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INTRODUCTION

Destruction, Survival, and Recovery in the Ancient Greek World

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FROM THE TROJAN WAR TO THE SACK OF ROME BY ALARIC, FROM THE fall of Constantinople to the bombing of European cities in World War II and now the devastation of Syrian towns filmed by drones, the destruction of cities and monuments and the slaughter of civilian populations are among the most dramatic events in world history. Since the beginning of literature and figurative art, authors, storytellers, bards, poets, artists, tragedians, historians, art historians, and archaeologists have been fascinated by the evocative power of destructions and ruined cities.¹

The ancient literary sources recount many incidents of destruction and slaughter in the Greek world. The fear of being attacked, enslaved, or annihilated was so real that almost all city-states increasingly built city-walls to protect their populations and economic assets, a process that started in the Archaic period.² Despite extensive fortifications and their power to repel invaders, however, the ancient historians report that Greek cities continued to be besieged, stormed, “looted,” “destroyed,” “annihilated,” and “razed to the ground.” For instance, Herodotus (6.101.3) states that the Persians burned down the sanctuaries of Eretria in 490 B.C. and took away its citizens as slaves. According to Livy (45.34.1–6) in 167 B.C., the Romans destroyed seventy

¹ For the reception of destructions and ruined cities in various cultures, see the collection of essays edited by Pretti and Settis 2015. On the theme of destruction in poetry and rhetoric, see Demoen 2001.

² Frederiksen 2011; Ducrey 2019, pp. 329–365.

towns and enslaved 150,000 people in Epeiros, an act of destruction with few parallels in the Ancient World (see B. Forsén, in this volume). But how reliable are these literary sources? Did ancient authors exaggerate the scale of destruction and the number of killings to create sensational narratives? What were the motives for destroying or “killing” cities? How can we measure the effects of destruction on their populations? Can we study the patterns of demographic and economic recovery? The volume aims to provide, if not definitive answers, at least an archaeological and historical framework for studying the impact of destruction on ancient Greek cities and the sequences of survival and recovery.

Archaeological data related to destructions are challenging (as discussed in P. Karkanas’ chapter in this volume), especially when one attempts to link archaeological horizons with a single event that unfolded in the span of a few days.³ In some cases, destruction layers do not survive, as they were cleaned away during a phase of recovery. Moreover, even if a destruction layer is well dated and documented in excavation, it remains difficult to assess its exact causes – not to mention the scale of destructions for an entire city and its impact on a region. The incompleteness, ambiguity, and complexity of archaeological data in relation to destructions data have been neatly analyzed by A. Snodgrass. A passage deserves to be quoted in full:

If an archaeologist reports that a settlement site that he is excavating was burned and then abandoned, the historian and the layman in general will understand him to mean the settlement as a whole, or at least very substantial parts of it. In fact, of course, such an inference is only secure when the settlement has been entirely, or very largely, excavated. Even in Greece, where some settlements have been under intermittent excavation for over a hundred years, this condition is very seldom satisfied. Even when it is, and a horizon of destruction is found everywhere, the conclusion that this destruction was synchronous, that it was all a single episode, is likely to be based on common sense inference rather than on demonstration: the degree of precision, in even the best-dated pottery series, is unlikely to justify a distinction between one day and, say, ten years. It may be unnecessary to remind ourselves that documented history offers cases of a settlement being destroyed twice within a very short time. Furthermore, destruction deposits frequently (and predictably) contain material that was far from brand-new at the time of the disaster. (. . .) The distinction between natural disasters, such as earthquake and accidental fire, and the results of military action becomes a crucial one in the context of historical reconstruction. Yet for the archaeologist excavating a site, it is often very obscure, even imperceptible. There is an area of especial doubt centered round the question of how far the military resources of the ancient world were capable of visiting *total* destruction on the whole

³ Driessen 2013b, pp. 12–16.

surface area of a settlement. Even the slaughter of an entire population, followed by permanent abandonment of the site, could easily be encompassed without leaving archaeologically traceable evidence.⁴

Despite these difficulties, we were intrigued by the cases in which archaeologists had repeatedly failed to discover compelling evidence for destruction or abandonment. Not that we denied that the event ever took place, but it appeared increasingly evident that the magnitude and impact of the destruction had often been inflated by ancient and modern historians alike, as well as, in some instances, by archaeologists. Then, although we were struck by the high number of cities that allegedly sustained sieges and “destructions,” we were surprised to see how many of them seemed to have recovered in the span of one or two generations. Attacks can be quick and lethal, but not devastating enough to terminate occupation. For instance, P. Bruneau has shown that the impact of the attacks on Delos by the troops of Mithridates in 88 B.C. and the raid of the pirate Athenodorus in 69 B.C. had been exaggerated; these assaults did not provoke the abandonment of the island.⁵ Other destructions, despite their violence, end up having a modest impact in the long term. Many examples in this book demonstrate “miraculous” recoveries in the span of one generation. How could this happen?

The pattern of rapid recovery following devastating destructions appears to contradict the verdict of several economic historians. Did destruction from warfare truly inhibit economic growth in the Ancient Greek World? Violent episodes were disruptive in the short term, but perhaps not substantial enough to shake or devastate the economic and institutional foundations of cities. Moreover, many examples show that population evacuation was an effective survival tactic, destructions in the countryside resulting from pillaging and ravaging were limited in scale, ancient populations were surprisingly resilient, and demographic and economic recovery could be astoundingly rapid. Besides, because Greeks were aware that warfare could interrupt economic activity (in some cases factoring this possibility into their contracts), adequate measures were taken to recover from a disaster. In the course of our research, site visits, and extensive conversations, it became increasingly clear to us that there was another story of destruction to be told, one focusing as much on the immediate impact of the event as on the recovery phase in the long term. In an illuminating way, by studying the recovery phase of a Greek city following destruction, much can be said about its population, economic base, and institutions.

⁴ Snodgrass 1987, pp. 41–42. ⁵ Bruneau 1968, pp. 671–691.

THE STUDY OF NATURAL DISASTERS AND MILITARY DESTRUCTIONS

The topic of destruction and its impact on ancient populations is as old as the destructions themselves. Ancient authors reflected upon them, and Polybius even criticized the accounts of them made by his fellow historians (discussed below). Since the end of World War II, the topic has been studied from different angles and by different disciplines (ancient history, philology, archaeology, economic sciences), yet without much collaboration in most cases. Ancient historians, archaeologists, and philologists have different perspectives regarding destructions and tend to study them differently. Moreover, there has been a clear tendency to study human and natural destructions separately. A rapid review of the scholarship will help us frame the debate, situate our research questions, and specify the aim of the current volume.

Earthquakes, volcanoes, flooding, and landslides have attracted some scholarly attention in the nineteenth and most of the twentieth century. Since the 1970s, however, the concept of “natural disaster” has emerged as a proper field of research,⁶ and the last decades have seen the multiplication of studies devoted to natural disasters and their impact on ancient populations. The proliferation of studies on natural disasters can be attributed to their high relevance, as the number, frequency, and violence of these events have significantly increased in the last twenty years due to global warming (tsunamis, hurricanes, earthquakes, floods, droughts, wildfires). In 2006, J. Jouannat, J. Leclant, and M. Zink published *L’homme face aux calamités naturelles dans l’Antiquité et au Moyen Âge*, studying the reception of natural disasters and other calamities in literary sources.⁷ In 2016, L. Thély provided a historical study of natural disasters in ancient Greece, reviewing their impact and exploring the management of catastrophes by communities, as well as their resilience and the financial mechanisms for reconstruction.⁸ At the same time, archaeologists became increasingly interested in studying natural disasters and destructions, as well as their impact on ancient settlements, architecture, and populations. In 2000, a collection of papers entitled *The Archaeology of Geological Catastrophes* addressed the archaeological signature and cultural impact of large-scale geological events such as earthquakes and volcanic eruptions.⁹ Five articles of the volume were devoted to the Thera eruption, thus illustrating the vitality, this topic of inquiry would acquire in the following decades within the field of Aegean Bronze Age Archaeology.

During the same period, archaeologists increasingly felt the need to theorize destructions in their field. In 2002, R. Torrence and J. Grattan published *Natural Disasters and Cultural Changes*, stressing the importance of past and

⁶ Thély 2016, pp. 17–23. ⁷ Jouannat, Leclant, and Zink 2006. ⁸ Thély 2016.

⁹ McGuire et al. 2000.

present disasters experienced by societies, their role as possible vectors of cultural change, as well as their importance for archaeological theory and practice.¹⁰ More recently, J. Driessen, a specialist of the Thera eruption and its impact on Crete, has conducted very stimulating work on the archaeology of destruction. In 2013, he published *Destruction: Archaeological, Philological and Historical Perspectives*, a broad and robust collection of topics by archaeologists, historians, and philologists engaging with theoretical and general patterns of destruction using different approaches and chronological scales. In 2017, he co-edited with T. Cunningham *Crisis to Collapse: The Archaeology of Social Breakdown*, a collection of essays investigating crisis and collapse narratives in archaeology using different case studies from Europe, the Levant, and South America.

