T.C. De Haas and G. W. Tol (eds.), *The Economic Integration of Roman Italy: Rural Communities in a Globalizing World*. Mnemosyne, Supplements, History and Archaeology of Classical Antiquity vol. 404. Leiden and Boston: Brill, 2017. ISBN13: 9789004325906.

Any study on the economy of the ancient world has to contend with the fact that in preindustrial societies agriculture was the occupation of the majority of the population and the capacity to produce agricultural surplus determined the level of growth possible; in other words, the rural sphere is central to studying the ancient economy. Conversely, any landscape and/or archaeological regional study has had at its heart field surveys aimed at identifying types of rural settlements, defining their chronology, and reconstructing the relative settlement hierarchy of a region. However, such prevalence of the 'rural' component in these different research fields has not yet resulted in a holistic investigation of rural communities. The important question of how and to what degree rural communities were integrated from an economic point of view with the rest of the Roman world has hitherto been addressed only partially. This is the theme at the core of this stimulating book.

This volume stems out of a two-day conference held at the Royal Netherlands Institute in Rome in 2013 and gathers contributions by an international group of ancient historians and archaeologists, including landscape and field archaeologists and experts in material culture. The volume features eighteen chapters organized into five sections: Part 1 introduces 'the economic, social and geographic context'; Part 2 focuses on 'arable production and society'; part 3 discusses 'rural crafts'; Part 4, featuring the highest number of chapters (six), investigates 'commercialization'; and part 5, 'conclusions', comprises two chapters. While the focus of the volume is Roman Italy, both the themes treated and the methodologies discussed and adopted by the researchers are of great relevance to the study of other geographic areas of the Roman world.

The various chapters are essentially concerned with two developments that have occurred in the study of the ancient rural world. On the one hand, ever growing archaeological data, coupled with geo-archaeological, ecological, geophysical, climatological and palaeogeographical data, now offer great potential for the 'understanding of rural sites, landscapes and regions' (p. 2), going beyond the limited answers field surveys alone can give. However, in order to do so, such data need to be systematically integrated, and this is the challenge the volume addresses, by showing possible approaches and theoretical frameworks. On the other hand, the increasing number of available regional datasets allows comparisons in 'order to produce supra-regional syntheses of developments in rural settlements and economy that allow the identification of both general trajectories and regionally and microregionally-specific socio-economic and demographic developments' (p. 3). Thanks to the different methods and perspectives brought by each author, this book does an admirable job showing the way forward. It is not possible to give here a full account

of each chapter, so I will therefore limit my observations to the major points that emerge. It should be stated at the outset, however, that each contribution raises interesting points and gives much food for thought.

Part 1, comprising three chapters written respectively by W. Jongmann, R. Witcher, and T. de Haas, provides an excellent framework for the thematic chapters that follow in the other sections. These introductory chapters engage with the most recent theoretical debates (e.g., the concepts of 'globalization', 'connectivity', or the issue of the level of market integration existing in antiquity), and offer stimulating considerations on the broader geographic, economic and social context in which to place the development of the Roman rural economy. They will become a fundamental reading for anyone interested in the Roman economy in general, and in how to integrate landscape archaeological studies with research on the rural ancient economy. Jongmann illustrates the potential of archaeological data for addressing crucial historical questions, such as determining economic growth, decline, and population levels. His concluding remarks on 'market integration' stress an important point, which emerges more or less clearly from other chapters: that the marketoriented agricultural production attested in the Roman world presupposes not only a network of market integration and transport infrastructure, but also information networks and a degree of rural manufacturing, in which minor centres and the connections they provided were crucial. However, Jongmann rightly reminds us that such system had a vulnerable equilibrium and that therefore we should not only focus on its growth/rise, but also on its collapse, as this can reveal much about the system itself and its dynamics.

R. Witcher's chapter applies the notion of 'global countryside', advanced by rural geographer Michael Wood, to the rural landscape of Roman Italy. Witcher is interested in exploring the usefulness of debates from other historical contexts to the study of the Roman countryside, and he makes many thought-provoking observations on connectivity and community. His chapter stresses how the 'top-down grand narratives fail to accommodate the diversity attested' (p. 49) by many decades of archaeological research, while, conversely, bottom-up case studies have been unhelpful in identifying trends and recognizing the level of connectivity. The 'global countryside' framework is useful because promotes investigation of the Roman period in broader spatial and chronological contexts. Furthermore, it allows for the consideration of a range of diverse political and social motivations, and recognizes the agency of rural community in deciding about how to 'integrate' themselves. One cannot consider the rural population as a single undifferentiated group; rather, by allowing the rural population to have agency in influencing their own integration 'it is also necessary to allow for the possibility that there were varied and perhaps conflicting attitudes towards change' (p. 46).

