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FAMINE AND FOOD SUPPLY IN THE GRAECO-ROMAN WORLD

RESPONSES TO RISK AND CRISIS

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RESPONSES TO RISK AND CRISIS

PETER GARNSEY

Reader in Ancient History and
Fellow of Jesus College, Cambridge

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PREFACE

Ancient historical studies have traditionally followed the literary sources in their preoccupation with wars and international relations, political events and institutions, and the careers and personalities of powerful and charismatic individuals. However, the first concern of the vast majority of the inhabitants of the Mediterranean in ancient times was not whether Alexander the Great would reach the Ocean that surrounded the inhabited world, or whether Julius Caesar was justified in crossing the Rubicon, but food: how to feed themselves and their dependants.

Famine is a major preoccupation of geographers, anthropologists, economists and historians of periods other than antiquity. While interest has been kindled by contemporary events, it is also recognised that the study of famine leads to a deeper understanding of the dynamics of particular societies.

Historians of antiquity have by and large neglected the topic. There is room for a study that will assess the ability of the peoples of the ancient Mediterranean to produce and distribute essential foods in a setting marked by climatic variability, traditional farming methods, a rudimentary transport system and a significant level of urbanisation.

Food crisis is a consequence of the breakdown of the system of production, distribution and consumption of essential foodstuffs. An analysis of the origins and impact of famine would involve one in an investigation of the whole material basis of Graeco-Roman civilisation. Discussion of these matters must be postponed for the present. This book is limited in focus; it concerns the responses of both urban and rural dwellers to food crises, actual or anticipated.

Three introductory chapters on the definition, frequency and severity of food crisis (in Part I) preface a general discussion of the mechanisms for coping with the risk and actuality of food crisis (in Part II). An exhaustive catalogue of food crises has not been attempted. I have chosen to present instead criteria for the evaluation and com-

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parison of individual crises and an account of the strategies open to and adopted by residents of both city and countryside. My aim in these sections and in the work as a whole has been to produce an interpretative account of food crisis in antiquity based on a qualitative analysis of the evidence.

An essential first step is to understand the meaning of 'famine'. 'Famine' is normally used by translators, commentators and historians as a blanket term to refer to any food crisis mentioned in the ancient sources. In this book famine is defined as a catastrophic food crisis, which is responsible for a dramatic rise in mortality rates in a given population. Starting from this definition, I establish that famines were rare and that food crises less serious than famines, which I call food shortages, were common. The famine/shortage distinction is important; it both enables us to make a realistic assessment of the scale of the problem, and confirms that significant public responses to the risk and presence of food crises were possible and are potentially recoverable from the ancient sources. Man was helpless in the face of famine, epidemic disease or earthquake. Apart from propitiating the gods, there was very little he could do about any of these natural disasters. But if the typical food crisis was a shortage not a famine, and if situations of shortage which did not amount to famine were frequent and unpredictable occurrences, then it makes sense to ask what practical steps were taken to ward them off or reduce their impact.

Food supply was a recurring problem for rural and urban dwellers alike. In addition to the constraints imposed by the eternal facts of climate and geography, the existing technology and the primitive development of agricultural knowledge, peasant farmers had to compete for the food they produced with the populations of cities to which they were politically and economically subject. Their survival depended upon their success in practising risk-minimising production strategies, and building up a safety net of social and economic relationships with kinsmen, neighbours, villagers and patrons.

Urban centres included consumers, often in very considerable numbers, who did not make any contribution to agricultural production. Cities were in part wealth-creating, but their survival depended crucially on their capacity to exploit a rural territory. As urban populations developed and grew too large for their agrarian base, they had either to siphon off surplus consumers or develop exchange or trading relationships. One therefore looks for and expects to find a network of institutions designed to monitor or administer long-term trade and to ensure the distribution of imported (and locally produced) goods among the citizenry. The results of such an

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investigation are striking. Instead of an elaborate structure of protective mechanisms designed to buffer ordinary consumers against food shortage, we find that civic governments produced a variety of rudimentary, ad hoc measures. The key role in the resolution and alleviation of food crises was performed by local men of wealth, who, on the one hand, controlled food production and distribution, and, on the other, dominated local government.

Among ancient states, Athens and Rome deviate from the general practice of minimal government intervention in the provision of access to food supplies. But this was not the case at all times. Athens only built up an impressive structure of laws and institutions to secure the food supply in the fourth century BC, while Rome developed a regular food supply system from the turn of the third century BC and operated monthly distributions of grain from 123 BC; the grain was not handed out gratis to most citizens until 58 BC. The rest of the book (Parts III and IV) is taken up with a systematic account of food supply and food crisis in Athens and Rome, at once the best documented and the least typical of ancient states. The experience of Athens is examined from roughly the beginning of the sixth century BC, the age of Solon, to the suppression of democracy by the Macedonians in 322 BC, and that of Rome from the beginnings of the Republic, traditionally 509 BC, to the end of the Principate, around the middle of the third century AD.

