

CONTENTS

<i>List of Illustrations</i>	xi
<i>List of Tables</i>	xiii
<i>List of Maps</i>	xv
<i>Series Editor's Foreword</i>	xvii
<i>Preface. "It's the End of the World as We Know It"</i> <i>(... and I Don't Feel Fine)</i>	xix
PROLOGUE.	
Welcome to the Iron Age	1
CHAPTER ONE.	
The Year of the Hyenas, When Men Starved	7
CHAPTER TWO.	
Conqueror of All Lands, Avenger of Assyria	42
CHAPTER THREE.	
The Mediterranean Became a Phoenician Lake	80
CHAPTER FOUR.	
King of the Land of Carchemish	111
CHAPTER FIVE.	
In the Shadow of the Ruined Palaces	134
CHAPTER SIX.	
From Collapse to Resilience	157

EPILOGUE.

End of a Dark Age	195
<i>Author's Note and Acknowledgments</i>	201
<i>Dramatis Personae</i>	207
<i>Notes</i>	213
<i>References</i>	251
<i>Index</i>	305

CHAPTER ONE

The Year of the Hyenas, When Men Starved

(Egypt, Israel, and the Southern Levant)

A quick knife thrust to his throat by an assassin ended the thirty-two-year reign of Pharaoh Ramses III of Egypt in 1155 BC. Two decades earlier, Ramses had won an immense victory over the Sea Peoples, but now he fell victim to a sordid harem conspiracy set in motion by one of his own wives, named Tiye, and a lesser son named Pentawere.

The assassination, now known as the Harem Conspiracy, first came to the attention of modern Egyptologists about 150 years ago.¹ The details are contained on approximately six papyri, some or all of which may have originally been part of a single scroll that was cut into sections by an enterprising antiquities thief before being sold to various people and places. The longest of these documents is now known as the Turin Judicial Papyrus, housed (perhaps not surprisingly, given its modern name) in the Museo Egizio in Turin, Italy. It had originally been purchased by Bernardino Drovetti, the French consul general to Egypt in the early 1800s; he then sold it to the king of Sardinia; and it eventually came to live in the Museo Egizio.²

The papyrus contains many of the details of the four trials of his accused assailants. The conspiracy was apparently hatched by Tiye, who wished to have her son by Ramses III, Prince Pentawere, accede to the throne. There were as many as forty accused conspirators, both members

of the harem and court officials, who were tried in four groups. A number of them were found guilty and received the death penalty; several were forced to commit suicide right in the court. Pentawere was among those sentenced to death, and it is assumed that was true of his mother as well, although no record of her trial survives.

Although it was known that Ramses III had died before the verdicts were reached in this case, it is not clear from these documents whether the plot had succeeded, and the question was left open by Egyptologists. But apparently it had, although this fact was only brought to light in 2012, when CAT-scans were made of Ramses III's body, which had been found more than a century earlier, in 1881, within the Deir el-Bahri cache of mummies near Hatshepsut's mortuary temple. It had been moved there by priests for safekeeping early in the Twenty-Second Dynasty, in the late tenth century BC, following a series of royal tomb robberies that had stretched back over more than a century.

As reported in the *British Medical Journal*, it was clear that Ramses's throat had been cut. The sharp knife that caused the wound had been thrust into his neck immediately under the larynx, all the way down to the cervical vertebra, cutting his trachea and severing all the soft tissue in the area. Death was most likely instantaneous, or nearly so. Subsequently, during the embalming process, a protective Horus-eye amulet had been placed in the wound, either for protection or for healing, though it was far too late to help the king in his corporeal life. In addition, a thick collar of linen was placed around his neck to hide the stab wound. It was only during the CAT-scan analysis that the scientists were able to see through the thick cloth and identify the injury that killed the king.³

A second body, of a male aged between eighteen and twenty and known only as "Unknown Man E," was found with Ramses III in the royal burial cache at Deir el-Bahri. Wrapped in a ritually impure goatskin and not properly mummified, the body has been suggested to be that of the guilty prince, Pentawere. DNA tests indicate that he could have been Ramses III's son, but this conclusion is by no means universally agreed within Egyptology. The forensic evidence, including facial contortions and injuries on his throat, suggests that he was probably strangled.⁴

The assassination set the tone for the coming centuries in Egypt, for the aftermath during the years that followed their victory over the Sea

Peoples was not pretty. For instance, we now have evidence that the megadrought, which can be traced via proxy data from Italy all the way to Iran (in modern terms) and which I believe was one of the primary stressors leading to the Late Bronze Age Collapse, finally hit Egypt at about this time. This occurred because the flow of the Nile was reduced when rainfall decreased on the Ethiopian plateau, a situation that lasted for approximately two hundred years. This, not surprisingly, led in turn to a food crisis and thus famine in Egypt, as well as to related economic problems, including nonpayment of wages, which culminated in a strike and demonstration by the workers at Deir el-Medina in Ramses's twenty-ninth year on the throne—possibly one of the first recorded pieces of industrial action in history.⁵

When Ramses III died, this era in Egyptian history also came to an end, although his sons and grandsons continued his dynasty for another four decades. Although Egyptian culture and society did not completely collapse, and Egyptians did not vanish from the face of the earth, neither was their transformation to the new world order particularly successful after the Bronze Age Collapse. While they did survive, it was at a much-lesened capacity; no longer would they have been counted among the “Great Powers” of the day, as they had been during the heyday of the Eighteenth and Nineteenth Dynasties.

Instead, for the next two centuries, the Egyptians were hobbled by a government riddled with intrigue, not to mention problems with succession and rivalries that occasionally resulted in two, three, and sometimes even four rulers in different parts of Egypt at the same time. On occasion, a strong leader would emerge, such as Sheshonq I, a Libyan ruler who founded the Twenty-Second Dynasty, but that would not be until ca. 945 BC, more than two hundred years after the death of Ramses III, and it would not last.

The eight pharaohs who followed Ramses III were all named Ramses (IV to XI), and their reigns witnessed a steady deterioration of the situation in Egypt. The first two kings, Ramses IV and V, were on the throne for just ten years between them and did little that merits mention.⁶

There are also intriguing questions surrounding the latter's death, for he may have fallen victim to yet another calamity—disease—which might be associated with the Bronze Age Collapse. His mummy has pustules still visible on his face, leading to the suggestion that he may have died of smallpox ca. 1140 BC, which might be corroborated by texts that mention new tombs being dug for himself and other members of his family. The men who did the digging were subsequently given a month's leave "at the expense of the Pharaoh" (i.e., with full pay), following which the Valley of the Kings was closed to visitors for six months, perhaps as an effort at quarantine.⁷

During Ramses V's rule, Egypt continued to control the copper mines at Timna, in the Sinai Peninsula, but he is the last Egyptian pharaoh whose name is found in that region. Similarly, his successor, Ramses VI, is the last pharaoh whose name is found at the turquoise mines of Serabit el-Khadim, also located in the Sinai. This is usually interpreted to mean that the Egyptians had lost control and/or withdrawn from the southern Levant almost entirely by about 1140 BC or so.⁸ Interestingly, a small bronze statue base found at Megiddo by the Chicago expedition in the 1930s is inscribed with the cartouche of Ramses VI and is frequently cited as proof that Canaanite Megiddo was not overcome until this time, but it is in a disputed context and cannot be used to shore up any such arguments.⁹

When Ramses VI died in 1133 BC, the workmen constructing his tomb in the Valley of the Kings accidentally buried the tomb of Tutankhamun, which lay next to it, thereby leaving it for Howard Carter and Lord Carnarvon to discover in 1922. His son then came to the throne in turn, as Ramses VII. We don't know much about his reign, but texts from the ten years (or less) during which he ruled indicate that the price of grain soared and that the economy was unstable.¹⁰

Similarly, after a brief reign of just one year for Ramses VIII, who, as a son of Ramses III, was probably already elderly when he became pharaoh, the problems continued for the next ruler, Ramses IX (ca. 1126–1108 BC). He was on the throne for eighteen years, during which time trouble was increasing in Egypt, specifically in the form of tomb robberies, famine, and disruptions by "foreigners" near the workers village

at Deir el-Medina. It may have been at this time that Egypt first lost control over Upper Nubia and the gold mines located there. It is also possible that the rule of Egypt was split during his reign, presaging a common occurrence over the coming centuries.¹¹

Among the legal documents from this period are the Tomb Robbery Papyri, as they have come to be known. These are a dozen or more texts, spanning the reigns of Ramses IX through XI, which include the so-called Abbott Papyrus and the Leopold-Amherst Papyrus from Ramses IX's sixteenth year. Within them, we find detailed descriptions of tomb robbing within the royal necropolis as well as in private cemeteries. Most of the looting had apparently just taken place during this Year 16. A number of the tomb robbers were caught, and confessions were extracted during the subsequent interrogations and trials. The thieves were all sentenced to death, most likely by impalement, since that was the usual sentence for robbing a royal tomb.¹²

The robberies had begun even earlier, however, for we know that sometime prior to Year 9 of Ramses IX's reign thieves broke into Ramses VI's tomb. Again some of the thieves were caught. In a fragmentary papyrus in Liverpool, England, known as P. Mayer B, one of those arrested confessed specifically: "I spent four days breaking into it [the royal tomb], there being five of us. We opened the tomb and entered it. We found a basket lying on 60 boxes." He then described finding bronze cauldrons, bronze washbasins, and various other bronze objects. They also opened two chests full of clothing, which are described in detail.¹³ The fact that bronze objects, rather than gold, are mentioned is especially interesting and may be a reflection of the decline in prosperity since the days of Tutankhamun.

Unfortunately, at that point the text breaks off, so we do not know what else they found and/or took, how their theft was discovered, or what punishment was subsequently meted out, though it was likely the death penalty. However, we do know that when Ramses VI's mummy was found in 1898, within the tomb of Amenhotep II where it had been subsequently moved for safekeeping, it was clear that it had been "savagely attacked by the tomb robbers, the head and torso having been hacked to pieces with an axe." As the British archaeologist

Peter Clayton notes, “The priests had piously rewrapped the pieces on a board in an effort to make it resemble human form. When Elliot Smith examined it in 1905, he found portions of at least two other bodies included within the wrappings: a woman’s right hand and the mutilated right hand and forearm of another man. Where the king’s neck should have been were his separate left hip bone and part of his pelvis.”¹⁴

Some of the problems from Ramses IX’s time continued into those of his successor, Ramses X, who ruled briefly at the end of the tumultuous twelfth century BC. According to the scanty records from his reign, principal among these problems were a continuing lack of food and a related reduction in work-related activities (presumably because of hunger) as well as the presence of additional unnamed foreigners in and around Deir el-Medina.¹⁵ His successor was to be the last of the Ramses—Ramses XI—whose rule marked both the beginning of the new century and the ending of the Twentieth Dynasty.

Overall, the twelfth century BC in Egypt was marked by food shortages and political infighting, among other problems. How resilient were the Egyptians then? They were able to cope and continue to exist but really failed to make the transition properly, neither adapting particularly well nor transforming at all. As a result, not only do we see societal problems but also a rapid decline in Egypt’s previous role as a major international power.

