

Introduction

Investigating an Urban Economy

Miko Flohr and Andrew Wilson

Moses Finley once famously claimed that, because of the quality of the data, attempting to write the history of individual ancient towns was a ‘cul-de-sac’.¹ Instead, he championed the idea that the ancient city needed to be approached on a conceptual level, so that the role of the city as a ‘pivotal institution’ in the Greco-Roman world could be understood. Several decades of fierce debate about what precisely this role might have been followed Finley’s discussion of the nature of the ancient city. Essentially, however, the most important conclusion emerging from this debate has been that, ultimately, Greco-Roman urbanism was too varied for a conceptual approach to yield historically meaningful results: it was not so much Finley’s theory that ancient cities were Weberian ‘consumer cities’ that was misguided, but rather the idea that a single ideal type was the best approach to understanding Roman urbanism, and particularly Roman urban economies.² In other words, trying to write the history of an individual town, however complicated it is, is not a cul-de-sac, but an essential part of debating the history of Roman urbanism, and of urban economies in the Roman world.

Indeed, over the past decades, several scholars have examined the economic histories of specific towns in the Roman world, sometimes with significant impact on the debate. In the 1980s and early 1990s, there was the work of Leveau on Caesarea, Jongman’s book on the economy and society of Pompeii, and the monograph of Engels on Roman Corinth.³ Around the turn of the millennium, Mattingly and others investigated the economy of Leptiminus, and Wilson those of Sabratha and Timgad.⁴ More recently, there has been

¹ Finley (1977: 325).

² See esp. Mattingly et al. (2000: 81–4); Wilson (2002: 265–6).

³ Leveau (1984); Jongman (1988); Engels (1990).

⁴ Mattingly et al. (2000); Wilson (2002).

further work on Leptiminus,⁵ and the study by Jaschke of the social and economic history of Puteoli.⁶ While these studies have all enriched the debate, it may be observed that most of them were, by choice or necessity, mono-disciplinary in the sense that they approached their case through one dataset, or from one specific theoretical or methodological angle. Often there were also strong echoes of the research agenda set by Finley's provocative model of the consumer city. There have been no efforts to look at one specific city from a variety of perspectives and through several different datasets, even though such an exercise could be of great value, both on a methodological and a historical level: a multidisciplinary effort can highlight how the different aspects of economic history work together in one specific place, and may result in a detailed understanding that cannot easily be achieved through other means. At the same time, such an effort may foster historical, theoretical, and methodological debate that may inform approaches of scholars focusing on urban economies elsewhere in the Roman world.

Pompeii is perhaps the best possible place to do this. There can be little doubt that the remains of Pompeii and, to a lesser extent, Herculaneum, present a uniquely rich body of evidence for studying key aspects of Roman urbanism, including anything related to urban economic history. There is no other place in the Roman world whose economic history can be approached from such a variety of angles, including, amongst other things, the everyday urban processes of production, retail, and consumption, their historical development over time, the use of money and the sophistication of the local financial system, the functioning of a city and its regional environment within the wider Mediterranean trade system, and the effects of a city's economic performance on the prosperity of the urban population.

The present volume aims to bring together a variety of approaches to the economic history of Pompeii. This is, strangely enough, no superfluous exercise: despite the quality of the evidence discovered in Pompeii and the region destroyed by the AD 79 eruption of Mount Vesuvius, it may be argued that the city—and especially its archaeological remains—has so far contributed only to a very limited extent to debates about Roman economic history. Even in the vibrant 'consumer-city debate' of the 1980s and 1990s, the city played a much more modest role than perhaps could have been expected: Jongman's radically primitivist reading of the city's economy failed to provoke any serious response from archaeologists who were familiar with the Pompeian evidence—there was little debate about economic history among Pompeian scholars at the time, and scholars working on urban economic history in the Roman world generally worked with evidence from outside Italy.⁷ This has not really

⁵ Mattingly et al. (2011). ⁶ Jaschke (2010).

⁷ Jongman (1988). Significantly, most scholars reviewing the book were generalists; none of them was an archaeologist, or seems to have had specialist knowledge of Pompeii's material

changed over the last ten years. Of course, the city is frequently mentioned in scholarly literature on the Roman economy, but often only briefly, in passing, mostly when some individual piece of evidence from the site is brought forward in support of some particular argument.⁸ For instance, the discovery of many agricultural tools in the city has recently been used to support the idea that many urban residents in the Roman world were directly engaged in agriculture.⁹ Similarly, archaeobotanical finds from Pompeii have been used to argue in favour of a substantial Roman spice trade.¹⁰ However, these brief references appear decontextualized: generalists using Pompeian evidence do not tend to show much consideration for the particular historical background within which the Pompeian evidence was originally produced. Indeed, in many cases, Pompeii still seems to be used as an exceptionally well-preserved, but ultimately more-or-less average Roman city—an ideal source for vivid anecdotes of how things worked in ‘the Roman economy’.

Things, of course, were not so simple. Like any city, Pompeii was a very specific place, shaped by the unique geographic, historical, and ecological peculiarities of its regional environment, and it is only through a critical understanding of the way in which these circumstances shaped the Pompeian evidence that it becomes possible to understand the economic history of the city, and to assess the relevance of the Pompeian evidence for wider debates about Roman economic history. As will be emphasized throughout this volume, this interpretative process is not at all straightforward, and the Pompeian record is much more complex than it perhaps may seem to be at first sight. Indeed, even with regard to Pompeii, there are significant limits to our knowledge, and these will be exposed in virtually all of the chapters following this Introduction. Still, Pompeii’s unique material and textual record makes it possible to discuss its economic history in a unique level of detail, both regarding the AD 79 situation, and the historical development of the urban economy in the preceding centuries.

The following pages will further introduce the theme of this volume. They will provide an overview of what has been written so far about Pompeii’s economy and economic history, and introduce the various contributions to this volume, before assessing some of the trends emerging, and put them into the context of recent debates about Roman urban economies. First, however, a

evidence. Cf. Banaji (1989); Purcell (1990); Franklin Jr (1990); Frier (1991); Scheidel (1992). On the geographical emphasis of the consumer-city debate see Flohr and Wilson (2016: 35–40).