T. De Haas's chapter focuses on economic geography, with the aid of GIS tools. By holistically discussing regional geography, distribution of population, available infrastructure and resources, together with demand, production and circulation of

goods, de Haas reconstructs a scenario in which, as one might expect, the variation on all these elements offered different potentials for economic development and integration of rural communities. However, and perhaps more surprisingly, the data also seems to show that rural population not only of core areas, but also in more remote areas became integrated into superregional systems.

In Section 2, A. Launaro (Ch. 4) returns to his earlier work on the relationship between villas and farms. By analyzing large datasets from field survey, he stresses that with only very few exceptions the rise in the number of villas is accompanied by an increase in the number of farms. If the appearance of a villa economy (with a tendency towards larger estates and higher levels of land-investment and surplus production) in the course of the  $2^{nd}$  c. BC is undeniable this did not happen at the expense of the free peasantry.

In Ch. 5 (Part 2), Kron focuses on the relationship between small and wealthy farmers and their complementary role in promoting the diversification and intensification of Roman agriculture. On the basis of zooarchaeological assemblages from farms and villas, he reconstructs an increasing rural prosperity, not limited to elite landowners. Where wealthy landlords had the financial means to take risks by investing in novel approaches, and thus could stimulate innovation (the example Kron investigates concerns game farming), small farmers had good knowledge of local farming conditions. Kron stresses the independence of small farmers and big owners in addressing the demands of urban and rural markets. This chapter continues the line of investigation and argument for high levels of prosperity in the Roman period and for the application of various agricultural techniques (e.g., lay farming) allowing even small farmers to be competitive on the market which Kron has advanced years ago. The results of the Excavating the Roman Peasant Project (discussed in this volume at Ch. 7) support his view.

In Ch. 6 Heinrich presents a novel discussion of agricultural decision making, focussing on crop selection (largely types of cereals: husked grains vs. non-husked cereals) as revealed by archaeobotany. He shows how crop choice was part of technical knowledge and reflected a range of different conditions, such as market access, type of organization in the transformation of the agricultural produce, and even level of integration between rural and urban spheres: non-husked grains require a lower input of labour to process them after harvest; on the other hand, they are less suitable than husked grains to long-term storage. The switch from husked to nonhusked grains observable in many areas in the Roman period is thus not simply a matter of dietary taste, but a choice related to market access and the organization of the transformation of the product (from grain to flour and then into bread). If urban markets were the end point for the produce and transformation took place in town, then non-husked grains were a better choice because they were lighter to transport and did not need the same amount of processing at the farm. On the other hand, if a farmer did not have access to urban markets and the primary aim was self-sufficiency or regional sale of the product when market price was good (and so there was greater

need to store the cereals long term), then husked grains were a much better choice. Heinrich shows very well that these were important considerations farmers took into account.

Ch. 7, on the results of the Excavating the Roman Peasant Project, concludes section 2. This project has shown that when the integration of various archaeological and environmental studies occurs from the outset within a truly interdisciplinary framework, the results in terms of reconstructing the activities that took place on site and the type of agricultural strategies followed are more than worthwhile. The various rural minor and non-elite sites investigated by the project in the territory of Cinigiano (Grosseto) have revealed that during the late Republic and the early imperial period the area underwent a period of agricultural intensification. Palaeobotany and environmental studies suggest that such intensification was achieved by the application of convertible agriculture, thus highlighting the importance of pasture and crop rotation. Even at non-elite rural sites like these, one finds the application of 'sophisticated' farming techniques, in addition to a terra sigillata production centre (discussed in Ch. 9). The surprising results force a reconsideration of Roman peasant farmers, while the researchers raise important methodological points about the uncritical use of survey data to classify site types that in turn are used to reconstruct demographic trends: for example, a site initially surveyed and classified as small farm on the basis of surface scatter turned out to be a field canalization.