Where’s My Mummy?

Egypt during the Twenty-First Dynasty

Ramses XI ruled Egypt for nearly thirty years at the beginning of the eleventh century BC, from ca. 1098 to 1070 BC. He had by far the longest tenure of any pharaoh during the Twentieth Dynasty. His first nineteen years were relatively peaceful, though there were still tomb robberies and famine. One papyrus mentions a woman possessing gold looted from a tomb, who claimed she had received it in return for selling some food during “the year of the hyenas, when men starved.” Worse was yet

to come, for the second half of his reign was marked by fragmentation and civil war within Egypt, ending in rival rulers.¹⁶

Egypt had managed to retain most of its administrative structure until this point, but the system now began to break down when the high priests of Amun in Thebes began competing with the kings to rule the country. A high priest of Amun named Herihor, who is mentioned in the *Tale of Wenamun*, which I will discuss in chapter 3, claimed control over Nubia and Upper Egypt and assumed the title of viceroy of Kush as well as vizier to the pharaoh. By Ramses XI's nineteenth year, Herihor was ruling Upper Egypt and Nubia as far as Thebes. This now became known as Year 1 of the "Renaissance" (from the Egyptian *wehem meswt*, meaning "the repeating of births"), though it was hardly a renaissance as we now understand the term.¹⁷

At the same time, an administrator named Smendes took control in the north, that is, Lower Egypt, specifically in the region of Piramesse in the Nile delta. He too is mentioned in the *Tale of Wenamun*, along with his wife Tanetamon, who may have been a daughter of Ramses XI. Ramses himself remained as pharaoh but was essentially reduced to a figurehead. Thus, at that point, rulership of Egypt was split among the three men—Ramses XI, Herihor, and Smendes—with the latter two ostensibly owing allegiance to the former but actually operating independently.¹⁸

The fragmentation of Egypt did not help the country respond to the crises of the age. Tomb robbing remained enough of a problem that Herihor and the other priests moved some of the royal bodies from their original tombs in the Valley of the Kings. Ramses II's mummy, for instance, was temporarily placed into the tomb of Seti I in Year 15 of Smendes. The two were later moved again, ultimately into the cache at Deir el-Bahri, late in the tenth century.¹⁹

Immediately following Ramses XI's death in 1070 BC, Smendes became pharaoh, thus founding a new royal dynasty, the Twenty-First, and ruled for the next twenty-five years. This marks the start of the Third Intermediate Period, which was, as a whole, a time of dislocation, punctuated by periods of disorder—and a few of relative prosperity. He and his immediate successors ruled from the new capital of Tanis in the Nile delta region for the next century and more, until ca. 945 BC.²⁰

For his part, Herihor continued to rule Upper Egypt from Thebes, meaning that the country was now split in two. The situation apparently continued into the time of Herihor's successor, Panedjem I, who was elevated from high priest to king following Herihor's death. He was most likely married to Henuttawy, probably a granddaughter of Ramses XI, thereby linking both of the new ruling families to the previous dynasty and beginning a reunification of Upper and Lower Egypt.²¹

The work of safeguarding the burials in the Valley of the Kings was continued by moving ten royal mummies into a side chamber within the tomb of Amenhotep II. Among these were the bodies of Thutmose IV, Amenhotep III, Merneptah, Siptah, Seti II, and Ramses IV, V, and VI. In 1898, French Egyptologist Victor Loret, who had just been appointed director of the Antiquities Service, discovered the tomb and all of its royal mummies, including that of Ramses VI mentioned above. Although he excavated the tomb with care and kept a journal at the time, he only ever published a preliminary report of his findings. Ironically, long after Panedjem died, his own mummy would also be moved for safekeeping to the cache at Deir el-Bahri.²²

Meanwhile, when Smendes died in about 1043 BC, he was probably buried at Tanis in the first of a series of burials from the Twenty-First Dynasty. About five years after Smendes's death, after a brief rule by another sovereign, a son of Panedjem I named Psusennes I came to the throne and proceeded to rule for nearly fifty years (ca. 1039–991 BC). With his accession, Upper and Lower Egypt were reunited once more. His reign may also mark the first instance of Egyptian involvement with the Levant in nearly a century.²³

The evidence comes in part from the gold and silver vessels as well as other objects, including *ushabtis* (small human-shaped statuettes that were placed in graves to accompany the buried person into the afterlife), found in Psusennes's tomb at Tanis. The French Egyptologist Pierre Montet discovered the tomb in 1939–40, just as World War II was beginning. What he found in the tomb was unexpected; it has been described

as one of the richest burials ever found from ancient Egypt, surpassed only by that of King Tutankhamun.²⁴

When Montet first entered the burial chamber, he saw a solid silver coffin in the middle of the room, surrounded by bronze vessels and other objects, with more items against the walls. The wall decorations confirmed that it was the tomb of Psusennes I. Montet alerted King Faruq, who was ruling over the modern country of Egypt at the time, and waited until the king arrived at the site before opening the coffin. As Egyptologist Bob Brier tells the story, “When the coffin was opened on March 23, 1939 . . . a gold mask was revealed, covering the long dead Pharaoh.” However, it was not Psusennes. Instead, the hieroglyphs indicated that the mummy in the coffin was a previously unknown king, Sheshonq IIa. This was extremely strange, as on the basis of his name, this king belonged to the dynasty following that of Psusennes, ruling perhaps a century later, during the Twenty-Second Dynasty. Moreover, Sheshonq was not alone in the antechamber, for the mummies of the last two kings of the Twenty-First Dynasty, Siamun and Psusennes II, were found there as well; Sheshonq’s coffin had been placed between them.²⁵

As Brier notes, if Sheshonq IIa was in Psusennes I’s tomb, then where was Psusennes? Was this another case of a royal mummy having been moved or hidden in antiquity? As it turned out, the mummy hadn’t gone very far, and it didn’t take Montet long to determine that fact, for the next year, starting in mid-January 1940, as Montet continued to clear what was actually the tomb’s antechamber of the various grave goods, he noticed that there were two hidden doorways, barely visible in the west wall. As he later wrote: “We started with the northern opening. Small blocks were removed easily, but we then found ourselves stopped by a large block of granite which so exactly filled the corridor that for some time we did not believe it possible to extract it. Projecting through the very narrow slit the light of an electric lamp, inside we saw two metal objects, one shiny, the other green with oxide, and a massive stone.”²⁶

When he was finally able to remove the blocking stone, by wrapping a cable around it six times and pulling it out of position by means of a hoist, and continued down the corridor, Montet found himself in a narrow room. It was one of two burial chambers in the tomb, with a massive

pink granite sarcophagus surrounded by gold and silver vessels, as well as canopic jars (which contained the mummy's preserved viscera) and other items. By this point, it had been nearly a year since Montet first found the tomb, but had he finally found the long-dead pharaoh? As Montet described it, "The inscriptions which framed it on the right and on the left and those which were engraved on the east face told us that we were, this time, at Psusennes."²⁷

However, it was clear that the sarcophagus had originally been intended for, and used by, Pharaoh Merneptah, the first pharaoh to fight against the Sea Peoples and to mention "Israel," back in 1207 BC. The cartouches had all been erased and those of Psusennes substituted, although enough traces remained to make the original readings certain. Merneptah's mummy had recently been moved into the tomb of Amenhotep II a short while before, and thus this sarcophagus (the innermost of three) was now available for reuse. It had therefore apparently been moved from its original location in the Valley of the Kings to this tomb in Tanis.²⁸

In late February, Montet lifted off the heavy lid of the pink sarcophagus. Inside, as he later wrote, was "a second sarcophagus, in black granite and in the shape of a mummy." By its style, this one had once belonged to a Nineteenth Dynasty noble. Without waiting any longer, Montet opened this second coffin. Within it lay a third coffin, this one made of solid silver. When its lid was opened, there were no additional coffins, only a gold mask and a gilded mummy-board. These covered the king's body, all its wrappings and flesh utterly decayed down to a bare skeleton but bedecked with gold jewelry. The hieroglyphs confirmed that he had finally found Psusennes I, who has since been nicknamed "The Silver Pharaoh." It took Montet a further ten days to carefully remove the gold mask and then the bones of Psusennes; they and other artifacts from the tomb were eventually transported to the Cairo Museum in an army truck.²⁹

Meanwhile, behind the other hidden doorway lay yet another burial chamber. It had originally been intended for Psusennes I's wife, Mutnedjmet, but her body had been removed at some point and replaced by that of Psusennes's immediate successor, Amenemopet. It is not clear why this exchange took place, nor is it clear why Siamun, Psusennes II, and

Sheshonq IIa were all in the antechamber of Psusennes I's tomb rather than in tombs of their own. Siamun and Psusennes II may have been buried in the tomb from the outset, but Egyptologist Aidan Dodson has noted that plant remains found on Sheshonq's mummy "seem to have grown into the bones while the coffin lay in standing water," which would indicate that Sheshonq's original tomb may have been flooded, thus requiring his reburial here in Psusennes's antechamber.³⁰

Although Montet had found an intact pharaoh's tomb, with some material as spectacular as that found in Tutankhamun's vault, the world's media was more concerned with the world war going on at the time than it was with a long-dead pharaoh. As a result, this amazing discovery has not received the notice and acclaim that it should, although the treasures were displayed in their own special room within the Cairo Museum and have now been redisplayed in rooms that all held treasures of Tutankhamun.³¹

Montet also found hundreds of *ushabtis* in Psusennes's tomb, as mentioned. These are now scattered, in various museums and private collections, according to Shirly Ben-Dor Evian, who served as curator of Egyptian archaeology at the Israel Museum in Jerusalem.³² The museum has four of them in its collection—three were found in his tomb; the other probably comes from a looted tomb located somewhere nearby. All are made of copper. One has the name "Psusennes" inscribed on it; another has the name of his wife Mutnedjmet; and two more have the name of the general Wendjebaendjed, who was buried in a subsidiary chamber of Psusennes's tomb.

Ben-Dor Evian and her colleagues subjected the four *ushabtis* to lead isotope analysis, a technique that can help pinpoint the origin of the copper used to make the objects. Intriguingly, the copper in each of them comes from the Arabah region of the Negev highlands, on the border between modern Jordan and the Sinai. This is where the copper mines in the Timna Valley (in the Sinai), sometimes called "King Solomon's Mines," and Wadi Faynan (in Jordan) are both located. Clearly

Egypt, which had received much of its imported copper from Cyprus during the Bronze Age, was now getting at least some from this region. This is part of the evidence that suggests international trade had resumed between Egypt and the southern Levant after a gap caused by the Collapse.³³

Israelites and Philistines

I am attempting to cover two areas in this first chapter, so by pivoting at this point to more fully introduce details about the southern Levant before returning to Egypt and what will become an ever-more intermingled story, we can learn a few details about the situation there at the time from a papyrus called the *Onomasticon of Amenemopet*, which was found in 1890 within a jar at the site of el-Hibah in Egypt. It is now known in fully nine different copies. One portion of this manuscript, which lists peoples and places, mentions three of the groups that made up the Sea Peoples—the Sherden (Shardana), the Tjekker, and the Peleset (Philistines)—along with three cities: Ashkelon, Ashdod, and Gaza.