The studies of Athens and Rome run along roughly parallel lines, in that both are built around the historical development of institutionalised responses to the food supply problem. However, in the case of Athens, I begin with an assessment of the productive potential of the rural hinterland, Attica, while in the case of Rome, I end with an examination of the effect of the demands of the imperial power on the subject peoples (Chapters 6 and 15, respectively). Chapter 6 is not a full investigation of climate and agriculture in Attica (which is best pursued elsewhere), but a re-evaluation of the evidence for Attic cereal production and the import of cereals into Athens. There is reason to believe that scholars have seriously underestimated the agricultural potential of Attica and the contribution of domestic production to Athens' food needs, and in consequence dated Athens' dependence on foreign grain too early and misinterpreted the available evidence for Athenian foreign policy in the archaic period in the light of their mistaken assumptions. In the case of Rome, there is the challenge of bringing to bear on a traditional problem, the nature of Roman rule, a considerable body of evidence that has not been collected and addressed before: namely, the data relating to the supply, distribution and shortage of food in the cities of the empire. An old debate is moved

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onto new terrain: the question at issue is the impact of the demands of the imperial power on the living standards and survival chances of the mass of subject communities and households.

In writing this book I have received information, advice and encouragement from friends, colleagues and students on all sides. Paul Cartledge, Tim Cornell, Michael Crawford, Mogens Hansen, Michael Jameson, David Lewis, Paul Millett, Ian Morris, Dominic Rathbone, Dorothy Thompson, Frank Walbank and Gregory Woolf have read all or part of this book in draft and enabled me to make numerous improvements. I have benefited from discussions with Tom Gallant, who also gave me valuable assistance in data analysis. I am grateful to Christopher Hope for allowing me to draw on his mathematical and computer skills, to Paul Roesch and his colleagues in Lyon for introducing me to the epigraphic material from the Hellenistic age, and to Peter Brown for encouraging me to move beyond the canonical texts and to 'rummage in the rubbish-bins of history'. Finally, I acknowledge funding from the Economic and Social Research Council for the initial stages of a parallel project on the agroclimatology of the Mediterranean, which has influenced the writing of the early chapters of this book.

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ABBREVIATIONS

Most of the abbreviations are those of *L'Année Philologique*. In addition the following may be unfamiliar to some readers.

Abbott and Johnson	F. F. Abbott and A. C. Johnson, *Municipal Administration in the Roman Empire*, Princeton, 1926
AE	*L'Année Epigraphique*
Austin	M. M. Austin, *The Hellenistic World from Alexander to the Roman Conquest*, Cambridge, 1981
BAR	*British Archaeological Reports*
BGU	*Ägyptische Urkunden aus den Staatlichen Museen zu Berlin, Griechische Urkunden*, 1895–
CIG	*Corpus Inscriptionum Graecarum*
CIL	*Corpus Inscriptionum Latinarum*
CMG	*Corpus Medicorum Graecorum*
C. Ord. Ptol.	M. T. Lenger, *Corpus des ordonnances des Ptolemées*, 2nd edn, Brussels, 1980
CSEL	*Corpus Scriptorum Ecclesiasticorum Latinorum*
FE	*Forschungen in Ephesos*
FGH	F. Jacoby, *Die Fragmente der griechischen Historiker*, Berlin, 1923–
*FIRA*²	*Fontes Iuris Romani Anteiustiniani*, 2nd edn, 1940–3
Fornara	C. W. Fornara, *Archaic Times to the End of the Peloponnesian War: Translated Documents of Greece and Rome*, Vol. 1, 2nd edn, Cambridge, 1983
Harding	P. Harding, *From the End of the Peloponnesian War to the Battle of Ipsus: Translated Documents of Greece and Rome*, Vol. 2, Cambridge, 1985
IG	*Inscriptiones Graecae*
IGR	*Inscriptiones Graecae ad Res Romanas pertinentes*
ILAlg.	*Inscriptions latines de l'Algérie*
ILLRP	*Inscriptiones Latinae Liberae Rei Publicae*
ILS	*Inscriptiones Latinae Selectae*
LBW	P. Le Bas and W. H. Waddington, *Voyage archéologique en Grèce et en Asie Mineure 1843–1844* . . . 6 vols., Paris, 1853–70

