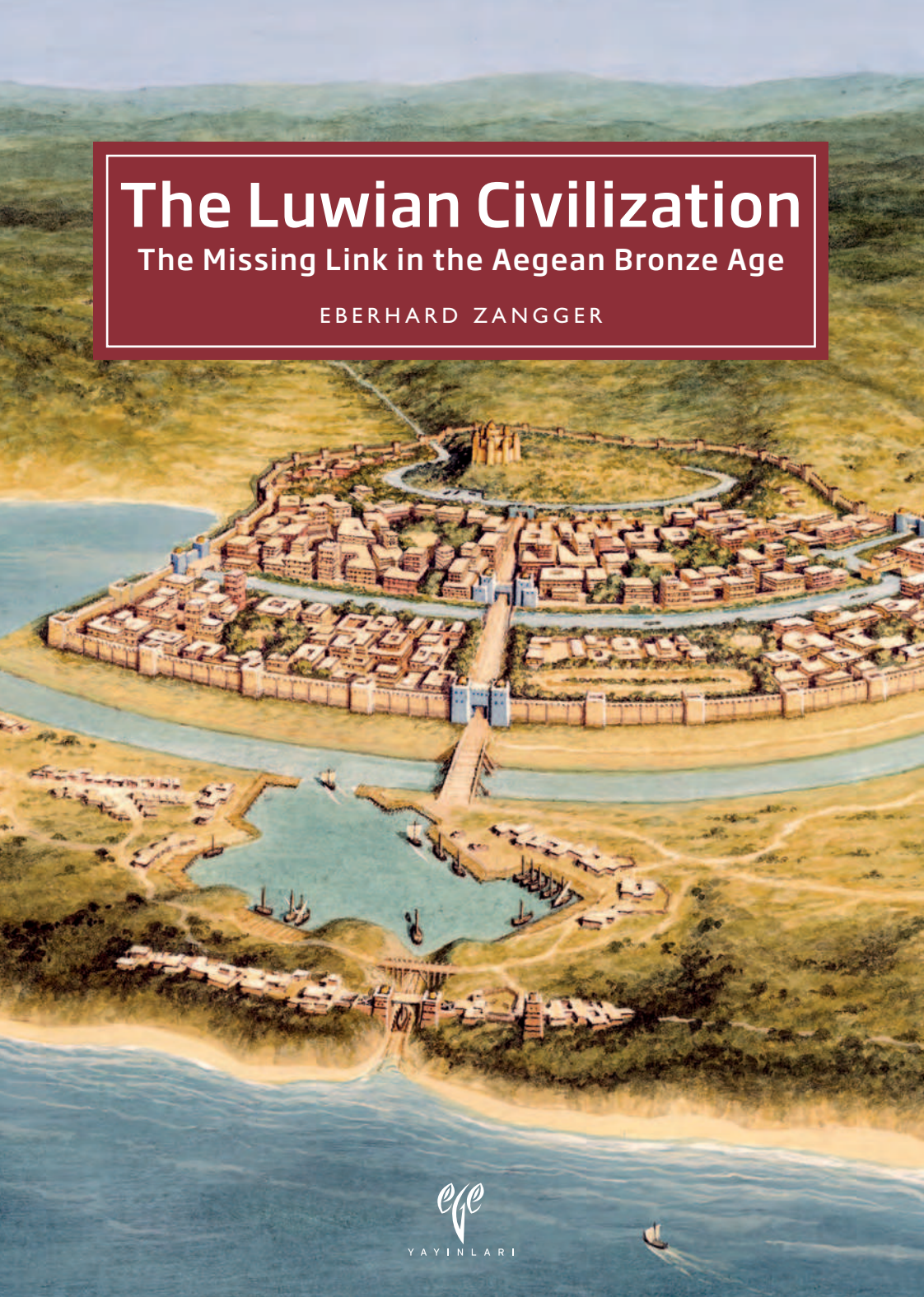
The Luwian Civilization

The Missing Link in the Aegean Bronze Age

EBERHARD ZANGGER



EGE YAYINLARI

About the author

Dr. Eberhard Zangger, born in 1958, is President of the Luwian Studies foundation and an expert in the reconstruction of archaeological landscapes. His full-time geoarchaeological research began in 1982. He earned a master's degree from the University of Kiel, a PhD in geology from Stanford University, and at the University of Cambridge was a Senior Research Associate at the Department of Earth Sciences and a Research Fellow of Clare Hall. Zangger has worked on archaeological excavations and surveys in the countries around the eastern Mediterranean, including mainland Greece, Crete, Cyprus, Egypt and Tunisia, as part of projects directed by universities based in the U.S., U.K., Germany, Sweden, Denmark, Australia, and Greece. His four-year study of the Argive Plain received financial support from and was published by the German Archaeological Institute. Zangger was co-director and chief physical scientist of the Berbati-Limnes Survey and of the Pylos Regional Archaeological Project (PRAP). His landscape reconstructions include the Late Bronze Age palaces of Mycenae, Tiryns, Pylos and Iolcos, and have appeared in the *American Journal of Archaeology*, the *Oxford Journal of Archaeology*, the *Journal of Field Archaeology*, *Hesperia*, and, most recently, *Olba*. Zangger's books addressing a general audience – of which "The Luwian Civilization" is the fourth – have been published in English, German, Japanese, Turkish, and other languages. He lives in Zurich, Switzerland.

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E G E Y A Y I N L A R I

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Eberhard Zangger

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1. Prologue

As far back as 1836, 180 years ago, the German scholar Johann Uschold published a 352-page compendium about the history of the Trojan War in which he concluded that the famous Carians, Lydians, Phrygians, Mysians, and Lycians in Asia Minor "had been considered in antiquity to be branches of one and the same nation." He also pointed out that the predecessors of these people inhabited Greece in prehistoric times, and that "…so much information has been preserved by the best established writers in antiquity that we cannot understand why these people have been passed over in previous treatments."

The German linguist Paul Kretschmer argued along similar lines. In 1896, he wrote that many place names in Greece could be traced back to a wave of Indo-European people who came from Anatolia, long before Greek-speaking people had arrived. This argument was picked up and developed further by the Troy excavator Carl Blegen in 1928.