⁸ In the recent *Cambridge Companion to the Roman Economy*, evidence from Pompeii is mentioned (in passing) only in three chapters: Wilson (2012: 140, 150); Kron (2012: 161, 169); Erdkamp (2012: 246). In the *Cambridge Economic History of the Greco-Roman World*, Pompeii is briefly referred to by Sallares (2007: 31); Schneider (2007: 154, 158, 161, 169); Harris (2007: 532, 539); Kehoe (2007: 565); Morley (2007: 588); Jongman (2007: 616); Leveau (2007: 662); and Chery (2007: 731).

⁹ Erdkamp (2012: 246).

¹⁰ Kron (2012: 161).

few things may need to be said about Pompeii itself, its regional context, and the nature of its evidence.

INTRODUCING POMPEII

Pompeii was situated close to the sea on a low hill of volcanic origin, overlooking the Sarno estuary. The city has a long history: its oldest visible remains go back to as early as the seventh century BC, but recent excavations have led to the discovery of even older evidence.¹¹ Relatively little, however, is known about the town before the third century BC, and Pompeii's history before the mid-second century BC is the subject of fierce academic debate.¹² The town of AD 79 was decisively shaped by a series of developments, including several phases of intense building activity. The first major building boom of Pompeii is commonly dated in the second half of the second century BC, a period that has been described as Pompeii's 'golden century', and which saw the arrival or emergence of a wealthy urban elite building large urban palaces in the Hellenistic fashion.¹³ The foundation of a Roman colony, in 80 BC, was another major event, and though its immediate effect on the urban economy is not immediately clear, it had major implications for the socio-economic ties between the city and the Roman elite, and, practically, for the legal framework within which economic activity took place.¹⁴ A second period that appears to have brought significant changes to the urban economic landscape is the Augustan period, which not only saw developments around the forum, but also great building activity along the city's through-roads.¹⁵ Finally, the two decades preceding the AD 79 eruption of Mount Vesuvius were characterized by increased seismic activity, including at least two major earthquakes, which have left clearly visible traces in the material remains of Pompeii; the effects of these disasters on the city's economy have been fiercely debated in the past, as will be discussed in the next section ('The Pompeian Economy: A Century of Scholarly Debate'), and in several of the contributions to this volume.¹⁶

Pompeii was surrounded on three sides by fertile and heavily cultivated agricultural land, as is attested by the large number of villas discovered

¹¹ On the early history of Pompeii see the chapters in Ellis (2011), esp. Guzzo (2011); Robinson (2011); Coarelli and Pesando (2011).

¹² See, for instance, the debate about the date of early atrium houses like the Casa del Chirurgo (V 1, 10), the Casa degli Scenziati (VI 14, 43), and the Casa del Naviglio (VI 10, 11). Cf. Peterse and de Waele (2005); De Haan et al. (2005); Coarelli and Pesando (2011: 51).

¹³ For the term see Pesando (2006). ¹⁴ On the Sullan colony see esp. Zevi (1996).

¹⁵ On the Augustan period see also Chapter 10 (this volume).

¹⁶ See esp. Chapter 7 (this volume).

between Pompeii and the southern slopes of Mount Vesuvius. Many of the villas show evidence of mixed farming, with an emphasis on viticulture.¹⁷ However, more important than this rich agricultural hinterland is the fact that Pompeii was extremely well connected. With the shore, already in antiquity, a kilometre or so away from the Porta Marina, Pompeii was not really a coastal town in the most literal sense of the word, but there was a port associated with the city—though its precise location is disputed.¹⁸ Overland, Pompeii was connected by a road along the coast to Naples and Herculaneum, and there were direct roads leading to Nola and Nuceria.¹⁹ The latter two roads also connected with the Via Popilia, which ran from Capua through Nola and Nuceria to Salerno and further to the south until Rhegium.²⁰ This all meant that the harbour of Pompeii could develop a regional function—as is indeed suggested by Strabo, who claimed that the port of Pompeii served Nuceria, Nola, and Acherrae.²¹ Moreover, the presence of a maritime connection also meant that Pompeii could easily maintain close ties with the entire Bay of Naples region, which included cities like Cumae, Misenum, Naples, Surrentum, and, particularly, of course, Puteoli.²² This is the regional context in which Pompeii's economy needs to be understood, as is perfectly illustrated by the Sulpicii archive, which records business practice in Puteoli in the AD 30s, but was found in the immediate vicinity of Pompeii.²³ It is a context which, from the second century BC onwards, increasingly began to be dominated by the Roman elite, who started to build large villas around the Bay of Naples shoreline, and to spend large parts of the year in the region.²⁴

Finally, something needs to be said about the nature of the Pompeian evidence. Pompeii can barely be understood without understanding its complex excavation history, which has a decisive influence on the degree to which evidence actually can be used. Besides the problem, discussed at some length by Monteix in Chapter 7, that the site was buried at a very particular moment in its history, there are three main issues.²⁵ First of all, the variation in preservation strategies employed after excavation means that there are major differences within the site in the state of the standing remains and the degree to which they reveal information about the history and use of buildings—certain types of evidence have survived in some parts of the town, but not in

¹⁷ Oettel (1996); Moormann (2007).

¹⁸ The archaeological evidence discovered between Pompeii and the sea is discussed in Stefani and Di Maio (2003). On the location of the harbour of Pompeii see also, unconvincingly, Curti (2008).

¹⁹ On the road between Pompeii and Nuceria see De' Spagnolis Conticello (1994).

²⁰ Cf. *CIL* 1.6950. ²¹ Strabo, *Geogr.* 5.4.8.

²² On Puteoli see Tuck (2012); Jaschke (2010).

²³ It is unclear how the archive actually ended up at Murecine. See, on the context of its discovery, Camodeca (1992: 5–6).