In general, it is revealing to note that most archaeological and theoretical work regarding destructions in Greece deals with natural disaster during the Bronze Age. As a result, Aegean prehistorians have led the way on this topic. True, destruction layers play a crucial role in archaeology, as they provide convenient chronological horizons that mark the end of a period and the start of a new one. As shown by A. González-Ruibal, “archaeological periods, with its focus on the life of the material, *tend to privilege destruction*” (italics are ours).¹¹ The Thera eruption, the destruction of palatial complexes, and the collapse of the Mycenaean civilization due to societal and natural/environmental factors have, in many ways, defined the chronological landmarks of the Bronze Age used by Aegean prehistorians.¹²

On the other hand, the military destruction of cities and the fate of ancient populations have primarily been studied by ancient historians working in the domain of Greek warfare. P. Ducrey published in 1968 his University of Lausanne dissertation on the treatment of prisoners of war following the fall of cities in ancient Greece and the violence which civilians suffered.¹³ The book provided a social history of siege warfare seen from the perspective of the besieged and the vanquished. Using siege statistics, Ducrey was able to correct many *idées reçues* on the fate of populations and prisoners after sieges, to track down the realities of *andrapodismos*, and to outline the general terms of negotiation and capitulation. Interestingly, it appears that the massacre of populations following sieges were more common during the Peloponnesian War than during the Hellenistic period.¹⁴ Ducrey later published other essays on these topics, examining cases of cruelty and violence, and analyzing the global importance of city-walls as negotiation leverage and as a factor in negotiating

¹⁰ Torrence and Grattan 2002. ¹¹ González-Ruibal 2013, p. 41.

¹² Civilization collapse, in particular, continues to draw considerable scholarly attention and interest. See Cline 2014 and Murray 2017.

¹³ Ducrey [1968] 1999. For Hellenistic Asia Minor, see also Boulay 2014, pp. 253–272.

¹⁴ Ducrey [1968] 1999, pp. 56–74; Chaniotis 2005, p. 125.

favorable terms for the city's population after capitulation – thus avoiding massacres and limiting the range of destructions.¹⁵

The impact of warfare and destructions had mostly been studied in urban contexts, but in the 1980s, the attention progressively shifted to include the territory of Greek *poleis*. In *Warfare and Agriculture in Classical Greece*, V. D. Hanson analyzed in great detail the effects of conquest, military operations, and destruction on the rural landscape of Greek cities, mainly Athens during the Peloponnesian War. Contrary to prevailing assumptions, he was able to demonstrate that invasions and ravaging did not have a profound and lasting impact on the agricultural (and therefore, economic) backbone of most *poleis*, stressing the resilience of ancient communities. Hanson observed that the effects of destroying crops were generally short-term.¹⁶ It is very difficult to destroy olive trees without completely uprooting them, and fields of burnt crops can be quickly sown again. All the available evidence indicates that the economy of Athens recovered quickly after the Peloponnesian War.¹⁷ According to Hanson, “*permanent and systematic agricultural damage and subsequent economic collapse were difficult to achieve under the conditions of ancient warfare.*”¹⁸ The book was very well received and launched a new cycle of interest on the defense of territories, rural populations, and agricultural production in ancient Greece.¹⁹ Other scholars confirmed Hanson's conclusions. According to C. Chandezon, Greek warfare, in its traditional form, could not endanger the agricultural resources of the *polis*: war would indeed provoke a severe and sudden subsistence crisis, but it was followed by rapid recovery.²⁰

These results raised new questions: if most invasions and ravaging did not destroy the agricultural and economic backbone of Greek *poleis*, what then was the real impact of conquest and destruction? A way to look at these dynamics is to review the sizeable literary evidence related to booty and conquest, and thus to indirectly collect data on the economic losses of the defeated. In 1991, W. K. Pritchett dedicated a large part of the fifth volume of *The Greek State at War* to war booty, the object of booty (including cities and sanctuaries), the fate of captives following sieges, and the profits of war. By collecting *testimonia* and organizing them into thematic tables, Pritchett provided the bases for studying the potential financial advantages of (siege) warfare from the victors' point of view.²¹ Many texts give the impression of total economic disaster following plunder, but the narrative of booty in ancient texts should often be parallel to that of destruction, which is often inflated to strike awe and inspire emotions. It remains that the actual economic consequences of booty for the defeated remain hard to quantify and that the real price of destruction is poorly

¹⁵ Ducrey 2019. ¹⁶ Hanson 1998. ¹⁷ See Hanson 1998, pp. 131–173.

¹⁸ Hanson 1998, p. xii. ¹⁹ Ober 1985; Fachard 2012.

²⁰ Chandezon 1999, p. 207 (with ref.). ²¹ Pritchett 1991.

understood. How much booty could be taken by the enemy? Similarly, how much capital could be hidden or saved by the defeated? How fast could a city recover economically from defeat and plunder? Was pillage extensive enough to shake the economic fabric of Greek *poleis*? Such questions remain unanswered and must be tackled only on a case-by-case basis. They illustrate again that the economic dimensions of Greek warfare must be studied more systematically.

In his social and cultural study of Hellenistic warfare, A. Chaniotis dedicated several sections to the economic impact of war, the fate of vanquished populations, and the economics of booty.²² He considered that the economic impact of siege warfare, particularly for sacked cities, was particularly heavy: “For a city, a foreign attack and a long siege not only meant the temporary loss of the countryside with all its resources, but also the substantial destruction of the urban center, especially as artillery device became increasingly effective (. . .) When a city was actually taken (*doria lotos*) – and this occurred quite often – the damage was more substantial.”²³ One might object that the use of artillery would undoubtedly damage the walls (especially the parapets and the towers), but the bombardment of the urban fabric with stone balls would provoke more terror than extensive and irreparable damage. Moreover, the destruction of public infrastructure and religious monuments would certainly come at a cost, but the latter could also be postponed to better times (as Athens did after 480 B.C., see J. Camp in this volume) and did not undermine the economic base of cities dramatically. Yet Chaniotis rightly points out that the impact of *repeated* conflicts could be heavy. Literary sources indeed refer to abandoned cities and rural landscapes due to *continual* wars, which, in turn, suggest a demographic and economic decline.²⁴ Many authors, ancient and modern alike, have attributed the general demographic decline of Greece in the late Hellenistic and Early Roman period to chronic warfare, which finally had an enduring toll on Greek demographics.²⁵ This phenomenon is, obviously, a complex one, and attributing the demographic decrease of the Greek countryside – well documented by survey archaeology throughout Greece – cannot be attributed to warfare alone, as already suggested by Polybius (36.17.5–7). Other factors were at stake (rural exodus, economic recession, a progressive weakening of institutions, Roman policies of occupation, economic opportunism of the conqueror), and many issues remain unresolved.²⁶ More recently, W. Scheidel studied the impact of mass warfare in World History as a leveling factor on ancient populations, following his “Four Horsemen” of violence and leveling: mass-mobilization warfare, transformative revolutions,

²² Chaniotis 2005. See also Boulay 2014, pp. 253–272. ²³ Chaniotis 2005, pp. 119–120.

²⁴ Chaniotis 2005, p. 126. ²⁵ Alcock 1993, pp. 25–27; Chaniotis 2005, pp. 138–140.

²⁶ Bresson 2016, pp. 61–64; Rousset 2008; Bintliff in this volume.

state collapse, and catastrophic plague (which we have just experienced with COVID-19).²⁷ However, the military events described by Scheidel belong to major conflicts whose scales of destruction are not comparable with the conquests and “destructions” suffered by ancient Greek cities.

Overall, there is no doubt that war and looting provoked economic disruption, terror, and death – especially in cases of endemic warfare. However, it is essential to distinguish the narrative of destruction from the accurate scale and extent of military damage and to focus on the recovery phase of destroyed cities. In light of current research, we wish to find ways to measure the economic and demographic impact of such military destructions on a case-by-case approach and to study the recovery phase with greater care.

WAR AND THE ANCIENT ECONOMY

We often read that perpetual warfare among the Greek city-states inhibited the expansion of markets and virtually eliminated the possibilities for economic growth in the Classical and Hellenistic worlds. According to this belief, the best way for states and individuals to gain profits was by booty from conquest and by slave labor. For instance, P. Millett has asserted that “exogenous shocks of famine, plague, and war took a heavy toll in the smaller economy of the Greek world.”²⁸ As a result, “scope for sustained growth in the centuries B.C. was elusive or non-existent.” According to Chaniotis “the extensive destruction of cities and the surrounding countryside had ‘long-term consequences’ and caused a decrease in population.”²⁹ J. Ober has noted that “a Greek *polis* confronted a meaningful chance of being destroyed (...) as a result of the sack, of the central city and/or extermination, enslavement, or forced resettlement of the entire population.”³⁰ According to him, “a Greek *polis* confronted something like a 1:3 chance of suffering from destruction at some point in its archaic/classical history.” This would mean that hundreds of city-states out of the thousands listed in the *Inventory of Poleis* compiled by the Copenhagen Polis Project would have suffered destruction from 600 to 300 B.C. This would seemingly have had a devastating effect on the economy of the cities. One is often brought to this natural and logical conclusion when reading the ancient accounts of destructions. But how much of this was true? Did literary sources exaggerate the effect and scale of these “destructions”? What was the real economic and demographic impact of a “destruction” for an ancient Greek city? How could cities and states recover from “destructions”?