The implication in the papyrus is that remnants of the three groups had settled in these cities or had been settled there by the victorious Egyptians, as Ramses III claimed. It is noteworthy not only that we see the Tjekker here too, as well as the Peleset, but also that the cities named are three of the five that belonged to the so-called Philistine Pentapolis: Ashdod, Ashkelon, and Gaza were located along a stretch of the coastline in southern Canaan at or near the modern cities by those names, while Ekron (Tel Miqne) and Gath (Tell es-Safi) were situated further inland. Archaeological evidence uncovered at four of these five cities (Gaza has not yet been excavated) indicate that they were all Canaanite cities during the Bronze Age but then began to exhibit the material trappings of Philistine culture beginning at about this same time, that is, during the late twelfth and into the eleventh century BC.³⁴

Just under a decade later, by 1899, the site of Tell es-Safi was identified as Philistine Gath, and joint excavations by the American archaeologist Frederick Bliss and the Irish archaeologist Robert Alexander Stewart (R.A.S.) Macalister began. By 1914, Macalister had published one of the

first books in English devoted entirely to the Philistines, titled *The Philistines, Their History and Civilization*. Renewed excavations at the site began under the direction of Aren Maeir of Bar Ilan University in 1996 and have yielded much new information; I will refer to some of this data below.³⁵

As Carl Ehrlich of York University has said, it seemed at first that the Philistines were going to be “the legitimate heir to the ancient Egyptian empire in Canaan.” However, that was not to be. Instead, the Israelites took over most of what had been Canaan and, after feuding with the Philistines from the time of Israelite King Saul, as well as with David and then his son Solomon, eventually “the status as Egypt’s heir” in the region “passed . . . to Israel.”³⁶ The Israelites were unique in this period as practitioners of monotheism. They are variably considered either newcomers to the scene or lurkers in the background for some time, for the date and means by which the Israelites came to establish themselves in the land of Canaan is a complex and controversial issue.

Numerous scholars have weighed in on this topic, including with hypotheses that involve the biblical story of the Exodus and a military conquest of Canaan by the Israelites, resulting either in a genocide or a more peaceful integration such as variously described in the Books of Joshua and Judges in the Hebrew Bible. Other possibilities have been suggested as well, envisioning the Israelites as nomads or semi-nomads peacefully infiltrating the area, or as peasants from the highlands who revolted against Canaanite overlords, or even as gradually developing into “Israelites” from within the local Canaanite population. These theories are known variously as the “Conquest” model, the “Peaceful Infiltration” model, the “Revolt of Peasants” model, and the “Invisible Israelites” model.³⁷ The most recent discussions have revolved around more anthropological considerations of the ethnicity of the Israelites, especially in comparison to the other peoples who also emerged in the region during this same approximate period.³⁸ These include the Philistines, who took over the coastal region of the southern Levant.

No matter which theory individual scholars subscribe to, we know for certain that an inscription on a victory monument of Pharaoh Merneptah, found by Sir William Matthew Flinders Petrie in 1896, claims that the Egyptians defeated a people called “Israel” who were

living in the land of Canaan by about the year 1207 BC. We also know that, regardless of the antecedent events and the means by which they entered the picture, the initial Israelite settlements were established by the end of the twelfth century or thereabouts, and quickly exploded in number during the early eleventh century BC. That much has been attested courtesy of a multitude of archaeological surveys that have been conducted in the region since at least the 1960s.³⁹

Given those facts, and regardless of whether they had been languishing in the Sinai for several decades or were already present in the land but “invisible” or had been infiltrating the land slowly over centuries, the Israelites may have simply taken advantage of the havoc in Canaan that was occurring during the Collapse. The political and military vacuum created by the retreat of the Egyptians, and the destruction of the various Canaanite cities, would have meant that the Israelites could have moved into areas that they could not normally have occupied under their own power. As a result, they would have been able to take over all or most of Canaan by the end of the twelfth century BC.⁴⁰

While still speculative, this scenario plausibly provides the “how” that is missing from most of the other hypotheses. For those who believe in the miraculous hand of God, there is no need to investigate further, but for the rest, it remains a viable question as to how else the Israelites could have possibly attacked and successfully captured the imposing Canaanite cities. Under normal circumstances, they are unlikely to have been able to do so, at least on their own. However, once the Sea Peoples invaded the Canaanite coast as part and parcel with the other calamities (drought, famine, internal rebellion, etc.) that brought the Canaanite culture to its knees, and once the Egyptians had retreated from the region, the Israelites may have been able to occupy the ruins of the larger cities and to take over some of the lesser towns all by themselves, thus completing the conquest of Canaan. It is likely that the later biblical writers subsequently gave complete credit for the capture and destruction of the Canaanite cities to the Israelites without even mentioning the role of the Sea Peoples because they only knew the latter in terms of the biblical Philistines who caused such trouble for Saul and David over the course of their reigns.⁴¹

Recent studies involving climate change by Dafna Langgut of Tel Aviv University and her colleagues indicate a possible link to the early Israelites and Philistines in terms of a temporary cessation in the severe drought. Starting perhaps as early as 1150 BC and certainly no later than ca. 1100 BC, there seems to have been an uptick in the available moisture in the southern Levant, creating slightly wetter climate conditions, which in turn permitted “intense olive and cereal cultivation.”⁴²

The more favorable conditions may have lasted in this region until ca. 950 BC, which corresponds to the same approximate time period as the initial emergence of the Israelites. As Langgut and her colleagues state, “The improved conditions in the highlands during the Iron Age I enabled the recovery of settlement activity, which is the backdrop for the rise of ancient Israel. . . . Similar conditions in other parts of highlands in the Levant could have led to the development of equivalent settlement systems which gave birth to other biblical nations—the Aramaeans in Syria and the Ammonites and Moabites in Transjordan.”⁴³

This idea has now been supported by another new study, which suggests that this area in particular was one of the only regions in which the population actually increased, rather than decreased, at the beginning of the Iron Age, that is, the period immediately following the Collapse. If so, the population increase could potentially be the result of the new kingdoms established in the southern Levant, including Israel and Judah, as well as Moab, Ammon, and Edom, though scholarly discussions continue about whether there were already inhabitants in these areas, quite possibly nomadic, as some have suggested, who survived the Collapse or if they were all newcomers to the region who migrated in during the aftermath.⁴⁴

King David

Our primary source for what happened next is the Hebrew Bible, where—if we take the story at face value—we are told that the Philistines created problems for the fledgling Israelites and their newly

anointed King Saul and his sons later in the eleventh century. Matters came to a head when Saul and his progeny fought the Philistines in the Jezreel Valley, not far from Megiddo (biblical Armageddon). There, in about 1016 BC on the flanks of Mt. Gilboa, according to the biblical account, Saul and three of his sons were killed in battle and their bodies hung from the walls of Beth Shean (1 Samuel 28–31; 2 Samuel 1; 1 Chronicles 10).

Soon thereafter, one of Saul's remaining sons, Ishbaal (or Ishbosheth), took over the northern half of the young Israelite kingdom while David declared himself king over Judah, the southern half of the kingdom (2 Samuel 2:1–4, 8). Eventually David took over the northern part as well, establishing what we now call the United Monarchy around the year 1000 BC.⁴⁵

Unfortunately, we have no corroborating evidence from any archaeological or epigraphic sources to confirm these stories told in the Hebrew Bible, so we have no way of independently confirming their accuracy—but, though much debated, they seem plausible, especially given the other events taking place in the general area during this time period. Moreover, even until recently we had no evidence from outside the Bible attesting to the actual existence of David, strange as that might seem. All of that changed in 1992.

During that summer, Gila Cook was working as the architect for the archaeological expedition at the site of Tel Dan (ancient Laish), located north of the Sea of Galilee in modern Israel. The excavation was being directed by Avraham Biran, a longtime, well-respected archaeologist and professor at the Jerusalem campus of Hebrew Union College. He had been digging at Tel Dan for more than twenty-five years by that point, since 1966. The site itself is in the middle of a beautiful nature preserve that includes the icy-cold headwaters of the Jordan River and a great restaurant serving fish for tourists and locals.

Cook's goal that day was to accurately draw and record the stones in a wall that they had recently uncovered. However, her project was derailed when the raking light of the sun created shadows on one stone in particular, revealing the presence of an inscription that was carved on its surface, which nobody had previously spotted. It was written in



FIG. 2. Tel Dan inscription with the words *Beit David* highlighted. Photograph courtesy of Oren Rozen via Wikimedia Commons.

Aramaic, using Phoenician lettering. When it was subsequently translated, the text created a sensation, for it contained the words *Beit David*—the “House of David.” This was the first time that an inscription mentioning the biblical King David had been found; in fact, it was the first time that any attestation to the existence of King David had been found outside the Bible.⁴⁶

It turned out that the stone probably came from a larger monument that had most likely been set up about 841 BC, nearly a century and a half after David ruled (ca. 1000–970 BC). Additional fragments belonging to the same monument were subsequently found by the expedition the next year, although there are still many pieces missing. While it remains the subject of some scholarly debate and discussion, it seems that the inscription had commemorated the capture of Tel Dan by an Aramaean king named Hazael, whose home base lay just to the north at Aram-Damascus and who ruled ca. 842–796 BC. We shall meet him again below.

The fragmentary inscription, as it is currently extant, reads:

. . . my father went up [against him when] he fought at [. . .]. And my father lay down, he went to his [ancestors]. And the king of I[s]rael entered previously in my father's land. [And] Hadad made me king. And Hadad went in front of me, [and] I departed from the seven [. . .] of my kingdom/kings, and I slew [might]y . . . kin[gs], who harnessed tho[usands . . . of cha]riots and thousands [of] chariot horses. [I killed Jo]ram . . . son of A[hab], king of Israel, and [I] killed [Ahaz]iahu son of [Joram, kin]g of the House of David. And I set [their towns into ruins and turned] their land into [desolation . . .].⁴⁷

The discovery of this inscription put to rest a dispute that had been raging in academic circles, with some scholars doubting that the tenth-century BC rulers David and Solomon had ever existed, for no extrabiblical (i.e., outside the Bible) evidence for either monarch had been found until that point. Thus, the discovery of this inscription, with its mention of the House of David and the inherent implication that there had been a historical David (who had founded the dynasty), was extremely important. The reference to David and the dynasty that he founded also suggests that Solomon most likely existed as well, since he is David's son.⁴⁸

As a side note, I should mention that a possible, though very much debated, second reference to the House of David can be seen on what is known as the Mesha Stele. The inscription, which is much better known for its mention of "Omri, king of Israel," was first seen and identified by an Anglican missionary named F. A. Klein in 1868 at the site of Diban in what is now modern Jordan. Even with a third of its text now missing, it is still the longest monumental inscription ever discovered in the Holy Land and is one of the first discovered extrabiblical inscriptions that names a person or place known primarily from the Hebrew Bible—for example, Omri, king of Israel, in addition to, possibly, the House of David.⁴⁹

Edom and the Edomites

According to the biblical account, when David was establishing himself as king, the nearby kingdom of Edom was among the territories that he conquered. This was located to the south and east of David's original

territory, in the general area of Wadi Faynan in what is now modern Jordan.