²⁴ D'Arms (1970). ²⁵ Chapter 7 (this volume).

others. Secondly, abysmal recording of movable objects and loose finds for most of Pompeii's excavation history enormously complicates our view on many everyday social and economic processes, as is clear from the work of Penelope Allison on Pompeii's domestic assemblages.²⁶ Thirdly, there is the problem that only a very limited part of the city has been stratigraphically excavated below the AD 79 floor and ground levels, while there is debate about the reliability of evidence like construction materials and techniques for dating buildings, particularly before the second century BC.²⁷ Even though the situation has improved considerably over the last two decades, this means that the large majority of what is visible at Pompeii is particularly revealing about the last decades of the town's existence, and tells us much less about what happened earlier.²⁸ Nevertheless, Jongman was unduly pessimistic when he considered Pompeii 'unsuitable for dynamic analysis' and described it as 'a necessarily static cross-section at more or less one moment in time': many things can be said about Pompeii's economic history, but one necessarily has to extrapolate from a limited, and not necessarily representative, amount of observations.²⁹

THE POMPEIAN ECONOMY: A CENTURY OF SCHOLARLY DEBATE

The nature of the Pompeian economy has been debated since the early twentieth century. Highly influential—initially—was Tenney Frank's discussion of Pompeii's economic life, which first appeared in 1918 in *Classical Philology*, and was later reprinted almost verbatim in his 1927 *Economic History of Rome*.³⁰ Frank sketched a vivid picture of manufacturing and retail in Pompeii, examining food and textile industries, and agriculture. He argued that, although the Pompeian economy was dominated by entrepreneurs operating on a small scale, industries 'appear in all stages of development toward capitalistic production', pointing in particular to the presence of bakeries, fulleries, and a tannery operating on a large scale, and to Pompeii's garum industry. A more systematic and detailed account of the Pompeian economy was produced by Helmut Sievers, who, in his dissertation, discusses

²⁶ Esp. Allison (2004).

²⁷ On the excavated area see Coarelli and Pesando (2011: 37). On the use of walls for dating see Ellis (2008) on Peterse (2007).

²⁸ For a more elaborate discussion of this issue see Chapter 7 (this volume).

²⁹ Jongman (1988: 56). In Jongman's defence, though, it has to be noted that our knowledge of Pompeii's past, and our awareness of the site's chronological complexity, have increased dramatically since the mid-1980s, when he wrote his book.

³⁰ Frank (1918; 1927: 245–70).

the evidence for agriculture, manufacturing, and trade.³¹ Though the emphasis of his work is very much on the evidence, and though the book lacks interpretation and a clear conclusion, Sievers mostly followed Frank's emphasis on the scale of some manufacturing establishments, and on the significance of the Pompeian textile industry.³² After the Second World War, the work of Frank would be the starting point for scholars belonging to the group of Wilhelmina Jashemski, who studied specific branches of the Pompeian manufacturing economy in greater detail: Walter Moeller investigated the evidence for textile production at Pompeii, Robert Curtis focused on the garum industry, while Betty Jo Mayeske analysed Pompeii's bakeries.³³ Generally, these works tended to echo the modernist views outlined by Frank, but they were never joined up into a wider picture of the Pompeian economy.

A second important line of thinking about Pompeii's economy started with Amedeo Maiuri, who believed that Pompeii underwent significant socio-economic changes in the years following the AD 62/3 earthquake, leading to the emergence of a class of entrepreneurs and the retirement of the traditional urban elite. While his dramatic picture of the last years of Pompeii is now almost universally rejected, it should not be forgotten that a key contribution of Maiuri, who was one of the very few before the 1990s to excavate underneath the AD 79 floor levels, was his emphasis on the notion of chronological change, something that had been almost completely absent from earlier scholarship.³⁴ Moreover, his idea that the archaeological record of Pompeii does to some extent reflect a city in upheaval rather than a 'normal' situation has—rightly—remained very central to Pompeian scholarship since, albeit on a methodological level.³⁵

The late 1980s and early 1990s arguably marked a watershed in the debate about Pompeii's economy. There was, of course, the pivotal monograph on the city's economy and society by Jongman, which, even though its central argument suffered, at points, from primitivist dogmatism, played a major role in highlighting some of the methodological shortcomings of earlier Pompeian scholarship, and helped to introduce the approaches and models of economic historians to the study of Pompeii. Jongman's work received a mixed reception, and it may be argued that it did not help that he did not really provide a powerful model for making sense of the visible archaeological remains of the city: his analysis mostly focused on Pompeii's epigraphic record.³⁶ More important in their impact on subsequent approaches to Pompeii's economy were the works of Wallace-Hadrill and Laurence, in which these archaeological

³¹ Sievers (1938).

³² See e.g. on bakeries Sievers (1938: 22) and on the textile industry Sievers (1938: 72).

³³ Moeller (1962; 1976); Curtis (1973); Mayeske (1972).

³⁴ Maiuri (1942). See, for a rebuttal, esp. Wallace-Hadrill (1994: 122–31), and Monteix (2010: 3–36).

³⁵ See e.g. Allison (2004). Chapter 7 (this volume).

³⁶ Jongman (1988). See also Chapter 2 (this volume), and Wilson (2002: 234–6).

remains play a much more central role. Wallace-Hadrill offered, in his depiction of Pompeii as a society organized around houses, a powerful vantage point from which to look at the structure of Pompeii's urban economy: the atrium house was not only the focal point of Pompeii's society, but also the pivot around which much of Pompeii's economic life was organized.³⁷ Laurence, while interested more in urban space than in Pompeii's economy, outlined, in a much more refined way than had been done before, the city's economic topography, and gave a rough sketch of Pompeii's commercial landscape.³⁸

It makes sense to group these three monographs together, as they marked a significant departure from 'traditional' approaches to Pompeii, and paved the way for many subsequent approaches to the city's economic life. At the same time, these books also have in common the fact that they antedate the revolution in Pompeian archaeology that started to take place from the late 1990s onwards, when, due to changed policies under the directorship of Pietro Giovanni Guzzo, a large number of research projects started to explore Pompeii in a more or less systematic manner underneath the AD 79 floor levels.³⁹ While not all projects have published their final results, and while few of them were specifically interested in questions about the Pompeian economy, this development has completely changed our view of Pompeii's history and, as a consequence, has also affected our understanding of Pompeii's economic history. Moreover, there have been several projects that have specifically investigated aspects of Pompeii's artisanal economy, and have dramatically improved our knowledge of Pompeii's shops and workshops.⁴⁰ These developments mean that a reassessment of Pompeii's economy and of the significance of its evidence for the Roman economy in general, is timely, and have had a clear impact on the chapters of the present volume.