²⁷ Scheidel 2017. ²⁸ Millett 2001, p. 35. ²⁹ Chaniotis 2005, p. 138.

³⁰ Ober 2008, pp. 81–82.

The topic of destruction is very important at the moment because we are in the middle of a revolution in approaches to the economy of ancient Greece. In the 1980s, there reigned in ancient history what K. Hopkins of Cambridge University called the New Orthodoxy. Hopkins reduced this orthodoxy to a series of basic tenets: the primary basis of wealth was agriculture with most people busy growing food, there was little inter-regional trade and little specialization of labor, and markets were very limited and catered mostly to the desires of the elite for luxury goods. According to this view, most farmers lived to achieve self-sufficiency and never participated in markets. City-states aimed only at securing a supply of imports and did not promote exports. These basic tenets were repeated verbatim in the 2007 *Cambridge Economic History of the Greco-Roman World*.³¹

These views started to be challenged twenty years ago, and in the past decade there has been a growing consensus that the economy of ancient Greece was not stagnant but dynamic and that the expansion of markets that started in the Archaic period led to economic growth and a rise in living standards. A leading proponent of this challenge was A. Bresson, who, as early as the late 1980s, showed that Greek city-states were concerned about both exports and imports. Bresson made a groundbreaking contribution in his *La cité marchande* published in 2000 and in 2007–2008 published his impressive synthesis *L'économie de la Grèce des cités*, which has now been translated into English.³² In an essay published in 2002, Harris demonstrated that the level of specialization was far higher than scholars like Finley and Hopkins had previously assumed and that this led to the creation of a permanent market in Athens and other Greek cities and extensive trade with other communities.³³ In the *Ancient Greek Economy*, E. M. Harris, D. M. Lewis, and M. Woolmer published essays by scholars stressing the importance of markets in the Greek world and their contribution to economic growth.³⁴ Recent work on the Roman Economy directed by A. Wilson and A. Bowman at Oxford University has drawn on the evidence of archaeology for the study of the rural economy and the importance of markets.³⁵

As stressed by Bresson, Greece experienced a period of growth between the Archaic and Hellenistic periods.³⁶ However, during this period of sustained growth, warfare was endemic, marked by extreme violence, enslavement, and urban destructions. Was the level of destruction as high as many ancient and modern historians claim? This brings us back to the issues to be addressed in this

³¹ Scheidel, Morris, and Saller 2007, with the criticism of Harris and Lewis in Harris, Lewis, and Woolmer 2016, pp. 1–40.

³² Bresson 2000, 2007–2008, 2016.

³³ Harris 2002, with Lewis' updated list in Stewart, Harris, and Lewis 2020, pp. 129–174.

³⁴ Harris, Lewis, and Woolmer 2016. ³⁵ Bowman and Wilson 2009, 2013.

³⁶ Bresson 2016, p. xxii.

volume: what was the economic impact of the destruction of cities? Was it pervasive? Could it have placed a major brake on economic growth?

ANCIENT ACCOUNTS OF DESTRUCTIONS: BETWEEN LITERARY TOPOS AND REALITY

There can be no doubt that some Greek cities were extensively destroyed in the Classical and Hellenistic periods. The fear of being attacked and the threat of destruction were a constant concern for their populations. For anyone questioning this, it is sufficient to look at the thousands of fortifications that dot the Greek landscape. R. Frederiksen has shown that Greek *poleis*, starting in the Archaic period, invested massively in building fortifications to protect their urban population and economic resources.³⁷ In later periods some of them took concrete measures to defend and secure the countryside and its resources.³⁸ At the outbreak of the Peloponnesian War, it would have been difficult to attack a city without having to breach its walls first. In the Classical period, over 60 percent of the 870 located *poleis* were fortified, and J. Ober has shown that almost all large cities were fortified by the end of the fourth century.³⁹ City-walls offered the best protection against loss of life, enslavement, the destruction of urban infrastructure, pillaging, loss of capital, and even state collapse and death. Yet, in many cases, they were just not enough to prevent a city from falling to the enemy and suffer destruction.

One of the most notorious examples was the destruction of Olynthus by Philip II of Macedon in 348 B.C., which is discussed in greater detail by S. Psoma and C. Gatzolis in Chapter 6. The site of the city was extensively excavated from 1928 to 1938 by a team from the American School of Classical Studies at Athens, under the direction of D. Robinson. Evidence for the siege was found in numerous sling-bullets, including one inscribed with the name of Philip's general Hipponicos and an arrowhead with Philip's name on it.⁴⁰ Many of the houses on the site showed traces of intense burning, and the excavations led by Robinson turned up very few valuable objects, which were no doubt looted by the Macedonian soldiers.⁴¹ In general, the site appears to have been abandoned after 348 B.C. It does appear that some houses in the Northwest quarter were reoccupied after the siege, which reveals that the claim of Demosthenes (9.26) that Olynthus was "so ruthlessly destroyed that a traveler would find it hard to say whether they (i.e. the cities of the Chalcidice) had even been inhabited" is somewhat exaggerated.⁴² In general, however, the literary evidence lines up with the archaeological finds. There can

³⁷ Frederiksen 2011. ³⁸ Ober 1985; Fachard 2012. ³⁹ Ober 2015, p. 43.

⁴⁰ Cahill 2002, p. 46. ⁴¹ Cahill 2002, pp. 48–49. ⁴² Cahill 2002, pp. 49–57.

be no question that the site was almost completely abandoned and that the town never recovered its former prosperity. Similarly, the site of Methone was besieged by Philip II of Macedon, who famously lost his eye during the siege. The excavations carried on by the Ancient Methone Archaeological Project have recorded archaeological evidence for this event, as well as the total abandonment of the city, which is presented in Chapter 5 (M. Bessios, A. Athanasiadou, and K. Noulas). Here too, the archaeological evidence is in accord with the literary.

Ancient historians often report about destructions in vivid terms, writing that Greek cities were “stormed with great violence,” “looted,” “destroyed,” “annihilated,” and “razed to the ground.” In some well-documented cases, however, it appears increasingly clear that the literary sources give a misleading account of destructions, which are influenced by literary *topoi* and written by authors who were rarely eyewitnesses but wrote about events at a distance of one or more generations later. For instance, Herodotus (6.19–20) informs us that in 494 B.C., the Persians laid siege to Miletus, took the city, killed most of the men, enslaved the women and children, and plundered and burnt the shrine at Didyma. From this account, one would conclude that Miletus ceased to function as a Greek *polis*. However, the *chora* of Miletus was spared by the Persians, as shown by H. Lohmann in this volume (Chapter 3). Thereby, a portion of the rural population did survive, thus securing the demographic resilience of the *polis*. A mere fifteen years after the destruction, Herodotus (9.104) tells us that there were Milesians living in the city who were ordered by the Persians to guard the passes around Mycale when the Greeks attacked there. They were perhaps numerous enough to pose a threat to the Persians, who did not allow them into their camp, and they later joined forces with the Greeks after the battle. Moreover, significant evidence for the economic recovery of Miletus is the fact that the earliest entry for the payment of tribute by the city in 449 B.C. records a sum of ten talents, one of the largest found in the lists ((*IG I*³ 263, (450/449 B.C.), Column V, line 18 [*aparche* of 1,000 drachmas = tribute of ten talents])). Yet the story of Miletus’ recovery is very complex, highlighting the incompleteness of archaeological findings and the problems of chronology, which are fully developed by Lohmann in this volume (Chapter 3).