The biblical stories of David's conquest of Edom might provide additional support for the link between Timna and Egypt, which I have mentioned previously, for we are told in the biblical account that during the fighting the Edomite crown prince Hadad, who was an infant at the time, was spirited out of the country and down to Egypt for his safety (1 Kings 11:14–22). When Hadad grew up, he married the sister of the Egyptian queen and had a son, Genubath, before returning to Edom after the death of King David and later rebelling against King Solomon.⁵⁰

Although there is no independent corroboration to confirm this story either, Egyptologist Kenneth Kitchen suggests that it may have been Psusennes I who gave Hadad sanctuary in Egypt, as well as a “house, food allowance, and land” (1 Kings 11:18). Psusennes, whose long rule lasted until ca. 991 BC and whom we met above, would have overlapped with David for at least a decade if not more. However, it is also possible to suggest instead that the episode took place during the reign of Psusennes I's son, Amenemopet, who ruled for about ten years after his father's death and extended the Twenty-First Dynasty's rule over all of Egypt, both Upper and Lower, from his base in Tanis.⁵¹

The kingdom of Edom was first seriously explored in detail by the colorful American archaeologist Nelson Glueck in his surveys in Jordan in the 1930s. Glueck, an ordained rabbi and later president of Hebrew Union College in Cincinnati, remains one of the few archaeologists ever to appear on the cover of *Time* magazine, in 1963. (James Henry Breasted, the founder and director of the Oriental Institute at the University of Chicago, had previously been featured in 1931.) Heavily influenced by the Hebrew Bible, Glueck linked the copper mines at Wadi Faynan in the Arabah Valley to King Solomon's activities, calling him the world's first “copper magnate,” though this designation is now considered unlikely.

More recently, two decades of research began in 1997, conducted by the Edom Lowlands Regional Archaeology Project of the University of California San Diego and the Jordanian Department of Antiquities. The project has now generated numerous publications by scholars such as Tom Levy, Mohammad Najjar, and Erez Ben-Yosef, as well as others. Their investigations of the copper mines at Wadi Faynan have shown that

there was a sudden increase in the exploitation of these mines, as well as those at nearby Timna, beginning as early as the eleventh century BC, and then continuing into the tenth and ninth centuries. This new exploitation of copper ore in Wadi Faynan may have presented a challenge to Cyprus's previous domination of the copper export industry.⁵²

The rise of Edom and the Edomites has now been suggested to be related to the exploitation of these copper resources, with Erez Ben-Yosef of Tel Aviv University suggesting that the management and operation was initially conducted by otherwise archaeologically invisible nomadic pastoralists who seized the opportunity to work the mines when the Egyptian authorities withdrew in the aftermath of the Collapse. According to his view, the nomadic miners eventually settled down and became the people whom the Bible calls Edomites. This latter suggestion in particular has engendered a lively ongoing debate. We may also note that if the area was mined before Solomon's time, then highlighting Solomon's presence in the Faynan as Glueck did is either irrelevant or not as significant as Glueck thought.⁵³

Khirbet Qeiyafa and Tel Gezer

There are additional discoveries that may have bearing on the extent of David's territory, but they are not without their debates as well. A prime example is Khirbet Qeiyafa, located in the Valley of Elah to the southwest of Jerusalem, where the battle between David and Goliath reportedly took place. The site was excavated by Yossi Garfinkel of Hebrew University, beginning in 2007. He has dated it to the tenth century BC and discussed its relationship to King David and the extent of his territory during that time. The site is not far from both Tell es-Safi (biblical Gath) and Tell Miqne (biblical Ekron), which belonged to the Philistines, but Garfinkel thinks that his site is just on the other side of what is essentially an invisible border and is thus part of David's kingdom rather than being in Philistine territory. He has also tentatively identified Khirbet Qeiyafa as biblical Sha'arayim, mentioned in the biblical account of David and Goliath (1 Samuel 17: esp. 52), but such an identification has not been embraced by all other archaeologists.⁵⁴

Among numerous other discoveries, the site has yielded two inscriptions so far. One is inscribed around the rim of a storage jar, in what appears to be Canaanite alphabetic script, and may include the personal name 'Išba'al—perhaps the owner of the jar. The other inscription, found in 2008, caused much more discussion. It consists of five lines in black ink on a broken pottery sherd (such an inscribed sherd is known as an “ostrakon” in archaeological terms). It is still not clear exactly what the lines say, but the various interpretations and translations have ranged from the mundane to the fantastic, in part because not everyone agrees on the language that is being used; most now lean toward a version of Old Hebrew script derived from Phoenician. One initial attempt at a translation included the lines “Judge the slave and the widow, judge the orphan and the stranger. Plead for the infant, plead for the poor and the widow,” but this is still very much a matter of debate.⁵⁵

There is also an unrelated inscription at the site of Gezer, located not far away, which similarly appears to date to the tenth century BC. The inscription is justifiably famous, although we can't assign it to any specific reign, whether that of David or any other ruler. This is the so-called Gezer calendar, an inscription written on stone in either paleo-Hebrew (the earliest known version of Hebrew) or possibly Phoenician. It was found long ago, in 1908, by R.A.S. Macalister (mentioned earlier), who was excavating on behalf of the Palestine Exploration Fund, which was based in London. It describes the principal agricultural activities conducted during the year and thus provides an insight into life in the region during this time. It reads: “Two months of ingathering, two months of sowing, two months of late sowing, one month of chopping flax, one month of barley harvest, one month of harvest and completion, two months of grape cutting, one month of summer fruits.”⁵⁶

Pharaoh Siamun and the Deir el-Bahri Cache

The site of Gezer is also featured prominently in a biblical passage stating that an Egyptian pharaoh captured the city and then gave it to Solomon as part of a dowry when the latter married the pharaoh's daughter (1 Kings 9:16–17). We are told that “Pharaoh King of Egypt had gone up



FIG. 3. Replica of Gezer calendar inscription. Photograph by E. H. Cline.

and captured Gezer and burned it down, had killed the Canaanites who lived in the city, and had given it as dowry to his daughter, Solomon's wife; so Solomon rebuilt Gezer."⁵⁷

Note that the name of the pharaoh who did this to the city of Gezer is not given. However, a number of biblical historians and Egyptologists have suggested that Pharaoh Siamun of the Twenty-First Dynasty, who ruled for twenty years (ca. 979–958 BC), could be the Egyptian ruler in question. There is indeed evidence of a destruction level at Gezer that may date to this approximate period and that could conceivably be related to a campaign by Siamun, though there is nothing definitive tying him to it.⁵⁸

If this account has any basis in reality, then there had clearly been a change in power dynamics after the Collapse, for never during the Bronze Age would an Egyptian pharaoh have given his daughter in marriage to a foreign king. However, we have already seen that things were now different in the Iron Age—remember that during David's reign, the Egyptian queen's sister had been given in marriage to the young Hadad, crown prince of Edom, according to the biblical account.⁵⁹ Now we hear of another such marriage, which would previously have been unthinkable. However, Solomon seems to have taken good care of the Egyptian princess, reportedly building a separate residence for her in Jerusalem: "But Pharaoh's daughter went up from the City of David to her own house that Solomon had built for her" (1 Kings 9:24).

It may be that such a royal marriage, which frequently accompanied some sort of alliance or mutual treaty, was part of an attempt by Siamun to shore up his reign in Egypt, for things may not have been going well for him. For instance, an additional shuffling of royal mummies may have reflected concerns for security at Thebes. Some were first moved into the tomb of Queen Inhapy in Siamun's Year 10. Sometime later (some would argue as late as Sheshonq I's Year 11, about 935 BC), they and others, now including Kings Ahmose I; Thutmose I, II, and III; Seti I; Ramses I, II, and III; and also members of the family of Panedjem II, ended up in a tomb near Deir el-Bahri. This seems to have been originally the tomb of the Eighteenth Dynasty queen Ahmes-Nefertiry and had recently been used for the family of Panedjem II.⁶⁰

This hiding place, now usually called the Deir el-Bahri Cache (with the official number TT 320), was a good one, for it remained undiscovered for nearly three millennia. It was only about 150 years ago, sometime around 1870, according to the most prevalent version of the story now told, that it was found by a member of the Abd el-Rassul family, allegedly as he was searching for a goat that had fallen into the tomb shaft. Few believe this story, however, and there is much speculation that he was more likely searching specifically for tombs to rob, since the location was subsequently kept as a closely guarded family secret. The family treated the tomb as their own personal treasure vault, selling various objects one by one to well-to-do European and American tourists over a period of about ten years.

The scheme was finally uncovered in 1881 by Emil Brugsch, who had been sent by Gaston Maspero, the new director of the Egyptian Antiquities Service. Brugsch hired several hundred local villagers and removed all the reburied pharaohs, queens, and their goods from the tomb within a period of only about forty-eight hours, forsaking precise recording of the specific location of the contents in favor of a rapid removal. The story is now among the most repeated in histories of modern Egyptology, and the collection of royal mummies and burial objects has been among the most valuable treasures in the Cairo Museum for decades.⁶¹ They now rest in a specially prepared crypt at the National Museum of Egyptian Civilization, in the Cairo suburb of Fustat. Unfortunately, the rapid removal meant that all information beyond the actual objects was lost or not recorded; had it been done in a slow and deliberate fashion, as should have been the case, much more data would have been gained—in comparison, the removal of objects from Tutankhamun's tomb by Howard Carter, which began in 1922, took ten years.

Solomon at Megiddo and Jerusalem

It was while Carter was carefully documenting and removing the objects in Tutankhamun's tomb that archaeologists from the Oriental Institute of the University of Chicago began excavating in 1925 at the site of Megiddo, in what is now northern Israel but which lay in British

Mandate Palestine at the time. Three years later, in 1928, they uncovered several large buildings that had internal aisles lined with standing stones and what appeared to be troughs. The field director, P.L.O. Guy, interpreted these as stables and sent a telegram to James Henry Breasted, the director of the Oriental Institute. It read in part “believe have found Solomon’s Stables.”

The news made headlines around the world, but debate still rages today, a century later. Most archaeologists accept that these are indeed stables, but the majority no longer think that they were built by Solomon. Based on radiocarbon dating, pottery styles, and other chronological indicators, it now seems more likely that they were built either in the ninth century BC, possibly by Omri or his son Ahab, or even in the eighth century BC, perhaps by Jeroboam II.⁶²

Similarly, several decades later, the famous Israeli archaeologist Yigael Yadin and his team excavated at both Megiddo and Hazor and found that the large entrance gate at each looked identical—what is now known as a six-chambered gate. He also looked at the records from Macalister’s earlier excavation at Gezer and recognized that the city gate was essentially identical there as well. He dated all three to the time of Solomon and declared that there was a “Solomonic blueprint” for entry gates that could be seen at such cities.⁶³

However, just as with “Solomon’s Stables,” so too these city gates may date to the ninth century and the reign of Omri or Ahab, or even to the eighth century and the reign of Jeroboam II, rather than to the tenth century and the time of Solomon. The discussion has been ongoing for some time and is occasionally quite heated, since not all scholars agree, but it now looks as if this possible evidence for Solomon’s building activities may have also disappeared.⁶⁴

The textual evidence involved in this debate comes from a single biblical passage that mentions those specific cities as examples that Solomon supposedly fortified: “And this is the account of the forced labor which King Solomon levied to build the house of the lord and his own house

and the Millo and the wall of Jerusalem and Hazor and Megiddo and Gezer” (1 Kings 9:15).