ABOUT THE PRESENT VOLUME

This volume approaches the Pompeian economy from a variety of perspectives. Whereas traditional emphasis in the study of Pompeii's economy has lain mostly with everyday economic processes like manufacturing, trade, and retail in the city itself, the focus here is predominantly on four other themes.

³⁷ Wallace-Hadrill (1994: 134–42).

³⁸ Laurence (1994); for an earlier approach see Raper (1977).

³⁹ For results of these developments see e.g. Guzzo and Guidobaldi (2005); Coarelli and Pesando (2006); Amoroso (2007); Guidobaldi and Guzzo (2008); Verzar-Bass and Oriolo (2010); Ellis (2011).

⁴⁰ In particular, the project of the Centre Jean Bérard (see esp. Borgard et al. [2003; 2005]), the Cleaning the Laundries Project (Flohr [2007; 2008; 2011]), and the work of Nicolas Monteix and his team on Pompeii's bakeries (Monteix et al. [2012; 2013; 2014]).

Chapters 1 and 2 discuss the position of Pompeii in its regional context, and the economic basis of the patterns of consumption visible in Pompeii's archaeological record. This is followed by three chapters focusing mostly on the outcome side of the economy, and on the way in which Pompeii's economic performance shaped the lives of its population. Part III of the volume looks more at the contexts in which economic life took place—focusing less on the everyday processes, and more on the built environment within which retail and manufacturing occurred. In Part IV, Chapters 10–13 focus on money, trade, and the way in which evidence from Pompeii enables us to understand economic processes in the wider region of the Bay of Naples and beyond. The volume concludes with Chapter 14, by Willem Jongman, on the way in which the arguments presented in this volume alter the picture of the state of Pompeii's economy, and affect ongoing debates about the Roman economy.

City and Hinterland

The first chapter serves to set the scene by giving a broad overview of the agricultural landscape of the Vesuvian region in the first century AD. Discussing the evidence for wine production, cereals, oleiculture, horticulture, and woodland farming in the territories of Naples, Pompeii, and Nola, Ferdinando De Simone sketches, for the entire Vesuvian region, a highly integrated and specialized agricultural economy, in which cities, for certain agricultural products, were dependent on the territory of neighbouring cities and on the outside world; other products, however, particularly wine, were exported on a substantial scale.

Chapter 2, by Miko Flohr, homes in on the city itself and discusses some of the basic parameters that underlay Pompeii's economy, particularly focusing on the relationships between population, hinterland, and consumption. Starting from a critical analysis of Pompeii's excavated housing stock, the chapter argues that the city's size and the degree to which sub-elite groups had structural access to elements of the elite lifestyle can only be understood from Pompeii's ties with the outside world, whether through trade or through capital flows.

Quality of Life

The subsequent chapter, by Nick Ray, explores the possibilities of applying consumer theory to the Pompeian record. Ray uses a set of statistical tools to analyse assemblages of everyday domestic artefacts found in a selection of Pompeian houses, particularly focusing on metal, glass, and pottery vessels. The analysis highlights not only the fact that a wide range of artefacts was available to many people at Pompeii, but also that different households of

comparable socio-economic status followed differing consumption strategies, suggesting that a modern concept such as ‘consumerism’ may be of considerable use in understanding Pompeii’s consumer economy.

Chapter 4, by Erica Rowan, focuses on food consumption. While the chapter’s primary focus lies with the food remains found in the sewer underneath *Cardo V* at *Herculaneum*, the resulting picture is also relevant to an understanding of Pompeii’s food economy. Importantly, Rowan shows how varied and cosmopolitan the diet in both Pompeii and *Herculaneum* had become, and how that appears to have been a development of the last centuries BC—earlier, the diet appears to have been much more locally oriented.

In Chapter 5, Estelle Lazer discusses the health of Pompeii’s population based on the skeletal remains found on site. While this is a massively complicated dataset due to the way in which the evidence has been recorded and preserved, it is still possible to extract some basic health indicators. These do seem to allow for a more optimistic view of the health of the Pompeian population than some scholars have suggested in the past. In particular, the evidence suggests that a significant number of Pompeians was living well into old age.

Contextualizing Economic Life

The subsequent four chapters touch upon the theme of urban economic life. One key issue in understanding Pompeii’s economy, and particularly investment, is the theme of location: not all locations in the city were commercially attractive in the same way, or to the same degree, and understanding Pompeii’s commercial landscape and the strategic choices made by investors at certain locations requires a detailed knowledge, particularly of the way people moved through the city. Substantially refining earlier work by Laurence and Kaiser, Chapter 6 by Eric Poehler discusses a new model of movement through the city, one that gives a much more detailed insight into the economic potential of certain places—not only the expected major thoroughfares of the *Via degli Augustali*–*Via Stabiana*–*Via dell’Abbondanza* axis, but also streets such as the *Via Consolare*, the *Vicolo di Modesto*, and the *Via delle Terme*, which emerge as busier than had been appreciated.⁴¹

Chapter 7, by Nicolas Monteix, gives a thorough reassessment of the evidence for manufacturing and retail in Pompeii, and analyses the ways in which it can and cannot be used to understand Pompeii’s economic history. Monteix’s cautious approach to the evidence leads him to reject approaches based on quantification; instead, he proposes approaches based on understanding

⁴¹ Laurence (1994); Kaiser (2011).

investment strategies, and on analysing the *système technique*, as defined by Bertrand Gille.⁴²

Chapter 8, by Damian Robinson, examines a specific area of the city, discussing the commercial development of insula VI 1, in the north of the city, and particularly the Casa delle Vestali, which is the largest property in the block. Robinson starts from the data gathered by the Anglo-American Project, and connects these to literary evidence to sketch a picture of the development of commercial investment over time, arguing that Pompeii's upper class, exemplified by the consecutive owners of the Casa delle Vestali, saw economic investment as a key priority—from the second century BC right up to the last years of the city's existence.

Chapter 9, by Domenico Esposito, highlights a form of production of which the results are highly visible in Pompeii but which has rarely been discussed in economic terms: painting. Esposito provides a detailed discussion of the organization of two identifiable painters' workshops, showing how they operated on a relatively large scale and worked on several locations in the city at the same time. Interestingly, the two workshops appear to have served different segments of the market, with one working mostly for the elite, and the other one mostly decorating middle-class houses, shops, and restaurants. The chapter evokes a detailed and vivid picture of a branch of the economy that, especially in Pompeii's last years, must have been flourishing.