A rapid recovery appears to have taken place at Eretria, which is in contrast to the literary *topos* of the destruction and the subsequent enslavement of its population. We are told by Herodotus that the city was taken, and the shrines were burned in 490 B.C. A section of the population was taken as prisoners back to Persia at Arderrika (6.119), where they were still living in Herodotus’ time. Other authors, after Herodotus, offer a dramatic account of the fall of Eretria and the capture of its population. Plato (*Menexenos* 240 B–C; *Laws* III 698 C–D) mentions the *sageneia* “capture with the fishing net” to describe how the Persians, joining hands, made a human chain between the two coasts of

EuBoea and captured the entire population like fish in a net. In the *Laws*, Plato has the Athenians allude to this episode but expresses doubts about the veracity of the episode (“whether true or whatever its origin”). Later on, Strabo, who never set foot on EuBoea, referred to the siege, saying that the current city of Eretria was an entirely new foundation, the old one having been entirely destroyed by the Persians and its population taken by the net. D. Knoepfler, who has carefully studied these passages, concluded that Herodotus’ version was the most realistic and that later sources “dramatized to the extreme” the fall of Eretria. Therefore, as Knoepfler suggests, we are dealing with “an ideological discourse, whose historical significance is weak.”⁴³ But what was the actual impact of the Persian siege? The archaeological evidence for the destruction is most difficult to detect and has been the source of considerable debate among the excavators. In the agora, the East stoa built in the last quarter of the sixth century was destroyed by fire and quickly repaired.⁴⁴ A pit, filled with discarded and partly burnt pottery, is the result of cleaning up of the area, prior to the rebuilding of the stoa sometime in the last decades of the Archaic period. By comparison with assemblages from the Persian sack of Athens in 480 B.C., the pottery from the Eretria pit is dated to a decade earlier and could, therefore, possibly match the horizon of 490 B.C., according to a new study by T. Saggini.⁴⁵ Elsewhere in Eretria, clear evidence of a *Perserschutt* is lacking, despite earlier attempts to link some destructions layers by the West Gate with the siege of 490 B.C.⁴⁶ The famous Apollo temple sculptures have been often associated with the event of 490 B.C. However, because of the uncertainty of their date, fluctuating between 510 and 480/470 B.C., it is still tricky to say whether they were carved before or after the Persian siege. At any rate, the statues show no trace of violent destructions or exposure to fire. However, the statues do show signs of modification in their arrangement, which could suggest that, if carved before the siege, they were restored after the destruction of the sanctuaries by the Persians.⁴⁷ Moreover, as far as we can tell, the Temple of Apollo itself shows no evidence of destruction that can be linked to this event. Compared to the small amount of evidence for destructions, evidence for continuity and recovery is plentiful. In 480 B.C., just a decade later, the Eretrians took part in the battle of Cape Artemision and Salamis with seven triremes. This indicates a male adult population of at least 1,400 men and a civilian population of some 5,000. Additionally, 600 hoplites from Eretria and Styra fought at Plataea (Hdt 9.28.5), which is more than the number supplied by Aigina or Ambrakia. Moreover, coins were minted by Eretria in

⁴³ Knoepfler 2008, p. 606. ⁴⁴ Tanner 2013, 114. ⁴⁵ Saggini 2019.

⁴⁶ *AntK* 1966, 109; 1968, 96; Krause 1972, 47; Schefold and Auberson 1972, 80, 109–111; Saggini 2019, 372.

⁴⁷ Persano 2017, p. 258.

the third quarter of the fifth century,⁴⁸ and Eretria imported Attic pottery in the first half of the fifth century, which shows continuity in settlement.⁴⁹ Overall, there is no direct evidence for the city being utterly annihilated and its population wiped out, as portrayed in the literary sources. On the contrary, it is important to emphasize that, from a demographic point of view, perhaps as much as half of the Eretrian population probably never saw the Persian army. Indeed, Eretria had a large territory at the time, and a substantial part of the population lived in villages and demes, outside the city. After the siege, some of the rural inhabitants probably moved into the city, which was able to recover in less than one generation.

Another example from the Persian Wars shows how the accounts of historians can be misleading. Herodotus (6.46–47) reports that Darius ordered the people of Thasos to destroy their wall in 491 B.C., and Thucydides (1.101.3) states that after the Athenians besieged the city for two years, the people of Thasos agreed to tear down their walls again in 463 B.C. As Y. Grandjean, however, observes, “these dismantlings of the wall mentioned in the literary texts were not as thorough as the descriptions they give would lead us to believe.”⁵⁰ There is no stratigraphic evidence for “the destructions” of 491 B.C. by the Persians and 463 B.C. by the Athenians. At the Silenus Gate, there is no evidence for destruction and the late Archaic relief remained intact in its original position. Both in 491 and 463 B.C., it is likely that the people of Thasos were only required to open some breaches in the walls and to level some parts of the curtain wall. At Thasos, on the acropolis, breaches in the wall have been identified at the Apollo sanctuary and the Athenaion. These breaches were later filled in the second half of the fifth century, so they were perhaps rebuilt in 411, that is after the Athenian destruction of the walls following their siege of 465–463 B.C. The act of dismantling city-walls is a current practice imposed on defeated cities, often as a retaliatory measure and a pre-emptive strike in case of future rebellion. Yet, the powerful image of tearing down walls should be rescaled, as the destruction only concerned strategic sectors in most cases.

Other passages in the literary sources describing extensive destruction must also arouse suspicion. Demosthenes (18.36, 41; 19.65, 141. Cf. Aeschin. 2.162) gives an alarming account of the treatment meted out to the Phocian cities as a result of their punishment by the Amphictyons in 346 B.C., but Pausanias (10.33.8) states that they were refounded soon afterward.⁵¹ One of them, Elatea, appears to have been fortified again by 338 B.C. (Aeschin. 3.140; Dem. 6.15). Relying on excavation reports, D. Rousset has shown that sections of the walls of Ambryssos, Antikyrra, and Kirrha were built in the Hellenistic period.⁵² On architectural grounds, the large towers at Lilaia and Tithorea seem

⁴⁸ Ducrey et al. 2004. ⁴⁹ Gex 1993, pp. 58 and 89.

⁵⁰ Grandjean 2011, p. 370 (see also p. 567). ⁵¹ Cf. McInerney 1999, pp. 281–283.

⁵² Rousset 2005, p. 102.

to belong to the Hellenistic age of torsion artillery. The combined evidence, presented in the Appendix (www.cambridge.org/fachard-harris-appendix), demonstrates that 95 percent of located Phocian *poleis* recovered from the events of 346 B.C. In sum, there were few long-term consequences, and several cities gained a renewed importance under the Aitolians in the third century B.C.

In other cases, reports of destruction appear to have been greatly exaggerated. Isocrates, in his *Archidamus* of 366 B.C. (6.27), says that Thespiyai was “destroyed” (*anastatous*), and Demosthenes in his speech *On the Megalopolitans* delivered in 353/352 B.C. (16.4, 25, 28) gives the impression that Thespiyai was not inhabited. Field surveys conducted in Boeotia over the past thirty years by the British School call these statements into question, and J. Bintliff explores these issues in greater detail (Chapter 13). Based on this evidence, Snodgrass concludes that “the population of fourth-century Thespiyai, that is, of the *astu* proper, over the century as a whole was at least as high as, and in all likelihood higher than, at any time before or after.”⁵³ There also may have been building activity in the center of the city in the 350s B.C.⁵⁴ The Thespians were numerous enough to join in the destruction of Thebes in 335 B.C. (D.S. 17.13.5). As Snodgrass observes, “Isocrates, Demosthenes and their like had political axes to grind,” and it is doubtful that “they or their rivals ever traveled to Thespiyai to check their reporting.”⁵⁵ Just as the speeches of modern politicians need to be fact-checked, so too do the accounts of ancient authors.

All these examples show that ancient authors have a marked tendency to exaggerate the scale and intensity of destructions. Very few authors were eyewitnesses to the events they describe or conducted a personal autopsy. This phenomenon has been studied by N. Barrandon, who shows in her 2018 book *The Massacres of the Roman Republic* that the suffering of civilians was a popular theme in epic and tragedy since Homer.⁵⁶ In the first century A.D., descriptions of destructions became a favorite subject in rhetorical exercises according to the textbooks of the era. Despite the warnings of Polybius and Quintilian, historians like Livy, Plutarch, Appian, and Cassius Dio invented lurid descriptions of bloody sieges to create *pathos* and attract readers. But not all ancient historians were accustomed to exaggerate. Polybius even denounces historians who have described sieges and wars in exaggerated terms (29.12):

They are obliged to give petty affairs an air of importance, and fill out and give rhetorical flourishes to what was originally expressed briefly (. . .). As

⁵³ Snodgrass 2016, p. 21.

⁵⁴ See Snodgrass 2016, p. 14 and Schachter 1981–1994: I, pp. 217–218.

⁵⁵ Snodgrass 2016, p. 31.

⁵⁶ Barrandon 2018. On the caution required when dealing with such episodes, see Boulay 2014, p. 262.

for sieges, local descriptions, and the like, one cannot say that their treatment is adequate, because they have no facts to give. (...) Such historians as I refer to, when they are describing in the course of their work the siege, say of Phanoteia, or Coroneia, or [Haliartus], are forced to display all the contrivances, bold strokes, and other features of a siege; and when they come to the capture of Tarentum, the sieges of Corinth, Sardis, Gaza, Bactra, and, above all, of Carthage, they must draw on their own resources to prolong the agony and heighten the picture, and are not at all satisfied with me for giving a more truthful relation of such events as they really occurred.