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Abbreviations

Meiggs and Lewis	R. Meiggs and D. Lewis, *A Selection of Greek Historical Inscriptions*, Oxford, 1958
Nouveau Choix	*Nouveau Choix d'inscriptions grecques: textes, traductions, commentaire*, L'Institut Fernand-Courby, Paris, 1971
OGIS	*Orientis Graeci Inscriptiones Selectae*
P. Erl.	*Die Papyri der Universitätsbibliothek Erlangen*, 1942
P. Lond.	*Greek Papyri in the British Museum*, 1893–1917
P. Oxy.	*The Oxyrhynchus Papyri*, 1898–
PSI	*Pubblicazioni della società italiana per la ricerca dei Papiri greci in Egitto*, 1912–
SEG	*Supplementum Epigraphicum Graecum*
SHA	*Scriptores Historiae Augustae*
Syll.^{3}	*Sylloge Inscriptionum Graecarum*, 3rd edn
TAM	*Tituli Asiae Minoris*
Tod II	M. N. Tod, *A Selection of Greek Historical Inscriptions*, Vol. 2, Oxford, 1948
Wilcken, *Chr.*	L. Mitteis and U. Wilcken, *Grundzüge und Chrestomathie der Papyruskunde*, Leipzig, 1912

MEASURES, WEIGHTS AND COINS

1 Greek medimnos of wheat = 6 Roman modii = 51.7 litres = 40 kg = 127,400 kcals.
1 hectare = 4 Roman iugera = 11 Greek plethra.
1 Attic talent = 6,000 drachmas = 36,000 obols.
1 Roman denarius (= 1 Attic drachma) = 4 sestertii = 16 asses.

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1 The Roman world

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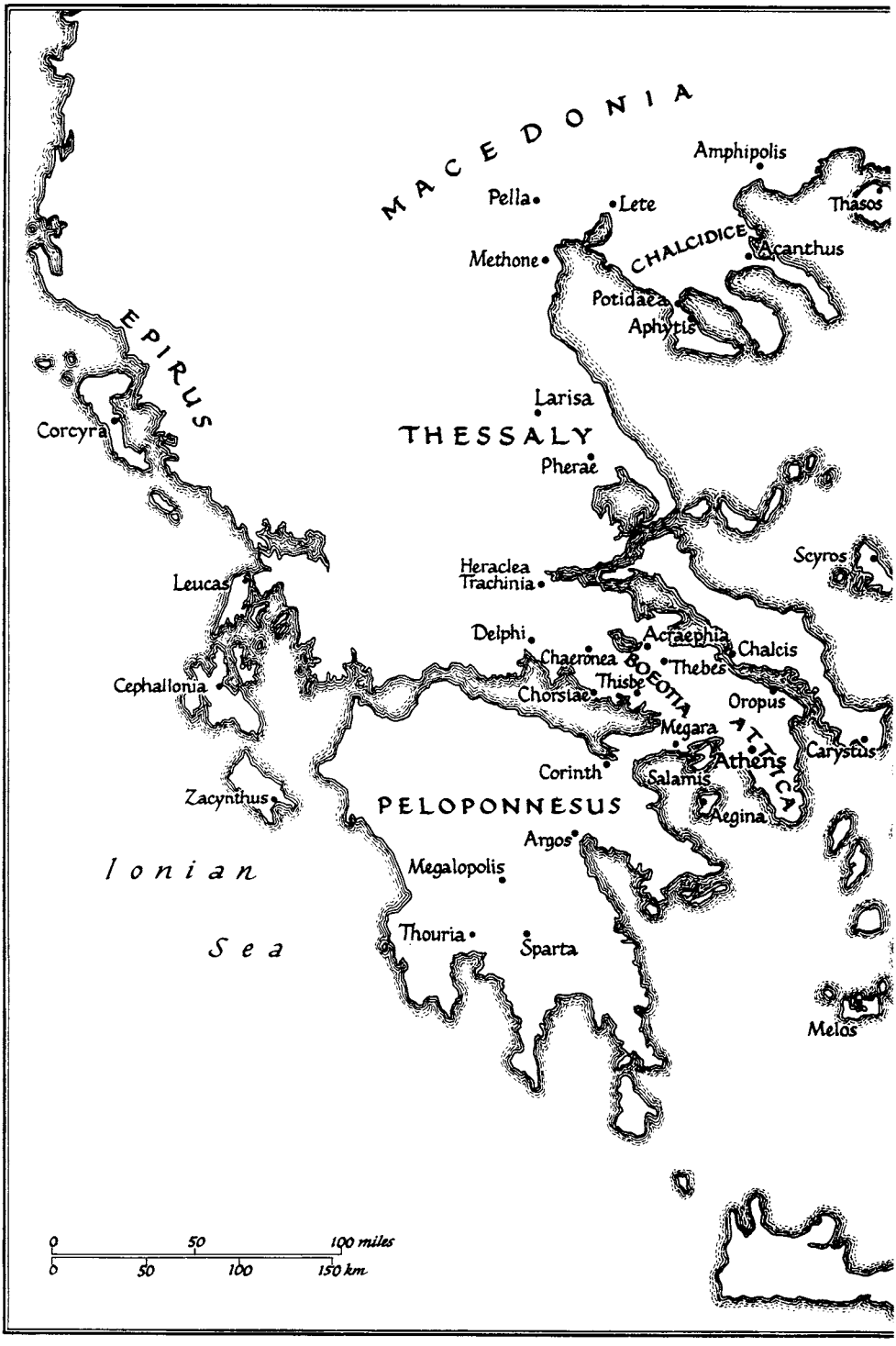