Money and Trade

Part IV groups together four chapters which explore questions of coinage, money, and commercial transactions, starting with a methodological contribution from excavations at Pompeii and moving to a broader picture of trade in the Bay of Naples region. In Chapter 10, Steven J. R. Ellis explores the analytical possibilities of the coin evidence gathered in his excavation of the two house blocks surrounding the lowest stretch of the Via Stabiana. Ellis notes that his coins, even though many come from shops, were mostly found in construction layers, not in deposits suggesting coin loss; he introduces the concept of 'afterlife coinage' as a tool for discussing the whereabouts of coins between the moment that they stopped circulating as coins, and the moment of their final deposition in construction layers. At Pompeii, Ellis argues that coin finds often should be seen as indicating building activity rather than as a proxy for retail activities; in the Porta Stabia area they serve to highlight a commercial 'boom' in the Augustan period, whilst at the same time suggesting a massive increase in monetary exchange in the preceding period in Pompeii in general.

⁴² Gille (1979).

The next three chapters relate the evidence of Pompeii to the wider historical context in which the city operated. Chapter 11, by Richard Hobbs, discusses the Republican coins found in the excavation of insula VI 6, highlighting both the circulation of large quantities of coins from cities in the Western Mediterranean, particularly Ebusus and Massalia, alongside local (or regional) imitations of these coins, which sheds new light on the commercial ties of Pompeii and the Bay of Naples region in the second and early first centuries BC.

The subsequent chapter by Koenraad Verboven discusses currency and credit in the entire Bay of Naples area. Focusing on the first century AD, Verboven sketches the structural elements of the monetary economy of the region within which Pompeii functioned. Connecting evidence from within the city and the archive of the Sulpicii, found just outside Pompeii but referring principally to transactions at Puteoli, with literary and juridical texts, he argues that, while coins were a dominant element in the regional money system, credit and accounting instruments played a crucial role in the economy, reducing transaction costs perhaps to an extent rare in many other places in the Roman world.

The archive of the Sulpicii also plays a central role in Chapter 13, by Wim Broekaert, who focuses on the social institutions and juridical frameworks surrounding long-distance trade in the port of Puteoli, and particularly on how traders dealt with fraudulent business partners. Broekaert shows how the close-knit business community at Puteoli used the flexibility inherent in the Roman juridical system, as well as reputation mechanisms, to prevent their business partners from fraudulent behaviour. While this chapter does not directly deal with Pompeii itself, it highlights a central element in the economic world in which Pompeii functioned: the everyday processes of business and trade.

The volume concludes with a response by Wim Jongman, whose 1988 monograph on the economy and society of Pompeii has played a pivotal role in approaches to Pompeii's economy over the past twenty-five years. In Chapter 14, Jongman assesses how research over the intervening period has altered the picture, and suggests further avenues for fresh enquiry, in particular, on understanding the economic realities of agriculture in the Vesuvian region. As he rightly observes, the chapters of this volume together provide a more positive assessment of Pompeii's economic performance than some past accounts—including Jongman's own.

DISCUSSION

Our view of Pompeii's economic history is far from complete yet, and as several of the contributions to this volume have suggested, there are still many roads that can and need to be explored further, particularly when it comes to

our understanding of the city's consumer economy, the economic strategies that shaped the built environment, and the ties of Pompeii with its regional surroundings, and its immediate hinterland and agricultural production. The chronological dimension of our understanding of Pompeii's economy can also be strengthened considerably, as undoubtedly will happen following the final publication of all projects that, in recent years, have explored the historical development of Pompeii's *insulae*. Yet, in this volume, Chapters 4, 8, 10, and 11 already highlight how Pompeii's economy changed between the second century BC and the first century AD. While Pompeii will never provide us with the possibility to discuss the historical development of an urban economy from the beginnings of urbanization to late antiquity, it does provide us with the possibility to study the development of an urban economy from the middle Republican period until the late first century AD, when urbanism in Roman Italy was at its peak, or close to it. Moreover, it increasingly does so in a way that is unparalleled elsewhere: any scepticism about the possibility of studying historical change in the urban economy of Pompeii implies scepticism about the general possibility to do this in *any* urban economy in the Roman world.

Thus it seems worthwhile to delineate the broad characteristics, as they currently appear, of Pompeii's economy on the eve of the city's destruction. We should not lose sight of the fact that Pompeii was a port city on the Bay of Naples, and even though its harbour has not been identified with certainty, we may presume it served at least three functions: the export of some of the agricultural production (especially wine, as discussed by De Simone) of the city's territory, and that of Nuceria and Nola too; the import of a range of consumption goods from overseas; and, probably, a role as a fishing harbour providing at least the city and immediately neighbouring villas with fresh fish and shellfish, and no doubt also serving the fish-salting industry, of which there is evidence.

The city's connectivity, and its particular location on the Bay of Naples, with a high concentration of elite (including senatorial and equestrian) villas in the vicinity, perhaps gave it access to an unusually wealthy market. Estimates of the population (see Chapter 2) at between 7,500 and 13,000 (including the immediate suburbs) put Pompeii squarely in the range of middling cities, well above the hundreds of towns with populations of up to c.5,000, but well behind the larger cities (many of them ports) around the Mediterranean whose populations ranged from 25,000 to in excess of 100,000.⁴³ The city's role as a local and perhaps regional market is emphasized by 800 shops lining the main streets, their location strongly influenced by the intensity of traffic along particular thoroughfares. These fixed installations for the sale of particular goods, in addition to the commercial public spaces of the forum and

⁴³ Cf. Wilson (2011).

macellum, are perhaps a characteristic feature of Roman urbanism in the Western provinces; they show a thriving retail economy, with a high degree of specialized trades, serving both local residents and the inhabitants of the surrounding villas. Especially interesting is a group of fourteen *tabernae* built as a single complex outside the Herculaneum gate, clearly an investment in commercial property. Striking too is the high number—158—of bars and establishments selling hot food, although it is unclear whether Pompeii was unusual in this respect, or that we simply do not have evidence of equivalent quality from elsewhere.⁴⁴ The thirty-nine bakeries suggest that, by the mid- to late first century AD, most of the urban population consumed shop-bought bread, again an indication of specialization of labour; the finds of large numbers of commercial mills at, for example, Timgad, Djemila, and Volubilis, suggests that this was not unusual in the Roman Empire, at least from the second century AD.⁴⁵ This commercial landscape was animated by a high degree of monetization, with the use of small change facilitating quotidian purchases, and credit arrangements available for larger, mercantile, transactions and investments.