Note that the passage also gives credit to Solomon for building the original Temple in Jerusalem (“the house of the lord”). For this, according to the biblical account, Solomon turned to Hiram, the king of Tyre, located in what had been the central part of Canaan and is now the modern country of Lebanon, who reportedly supplied craftsmen and even the building plan for the Temple (1 Kings 5:1–7:51). Although archaeologists have not yet found anything that might directly confirm this biblical story (or even for the existence of Solomon, his rule, or the extent of his kingdom, for that matter), the biblical accounts about his reign are full of details of his relationship with Hiram and Tyre.⁶⁵

In this case, we are further told specifically that “Hiram sent word to Solomon,” saying as follows: “I have heard the message that you have sent to me; I will fulfill all your needs in the matter of cedar and cypress timber. My servants shall bring it down to the sea from the Lebanon; I will make it into rafts to go by sea to the place you indicate. I will have them broken up there for you to take away. And you shall meet my needs by providing food for my household.’ So Hiram supplied Solomon’s every need for timber of cedar and cypress. Solomon in turn gave Hiram twenty thousand cors of wheat as food for his household, and twenty cors of fine oil. Solomon gave this to Hiram year by year” (1 Kings 5:8–11; see also 2 Chronicles 2:1–16).⁶⁶

In this context, Hiram also spoke of dispatching skilled craftsmen to help Solomon, as follows: “I have dispatched Hiram-abi, a skilled artisan, endowed with understanding, the son of one of the Danite women, his father a Tyrian. He is trained to work in gold, silver, bronze, iron, stone, and wood, and in purple, blue, and crimson fabrics and fine linen, and to do all sorts of engraving and execute any design that may be assigned him” (2 Chronicles 2:13–14).

Since no part of Solomon’s Temple is still standing, the biblical description is all we have to go on (1 Kings 6:14–22). As a result, as might be expected, there has been no end of scholarly discussion as to what it actually looked like, but it seems to fit the description of what is called by archaeologists a “long room” temple—that is, a long rectangular building

that one would have entered on a short side and proceeded into a long main room, at the end of which is a much smaller room known as the “holy of holies” where one would keep something like the Ark of the Covenant.

However, the more usual temple form in the southern Levant at the time was a “broad room” temple, which was much more squat and where one entered through the middle of the long side. We can see an example of the latter in the tenth-century BC temple at the site of Arad, down by Beersheva in what is now southern Israel. The “long room” temple is more common farther to the north, for instance, at the site of Ain Dara in northern Syria where there is a temple that is thought to be the closest extant example of what Solomon’s Temple might have looked like.⁶⁷ It may well be that Hiram’s craftsmen brought the blueprint of the actual plan of the Temple with them, as well as the materials with which to build it.

We are also told that, in gratitude, Solomon gave Hiram twenty cities located in what is now northern Israel, but that Hiram refused to accept them (1 Kings 9:10–14). In addition, the two of them teamed up in sending an overseas expedition to Ophir (1 Kings 9:26; 2 Chronicles 8:17, 9:10), whose location has never been confirmed. Furthermore, we are told that Hiram sent expeditions to Tarshish (1 Kings 10:21–22; 2 Chronicles 9:21), which is frequently identified as Tartessos in Spain, although there is no firm foundation for such an identification.⁶⁸ It has recently been suggested that King Solomon may have also been involved in joining the Phoenician expeditions to Spain at this time, in particular to the region of Huelva, to acquire silver and other goods, though there is no proof of that at all and the hypothesis lacks any supporting physical evidence.⁶⁹

Sheshonq/Shishak

At this point in our story, Egypt and the southern Levant became entwined once again, but this time it was because Egypt was, at long last, regaining strength, courtesy of Sheshonq I. He came to the throne of Egypt in the middle of the tenth century, ca. 945 BC, after Psusennes II, who ruled Egypt following the death of Siamun. Siamun and Psusennes II were the last two kings of the Twenty-First Dynasty; as I have

mentioned above, they were both buried in the antechamber of Psusennes I's tomb. Sheshonq was to be the first king of a new dynasty, the Twenty-Second.⁷⁰

Sheshonq was of Libyan origin, though his family had lived in Egypt for generations, and his uncle, Osorkon the Elder, had actually been king of Egypt directly before Siamun. Sheshonq maintained the capital at Tanis but brought Thebes under closer control by appointing his son Iuput as high priest of Amun. This replaced the previous hereditary line and for a few decades brought a degree of unity back to Egypt. He is also the first king to have left records of military operations in the Levant since the Late Bronze Age Collapse.⁷¹

This is where the Hebrew Bible may come into play again as well, for it just so happens that we are told an Egyptian pharaoh named Shishak besieged Jerusalem and carried away an untold amount of gold and other treasure from the city, palace, and Temple a few years after the death of King Solomon, that is, somewhere around 930–925 BC. “In the fifth year of King Rehoboam, King Shishak of Egypt came up against Jerusalem; he took away the treasures of the house of the Lord and the treasures of the king's house; he took everything. He also took away all the shields of gold which Solomon had made” (1 Kings 14:25–26).⁷²

Although it is disputed by some, most biblical historians and Egyptologists are of the view that the Pharaoh Shishak mentioned in the Bible is to be equated with none other than Sheshonq I. This is based in part on an inscription that Sheshonq ordered to be carved onto what is known as the Bubastite Portal of the Temple at Karnak in Egypt, which formed part of the first major extension of the complex since the Twentieth Dynasty. Although it too is much debated, this lists a number of cities attacked by Sheshonq in the territory of what had been the United Monarchy of David and Solomon. Included among these is Megiddo, along with other cities in the Jezreel Valley, including Taanach and Shunem.⁷³

Sheshonq's list of conquered cities has elicited a great deal of attention and some skepticism over the years, but confirmation of its accuracy may have come almost a century ago, in late 1925, when the University of Chicago archaeologists working during their first season at Megiddo recovered an inscribed fragment of stone on which was carved the

cartouche of Sheshonq I. It had been excavated by the previous excavator of the site, Gottlieb Schumacher, when he was digging there from 1903 to 1905, but its importance was not recognized, and it was therefore thrown onto a backdirt pile next to an excavation trench, where the Chicago team found it twenty years later.

James Henry Breasted was able to translate the hieroglyphs on the recovered fragment when he visited his team in March 1926, and the news soon spread worldwide of the discovery that they had made, making a splash as great as the one that would follow two years later, with “Solomon’s Stables.” This fragment would seem to corroborate Sheshonq’s claim, for it is thought to come from an inscribed monument originally standing perhaps ten feet tall that would have been set up in the city of Megiddo after its capture by Egyptian forces.⁷⁴ However, since Schumacher’s men had not recorded the location of the fragment, we do not know in which of the levels at Megiddo it was found.

Nevertheless, at one point some scholars thought that they were able to identify the city at Megiddo that Sheshonq captured, which is the stratum known to excavators as Megiddo VIA. This level, which has been alternately described as the last Canaanite city or the first Israelite city built at the site, was burnt to the ground sometime during the tenth century BC. The Chicago excavators found unburied skeletons still lying in the ruined houses and the remains of wooden posts and trees still in situ. Others have suggested instead that the destruction might be attributable to King David’s forces or even to the Philistines. However, the evidence—which includes cracked and leaning walls in addition to the skeletons and burnt trees and posts—strongly points instead to an earthquake, which may have also devastated nearby communities.⁷⁵

What is especially interesting about Sheshonq’s attack on Megiddo is that the city may have already been located within the northern kingdom of Israel by that time. This northern kingdom was established by Jeroboam at the same time that the southern kingdom of Judah was established by Rehoboam, after the United Monarchy had split into the Divided Kingdoms following the death of Solomon. Jeroboam and Shishak already had a relationship by that time, for the biblical account states that prior to Solomon’s death Jeroboam had fled to Egypt and had

been living there, sheltering under the protection of Sheshonq/Shishak: “Solomon sought therefore to kill Jeroboam; but Jeroboam promptly fled to Egypt, to King Shishak of Egypt, and remained in Egypt until the death of Solomon (1 Kings 11:40).⁷⁶

This means that if Sheshonq did indeed campaign militarily against Megiddo and the other towns in the Jezreel Valley, as his inscription at Luxor and the stele fragment at Megiddo both imply, then—depending on the timing—either he would have been fighting against the forces of Jeroboam, the man whom he had until recently protected or, as has been tentatively suggested by Nadav Na’aman of Tel Aviv University, Sheshonq’s campaign to the north may have been intended in part to place Jeroboam on the throne of the northern kingdom of Israel in the first place. Such an action is not mentioned in the biblical account, however, though it may have once been preserved in the now missing “Book of the Annals of the Kings of Israel” (see, e.g., 1 Kings 14:19).⁷⁷

An interesting point is that the surviving list of cities attacked by Sheshonq I does *not* include Jerusalem, and the “itinerary” is not consistent with it being included in the campaign recorded on the Bubastite Portal. However, there are vast areas of the walls that Sheshonq added to the forecourt at Karnak, and it is likely that, had Sheshonq lived, additional tableaux and inscriptions would have been added, including one or more further campaigns that would have included the attack on Jerusalem.⁷⁸

The Bee’s Knees

Sheshonq also mentions the site of Rehov in his topographical list at Karnak. Rehov had been a major Canaanite city, located in the Beth Shean Valley, that somehow managed to make the transition to the Iron Age virtually unscathed. It is one of the largest archaeological tells in the southern Levant, consisting of a lower mound dominated by an upper mound at the southern end, covering between ten and eleven hectares (about twenty-five acres). It has been known since 1939, when a pottery sherd inscribed with a Proto-Canaanite inscription was found on the surface by two well-known archaeologists, Ruth Amiran, a pottery

(continued...)

INDEX

Note: Page numbers in *italic type* indicate figures or tables.