Section 3 addresses the issue of crafts and industries located in the countryside. Peña's chapter (Ch. 8) presents an overview of the field of study of Roman rural pottery production and proposes the use of a theoretical model based on the locational relationships (e.g., mobile production; rural-town distant). He then presents four case studies to show the different types of production attested, and also to demonstrate the limitations of the available evidence. Ch. 9 by Vaccaro et al. discusses a terra sigillata production site at Podere Marzuolo that seems to have been catering to the expanding local market. This section is closed by a chapter by S. Santoro on crafts and trade in minor centres from two study regions, Abruzzo and Friuli. Santoro reconstructs an important role for these centres both as centres of production activities and as foci of trade networks. Interestingly, she suggests that the establishment of an integrated system of these minor sites was the result of Rome's direct attempt to control newly conquered territories, with important consequences for the political, economic, and also cultural integration of these two regions.

Section 4 on commercialization is the largest of the sections. Wine production, as attested by amphora circulation and production centres, is the object of 3 chapters: in Ch. 11 Olcese discusses the role of local elite in the development of viticulture in the Bay of Naples in the Hellenistic period, with particular attention to the amphora production site on Ischia. While it was recognized that the arrival of Rome in Campania in the late 4<sup>th</sup> c. BC resulted in a re-organization and intensification of production of high-quality wine destined for export, recent studies on Graeco-Italic

amphorae have stressed that such production and transmarine trade networks existed already. The Romans simply entered 'an already existing network of economic and commercial relations which was created by the Neapolitans themselves' (p. 318), essentially identifying a situation of mutual benefit: local producers and traders had access to an expanded market, while Rome gained an economic gateway towards the south of the peninsula. In Ch. 12, Pasquinucci and Menchelli discuss the impact Roman expansion had on local economy by using a case study from coastal North Etruria, ultimately arguing that the annexation into Rome's territory and the development of infrastructure and other networks allowed the emergence of a system of interdependent markets. Ch. 13 by D. Van Limberg, P. Monsieur, and F. Vermeulen investigates the role of local and overseas demand in the development of viticulture in the Potenza Valley (Marche) in Central Adriatic Italy. They present preliminary results of their analysis in order to stimulate debate on the fundamental changes that shaped viticulture and agriculture more generally in Roman Italy. They argue that it is unlikely that in the  $1^{\text{st}}$  and  $2^{\text{nd}}$  centuries AD large quantities of wine could still be exported to provincial markets (which would coincide with the decline in that period in the export of central Adriatic amphorae) but rather satisfied local demands. What they suggest is that the changed local demographic profile diverted production locally, not that there was a crisis of viticulture as such. Tol (Ch. 14) discusses how field survey data could contribute to the reconstruction of the system of supply and demand. He uses ceramic data from field survey as a proxy for trade networks. By using the large dataset accumulate through the years by the Pontine Region Project, and comparing the consumption patterns for amphora and table ware between the Republic and the late empire, he shows that generally the area was well connected over the Mediterranean but also that there were marked differences in settlements and economic integration between primary areas (those at the head of the connection such as port towns) and sites at the end of the chain.

The last two chapters of this section take on very different topics. Veal (Ch. 15) focuses on the economy of wood consumption in the form of fuel, a fundamental but little studied requirement for production. Drawing on her earlier work on the fuel economy of Pompeii, Veal advances an interesting model for modelling Rome's fuel requirements. Ch. 16 by Crawford succinctly discuses a fundamental issue about economic integration of the countryside: the use of money in rural areas. He argues that the use of money in commercial transactions is foremost an urban phenomenon and that while there are cases of the discovery of coinage in the countryside, there is not secure evidence that coins were actually spent in rural areas.

The final two chapters cover the current state and future direction for research. G. Feinman (Ch. 17), an expert in pre-industrial societies of Meso America and China, gives an outsider's perspective of the current state of the study of the Roman economy as emerges from the volume. He stresses the need for cross-cultural and multi-scale approaches in any study of pre industrial economies. Attema considers the chapters of the volume in the light of the developments, both theoretical and

methodological, that have occurred in Mediterranean landscape archaeology and reiterate the needs to integrate diverse datasets if one wants to understand rural economies and reconstruct any general trends.

The volume is well edited and produced, and the illustrations are generally of good quality. The editors deserve great credit for putting together such an interesting volume. The book breaks new ground in the economic history and approaches to the study of rural areas in the Roman world. Many chapters apply novel methods to bring together diverse fields of studies and present useful methodological approached for using the great wealth of archaeological data now available for the purpose of economic history. It is one of the most stimulating volumes dealing with the Roman rural economy to have appeared in recent years and is a much recommended reading for archaeologists and historians alike.

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