The numerous *tabernae* included a number of relatively small-scale workshops, as well as retail shops, but the urban landscape of production was also characterized by a number of larger-scale workshops, some inserted into large atrium houses, and thus implying sufficient wealth to own such a property.⁴⁶ Those which can be identified from their archaeologically durable built infrastructure include dyeworks, *fullonicae*, tanneries, perfume workshops, and pottery workshops. The evidence demonstrates capital investment in specialized plant for a variety of manufacturing processes, and incidentally gives the lie to the notion that smelly and polluting activities were banished outside the city limits.⁴⁷ Moreover, a series of workshops (the so-called *officinae lanificariae*) whose function is disputed—some see them as for washing fleeces—also represent specialized investment in some kind of production; whatever these were for, there are between thirteen and twenty-four of them.⁴⁸ Together with the epigraphic evidence for the production of fish sauce and related products at Pompeii, by A. Umbricius Scaurus and others, it seems that the city's production activities encompassed a range of products, each produced on a scale requiring multiple specialized workshops—and, in the case of textiles, specialized workshops for different stages of production. Some properties in the east of the city also specialized in market gardening and viticulture.

⁴⁴ Chapter 7 (this volume: 218).

⁴⁵ Volubilis: Luquet (1966). Timgad and Djemila: A. Wilson, personal observation in 2013. For the Pompeian bakeries see Chapter 7 (this volume: 218).

⁴⁶ Cf. Flohr (2007).

⁴⁷ See on this, also Flohr (2013: 229–34); Monteix (2013).

⁴⁸ Chapter 7 (this volume: Figure 7.3).

These shops and workshops, and larger production units, often formed part of elite property portfolios (as Chapter 8 emphasizes), which also included rental properties. We cannot always be sure whether shops incorporated into the street façades of elite houses were directly owned, and run through slaves, or through freedman agents, or were rented out; but the key point is that income from them formed an integral part of the income streams of Pompeii's elites. Certainly A. Umbricius Scaurus, with a floor mosaic in his atrium representing the *urcei* in which his fish sauce was traded (complete with *tituli picti*), was not shy about advertising his involvement in trade to visitors.⁴⁹ In Pompeii, profit was not something of which to be ashamed.

To sum up, Pompeians consumed a rather varied diet, lived reasonably long and healthy lives, and had relatively easy access to consumer goods and art. The city's economy was highly monetized from at least the late first century BC onwards, and maintained active ties with the Bay of Naples region and beyond. Continuous investment in commercial facilities like shops and workshops testifies the vibrant and stable character of the Pompeian economy. Indeed, for a pre-industrial city, first-century AD Pompeii was performing rather well, and it increasingly seems that it had been doing so for at least the two preceding centuries as well. We can only conjecture what its developmental trajectory might have been like had its growth not been suddenly arrested in AD 79; how would it have compared, in the mid-second century, with other cities on the Bay of Naples and ports around the Mediterranean?

As far as the Roman economy is concerned, this book does not offer a lot of support for the more pessimistic readings of Roman economic performance. Two general points may be mentioned. In the first place, many chapters highlight the interconnectedness of Pompeii's economy. As Chapter 11 emphasizes, this began long before the grain fleet started to arrive in Puteoli on a yearly basis: from at least the second century BC onwards, Pompeii and its surrounding countryside were connected, directly or indirectly, to the Mediterranean trade system, and these connections, which also facilitated the trade in Vesuvian wine, were of vital importance in shaping the Pompeian economy, and its society. Without these networks, Pompeii would have been a different, and probably a smaller and less wealthy city. Secondly, Pompeii, and—as Chapter 4 clearly suggests—Herculaneum as well, were able not only to support the consumption of luxuries by a small group of elite households, but also by large parts of the rest of the population. Even if the Bay of Naples region is not representative of Roman Italy or the Roman world in general, this means that, under the right circumstances, Roman urban economies were able to provide opportunities for non-poor, non-elite households to accumulate wealth, and—thus—enable them to use the urban economy as a tool for social

⁴⁹ On these mosaics see Curtis (1984).

advancement. Whether we want to call these households ‘middling groups’, ‘middle class’, or something else does not matter: their existence adds a flexibility to Roman socio-economic landscapes that should not be underestimated. The question should thus no longer be whether these non-poor, non-elite households existed, but how common they were and under which circumstances they could flourish: their presence or absence is a useful tool for understanding the success or failure of specific urban economies.

In any case, looking at mid-first-century AD Pompeii—before the earthquakes began—one sees a flourishing urban economy that essentially was neither primitive nor modern, but that profited massively from the unique political and economic circumstances created by its position in the heart of the Roman Empire. Studying this very specific urban economy is not a cul-de-sac, but serves to illuminate also the larger historical processes at work, and what they could bring to local economies. In this respect, it is only to be hoped that future work on the economic history of specific cities will enable the scholarly community to compare the local ‘outcomes’ of these large historical processes in a more informed way.