From 1901 onward, the Berlin-based Assyriologist Hugo Winckler claimed that in addition to Mesopotamia and Egypt a third civilization – situated in Asia Minor – had existed, one that possessed its own writing system. He claimed that these Anatolian people adhered to an astral cult, of which much is preserved in today's religions. Despite the resistance and fierce scholarly dispute this triggered, in 1906, when Winckler initiated excavations near Boğazkale in central Asia Minor and discovered Hattuša, the capital of the Hittite kingdom, he found documents containing lists of stars in the very first season of fieldwork.

Many thousands of documents were retrieved from Hattuša. The first person to identify the eight different languages recorded in them was Emil Forrer, a Swiss Assyriologist and Hittitologist. In a letter to his PhD advisor, dated 20 August 1920, Forrer concluded that besides the Hittites another civilization had existed in Asia Minor, a "far greater

people than the Hittites." He called them the Luwians. According to him, "the culture of the Hatti Kingdom had been established in all parts by the Luwians."

More scholars conducted research on the Luwians. In 1876, a local peasant found a bronze tablet at Beyköy in the highlands of western Turkey. It eventually made its way into the archives of the Ottoman Empire. From the late 1950s, Yale professor and Anatolia expert Albrecht Goetze worked on the publication of these "Beyköy Texts." They contained a collection of lists of Anatolian states, kings, and military actions from dim memories dating back to 3170 BCE all the way until their compilation in 1170 BCE (with even some later addendums). But Goetze died before his manuscript was published, and by now both his manuscript and the original bronze tablets have been forgotten.

James Mellaart, the discoverer and first excavator of Çatalhöyük and Beycesultan, argued in the 1950s that the term "Luwian" should be used for the people of western Asia Minor to distinguish them from those in central and eastern Anatolia, the regions controlled by the Great Kings of Hatti. He drew maps in which a majestic state called "Arzawa" covered virtually all of western Asia Minor.

In the early 1960s, Leonard Palmer, a professor at Oxford University and president of the British Philological Society, published some books and articles in which he used the previous decipherment of Luwian hieroglyphic to draw further conclusions about Aegean prehistory – thereby triggering linguistic enquiries into the Luwians that are still vigorous today.

So it turns out that the existence of a Luwian civilization has been known for centuries – and yet its story has never been told. While there has been an abundance of work on the Aegean Bronze Age (ca. 3000–1200) in recent years, none has come close to answering fundamental questions such as: How did the Minoan, Mycenaean and Hittite civilizations come into being, and what caused their demise? Who were the Sea Peoples? Was the Trojan War an historic event? What did the city of Troy look like, and why did it become so famous? There are countless other open questions in connection with these major issues. As it turns out, answers to these questions begin to fall into place when the Luwian civilization is taken into account.