The criticisms of Polybius are confirmed by the large dataset of “destroyed” *poleis* collected in the *Inventory of Archaic and Classical Poleis* by M. H. Hansen and T. H. Nielsen, who suggested that the “fate suffered by these *poleis* was less disastrous than it appears.”⁵⁷ Their conclusions are largely confirmed by the data collected in the present volume’s web Appendix: in Asia Minor, very few cities disappeared following “destruction” and/or *andrapodismos*; the same can be said of the Aegean Islands, the Peloponnese, Boeotia, and Epiros; in Phocis, all cities survived destruction except for one, whose citizens were relocated (Parapotamoi). By collecting data ranging over one or two generations following the destruction of the city or the *andrapodismos* of the population, Hansen and Nielsen discovered that “the annihilated *polis* still existed, and apparently flourished almost as nothing had happened.”⁵⁸ Their conclusions deserve to be quoted in full:

The overall conclusion is that annihilation of a *polis* seems to have been achieved in about a score of the 122 individually attested *poleis* (out of a total of some 1000) over three centuries. In the other cases the *andrapodismos* must have been partial and the destruction of the city superficial. Just as it has been shown that the devastation of the countryside of a *polis* must have been less disastrous than is alleged in the sources, so it can be shown that in most cases the destruction of the urban center of a *polis* and the annihilation of its population must have been less effective and disastrous than appears from the accounts found in Herodotus, Thucydides, Xenophon, Demosthenes, and Diodorus.⁵⁹

Because authors have a strong tendency to exaggerate the scale of destructions, we must detect discursive bias, literary *topoi*, and other rhetorical effects. Moreover, ancient authors are seldom interested in what happened *after* the departure of the victor. We are, therefore, often left with an inflated account of a violent event marking the end of the siege narrative, which gives the

⁵⁷ Hansen and Nielsen 2004, p. 122. ⁵⁸ Hansen and Nielsen 2004, p. 122.

⁵⁹ Hansen and Nielsen 2004, p. 122.

impression that there is no sequel to the destruction. In the majority of cases, however, there is life after destructions and *andrapodismos*. Indeed, the data of the *Inventory* shows that close to 90 percent of cities which were exposed to *andrapodismos* overcame the ordeal (forty to forty-one out of forty-six). Similarly, 80 percent of “destroyed” *poleis* survived the destruction. It is, therefore, crucial to develop other methods for assessing the physical damage sustained by ancient cities, first by measuring the nature and scale of the destruction, then to focus on their recovery.

DOCUMENTING AND ASSESSING DESTRUCTION

Archaeology is the most reliable method for detecting, documenting, and assessing physical destruction in ancient cities. The discipline has a long tradition of investigating sites that were famously destroyed, either by siege (Troy) or by natural catastrophes (Thera, and Pompeii as early as 1738). As mentioned above, archaeologists have privileged the study of destruction layers, mainly because they can provide chronological horizons and closed deposits “sealed in time.” Indeed, under favorable circumstances, destruction layers and deposits will be quickly sealed and covered over, thus preserving them.⁶⁰ However, in practice, things can be more challenging, as deposits related to destruction will be affected by post-destruction processes.

If cleaning immediately follows the destruction of a house, for example, the archaeological evidence will be scarce and of indirect nature. If the destruction debris is moved far away (and outside the excavation), archaeologists might even fail to identify destruction. In other cases, archaeologists will interpret a layer as a violent “destruction layer” and try to connect it with a historical event recorded in literary sources – even without sufficient evidence. In most cases, the causes of a destruction and the nature of the event that provoked it will be unclear. Despite these difficulties, however, archaeological techniques provide the best method for identifying and documenting destruction. The development of sediment micromorphology in particular, offers a unique set of tools and methods for studying destruction layers and investigating their causes. Karkanas’ chapter in his volume outlines the theoretical framework for the depositional processes that form a destruction layer using micromorphology. The method analyzes the nature and evolution of a destruction by looking at post-destruction events (short- or long-term abandonment), natural processes (long-term erosion, redeposition, and collapses), the use of the destroyed areas as rubbish dumps, and the demolition and leveling of destruction materials before new buildings are being constructed.

⁶⁰ Driessen 2013b, p. 15.

The study of architectural monuments and works of art can also document destruction. The Persian destruction of the Athenian Acropolis in 480 B.C., for example, left a substantial mark on the monuments. Column drums from the Temple of Athena Polias and the Older Parthenon destroyed by the Persians were identified on the north wall of the Acropolis.⁶¹ The Kallimachos Monument, which celebrated the Greek victory at Marathon a decade earlier, had been smashed to pieces, while *korai* had been attacked with axes and mutilated in what appears to be an explicit and programmatic mutilation of works of art.⁶² There is also substantial evidence for burnt temples and destructions at Sounion and Kalapodi, and M. Miles has studied the phenomenon.⁶³ Symbolically targeting cultural monuments has been a common terror tactic in world history. Destroying one iconic monument will have a more emotional impact than thousands of human lives, and this topic has been well studied by R. Bevan in his *Destruction of Memory, Architecture at War*. The German bombings of landmark historical British cities were known as the “Baedeker raids,” during which the Luftwaffe would aim at buildings marked with two or three stars in the famous guide; the Allies responded systematically with the carpet bombing of German historical towns.⁶⁴ The destruction in 1993 of the Mostar bridge by Croat paramilitary forces had more emotional impact than the human lives, as it stands as one of the symbols of the war in former Yugoslavia. The latest example in the long collection of symbolic destructions provoking a strong emotional impact is ISIS’s destruction at the Ballshamin temple in Palmyra, which sent waves of emotional shock throughout the world. One could argue that ISIS did not wipe out ancient Palmyra from the map – a formidable task even with modern means – but targeted a monument whose performed destruction would strike the Western world, boost their propaganda, enhance their military prestige, and exemplify their unwavering ideological determination. Therefore, it appears that targeting symbolic monuments and works of art is a cost-effective way of “destroying” a city, humiliating its population, and leaving a mark on its urban fabric and collective memory.

This brings us to an important point, which concerns the spatial extent of the destruction. When an ancient author reports destruction, it is often assumed that the *entire* city was destroyed. Similarly, when the destruction of a building or a monument is recorded in an excavation, there is a tendency to extend the destruction to the entire site, thus amplifying its scale. However, destroying an entire city of several dozens of hectares and hundreds/thousands of houses is a formidable task. Setting buildings ablaze (*katakauēin, empimpranai, pyri polin*

⁶¹ Kousser 2009; Meyer 2019. ⁶² Kousser 2009. ⁶³ Miles 2014.

⁶⁴ Bevan 2006, pp. 74–80. On the bombing of Dresden and its visual representations, see Fuchs 2015.

nemein) is arguably easier, but this would affect mostly woodwork and roofs. Even the deadliest bombings of World War II rarely razed a city to the ground: official reports show that even the most devastating raids, gathering hundreds of bombers, seldom destroyed as much as 70 percent of an urban area. For an ancient army using axes and picks, destroying an entire city *by hand* would have taken months of hard work, and it is doubtful whether a commander would have dedicated significant resources to pay troops and mercenaries to conduct such tasks. It is impossible to come up with numbers, but destroying as much as 20–30 percent of an ancient city the size of Athens or Corinth would have required intense labor that few occupying armies enjoyed; this would have left 70–80 percent of the city physically intact. It is more plausible that, following looting, only specific areas of the city would have been damaged. In Athens, for example, there is now good evidence from excavations that the Sullan damage was mainly confined to some areas and buildings (D. Rogers in his volume).⁶⁵ Similarly, the Herulian invasion a few centuries later only damaged certain zones, leaving entire neighborhoods undamaged (L. Chioti, in this volume). In order to provide a balanced assessment of the damage, it is, therefore, necessary to study destruction at the level of the entire city. This, in turn, requires large archaeological datasets, which are mostly available on the “big sites” that have been systematically excavated for several decades or even more than a century. This approach has been implemented in the present volume with the case-studies of Athens (Camp, Rogers, Chioti), Corinth (C. K. Williams, N. Bookidis, K. Slane), Miletos (Lohmann), Selinunte (C. Marconi), Eretria (G. Ackermann) or for entire regions in which large datasets are available such as Boeotia (Bintliff), Northern Greece (Psoma and Gazolis), and Epiros (B. Forsén).

Cities were the ultimate goal of ancient warfare. The fall of a town, beyond the humiliation and violence, marked the final act of conquest. The fate of the defeated depended entirely upon the political will of the conqueror. Cities were usually destroyed not by military imperatives, but by political ones. *Urbicide*, a modern concept understood as the “widespread and deliberate destruction of the urban environment,” is a way of erasing a city from history and memory, a deliberate political act taken by the victor.⁶⁶ However, such cases were rather extreme and rare in the Greek world. In most cases, the urban fabric was damaged during the siege, in the course of the looting that followed, and the collateral damage. The notion of victors systematically razing constructions to the ground is a vivid and efficient literary symbol, but it is far distant from the realities and efforts that it implies. With the means available for antiquity, it would be surprising to record destruction rates superior to

⁶⁵ See Habicht 1997, pp. 307–311 with references to sources and archaeological reports.

⁶⁶ On *urbicide*, see Coward 2009; see also González-Ruibal 2013, p. 45.

