculations of the Roman population and the contribution of archaeology to historical debates.

Ulla Rajala

ALAN KAISER: *Roman Urban Street Networks*. Routledge Studies in Archaeology 2. Routledge, New York – London 2011. ISBN 978-0415-88657-4. XVII, 249 pp. USD 125.

Alan Kaiser's *Roman Urban Street Networks* provides a new way to study urban space in Roman cities. Within the era of the 'spatial turn' in the study of Roman archaeology and history starting from the 1990s, scholars have increasingly paid attention to streets and found them to reveal much about the surrounding society instead of being merely intermediate spaces between individual city blocks. Kaiser's contribution to this wave of interest is his method that allows the study of all cities in a similar manner – and, as he argues, even those that have not been excavated properly but known mainly from aerial photography.

Kaiser's approach is quantitative and thus enables the study of large amounts of data at once. His method borrows from urban geographers and uses concepts already previously adapted to archaeology. From space syntax analysis, for instance, he selects, very wisely, the concept of depth and proceeds to examine the depth of all streets in relation to city gates, *fora* and possible piazzas without worrying about the complex mathematical formulae that are connected to the analysis. In addition to depth, streets have other qualities that give them character. Drawing on Kevin Lynch's analysis of modern American cities and how people navigate inside them by defining paths, nodes, edges, landmarks, etc., Kaiser shows that Roman literature is also filled with descriptions of certain key elements in urban spaces. He counts the number of intersections along streets and defines the functions of buildings flanking them. This and

⁸ R. Cascino – H. Di Giuseppe – H. L. Patterson (eds.), 'Veii. The Historical Topography of the Ancient City': A Restudy of John Ward-Perkins's Survey (2012).