REFERENCES

- Allison, P. M. (2004). *Pompeian Households: An Analysis of the Material Culture*. Los Angeles.
- Amoroso, A. (2007). *L’Insula VII, 10 di Pompei. Analisi stratigrafica e proposte di ricostruzione* (Studi della Soprintendenza archeologica di Pompei 22). Rome.
- Banaji, J. (1989). Review of W. Jongman, ‘The Economy and Society of Pompeii’, *JRS* 79: 229–31.
- Borgard, Ph., Brun, J.-P., Leguilloux, M., and Tuffreau-Libre, M. (2003). ‘Le produzioni artigianali a Pompei. Recherche condotte dal Centre Jean Bérard’, *Rivista di Studi Pompeiani* 14: 9–29.
- Borgard, Ph., Brun, J.-P., Leguilloux, M., Monteix, N., Collin-Mingaud, M., and Libre, M. T. (2005). ‘Recherches sur les productions artisanales à Pompéi et Herculaneum’, in Guzzo and Guidobaldi (2005), 295–317.
- Camodeca, G. (1992). *L’Archivio Puteolano dei Sulpicii*. Naples.
- Cherry, D. (2007). ‘The frontier zones’, in Scheidel, Morris, and Saller (2007), 720–43.
- Coarelli, F. and Pesando, F. (2006). *Rileggere Pompei I. L’insula 10 della Regio VI* (Studi della Soprintendenza archeologica di Pompei 12). Rome.
- Coarelli, F. and Pesando, F. (2011). ‘The urban development of NW Pompeii: the Archaic period to the 3rd c. B.C.’, in Ellis (2011), 37–58.
- Curti, E. (2008). ‘Il tempio di Venere Fisica e il porto di Pompei’, in Guidobaldi and Guzzo (2008), 47–60.
- Curtis, R. I. (1973). *The Garum Industry of Pompeii*. College Park, MD.
- Curtis, R. I. (1984). ‘A personalized floor mosaic from Pompeii’, *AJA* 88.4, 557–66.

- D'Arms, J. (1970). *Romans on the Bay of Naples: A Social and Cultural Study of the Villas and their Owners from 150 B.C. to A.D. 400*. Cambridge.
- De Haan, N., Peterse, C., Piras, S., and Schipper, F. (2005). 'The Casa degli Scienziati (VI 14, 43): elite architecture in fourth-century B.C. Pompeii', in Guzzo and Guidobaldi (2005), 257–69.
- De'Espagnolis Conticello, M. (1994). *Il Pons Sarni di Scafati e la Via Nuceria: Pompeios*. Rome.
- Dobbins, J. J. and Foss, P. (2007) (eds). *The World of Pompeii*. London and New York.
- Ellis, S. (2008). 'A new Pompeian textbook. Review of J. Dobbins and P. Foss (eds), "The World of Pompeii"'. *JRA* 21.2: 450–7.
- Ellis, S. (2011) (ed.). *The Making of Pompeii: Studies in the History and Urban Development of an Ancient Town* (JRA Suppl. 85). Portsmouth, RI.
- Engels, D. (1990). *Roman Corinth: An Alternative Model for the Classical City*. Chicago.
- Erdkamp, P. P. M. (2012). 'Urbanism', in Scheidel (2012), 241–65.
- Finley, M. I. (1977). 'The ancient city: from Fustel de Coulanges to Max Weber and beyond', *CSSH* 19: 305–27.
- Flohr, M. (2007). 'Cleaning the laundries: report of the 2006 season', *Rivista di Studi Pompeiani* 18: 131–6.
- Flohr, M. (2008). 'Cleaning the laundries III: report of the 2007 campaign', *FOLD&R* 111 <<http://www.fastionline.org/docs/FOLDER-it-2008-111.pdf>> (accessed 8 June 2016).
- Flohr, M. (2011). 'Cleaning the laundries III: report of the 2008 campaign', *FOLD&R* 214 <<http://www.fastionline.org/docs/FOLDER-it-2011-214.pdf>> (accessed 8 June 2016).
- Flohr, M. (2013). *The World of the Fullo: Work, Economy and Society in Roman Italy* (Oxford Studies on the Roman Economy). Oxford.
- Flohr, M. and Wilson, A. I. (2016). 'Roman craftsmen and traders: towards an intellectual history', in A. I. Wilson and M. Flohr (eds), *Urban craftsmen and traders in the Roman World* (Oxford Studies on the Roman Economy). Oxford, 23–54.
- Frank, T. (1918). 'The economic life of an ancient city', *Classical Philology* 13.3: 225–40.
- Frank, T. (1927). *An Economic History of Rome*. New York.
- Franklin Jr, J. (1990). Review of W. Jongman, "The Economy and Society of Pompeii", *American History Review* 95.2: 469–70.
- Frier, B. W. (1991). 'Pompeii's economy and society. Review of W. Jongman, "The Economy and Society of Pompeii"', *JRA* 4: 243–7.
- Gille, B. (1979). 'La notion de système technique (essai d'épistémologie technique)', *Techniques & Culture* 1: 8–18.
- Guidobaldi, M.-P. and Guzzo, P.-G. (2008) (eds). *Nuove Ricerche Archeologiche nell'Area Vesuviana (scavi 2003–2006)* (Studi della Soprintendenza archeologica di Pompei 25). Rome.
- Guzzo, P.-G. (2011). 'The origins and development of Pompeii: the state of our understanding and some working hypotheses', in Ellis (2011), 11–18.
- Guzzo, P.-G. and Guidobaldi, M.-P. (2005) (eds). *Nuove ricerche archeologiche a Pompei ed Ercolano* (Studi della Soprintendenza archeologica di Pompei 10). Naples.
- Harris, W. (2007). 'The late republic', in Scheidel, Morris, and Saller (2007), 511–39.
- Janaschke, K. (2010). *Die Wirtschafts- und Sozialgeschichte des antiken Puteoli* (Pharos. Studien zur griechisch-römischen Antike 26). Rahden.