20–30 percent. As astutely noted by Hanson, the ancient notion of devastation can be paralleled to the way modern historians and journalists record bombings.⁶⁷ The expression “the city was bombed” records an aerial attack, but it does not detail the number of bombers used in the attack nor the physical extent of the destruction. One is left with the idea of devastation, but the reality might be far away from it.

SURVIVAL STRATEGIES, RESILIENCE, AND RECOVERY IN ANCIENT GREECE

In the fourth century B.C., an author known as Aeneas the Tactician wrote an entire treaty on *How to Survive under Siege*. This poliorcetic survival guide provides a wealth of information about the defense of cities under siege and demonstrates that the Greeks put a lot of thought, preparation, and even science into it. We also saw in the previous section that, under most circumstances, segments of the vanquished population would be able to survive massive enslavement or even escape from the city. Barrandon showed that enslavement, in most cases, concerned individuals that were most appropriate for the slave market; the rest were left behind. Then, in the panic of the looting, many individuals would be able to escape from a fallen city – Aeneas being the most famous case. The myth of the *sageneia*, used by Plato for the fall of Eretria, exemplifies that the only way to capture an entire population, would be to set a giant fishnet across Euboea, clearly showing that people would manage to escape under normal circumstances. An anecdote by Plutarch humorously captures escape after destruction:

As Sulla was enjoying the thermal baths at Aidipsos, he was offered a very fine fish from some fishermen. Being delighted with their gift, and learning that they were from Halai, he said “What! Is any man of Halai still alive?” For when he was pursuing the enemy after his victory at Orchomenus, he had destroyed three cities of Boeotia together, Anthedon, Larymna, and Halai. The men were speechless with terror, but Sulla smiled and bade them depart in peace, since they had brought with them no mean or despicable intercessors. The men of Halai say that this gave them courage to go back again in a body to their city. (Plutarch, *Sulla*, 26).

Outside cities, in the *chora*, rural populations could implement various strategies of survival. During an invasion, farmers might retreat to fortified areas and return after the enemy had left and resume cultivation.⁶⁸ Our sources offer

⁶⁷ Hanson 1998, pp. 13–14.

⁶⁸ For the function of fortified areas in the countryside as places of refuge for farmers see Fachard 2012, pp. 279–292.

many cases of large-scale evacuation before the enemy, and Hanson showed that this strategy could reduce losses to plunderers.⁶⁹ Facing the Persian advance in the Kephissos valley, the Phokians escaped to the slopes and summits of the Parnassos, accessible through several roads and passes from the cities of Lilaia and Tithorea (Neon). Some, however, stayed behind or tried to escape, but were caught. In such large-scale evacuations, populations left with capital and animals, leaving material goods and houses behind. After the passage of the enemy, the looting, and the destruction, refugees would return and pick up the pieces. Unless a commander could capture the main cities in an area, any attempt to lay waste to the land would inflict only temporary damage. When Agesilaus attacked Acarnania in 389 B.C., he methodically devastated farmland, not advancing more than a mile or two every day (*Xen. Hell* 4.6.4–5). The Acarnanians were able to withdraw into the mountains with their cattle, but even after Agesilaus was able to seize some of their cattle (*Xen. Hell* 4.6.6), they still maintained control of their cities and resumed planting after the Spartans left (*Xen. Hell*, 4.6.13). The long-term economic effect from the destruction during this campaign was close to nil, and a quick recovery was at hand. An interesting modern parallel was Normandy in 1944, when 150,000 refugees evacuated the towns and farms. Fifteen thousand died in the battles and bombardments, but most of them came back one month later. Cleaning, rebuilding, and farming the land followed immediately.⁷⁰

Recovery describes the processes by which the population of a destroyed city will deal with the physical damage, by cleaning debris, burying the dead, repairing buildings and public infrastructure, and eventually starting to rebuild. In the “anthropology of disaster,” as shown by S. Dawdy, there has been a tendency to focus on the disaster proper and the policy reactions, and less on the “day-to-day microprocesses through which individuals, households, and neighborhoods define recovery by moving around debris, burying past living surfaces, and rearranging the landscape.”⁷¹ In most cases, the recovery process will leave a trace in the archaeological record. Cleaning and moving debris, digging and filling up pits with broken material, evacuating debris in a well or a cistern, piling up debris in an abandoned locale, disposing of broken tiles on a floor level are all processes well-documented in archaeology. These actions testify to the recovery process, and their absence will most often demonstrate abandon, partial or total. Karkanis, in this volume, illustrates several cases of destruction, including the post-depositional processes that followed the event. Thanks to micromorphology, these complex processes can be better understood and interpreted.

⁶⁹ Hanson 1998, pp. 103–121. ⁷⁰ See F. Passera and J. Quellien 2014, pp. 234–235.

⁷¹ Dawdy 2006, p. 720.

For Ancient Greece, some of the collective recovery mechanisms have been studied by Thély, who collected evidence concerning the management of a crisis following natural disasters. Many of these mechanisms were similar to those implemented following military destructions. Among the first tasks were providing first aid to the injured and the survivors, often with the help of neighbors, burying the dead (often in collective burials), and cleaning the debris of the destruction in order to avoid injuries.⁷² There followed the reconstruction effort, which relied on public and private funds, as well as individual subscriptions and public borrowing. Based on the absence of documents dated to the Classical period, Thély suggested that cities relied on their own funds to finance reparations; later, however, cities turned to Hellenistic kings and Roman emperors.⁷³ In the present volume, A. Bresson studies the reaction of the Rhodians to the terrible earthquake of 227 B.C., as well as the network of “international aid” that the city benefited from. The case of Rhodes highlights some of the recovery mechanisms available to cities engaged in reconstruction. In general, we can assume that securing clean water sources and reconstructing private dwellings (before the winter) would have been a priority, achieved in a matter of months. These were followed by the repairs of the damaged fortifications and the public buildings most essential for the functioning of institutions, which could take up to several years. Temples and sanctuaries trailed behind, whose repairs could take several decades. The reconstruction of the temple of Apollo Pythios at Delphi, for example, destroyed by an earthquake in 373 B.C., took approximately forty years.⁷⁴ The temple of Apollo at Eretria, destroyed by the Persians in 490 B.C., might have never been repaired.

Because the Greeks were aware that warfare could interrupt economic activity, in some cases they factored this possibility into their agricultural contracts. We have many examples of contracts where lessees do not have to pay rent during an enemy invasion. A contract from the Attic deme of Aixone (for forty years with a rent of 152 drachmas a year rent) specifies that “if the enemy prevents (work) or destroys something, the people of Aixone have a right to half the produce from the land.”⁷⁵ The famous contract between Eretria and the entrepreneur Chairephanes for draining a marshy area in the heart of the *chora* stipulates that “if war will prevent Chairephanes from draining the marsh and making it dry as has been written, let an equal amount of time be given to him when it is possible and peace returns, to the length of time the war prevented him (i.e. from working). If war occurs and it is not possible to reap the land near the marsh, (. . .) let an equal amount of time be given him to the

⁷² Thély 2016, pp. 161–167. ⁷³ Thély 2016, pp. 167–181.

⁷⁴ Thély 2016, pp. 154–159 and 169–171. It is important to remember that during this time the Third Sacred War (356–346 B.C.) and the Phocian looting of the treasury took place.

⁷⁵ *IG II²* 2492 (345/344), lines 12–14.

length of time he was prevented (. . .).”⁷⁶ At Heraclea in the fourth century B.C., a contract clause requires that “if the lessees are driven out by war so that they cannot harvest the crop, their payment of rent will be revised according to the decision of the people of Heraclea, and their sureties will not be held responsible for their obligations in the contract.”⁷⁷ Even though these contracts indicate that destruction from war was a constant threat, they also give the impression that any damage caused would only last for a year or two and leave the renter free to cultivate the land after the enemy left.

The ancient historians fill their narratives with accounts of battles, raids, and plundering, but one must bear in mind that Greek armies were not very large by modern standards and that their marches only covered small areas, leaving the territory of most city-states untouched. Fighting was confined to small areas, and long, drawn-out sieges were comparatively rare and hard to sustain. The ten-year siege of Troy was the product of epic imagination. The war between Athens and the Peloponnesian League may have lasted for twenty-seven years, but large parts of the Peloponnese, Aetolia, Boeotia, Northern Greece, and Asia Minor never saw an Athenian army. For the Hellenistic period, Chaniotis suggested that, despite war, the conditions of a “globalized” world intensified trade activities: “At the same time, the damage caused by war had to be compensated, and this was also an important motor for economic activity: the loss of production could be alleviated through the import of grain, wine, and olive oil. The creation of large networks of grain trade is connected with the efforts of communities to safeguard the supply of their population with the necessary food items at low prices, in a period in which isolation was no longer possible (or desirable).”⁷⁸ Destruction and growth are therefore not necessarily antithetical. In general, there are many reasons to believe that the destruction caused by warfare did not have long-term economic consequences, and it appears clear that ancient Greeks had developed strategies of survival and resilience, which contributed to the demographic and economic recovery process.