- Abbott Papyrus, 11
- Abd el-Rassul, 30
- Abdi-Aštar (Abdastrus), 104
- Abibaal, 38, 101, 104
- Abibaal Inscription, 104
- Adad-nirari II, 56–57
- Adad-nirari III, 77
- adaptation: Assyria, 173–174; Babylonia, 173–174; civilizations, xxii, xxiv; concept of, 164; coping vs., 167–168; Crete, 140; Cyprus, 84–85, 89, 171; Egypt, 12; Greece, 137, 155; as key to survival, 194; Late Bronze Age, 109, 155; Mycenae, 133; Neo-Hittites, 119; Phoenicians, 171
- adaptive cycle, 160–164, 161, 170, 175, 198, 199
- Adcock, Sarah, 114, 186
- administrative structure: Assyria, 187–188, 222n19; Babylonia, 188; collapse of, 4, 188; Egypt, 13, 188; as factor in resilience, 188; Greece, 138
- Aegean region, xxxv, 133–156. *See also* Crete and the Minoans; Greece; Mycenae
- agriculture, 27, 119, 122, 137
- Ahab, 31, 39, 70, 105
- Ahaziah, 73
- Ahiram, 101, 105
- Ahmes-Nefertiry, 29
- Akhenaten, 101
- Aleppo, 116, 118, 120–121
- Alexander the Great, 40, 115
- Allen, Mitchell, 98
- alphabet. *See* writing
- Amenemopet, 16, 25
- Amenhotep II, 14
- Amenhotep III, 86, 101
- American Journal of Archaeology*, 107
- American Southwest, 3–4
- American University of Beirut, 119
- Amiran, Ruth, 36
- Ammon, 21, 38, 40, 80, 119, 159, 179
- Anatolia, 58, 72, 85, 98, 111–117, 121, 124, 132, 174, 186. *See also* Turkey
- Angel, J. Lawrence, 151–152
- anti-fragility, 84, 110, 169–170, 172–173. *See also* fragility/vulnerability; resilience
- apiary, 37–38
- Apollonius of Rhodes, 85
- Aramaeans, 42–43, 51, 54–56, 63, 69, 72–73, 78–79, 118, 173–174
- Aramaic language, 23, 42, 69
- archaeology: Aramaeans, 74; Assyria, 45, 51, 57–63; Babylonia, 45, 47; Canaan, 18, 36–38; Crete, 140, 145–148; Cyprus, 88–93, 109; dangers of, 111–112; and Dorian invasion, 1–3; Edom, 25; Euboea, 148–150; Egypt, 34–35; Greece, 135–136, 143, 145–154; Hittites/Neo-Hittites, 111–112, 115–121; Israelites, 20, 22–24, 26–27, 31–32; issues of scholarship in, 45, 180, 184; Mycenae, 134–135; Phoenicians, 95, 97, 100, 105–107. *See also* historical sources
- architecture, following collapse, 5

- Armenia, 129
- army, as factor in resilience, 188
- Ashkelon Deep-Sea Project, 107–108
- Aššur-bel-kala, 55, 124
- Aššur-dan I, 47
- Aššur-dan II, 56
- Aššurnasirpal I, 112
- Aššurnasirpal II, 60–67, 123–124, 128
- Aššur-reša-iši, 42–43, 46, 48
- Assyria: Aššurnasirpal II's reign, 60–67; administrative structure in, 187–188, 222n19; Aramaeans and, 42–43, 51, 54–56, 63, 69, 73, 173; archaeological discovery of, 45; attacks on Iron Age city-states by, 118–119; Babylonia and, 43, 48, 53, 68, 77; and Carchemish, 112; climate change in, 42–43, 52–53, 57, 78, 186; collapse of, 54–55; communication systems in, 69–70; Cyprus and, 79, 109; drought in, 48, 55, 186; Elam and, 173; food crises in, 54; historical sources available for, xxv, 43–45, 47–48; and Hittites/Neo-Hittites, 118, 123–133; in Iron Age, 42–79; Israelites and, 77, 119; in Late Bronze Age, 52; and the Levant, 39–40, 129–130; Middle Assyrian period, 55; Neo-Assyrian Empire, 55–79, 109, 116, 118, 123–133; Phoenicians and, 52, 62, 66–68, 70–71, 79, 118, 233n52; Phrygians and, 115; resilience of, 47–48, 53, 56–57, 61–79, 170–171, 173–174, 186–188; Shalmaneser III's reign, 67–76; Tiglath-Pileser I's reign, 48–54; Urartu and, 124–129, 174; writing in, 47–48, 187
- Assyrian and Babylonian Chronicles*, 43, 54, 56
- Assyrian King List*, 44
- Assyrian Pressure Paradigm, 233n52
- Assyrian Royal Annals*, 44
- Aštar(t)-imn, 104, 105
- Athaliah, 105
- Azarba'al Inscription, 141–142
- Baal-ma'zer (Baal-azor), 104
- Baal-ma'zer (Baal-azor) II, 106
- Babylonia: administrative structure in, 188; archaeological discovery of, 45; Assyria and, 43, 48, 53, 68, 77; climate change in, 53; drought in, 55; and Elam, 46–47, 78; food crises in, 56; historical sources available for, xxv; Neo-Babylonian Empire, 78; population of, 47; resilience of, 47, 53, 78, 170–171, 173–174, 188
- Babylonian Chronicles*. See *Assyrian and Babylonian Chronicles*
- Balawat gates, 57–61, 68, 69, 71, 123, 125–127
- Ballard, Bob, 107–108
- Bar Ilan University, 19
- Barnes, Julian, vii
- Battle of Qarqar, 63, 70–72
- Bavel, B. van, 246n57
- bees, 37–38
- beeswax, 37–38
- Bell, Carol, 83, 88, 99, 172–173
- Ben-Dor Evian, Shirly, 17
- Ben-Yosef, Erez, 25–26, 179
- Bible. See *Hebrew Bible*
- Biran, Avraham, 22, 37
- Black Lives Matter, xxiii
- Black Obelisk, 75, 76
- Blegen, Carl, 152
- Bliss, Frederick, 18
- Boardman, John, 153
- Book of Joshua, 19
- Book of Judges, 19
- Botta, Paul Émile, 45
- Breasted, James Henry, 25, 31, 35
- Brier, Bob*, 15
- British Medical Journal*, 8
- British Museum, 58–61, 63, 125, 131
- British School of Archaeology, 105, 145
- bronze, 11, 15, 57–60, 74–75, 85, 87, 91–93, 123–124, 173
- Brugsch, Emil, 30
- Bryce, Trevor, 66, 72
- Bryn Mawr College, 1
- Budge, E. A. Wallis, 59
- Byblos, 38–39, 51, 52, 66, 70, 71, 83, 84, 96, 100–105, 113, 118

- Ca' Foscari University, 113
Cairo Museum, 16, 17, 30
Calah inscription, 77
Cambridge University, 4, 43, 186
Canaan: assimilation of, 174, 177–178;
collapse of, 20, 177–178; Egypt and, 29;
foreign rule of, 119; Israelites and, 19–20,
32, 35; Philistines and, 18–19; and Phoe-
nicians, 83; resilience of, 40–41, 83–84,
172–174, 178; and trade, 83; writing in, 27,
80. *See also* Lebanon; Phoenicians
cannibalism, 54
Carchemish, 111–114, 116–119, 121–123,
129–133, 174
Carleton College, 139
Carnarvon, George Herbert, Lord, 10
Carpenter, Rhys, 1
Carter, Howard, 10, 30
Carthage, 82, 107–108
Catling, Hector, 145–148
cattle, 114–115
cedar, 32, 51, 53, 65, 68, 95, 113
Centeno, Miguel, 186
Christie, Agatha, 60
civilizations: adaptive cycle of, 160–164,
161; collapse of, xix–xxiv, 4–5, 5, 157–158,
190–191, 214n9, 246n57, 247n61; resilience
of, xxii–xxiii; responses of, to collapse,
xxii–xxv, 191
Claremont Graduate School, 76
clay prisms, 49, 59, 51
Clayton, Peter, 12
climate change: Assyria, 42–43, 52–53, 57, 78,
186; Babylonia, 53; contemporary mani-
festations, xxiii, 52, 164–171; Cyprus, 109;
fragility and resilience related to, 188–189;
Greece, 114; Iron Age, 159–160; Late Bronze
Age Collapse, 164–171; Neo-Hittites, 114.
See also drought
climate-society interactions, 213n3
Coca-Cola, xix, xx
Coldstream, Nicholas, 4, 144, 153, 196
colonialism, 45, 59, 89
Columbia Electronic Encyclopedia, 1
communications: Assyria, 69–70; Cyprus
and, 108; Phoenicians and, 83–84
Conquest model, 19
Cook, Gila, 22
coping: adapting vs., 167–168; Assyria,
170–171, 173, 174; Babylonia, 170–171, 173,
174; civilizations, xxii, xxiv; concept of,
164; Crete, 140; Cyprus, 84–85; Egypt,
12, 170–171, 174–175; Neo-Hittites, 119
copper mines, 10, 17–18, 25–26, 38, 74, 86,
90–91, 109, 150
Cornell University, 83
Coulson, Willie, 4
Country Lords, 111–113, 131–132
COVID-19, xxiii, 192
Cowgill, George, xxiv, 214n9
Cranfield University, 87
Crete and the Minoans: collapse of, 140,
155, 176; cultural continuity of, 176–177;
Cyprus and, 108, 232n43; disappearance
of, xxi; historical sources available for, xxv;
in Iron Age, 139–141, 153–154; Mycenae
and, 140–141; Phoenicians and, 100, 108,
154, 232n43; population of, 144, 153–154;
resilience of, 140; warrior burials on, 92,
145–148. *See also* Greece
Crielaard, Jan Paul, 93–94, 108
cultural continuity, 175–177
Curtis, John, 61
Cyprus: Assyria and, 79, 109; climate change
on, 109; collapse of, 89; and copper, 26;
disappearance and rise of cities in, 90–91;
drought in, 109; foundation myths for
cities of, 92; historical sources available
for, xxv; in Iron Age, 84–94, 100, 108–110;
Iron Age map, xxxiv; ironworking on,
85–88, 93, 110, 150, 173; population of,
89–90; resilience of, 85, 87–90, 94, 109–110,
171–173; and trade, 87, 88, 93–94, 108, 110,
173; warrior burials on, 92, 145–147
Dakar (submarine), 107
d'Alfonso, Lorenzo, 114
Damascus Coalition, 70–72

