

J. G. Manning, *The Open Sea: the economic life of the ancient Mediterranean world from the Iron Age to the rise of Rome*. Princeton: Princeton University Press, 2018. 448 p. \$27.95. ISBN 9780691151748.

In the *Open Sea*, J.G. Manning sets out to offer a fresh and innovative analysis of economic life in the Mediterranean Basin during the first Millennium BCE (principally from the dawning of the Iron Age until the end of the Second Punic War). At the heart of the volume is an effort to better understand economic development during a period which for many Mediterranean societies was one of momentous social, political, and economic change. In contrast to most economic historians, Manning considers the civilisations of the Iron Age Mediterranean to be interconnected cultural entities located in distinct environmental and geographic niches rather than isolated polities. Accordingly, he identifies three topics which need to be addressed in order to fully understand the rapid social and economic changes that occurred during the first millennium: first, the differing solutions that cultures devised to deal with common economic or political problems; second, the nature and patterns of cross-cultural and cross-societal exchange; and, third, the marked environmental contrasts between the disparate regions of the Mediterranean Basin. Via the discussions of these topics, Manning also seeks to determine the ways in which long-term drivers of socio-political and economic change influenced and shaped the institutions that emerged during the first millennium. Particular attention is given to environmental or geological drivers such as volcanic eruptions, earthquakes, and climate change.

Significantly, Manning accepts that premodern economies were complex adaptive systems which reacted to both positive and negative feedback. He thus uses evolutionary theory to show how learned economic behaviours were transmitted, new ideas taken up, and older theories modified or replaced. The prominence afforded to evolutionary economics is due to Manning's assessment that it is a conceptual framework that not only helps historians to understand the varied ways in which 'experience' influenced economic progress and development, it is one which also enables them to move beyond stage theory and the dialectical works of Marx. Manning's other prevailing concern is to demonstrate the importance of understanding the historical and cultural developments of the early first millennium when seeking to explain the emergence of Mediterranean-wide economic systems and networks during the Hellenistic and Roman periods.

The book is organised thematically and is divided into two parts: "History and Theory" and "Environment and Institutions". In preference to a single overarching narrative, Manning opts to explore several interconnected themes via a series of individual essays and case-studies. The volume opens with an introductory chapter that identifies the most contentious debates concerning the nature of the ancient 'economy' and which charts the emergence and evolution of pre-modern economics as a related but distinct discipline from economics and economic history. Despite having been comprehensively challenged over the last thirty years, Moses Finley's *The Ancient Economy* still takes centre stage before being abruptly dismissed as the end point of a long and largely unnecessary

debate. Chapter One surveys the innovative ways in which recent scholarship has started to approach and analyse pre-modern economies whilst identifying several potentially profitable avenues for future research. Essentially, the chapter is a comprehensive and thoroughly researched summary of the extensive and continuing debate between 'primitivists' and 'modernists'. Justifiably, much of the chapter is devoted to analysing the impact that New Institutional Economics had on the study of premodern economies. The second chapter contains a broad survey of the economies of the first millennium Mediterranean and a concise yet detailed critique of the textual and archaeological evidence pertaining to economic activities during this period. Although identifying several inherent problems with drawing generalised conclusions from the extant evidence, Manning nevertheless shows how quantitative data might be used to help identify and better understand universal economic trends in premodern economies. Chapter Three, the last of Part One, highlights the difficulties associated with analysing and interpreting historical processes as few, if any, were the result of geographically or chronologically contained events. In order to overcome these difficulties, Manning creates a framework in which time, space, and environment are recognised as the primary dynamic drivers of historical change.

Having shown that scholarly perceptions of premodern economies have generally been shaped by contemporaneous opinions concerning time-space boundary issues, periodization, cross-cultural exchange, and the significance of geographic, topographic, and environmental variability, Part Two explores the relationship between human institutions and environmental conditions. Although several interconnected ideas permeate the proceeding five chapters, two are afforded prominence: the first, that environmental and climatic change functioned as triggers for human responses, the second, that it is vital to consider 'coupled natural-human system dynamics' when determining the economic performance of pre-modern economies or when seeking to identify the principal drivers of institutional change. Chapter Four focuses on agricultural production and distribution, activities that were at the heart of all pre-modern economies and which generated a plurality of institutional responses and solutions. Manning uses these examples to illustrate how responses to agricultural problems were directly shaped by a region's climate, ecosystem, and geography. He therefore shows that prevailing ecological and topographical conditions not only dictated which types of crops could be grown and in what quantities, they also helped to determine the nature of the institutions that emerged to monitor and regulate production. Consequently, the chapter closes by suggesting that the varied response to common agricultural problems and challenges is not only to be expected but also logical as each region of the Mediterranean had its own distinct climate and geography. Environmental conditions are also the focus of Chapter Five, an extended discussion of climate change as an impetus for economic advancement and innovation during antiquity. Ultimately, the chapter is an elucidation of Manning's view that historians should utilise traditional historical sources in conjunction with the natural archive when reconstructing the economies of the Iron Age Mediterranean. Accordingly, the chapter closes with the suggestion that repeated

environmental shocks not only encouraged adaptive responses, they also led to the emergence of complex institutions designed to minimise the economic impact of climate change.