MODERN PARADIGMS OF DESTRUCTION AND RECOVERY

Greece was one of the countries most affected by World War II in terms of its size and population. Some 1000 villages were destroyed, two-thirds of the merchant fleet was lost, and one-third of the country’s forests were chopped down.⁷⁹ The toll on the Greek population amounted to roughly half a million civilian deaths, if not more. By the end of the war, Greece had lost one in

⁷⁶ *IG* XII, 9, 191 (late fourth century), lines 13–17. See Knoepfler 2001.

⁷⁷ *IJG* 12, lines 152–154. ⁷⁸ Chaniotis 2005, p. 138. ⁷⁹ Judt 2007, p. 17.

fourteen out of its prewar civilian population.⁸⁰ The suffering did not end with the withdrawal of the German army in October 1944. Two rounds of Civil War followed, the first in December 1944 to February 1945 and the next from 1946 to 1949, which forced 700,000 civilians to abandon their homes, 10 percent of the total population. Overall, the level of destruction during World War II reached an unprecedented level in world history. The Allied forces conducted a massive strategic bombing campaign on the industrial areas, railroads, and ports of Germany and Japan. By the end of the war, the productive capacity of both countries had been severely reduced, and large parts of their cities had been completely destroyed.⁸¹ After the end of the war, Germany counted twenty million homeless, while France lost half a million houses.⁸² For Japan, we need only to mention the names of Hiroshima and Nagasaki, but these were not the only cities to suffer extensive damage. The bombing of Tokyo in Operation Meetinghouse on the night of March 9–10, 1945 resulted in over 100,000 civilian deaths and made over one million homeless.

However, as early as the 1950s, the economies of all these countries grew rapidly. In the late 1940s, Germany and other countries were helped by the Marshall Plan, but the general European recovery had already started before the first funds were disbursed in late 1948. Even after American funding ended in 1952, Germany and other countries ravaged by the war continued to grow at a remarkable pace. In Germany, the rates of growth were between 9 percent and 10 percent per annum, and Japan enjoyed rates of 10 percent growth in the 1960s. By 1960, both countries were producing far more than they had before the war. By then, traces of warfare were hardly visible. The Greek recovery, in part boosted by the Marshall Plan, was also spectacular, both demographically and economically. By 1951, the population was 7.63 million, which means that despite the Civil War, the country recovered and exceeded its pre-war population in six years.⁸³ Following the 1953 devaluation of the drachma and a tight monetary policy, Greece experienced a boost in private enterprise and doubled the per capita income between 1955 and 1963.⁸⁴ Economists often refer to “the Greek economic miracle,” which saw twenty years of sustained GDP growth at a rate of 6.5 percent and in some years 10 percent (second after Japan).⁸⁵ It would have been hard to imagine that these countries had gone through such a level of physical destruction just a generation before. Recovery and “economic miracles” achieved under particular conditions should not obscure nor erase the exceptional levels of destruction and human tragedy suffered by world populations during World War II. Yet, the decades that followed the bloodiest

⁸⁰ Judt 2007, p. 18. ⁸¹ Hastings 1979, pp. 371–372. ⁸² Judt 2007, p. 17.

⁸³ See Baxebanis 1965. The pre-war population was 7.46 million in 1940, and the 1945 country data is unreliable.

⁸⁴ Clogg 2016, pp. 145–146. ⁸⁵ Close 2014, pp. 44–56, 76–79.

and most destructive conflict ever experienced in humankind shows that even the worst and largest-scale destructions can be followed by extraordinary patterns of human survival, demographic resilience, and economic recovery in a matter of one generation.

This phenomenon has been coined the “Phoenix Factor” by A. F. K. Organski and J. Kugler in their groundbreaking article of 1977, based on a sample of thirty-six modern states.⁸⁶ Like the mythical bird rising from the ashes, defeated and devastated populations living in the middle of destruction can recover in less than one generation and resume their antebellum growth rates, eventually overtaking winners. For sure, defeated countries suffer “intense short-term losses,” but “in the long run (from fifteen to twenty years), the effects of war are dissipated, because losers accelerate their recovery.”⁸⁷ Several factors influence such a recovery: the economic performance and growth rate of the defeated nation before the conflict, favorable occupational distribution after the war, post-war motivation, more significant effort to recover, and the necessity for work and sacrifice. Interestingly, foreign aid by the winner to the vanquished country (e.g., the Marshall Plan) is not a significant factor in the defeated country’s recovery rate. The “Phoenix” model was later extended by J. Kugler and M. Arbetman to include conflicts going back to the Franco-Prussian War of 1870.⁸⁸ Based on their data and considering “the relationship between the post-war economic recovery and the level of economic destruction suffered during the war,” Kugler and Arbetman suggested that the countries most devastated by war “grew at over twice their pre-war rate during the recovery period.”⁸⁹ The “Phoenix Factor” was profoundly innovative, because, until the 1970s, the literature on the economic consequences of war had rather privileged its devastating impact.⁹⁰ According to the latter, destructions caused by war resulted in the loss of capital and infrastructure, often followed by inflation, depression, forced migration, humanitarian needs, and war debt. World War I, for example, produced no growth and paved the way for World War II.⁹¹ This empirically diverging analysis led to the creation of the “war renewal” and “war ruin” schools of thought.⁹²

It is crucial for historians and economists to adopt a balanced view and draw equal attention to factors leading to positive and negative growth. The factors leading to recovery highly vary from state to state, and from war to war. Generalizations should be avoided, as stressed by K. Rasler and W. R. Thompson: “If it can be assumed that all or most wars probably involve some obvious and subtle mixture of destructive and constructive effects on war

⁸⁶ Organski and Kugler 1977. ⁸⁷ Organski and Kugler 1977, p. 1365.

⁸⁸ Kugler and Arbetman 1989. ⁸⁹ Kugler and Arbetman 1989, p. 101.

⁹⁰ Kugler et al. 2013, p. 2. ⁹¹ Kang and Meernik 2005, p. 90.

⁹² Kang and Meernik 2005, p. 88.

participants, one is still left with the possibilities that the net impact on economic growth may be positive, negative, variable (positive for some cases, negative for others), or simply insignificant.”⁹³ Yet, the “Phoenix Factor” provided an optimistic model of analysis for post-war economic growth, which proved to be influential. Reviewing the literature on the impact of war on economic growth, D. C. Van Raemdonck and P. F. Diehl summarized the views of the supporters and opponents of the positive and negative impact of war on subsequent economic growth.⁹⁴ Noting that there was no consensus on this issue, they nevertheless underscored that many studies supported a non-substantial long-term impact of warfare, as many examples demonstrate that rapid and steady economic recovery was possible, even within a generation. Besides positive pre-war growth, post-conflict motivation, and improved economic efficiency, factors for post-war growth include the nature of regenerative economic processes, replacement of technology, the absence of war reparations imposed on the defeated nations, the promotion of free trade, the free exchange of goods and services, and the responses of policy-makers.⁹⁵

Although the “Phoenix Factor” seemed to provide a valid model for developed societies, it did not apply to least-developing countries, which often failed to recover. In order to address this issue, T. Kugler et al. provided an “*Overlapping Generation Model (OLG) growth model*” to study and measure the demographic and economic consequences of war.⁹⁶ It appears that many least-developed countries which experienced devastating wars fell into a poverty trap and failed to rebuild within twenty years, mainly because they suffered more from war and endured more lasting costs. Most-developed countries, on the other hand, can fully recover their pre-war economic performance within twenty years.⁹⁷ In terms of demography, both types of countries made up their losses in a matter of years, thus confirming the widely accepted views that the effect of war on population is nil or even positive in the long term; in terms of economic recovery, however, both countries followed dramatically different paths. The new model includes the structural differences between countries, as well as their different levels of development:

In sum, populations recover from war in all societies, but the economic recovery from war is conditional on previous levels of development. The “Phoenix Factor” clearly applies to the most-developed nations, who also endure lesser short-term losses. Less-developed societies suffer more and recover about only half of prewar expectations. The least-developed societies endure the most-devastating and lasting costs following severe conflict. The OLG perspective helps explain the success and failure in the post-war period. Indeed, prewar levels of economic development

⁹³ Rasler and Thompson 1985, p. 513. ⁹⁴ Van Raemdonck and Diehl 1989.

⁹⁵ Van Raemdonck and Diehl 1989, pp. 258–259. ⁹⁶ Kugler et al. 2013.