- dark age, concept of, 4–5, 195–199
- Darwin, Charles, 194
- David, 19–26, 35
- Deger-Jalkotzy, Sigrid, 139
- Deir el-Bahri Cache, 8, 13, 14, 29–30
- Desborough, Vincent, 196
- Diodorus Siculus, 81
- disaster risk management and mitigation, 164–167
- disease, as factor in civilizational collapse, 10. *See also* COVID-19
- Divided Kingdom (Israelites), 35
- documents. *See* historical sources
- Dodson, Aidan, 17
- Dorian invasion, 1–3, 155, 159
- Dorians, 85
- drought: Anatolia, 115; Assyria, 48, 55, 186; Babylonia, 55; Cyprus, 109; Egypt, 9; Greece, 137; Iron Age, 159; Levant, 21; Mycenae, 190. *See also* climate change
- Drovetti, Bernardino, 7
- Eastern Mediterranean, Iron Age map, xxxi
- economy: Assyria, 187–188; collapse of, 4–5, 158–159, 188; Egypt, 9, 10, 39; as factor in resilience, 188; Hittites, 188; Mycenae, 138–139, 185, 188; vulnerability of, 166
- Edom, 21, 24–26, 29, 38, 40, 77, 80, 119, 179
- Edom Lowlands Regional Archaeology Project, 25
- Egypt: adaptive cycle model applied to, 175; administrative structure in, 13, 188; collapse in, 9–12, 40; drought in, 9; food crises in, 9, 12; historical sources available for, xxv; in Iron Age, 7–18, 33–40; Iron Age map, xxxii; and the Levant, 10, 14, 18, 33–40; Phoenicians and, 94–97; Ramses pharaonic period, 7–12; resilience of, 12, 170–171, 174–175, 188; Upper and Lower, 13–14
- Ehrlich, Carl, 19
- Eisenstadt, Shmuel, 190–191
- Elam, 46–47, 78, 173
- Elibaal, 39, 101–103
- Elibaal Inscription, 102–103, 103
- Elissa (Dido), 107
- Elissa (ship), 107–108
- Eponym Chronicles*, 44
- Erb-Satullo, Nathaniel, 87
- Esarhadon, 109
- Eshel, Tzilla, 98
- Ethbaal (king of Byblos), 101, 105
- Ethbaal (king of Tyre), 105–106
- famine. *See* food crises
- Faruq, King, 15
- Finné, Martin, 185
- Floyd, George, Jr., xxiii
- food crises: Assyria, 54; Babylonia, 56; Egypt, 9, 12
- fragility/vulnerability, 168, 184–190, 192. *See also* anti-fragility
- Frahm, Eckart, 48, 222n19
- Franklin, Benjamin, 193
- Garfinkel, Yossi, 26
- Gath (Tell es-Safi), 18–19, 74
- Gaziantep Museum, 131
- Genubath, 25
- Gerda Henkel Foundation, 140
- Gezer, 27, 29, 31–32
- Gezer calendar, 27, 28
- Gilbert, Alessandra, 113, 132
- Gilboa, Ayelet, 98
- Global Systemic Risk project, Princeton University, 186
- Glueck, Nelson, 25–26
- Goliath, 26
- Gordion, 115
- Gordion Knot, 115
- Grayson, A. Kirk, 47, 62, 70
- Greece: adaptive cycle model applied to, 161–162, 163, 198; administrative structure, 138; burials in, 151–154 (*see also* warrior burials in); climate change in, 114; collapse in, 137; Cyprus and, 85, 108; “dark

- age" period in, 4–5, 195–198, 248n7;
drought in, 137; historical sources available for, 135; in Iron Age, 134–156; ironworking in, 88; migrations within, 2–3, 159; and the Near East, 100, 108, 136, 137, 139, 150, 153–154; Phoenicians and, 81, 84, 108; population of, 2–3, 137, 143–144, 155, 159; resilience of, 136–138, 143, 154–156, 162, 176; and trade, 137; warrior burials in, 92, 145–150; writing in, 80–81, 138, 141–143, 198, 241n20. *See also* Crete and the Minoans; Mycenae
- Guy, P.L.O., 31
- Hadad, 25, 29
Hadad-ezer, 70, 72
Haldon, John, xxii–xxiii
Hamilton (musical), xxv, 160
Hammurabi's Law Code, 46, 47
Harem Conspiracy, 7–8
Harrison, Tim, 120
Hartapu inscription, 115
Harvard University, 105; Center for Hellenic Studies, 2
Hatiba, 101
Hawkins, J. D., 120
Hayya, 130
Hazeal, 23, 72–75
Hazor, 31–32
Hebrew Bible, 19, 21, 25, 31–34, 38, 42, 45, 73–74, 76, 78, 105, 116
Hebrew University, 26, 37, 105
Henuttawy, 14
Herihor, 13–14
Herodotus, 80–81, 135, 159
Herod the Great, 105
Hero of Lefkandi, 148–150
Hesiod, 5, 135, 138, 155
Hiram I, 32–33, 99, 104
historical sources: Assyria, xxv, 43–45, 47–48; Babylonia, xxv; Cyprus, xxv; "dark age" applied to periods lacking, 195, 197; Egypt, xxv; Greece, 135; Israelites, 21–22; Minoans, xxv; Mycenae, xxv; scholarly considerations concerning, 45, 180, 184. *See also* archaeology
History of Climate and Society, 213n3
Hittites, collapse of, 114, 116, 174, 177, 185–186, 188–191. *See also* Neo-Hittites
Hogarth, D. G., 117–118, 122
Homer, 135, 138, 145, 146, 155, 184, 196; *Iliad*, xxi, 82, 92, 147, 150; *Odyssey*, xxi, 82, 146
honey, 37–38
Huelva, 33, 93, 98, 106
Hurricane Katrina, 164
- Iacovou, Maria, 89
Iberia. *See* Spain
information. *See* communications
Inhapy, 29
Ini-Tešub (Iron Age king), 112–114, 118
innovation: in adaptive cycle, 160, 171; Assyria, 129; Cyprus, 85, 109, 171; Greece, 2, 198; Iron Age, 159; Phoenicians, 80–81, 85, 109, 170, 171
Intergovernmental Panel on Climate Change (IPCC), xxx, 164–171, 165, 188, 192
Invisible Israelites model, 19
IPCC. *See* Intergovernmental Panel on Climate Change
Iron Age: as a dark age, 4–6, 195–199; maps of Mediterranean region during, xxxi–xxxvi; scholarly opinions on, 1–6, 199
ironworking: Cyprus and, 85–88, 93, 110, 150, 173; origins of, 2, 85–88, 198; Phoenicians and, 229n16
Iš-Aštar, 104, 105
Ishbaal (Ishbosheth), 22
ISIS, 61
Israelites: Assyria and, 77, 119; conquest of Canaan by, 19–20; David's reign, 21–27; and Edom, 24–26; historical sources available for, 21–22; in Iron Age, 19–33, 178–179; settlements of, 20, 21; Solomon's reign, 30–36
Israel Museum, Jerusalem, 17

- Jeffers, Joshua, 197
Jehoram, 105
Jehu, 38, 71, 73–76
Jeroboam, 35–36
Jeroboam II, 31
Jezebel, 73, 105
Joint Expedition, 105
Joram, 73
Jordan, 17, 24, 25, 119, 150
Jordanian Department of Antiquities, 25
Josephus, Flavius, 71, 104, 106–107
Journal of the Royal Geographic Society of London, 63, 127
- Kaniewski, David, 90
Karageorghis, Vassos, 91
Kassianidou, Vasiliki, 86
Kenyon, Kathleen, 105
Khayyam, Omar, 190
Khirbet Qeiyafa, 26–27
King, L. W., 59
kings and regnal years, *xxvi–xxix*
Kitchen, Kenneth, 25
Klein, F. A., 24
Knodell, Alex, 139
Knossos Urban Landscape Project, 144
Koch, Ido, 177–178
Kotsonas, Antonio, 142, 144, 147–148
Kourou, Nota, 75, 93, 94, 99, 108, 232n43
Kulamuwa, 130
Kurkh Monolith, 63, 64
Kush, 13, 39–40
Kuzi-Tešub, 112, 118
- Langgut, Dafna, 21
Late Bronze Age, Great Powers in, 52
Late Bronze Age Collapse: adaptive cycle model of, 160–164, 162, 170; alternative histories of, 189–190; climate change and, 164–171, 213n3; complex histories of, 170–178, 191–192; fragilities/vulnerabilities contributing to, 184–190; international network's dissolution after, *xxiv*; ironworking after, 88; lessons for today from, 192–194, 194; migrations resulting from, 3, 159; overview of, *xxi*, 157–160, 189; resilience theory applied to, 170–180, 172, 181–183; scholarly opinions on, 1–6; temporality of, 2–3, 137–139, 157–158, 162–163, 193, 197
- Lawrence, T. E., 116–117
Layard, Austen Henry, 45, 57, 59, 64–65, 71
Lebanon, 32, 51, 53, 68, 69, 75, 83, 95, 97, 119.
See also Canaan; Phoenicians
Lefkandi, 148–150
Leiden University, 142
Lemos, Irene, 149
Leopold-Amherst Papyrus, 11
Levant: Assyria and, 39–40, 129–130; drought in, 21; Edom and, 24–26; Egypt and, 10, 14, 18, 33–40; in Iron Age, 19–41; Iron Age map, *xxxiii*; Israelites in, 19–33; Neo-Hittites and, 121; Philistines and, 19; population of, 21; temple form in, 33
Levy, Tom, 25
Linear B, 2, 138, 142
Liston, Maria, 152
literacy, 81–82
Liverani, Mario, 53, 61
Long Wall of Sculpture, 122
Loret, Victor, 14
Louisiana State University, 194
Luwian, 37, 72, 115, 117, 120, 159
- Macalister, Robert Alexander Stewart, 18–19, 27, 31
Maeir, Aren, 19
Mallowan, Max, 60–61, 66–67, 123
Maran, Joseph, 185
Marchetti, Nicolò, 111–112, 122
Marduk-nadin-ahhe, 53
Marduk-zakir-sumi, 68
Maspero, Gaston, 30
Matney, Tim, 62
Mattan I, 106
Mazar, Amihai, 37
McAnany, Patricia, 157–158

- Medea/Jason* (remotely operated vehicle system), 107
- Megginson, Leon, 194
- Megiddo, 30–32, 34–36
- Merneptah, 19
- Merriam-Webster's*, 4, 195, 198
- Mesha Stele, 24
- Mesopotamia. *See* Assyria; Babylonia
- Mesopotamian Chronicles*, 43
- Midas, 115
- migrations: accompanying collapse, 3, 4, 159; Greece, 2–3, 159; Late Bronze Age Collapse, 3, 159; Mycenae, 72, 89
- Minoans. *See* Crete and the Minoans
- Moab, 21, 38, 40, 80, 119, 179
- monotheism, 19
- Monroe, Christopher, 83–84
- Montet, Pierre, 14–17
- Morris, Ian, 137, 143, 144, 150, 154, 161–162, 196–197
- Morris, Sarah, 3, 197
- Mosul Museum, Iraq, 61
- Mühlenbruch, Tobias, 136
- Muhly, James, 147
- Murray, Sarah, 137, 139
- Mushki, 115
- Mutnedjmet, 16, 17
- Mycenae: collapse of, xxi, 134, 137–139, 143, 155, 175–176, 190–194; cultural continuity of, 175–176; drought in, 190; fragility/vulnerability of, 184–185, 188, 190; historical sources available for, xxv; migration of, 72, 89; and the Minoans, 140–141; pottery of, 2. *See also* Greece
- Na'aman, Nadav, 36, 106
- Nabu-apla-iddina, 63
- Nagy, Gregory, 2
- Najjar, Mohammad, 25
- National Museum of Egyptian Civilization, 30
- National Research Council, 167
- Naveh, Joseph, 241n20
- Near East: Aramaeans in, 78–79; Assyrian dominance of, 55, 62; Greece and, 100, 108, 136, 137, 139, 150, 153–154; ironworking in, 88; languages in, 42, 141
- Nebuchadnezzar I, 43, 46–47, 48, 53
- Neo-Assyrian Empire. *See* Assyria
- Neo-Hittites: Assyria and, 118, 123–133; beekeeping practiced by, 37; climate change and, 114; in Iron Age, 111–133; resilience of, 119, 132, 174; rulers and kingdoms of, 111–114, 116–118, 124–132. *See also* Hittites, collapse of
- New York University, 114, 144
- Nimrud, 64–66
- Nowicki, Krzysztof, 140
- NR-1 (submarine), 107
- Nubia, 13, 39–40
- obelos of Opheltas, 91–92
- Olympic Games, 150, 155
- Omri, 24, 31, 39, 105
- Onomasticon of Amenemopet*, 18, 94–95
- Oriental Institute, University of Chicago, 25, 30–31, 114. *See also* University of Chicago
- Osborne, James, 114
- Osorkon the Elder, 34
- Osorkon I, 39, 102–103, 103
- Osorkon II, 39, 70, 71, 105
- Page, Denys, 196
- Palestine Exploration Fund, 27
- Palistin, Land of, 120–121, 129
- panarchy, 162–163
- Panedjem I, 14
- Panedjem II, 29
- Papadopoulos, John, 152, 198
- Patin. *See* Palistin, Land of
- Peaceful Infiltration, 19
- Peleset. *See* Philistines
- Pentawere, 7–8
- Petrie, William Matthew Flinders, 19
- Philistines, 18–22, 26, 35, 77, 119