Chapter Six explores the varying ways in which individuals, households, and states functioned as economic actors. Specific attention is given to the interactions between the three groups and the ways in which they influenced or affected one another. The chapter also includes an extensive discussion of demographic modelling through which Manning stresses the importance of structural demographic theory as a tool for understanding internal conflicts within any given society (including economic competition). Expanding on the idea of the state as an economic actor, Chapter Seven investigates the evolutionary processes that connected concepts of exchange and legal institutions to institutional change and development. Concentrating on the latter half of the first millennium, the chapter reveals that major advances in economic thought were typically driven by advances in politico-economic theory and the evolution of economic institutions. Detailed examinations of two such institutions, money and law, serve to underline the central role the state played in shaping and regulating economic activity. The final chapter is devoted to a discussion of growth, innovation, markets, and trade; four interlinked concepts which dictated the evolution of pre-modern economies but which, as a rule, are still poorly understood. The overarching aim of the chapter is to demonstrate the importance of approaching premodern economies from the perspective of the *longue durée*; something which is especially true when trying to determine if institutional innovation and advancement is primarily attributable to socio-political events or to environmental changes. Significantly, by approaching economic growth from the perspective of the *longue durée*, Manning is able to show that periods of truly intensive growth and development were unsustainable. Consequently, for much of antiquity growth primarily resulted from technical innovation (e.g. improved ships, irrigation devices, or plant stock) or institutional developments (e.g. more effective legal frameworks, monetary systems, or credit markets). The volume closes with a short concluding chapter which summaries Manning's key arguments before identifying several potential avenues for future research.

As is to be expected of a monograph covering both an extended timeframe and a broad geographic area, some chapters are invariably better informed or more detailed than others. Likewise, the breadth of this synthesis means that some themes or topics receive considerably less attention than others. Perhaps the biggest grievance with this volume, however, is that despite acknowledging that previous studies have been dominated by the (classical) Greek and (imperial) Roman economies, Manning does little to rectify this imbalance. For instance, although the Egyptian economy is discussed at some length — understandably so considering the author's expertise in Ptolemaic Egypt — other Near Eastern economies are glossed over or ignored entirely. Particularly egregious is the short shrift given to the economies of the Phoenician city-states and colonies (including Carthage), and the absence of any reference to the well-documented economy of Israel. With Phoenician city-states such as Arwad, Byblos, Sidon, and Tyre

doing arguably the most to connect the disparate regions of the Mediterranean during the early centuries of the first Millennium, their cursory treatment feels like a missed opportunity. Furthermore, their absence also means that seminal or pioneering studies of near eastern economic history, such as María Eugenia Aubet's numerous works on Levantine commerce and colonisation, are overlooked entirely. Similarly, and despite claims to the contrary, the volume also has very little interest in the cultures situated west of the Aegean (Iberia, Sardinia, and Sicily are all absent) or in North Africa (Carthage is cited once whilst other significant commercial centres such as Leptis Magna and Utica are omitted completely).

Another source of frustration is the somewhat confusing or ambiguous chapter titles, several of which bear no relation to the subsequent discussion. For example, contrary to expectation, the chapter entitled '*Bronze, Iron, and Silver*' did not contain an analysis of the exploitation of metal resources but rather was an extended discussion of the need to establish a framework for analysing and understanding how time, space, and environment functioned as dynamic drivers of economic change. This is a criticism which can also be levelled at the title of the volume itself, *The Open Sea*, which leads one to expect a heavy maritime focus (an assumption that is given tacit support by a cover festooned with a variety of ancient ships). However, this turns out not to be the case; whilst shipwreck data is recurrently cited as evidence for an increase or decrease in seaborne trade, this volume is not primarily interested in the maritime economies of the ancient Mediterranean. In fact, the sea is largely tangential to many of the principal arguments or hypotheses that Manning advances. Consequently, the implicit suggestion that the volume is going to challenge or update Horden and Purcell's *The Corrupting Sea* is also somewhat disingenuous. Whilst Manning does engage sporadically with this volume, his analysis is generally confined to critiquing the authors' underestimation of the importance of environmental and climatic factors as drivers of institutional development. In contrast, there was no direct engagement with the works of F. Cline (*1177 B.C.: The Year Civilisation Collapsed*. Princeton, 2014) or R. Drews (*The End of the Bronze Age: Changes in Warfare and the Catastrophe ca. 1200 B.C.* Princeton. 1995) despite their being listed in the bibliography. As both volumes analyse the role of geological (volcanoes and earthquakes) and environmental (droughts, climate change, adverse weather) factors in the collapse of civilisation at the dawn of the Iron Age, it was somewhat surprising that neither was explicitly referenced or discussed.

With all that being said, the most effective chapters combine astute literary analysis with rigorous historical research in order to highlight the plurality of ways in which the environment functioned as a dynamic driver of economic and institutional change. A notable strength of the volume is Manning's innovative engagement with the paleoclimatic data. By acknowledging that climate change impacted on the development and disruption cycles of agrarian based economies, Manning reveals a previously unrecognised correlation between economic innovation and short-medium term changes in environmental conditions. Understandably, much of Manning's analysis is focused on volcanic activity, a highly destructive natural phenomenon which was able to trigger

sudden and dramatic changes in climate and weather conditions, and which is generally well-documented in the archaeological and literacy records. By carefully documenting the impact that this type of environmental event had on economic and socio-political systems, Manning neatly illustrates the explanatory importance of climate and climate change for understanding the complex history of the ancient Mediterranean. Another strength of this volume is that it prepares the way for others wishing to test the efficacy of integrating paleoclimatic data into social, economic, or political histories of the ancient Mediterranean. Particularly valuable in this regard is Manning's extensive discussion of the challenges encountered when seeking to incorporate paleoclimatic data into studies of pre-modern economies and his honest and forthright review of the strengths and limitations of the new types of evidence provided by paleoclimatology. *The Open Sea* therefore represents the first, tentative steps in evaluating the extent to which environmental and climatic conditions influenced the emergence and development of economic institutions and organisations, and, as such, this volume will undoubtedly serve as significant catalyst for future study. Whilst some of Manning's arguments are more persuasive than others, all invite further contemplation and will serve to reignite debates over the classification and interpretation of the economic systems and institutions of the Iron Age Mediterranean.

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