- Jongman, W. (1988). *The Economy and Society of Pompeii*. Amsterdam.
- Jongman, W. (2007). 'The early Roman Empire: consumption', in Scheidel, Morris, and Saller (2007), 592–618.
- Kaiser, A. (2011). *Roman Urban Street Networks*. New York.
- Kehoe, D. (2007). 'The early Roman Empire: production', in Scheidel, Morris, and Saller (2007), 543–69.
- Kron, G. (2012). 'Food production', in Scheidel (2012), 156–74.
- Laurence, R. (1994). *Roman Pompeii: Space and Society*. London.
- Leveau, P. (1984). *Caesarea de Maurétanie: une ville romaine et ses campagnes* (Collection de l'École française de Rome 70). Rome.
- Leveau, P. (2007). 'The western provinces', in Scheidel, Morris, and Saller (2007), 651–70.
- Luquet, A. (1966). 'Blé et Meunerie à Volubilis', *BAMaroc* 6: 301–16.
- Maiuri, A. (1942). *L'ultima fase edilizia di Pompei*. Rome.
- Mattingly, D., Stone, D., Stirling, L., and Ben Lazreg, N. (2000). 'Leptiminus (Tunisia): a "producer" city?', in D. Mattingly and J. Salmon (eds), *Economies beyond agriculture in the classical world*. London, 66–89.
- Mattingly, D. J., Stone, D. L., Stirling, L. M., Moore, J. P., Wilson, A. I., Dore, J. N., and Ben Lazreg, N. (2011). 'Economy', in D. L. Stone, D. J. Mattingly, and N. Ben Lazreg (eds), *Leptiminus (Lamta), Report No. 3: The Field Survey* (JRA Suppl.). Portsmouth, RI, 205–71.
- Mayeske, B.-J. (1972). *Bakeries, Bakers and Bread at Pompeii: A Study in Social and Economic History*. Ann Arbor, MI.
- Moeller, W. O. (1962). *The Woolen Industry at Pompeii*. College Park, MD.
- Moeller, W. O. (1976). *The Wool Trade of Ancient Pompeii*. Leiden.
- Monteix, N. (2010). *Les lieux de métier: boutiques et ateliers d'Herculanum* (Collection du centre Jean Bérard 34). Rome.
- Monteix, N. (2013). 'The apple of discord: fleece-washing in Pompeii's textile economy', *JRA* 26: 79–88.
- Monteix, N., Aho, S., Garnier, L., Hartz, C., Letelier, É., and Zanella, S. (2012). 'Pompéi, Pistrina: Recherches sur les boulangeries de l'Italie romaine', *CEFR*. <<http://cefr.revues.org/328>> (accessed 8 June 2016).
- Monteix, N., Aho, S., Coutelas, A., and Zanella, S. (2014). 'Pompéi, Pistrina: Recherches sur les boulangeries de l'Italie romaine: Rapport général', *CEFR*. <<http://cefr.revues.org/1242>> (accessed 8 June 2016).
- Monteix, N., Zanella, S., Aho, S., Macario, R., and Proudfoot, E. (2013). 'Pompéi, Pistrina: Recherches sur les boulangeries de l'Italie romaine', *CEFR*. <<http://cefr.revues.org/954>> (accessed 8 June 2016).
- Moormann, E. (2007). 'Villas surrounding Pompeii and Herculaneum', in Dobbins and Foss (2007), 435–54.
- Morley, N. (2007). 'The early Roman Empire: distribution', in Scheidel, Morris, and Saller (2007), 570–91.
- Oettel, A. (1996). *Fundkontexte römischer Vesuvvillen im Gebiet um Pompeji*. Mainz.
- Pesando, F. (2006). 'Il "Secolo d'Oro" di Pompei. Aspetti dell'architettura pubblica e privata nel II secolo a.c.', in M. Osanna and M. Torelli (eds), *Sicilia ellenistica, consuetudo italica. Alle origini dell'architettura ellenistica d'Occidente*. Rome and Pisa, 227–41.

- Peterse, C. (2007). 'Select residences in regions V and IX: early anonymous domestic architecture', in Dobbins and Foss (2007), 373–88.
- Peterse, C. and De Waele, J. (2005). 'The standardized design of the Casa degli Scenziati', in S. Mols and E. Moormann (eds), *Omni pede stare. Saggi Architettomici e circumvesuviani in memoriam Jos de Waele*. Naples, 197–219.
- Purcell, N. (1990). 'The economy of an ancient town. Review of W. Jongman "The Economy and Society of Pompeii"', *CR* 40.1: 111–16.
- Raper, R. (1977). 'The analysis of the urban structure of Pompeii: a sociological examination of land use (semi-micro)', in D. Clarke (ed.) *Spatial Archaeology*. London, 189–221.
- Robinson, M. (2011). 'The prehistoric and protohistoric archaeology of Pompeii and the Sarno valley', in Ellis (2011), 19–36.
- Sallares, R. (2007). 'Ecology', in Scheidel, Morris, and Saller (2007), 15–37.
- Scheidel, W. (1992). 'Neuen Wein in leere Schläuche: Jongman's Pompeii, Modelle und die kampanische Landwirtschaft. Review of W. Jongman, "The Economy and Society of Pompeii"', *Athenaeum* 80: 207–13.
- Scheidel, W. (2012) (ed.). *The Cambridge Companion to the Roman Economy*. Cambridge.
- Scheidel, W., Morris, I., and Saller, R. P. (2007) (eds). *The Cambridge Economic History of the Greco-Roman World*. Cambridge.
- Schneider, H. (2007). 'Technology', in Scheidel, Morris, and Saller (2007), 144–71.
- Sievers, H. (1938). *Beiträge zur Wirtschaftsgeschichte Pompejis*. Hamburg.
- Stefani, G. and Di Maio, G. (2003). 'Considerazioni sulla linea di costa del 79 d.C. e sul porto dell'antica Pompei', *Rivista di Studi Pompeiani* 14: 141–95.
- Tuck, S. L. (2012). 'Puteoli', in R. Bagnall, K. Brodersen, C. Champlin, A. Erskine, and S. Huebner (eds), *Blackwell's Encyclopedia of Ancient History*, vol. X. Oxford, 5675–6.
- Verzar-Bass, M. and Oriolo, F. (2010). *Rileggere Pompei II. L'Insula 13 della Regio VI* (Studi della Soprintendenza archeologica di Pompei 30). Rome.
- Wallace-Hadrill, A. (1994). *Houses and Society in Pompeii and Herculaneum*. Princeton, NJ.
- Wilson, A. (2002). 'Urban production in the Roman world: the view from North Africa', *PBSR* 70: 231–74.
- Wilson, A. (2012). 'Raw materials and energy', in Scheidel (2012), 133–55.
- Wilson, A. I. (2011). 'City sizes and urbanization in the Roman Empire', in A. K. Bowman and A. I. Wilson (eds), *Settlement, urbanization, and population* (Oxford Studies on the Roman Economy). Oxford, 160–95.
- Zevi, F. (1996). 'Pompei dalla città sannitica alla colonia sillana: per un' interpretazione dei dati archeologici', in M. Cébeillac-Gervasoni (ed.), *Les Élités Municipales de l'Italie Péninsulaire des Gracques à Néron. Actes de la table ronde de Clermont-Ferrand (28–30 novembre 1991)*. Rome, 125–38.