- Phoenicians: alphabet of, 80–81, 141–142, 198, 241n20; Assyria and, 52, 62, 66–68, 70–71, 79, 118, 233n52; communications system of, 84–85; contributions of, to Western civilization, 80–82; Crete and, 100, 108, 154, 232n43; Egypt and, 94–97; in Iron Age, 80–84, 94–108; and ironworking, 229n16; kings of Byblos and Tyre, 101–106; purple dye produced by, 82, 98, 110, 173; resilience of, 83–84, 88, 109–110, 169–173; self-identification of, 82; and Spain, 97–99, 106; territory of, 97; and trade, 83, 88, 99–100, 106–108, 110, 173. *See also* Canaan; Lebanon; Tyre
- Phrygia, 115, 177
- Piyaššili (Sharri-Kušuh), 118
- P. Mayer B (papyrus), 11
- population: Babylonia, 47; Crete, 144, 153; Cyprus, 89–90; decline of, accompanying collapse, 4–5; Greece, 2–3, 137, 143–144, 155, 159; Levant, 21
- Porter, Benjamin, 197, 247n59
- Postgate, Nicholas, 43, 186
- Princeton University, xxii; Institute for International and Regional Studies, 186
- Pritchard, James, 97
- Psusennes I, 14–17, 25
- Psusennes II, 15, 16–17, 33
- Pummayon (Pygmalion), 106–107
- punctuated equilibrium, 244n13
- purple dye, 82, 98, 110, 173
- Qarqar. *See* Battle of Qarqar
- Quinn, Josephine, 82
- Radner, Karen, 65
- Ramses III, 7–8, 18, 117
- Ramses IV, 9
- Ramses V, 9–10
- Ramses VI, 10, 11, 14
- Ramses VII, 10
- Ramses VIII, 10
- Ramses IX, 10–11
- Ramses X, 12
- Ramses XI, 12–13, 51, 97
- Rassam, Hormudiz, 45, 57–61, 68, 123
- Rawlinson, Henry, 127
- Rehav, 36–37
- Reisner, George, 105
- relief sculptures. *See* wall reliefs
- R.E.M. (band), xxii
- Renfrew, Colin, 4, 148, 189
- resilience: adaptive cycle model of, 160–164; Assyria, 47–48, 53, 56–57, 61–79, 170–171, 173–174, 186–188; Babylonia, 47, 53, 78, 170–171, 173–174, 188; Canaanites/Phoenicians, 40–41, 83–84, 88, 109–110, 169–174, 178; civilizations, xxii–xxiv; concept and theory, 160, 167–170, 184–190; Crete, 140; Cyprus, 85, 87–90, 94, 109–110, 171–173; Egypt, 12, 170–171, 174–175, 188; Elamites, 47; factors contributing to, 188–189, 193; Greece, 136–138, 143, 154–156, 162, 176; Late Bronze Age Collapse, 170–180, 172, 181–183; Neo-Hittites, 119, 132, 174; Phoenicians (*see* Canaanites/Phoenicians); terms and definitions related to, 169. *See also* fragility/vulnerability
- Revolting Peasants model, 19
- Rib-Hadda, 101
- Rich Athenian Lady, 151–152
- risk management. *See* disaster risk management
- rivers, 188–189
- Russia, xxiii
- Sader, Hélène, 119
- Samaria ivories, 105
- Sangara, 123, 129–132
- Sapaziti, 112–113
- sarcophagus of Ahiram, 102
- Sardinia, 3, 84, 86, 87, 93, 98, 106, 173
- Sarduri I, 128
- Sargon II, 77, 109, 118, 132
- Saul, 19–22
- Schliemann, Heinrich, 134
- Schneider, Tammi, 76
- Schumacher, Gottlieb, 35
- Scott, James, 6

- Sea Peoples, 7, 16, 18, 20, 85, 95, 117, 187, 190
Sennacherib, 77
settlement shift. *See* migrations
Sha'il, 130
Shalmaneser I, 124
Shalmaneser II, 112
Shalmaneser III, 39, 58, 60, 63, 67–76, 69,
106, 121, 123, 125–131; Black Obelisk,
75, 76; Monolith Inscription, 68, 70,
125–127, 130
Shalmaneser V, 77
Shalvi, Golan, 98
Shamši-Adad V, 68, 130
Sherden (Shardana), 18
Sherratt, Susan, 85, 197
Sheshonq I, 9, 29, 33–40, 104
Sheshonq IIa, 15, 17, 39
Sheshonq III, 39
Shipitbaal, 101–102
Shipitbaal Inscription, 102
Shishak. *See* Sheshonq I
Shitti-Marduk, 46
Siamun, 15, 16–17, 29, 33–34
Sicily, 3, 84, 87, 93, 110, 173
silver, 97–98, 106, 110
smallpox, 10
Smendes, 13–14
Smith, Elliot, 12
Smithson, Evelyn, 151–152
Snodgrass, Anthony, 151, 161, 196
Solomon, 17, 19, 24, 25, 27, 29–36
Solomon's Stables, 31, 35
source material. *See* historical sources
Spain (Iberia), 82, 93, 97–99, 106, 110, 173
Stager, Larry, 107–108
Stanford University, 137
Starr, Chester, 196–197
Strabo, 82, 85
Suhi I, 111–113, 132
Suppiluliuma I, 116, 118
Suppiluliuma II, 129
Syria, 21, 33, 51, 60, 62, 69, 72, 75, 77, 81, 83, 84,
93, 111, 116, 118, 119, 120, 121, 129, 153, 154,
174, 186
Tainter, Joseph, 2, 5
Taleb, Nassim Nicholas, 84, 229n13
Tale of Wenamun, 13, 94–97, 101
Tallis, Nigel, 61
Tanetamon, 13
Tanit (ship), 107–108
Taylor, John, 63, 125, 127
Tel Aviv University, 21, 26, 36, 106, 178
Tel Dan inscription, 22–24, 23, 72–73
Tel Dor, 84, 95–96, 97, 100
Telepinu, 118
Tell er-Rimah stela, 77
Tell es-Safi. *See* Gath
Temple, Jerusalem, 32–33
Terramare culture, 88
Thucydides, 1, 135
Tiglath-Pileser I, 43, 48–55, 113–116, 118, 124,
127; clay prisms of, 49, 50, 51
Tiglath-Pileser III, 74, 77, 132
Tigris Tunnel, 127
Time (magazine), 25
Timna mines, 10, 17, 26, 217n33
Titanic (ship), 107
Tiye, 7–8
Tjekker, 18, 95
tomb robberies, 8, 10–13, 30
Tomb Robbery Papyri, 11
trade: Canaan, 83; Cyprus, 87, 88, 93–94,
108, 110, 173; Egypt, 18; Greece, 137;
Levant, 37; Phoenicians, 83, 88, 99–100,
106–108, 110, 173
transformation: Assyria, 78; Babylonia, 78;
Canaan, 40–41; civilizations, xxii, xxiv,
168; concept of, 164; Crete, 140; Cyprus,
84–85, 94, 109–110, 171; Edom, 179;
Egypt, 9, 12; Greece, 137, 162, 176;
Israelites, 178–179; Late Bronze Age,
157–158, 189; Neo-Hittites, 119, 132;
Phoenicians, 109–110, 171, 173
transition: civilizations, xxii, xxiv; Egypt, 12;
Neo-Hittites, 132
Trojan War, 1, 92, 134, 135, 145–148, 196
Tsipopoulou, Metaxia, 140
Tukulti-Ninurta I, 124

- Tukulti-Ninurta II, 62
Turin Judicial Papyrus, 7
Turkey, 37, 49, 62–63, 68, 78, 111, 116, 120, 124, 154. *See also* Anatolia
Tutankhamun, 10, 15, 17, 30, 86
Tyre, 32, 52, 58, 66–67, 71, 77, 82, 83, 84, 97, 99, 104–107, 118
Tyrian purple. *See* purple dye
- Ugarit, 45, 84, 109, 119, 120, 140, 169, 173, 184, 190
Ukraine, xxiii
United Monarchy (Israelites), 22, 34, 35
United Nations, xxiii, 164
University at Buffalo, 151
University College London, 4
University of Akron, 62
University of Amsterdam, 93
University of Athens, 75, 93, 99
University of Bologna, 111
University of California Berkeley, 197
University of California Los Angeles (UCLA), 3, 152, 197, 198
University of California San Diego, 25
University of Chicago, 25, 30–31, 34–35, 114, 120, 186
University of Cyprus, 86, 89
University of Haifa, 95, 98
University of Lausanne, 142
University of London, 120
University of Michigan, 196
University of Oxford, 149
University of Pennsylvania, 97, 147, 197
University of Queensland, 66
University of Sheffield, 85
University of Toronto, 47, 70, 120, 129, 137
University of Waterloo, 152
Uppsala University, 170
Urartu, 58, 61, 68, 124–129, 132, 173, 177
Ura-Tarhunta, 112–113
- ushabti* (statuettes), 14, 17
US National Intelligence Council, xxiii
- Valley of the Kings, Egypt, 10, 13, 14
Vatican Museum, 131
Virgil, 92
vulnerability. *See* fragility/vulnerability
- Waal, Willemijn, 142
Wachter, Rudolf, 142–143
Wadi Faynan, 17, 25–26, 38, 74, 150, 179
Wallace, Saro, 140, 177
wall reliefs, 44, 65
Walters Art Gallery, Baltimore, 59, 68
warrior burials, 92–93, 145–150
Warrior vase from Mycenae, 135
Washington Post (newspaper), 52
Weiberg, Erika, 170, 185
Wenamun, 95–96, 101
Western Mediterranean, Iron Age map, xxxvi
Whitley, James, 154, 198
wine, 129
Wooden, John, 193
Woolley, Leonard, 117, 122
World History Encyclopedia, 195
writing: Assyria, 47–48, 187; Babylonia, 47; Canaan, 27, 80; as factor in resilience, 188; Greece, 80–81, 138, 141–143, 198, 241n20; Hittites/Neo-Hittites, 117; loss of, following collapse, 5, 195, 196; Luwian, 117; Phoenicians, 80–81, 141–142, 198, 241n20
- Xenophon, 85
- Yadin, Yigael, 31
Yale University, 6, 48
Yehimilk, 101–104
Yehimilk Inscription, 104
Yoffee, Norman, 157–158
York University, 19