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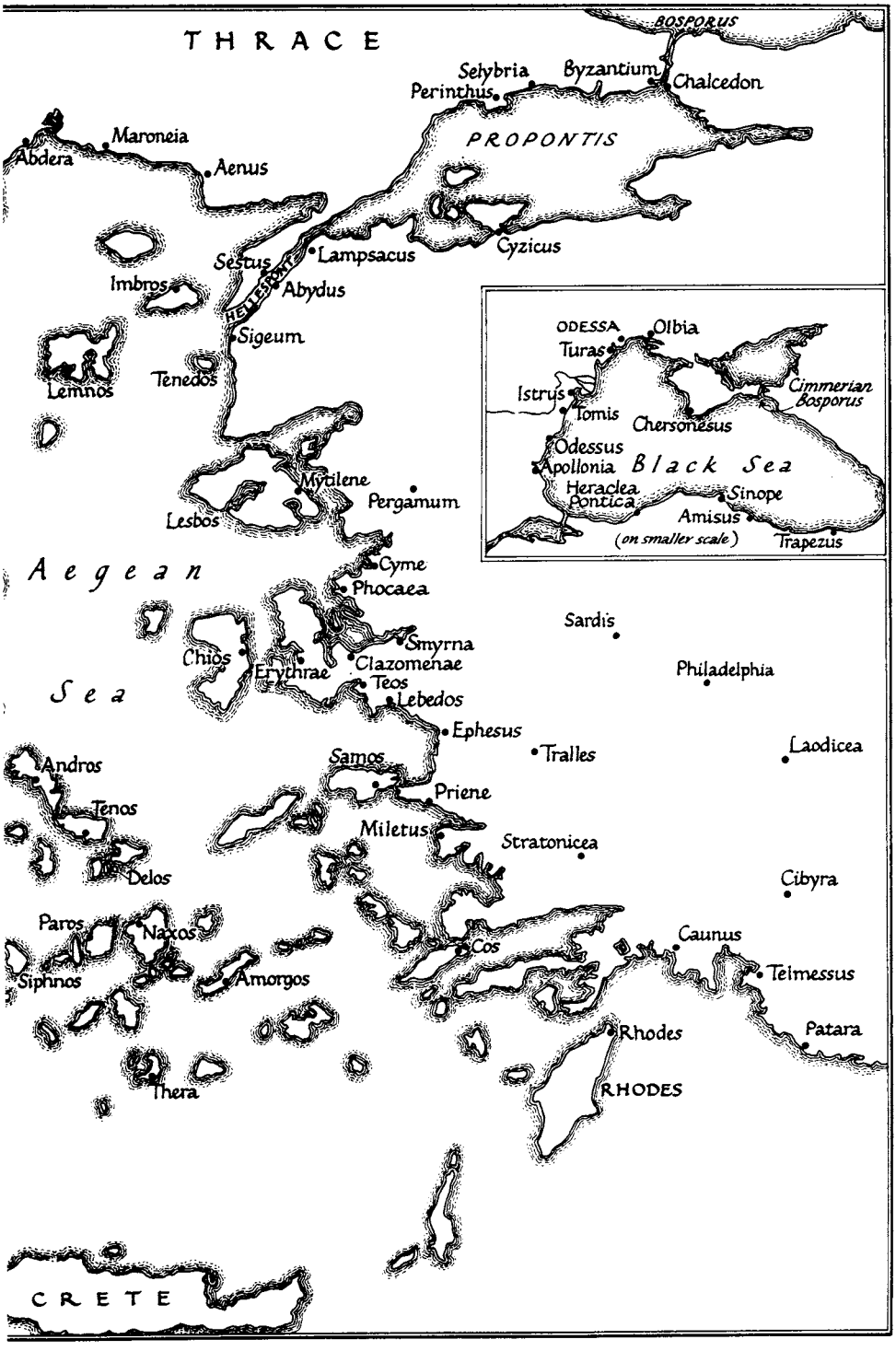

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