⁹⁷ Kugler et al. 2013, pp. 6–7.

seemingly determine to a large degree the rate and level of post-war economic recovery.⁹⁸

But can such economic models have implications for ancient Greek cities? Obviously, we cannot compare modern and ancient conflicts, states, and economies. The complexities and global scale of World War II, with casualties surpassing fifty million people, are incommensurable. Additionally, the economies of Japan, Germany, and the United States provide no comparison for pre-industrialized societies. However, we do believe that the theoretical framework and hypotheses provided by economic science help us understand and contextualize the impact of warfare on ancient, pre-industrialized societies.⁹⁹ Factors such as pre-destruction economic growth, markets, labor, capital, long-distance trade, institutions, and post-war policies – which all play a role in measuring post-war growth – are realities that can be variably measured and analyzed by the economic historians of ancient Greece. For example, the “Phoenix Factor” provides a relevant model for explaining Athens’ rapid and spectacular economic recovery following the Persian destruction of 480 B.C., which is studied by Camp in this volume. Athens enjoyed strong and robust economic growth during a pre-war period of twenty-five years, as well as new democratic institutions and arguably unparalleled levels of state complexity for the period. The Persian sack was brutal and extensive, implying staggering levels of physical destruction. Yet, the population had managed to flee the city with its capital and monetary reserves. Following the battle of Salamis, the Athenians came back and launched the recovery process. The capital was available to start rebuilding right away, increased by the war booty. Robust institutions, strong political leadership, vision, motivation, and effective post-war policies (such as no spending money on costly temples) contributed to a spectacular economic recovery. These factors and mechanisms are all inherent to the Phoenix model, as Athens’ pre-war level of economic and political development determined the rate and level of its post-war recovery. The physical impact of the Persian destruction had been devastating, but the demographic impact was negligible, and economic recovery picked up at a high pace. By 478 B.C., Athens emerged as the major military, economic, and political power in the Aegean.

Thanks to its unique set of data provided by literary sources, inscriptions, and archaeology, Athens provides a privileged case for studying the impact of destructions on ancient cities. The present volume offers three cases of destruction and recovery suffered by the city (Camp, Rogers, and Chioti), yet other destructions of Greek cities analyzed in the volume provide vivid case-studies for such recoveries. However, some cities do

⁹⁸ Kugler et al. 2013, p. 8. ⁹⁹ On this approach, see Bresson 2016, p. xxii.

not come back, such as Olynthos and Methone. Others recovered slowly, or on a very different structural, urbanistic, and demographic basis, such as Corinth. Why? In the cases of Methone and Olynthos, the decision was political: the conqueror decided to erase these towns from the map. After the looting, the population left town, which was never meant to recover. When Thebes was destroyed by Alexander, one of the most tragic events in Greek history, the town was supposed to remain in ruin; but after twenty years, Cassander decided to rebuild it, most probably for political and ideological reasons.¹⁰⁰ Both decisions – the destruction and the rebuilding – were political, and not military ones. As shown by Bevan, “destruction is often the result of political imperatives rather than simply military necessity.”¹⁰¹

In sum, the data collected in the chapters and appendices of this volume show that ancient Greek cities tend to recover from destructions – even catastrophic ones. When they do not recover, it is mostly because the conqueror decided not to let them rise again. When and if cities recover, they will do so at different rates, depending on various factors. Economic models suggest that the growth rate of a city before the destruction will have a substantial impact on its recovery. Other factors include the strength of its institutions, the dynamism of its economic fabric, motivation, and political leadership. If the conditions are met, recovery can be spectacular.

CONCLUSION

Given the state of research on the topic of natural disasters and destruction in Ancient Greece, our aim for the volume is to focus on Greek cities of the historical period (Archaic to Roman), thus covering what appeared to be a gap in scholarship.¹⁰² Our main goal is to reassess, as much as possible, the impact of physical destruction on ancient Greek cities and its long-term economic implications. In order to achieve this, we must go beyond the confines of the destruction as an “event,” and study destructions in the long term, stretching over three essential phases: a base or pre-war period, a war/destruction period, and a recovery period (if any).

Using well-documented case studies, archaeologists, numismatists, and economic historians in this volume rely on literary and archaeological data in order to evaluate the scale of physical damage sustained by several ancient cities and to study their recovery phase. Most of the chapters cover Greece proper, but Lohmann focuses on Miletos, and Marconi re-examines the Carthaginian conquest of Selinus

¹⁰⁰ Kalliontzis and Papazarkadas 2019. ¹⁰¹ Bevan 2006, p. 203.

¹⁰² After much thought, we decided to leave aside the Bronze Age, as we thought that one or two chapters would not do justice to the topic, which has been already well documented and studied, as shown above.

in 409 B.C. Two chapters focus on the cities of Northern Greece: Psoma and Gatzolis analyze the numismatic evidence on destructions and post-destruction on dozens of sites; Bessios, Athanassiadou, and Noulas present spectacular archaeological evidence from the Methone siege by Philip II and the abandonment of the city. Several chapters cover the Hellenistic period: Ackermann studies the three Hellenistic destructions at Eretria, while Bresson examines the responses to the Rhodian earthquake of 227 B.C. Three papers investigate destructions carried out by Roman arms. Forsén looks at the famous destruction of cities in Epiros and the economic transformation of the region under Roman rule, while Williams, Bookidis, and Slane provide a new study of the destruction of Corinth. Rogers and Chioti assess the extent of damages in Athens provoked by the Sullan and Herulian sieges, respectively. Bintliff compares the experiences of Classical Greek and Roman destructions and their responses. As stressed above, the volume's focus on "Big Sites," especially Athens, provides the "big data" needed to study the three phases of destruction. However, in order to include a more comprehensive geographical frame, several appendices offer an analytical catalog which records destruction and recovery for several regions and more modest cities of the Greek world: Asia Minor (S. Brandwood), the Aegean Islands (F. Foxley and S. Fachard), Northern Greece and Thrace (H. Smagh), Epiros (R. Sausville), the Peloponnese (G. Bladell), Boeotia (C. Pernet), Phokis, Attica, and Euboea (Fachard). Most of these appendices were written by Regular Members of the American School of Classical Studies in 2018–2019, when "destruction and recovery" was selected as a topic of inquiry during the School's site visits in Greece.

As made clear by the title of the chapter, our interest lies as much in the impact of the destruction as in the community's response to the devastation and its recovery process. The vast majority of destroyed cities in history survive destruction. If they do not, it is because of political reasons most often dictated by the conqueror. Following destruction and humiliation, a city has to redefine itself, and in some cases, even reinvent itself. As shown by Cunningham, "destructions rarely stop a settlement or a city or put an end to a civilization or society – they displace or recontextualize it. It is therefore the human response to destruction that should interest us."¹⁰³ The study of their recovery periods offer new ways of evaluating the reaction of ancient populations, the economic base of cities, and the strength of their institutions. Destructions and natural disasters were addressed and remembered in different ways, and the study of the recovery process allows us to understand how *poleis* reconstituted

¹⁰³ Cunningham 2013, p. 59.

and redefined themselves after such events.¹⁰⁴ S. Dawdy, who studied the reaction to Hurricane Katrina, showed that the study of the “recovery” strata has great potential for revealing the structure of that society both before the disaster and in its immediate and active remaking. By studying the long-term impact of destructions, we indeed believe that the recovery period of ancient, destroyed cities has a lot to say about these *poleis*, their institutions, and their economy. “Studying destructions,” writes Gonzalez-Ruibal, “is a way of understanding history in a different way.”¹⁰⁵

When we study destruction and recovery patterns, we must never forget the suffering, extreme violence, and pain experienced by the civilian populations. Even though the economic impact of warfare was, in most cases, only short-term, we should not underestimate the long-term traumatic impact suffered by the defeated. Neither should we underestimate the fear of being attacked or besieged, as epitomized earlier by city-walls. Statistics are very valuable for economic history but cannot convey the emotional impact of warfare. To understand what individuals experienced, we must turn to the tragedies of Aeschylus, Sophocles, and Euripides. Scenes of massacres, enslavement, and sexual violence are also a familiar theme in Greek art. One thinks, of course, of the Mykonos Pithos with one of the bluntest representations of civilian massacre, the Classical vases with scenes of the Troy killings, or sexual abuse.¹⁰⁶ The violent conquest of a city, a feminine personification in Greece and Rome, has been symbolically associated with rape. Today, we read about misery in Syria or Yemen, with children dying every ten minutes for lack of food and medicine. The refugee problem created by the civil war in Syria is familiar to everyone living in Greece today. Last, we all experienced at first hand the effects of the COVID-19 pandemic, which created the worst health crisis since World War II and whose consequences on populations, the world economy, and national institutions are still unknown.

But we would like to end on a more optimistic note. When Xerxes’ troops sacked the Athenian Acropolis in 480 B.C., the sacred olive tree of Athena was burnt with the rest of the shrine. The king ordered the Athenians to make a sacrifice the next day. Herodotus recounts that when Athenians went up to the sacred precinct, they saw a shoot of about a cubit’s length sprung from the stump. History is full of pain, history is full of suffering, but the fate of many captured cities in Ancient Greece shows that history is also full of recovery and full of hope.

¹⁰⁴ For issues related to post-crisis remembrance, recovery, and “crisis” as a catalyst for innovation in ancient Greece and Rome, see Klooster and Kuin 2020.

¹⁰⁵ González-Ruibal 2013, p. 46.

¹⁰⁶ The bibliography is too vast to be comprised here. See Anderson 1997; Pipili 1997; Mangold 2005; Pontani 2015; Ducrey 2019, pp. 399–412.

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