For me, as a natural scientist, a basic prerequisite of scientific advancement is the freedom to think along new lines. This is why almost all of the chapters of this book contain a section entitled "Suggestions." This treatment of the Aegean Bronze Age differs from others in that it offers rather little of a summary of existing knowledge, but above all new (or forgotten) ideas, hints, and arguments. Its main incentive is to provide food for thought and stimulate new research.

Zurich, April 2016
Eberhard Zangger

2. A New Perspective of the Aegean Bronze Age

This book invites you on a journey into a distant past, when the so-called Sea Peoples raided the coasts of the Eastern Mediterranean and Greek heroes set off to conquer legendary Troy. It aims to trace back what might have actually happened shortly after 1200 BCE. At that time, the majority of civilizations around the Eastern Mediterranean collapsed within a few years. It is the time when the heroic societies of the Bronze Age in the Mediterranean came to an end. To this day, we still don't quite know what caused the rather abrupt change in this part of the world. Finding a plausible solution for the cultural demise ranks as one of the most puzzling questions in Mediterranean Archaeology.

Since having started out as a geoarchaeologist, a specialist for the reconstruction of ancient landscapes, I keep coming back to a commonly accepted paradox in archaeology that has to do with prehistoric Troy, the legendary Troy, located in western Anatolia. For a long time the site was considered among archaeologists to be no more than a "pirates' nest," as its latest excavator Manfred Korfmann initially put it, a small residence of local rulers at best. According to Homer, however, a large number of Mycenaean kingdoms had gone through the trouble of forming an alliance, assembling a fleet of almost 1200 ships and sending one hundred thousand of their compatriots to fight against Troy and its allies in the early 12th century BCE. Furthermore, for two thousand years, western Europeans had tried to trace their roots back to the royal Trojan family. Not to mention major European cities, Rome, Paris and London among them, which claim to have been built according to the model of Troy. Something is obviously amiss here between the past and the current perception of this prehistorical era and location.

The more I focused my research on prehistorian societies in western Anatolia, the more it became evident that Troy wasn't an isolated small town at the entrance to the Dardanelles. Instead, Troy was tightly linked to its fertile and thriving hinterland as well as to neighboring settlements on the shores of the Dardanelles further south along the eastern coast of the Aegean. Aegean prehistorians, however, have never comprehensively examined this region, western Asia Minor. To determine who the actual neighbors of the Trojans were, I began establishing an inventory of the already known settlements in western Asia Minor that were inhabited between 2000 and 1000 BCE. It soon became clear that this pursuit required the training of an archaeologist and comprehension of the Turkish language. I was fortunate that Serdal Mutlu, a trained archaeologist and PhD candidate at Zurich University, took over the task of researching the literature – and I am exceedingly grateful to him. After two years of literature studies, we have accumulated a catalogue of 340 already known major archaeological sites. Very few of these have been excavated on a large scale – and virtually none of these were published in a western language.

It dawned on me that the people living in western Asia Minor – east of the well-known Mycenaeans and west of the Hittites – formed a civilization in its own right. Since as early as 1920, their culture has been recognized and called "Luwian" after the language they spoke. Throughout the 2nd millennium BCE, people speaking a Luwian language lived across Asia Minor. They were contemporaries, trading partners and at times opponents of the Minoan, Mycenaean, and Hittite cultures of Greece and Asia Minor. The Luwians in western Asia Minor possessed the knowledge of writing almost 600 years before it became customary at Mycenaean courts. And when the art of writing was lost in Greece at the end of the Bronze Age, it still persisted amongst Luwians for another half a millennium.

The territory inhabited by Luwian-speaking populations was about three times as large as the core area of the Mycenaean civilization and five times as large as that of the Hittites. We know that the settlement density in the Luwian territory was at least equivalent to that of the Mycenaean, Minoan and Hittite regions. The Hittite king Muršili II claimed to have taken 66,000 prisoners during his campaigns against Luwian lands. The richest and most powerful ruler of the world at the time, Pharaoh

Amenhotep III, specifically asked to be allowed to marry a Luwian princess. In his mortuary temple he had Luwians and Ionians depicted, half a millennium before Greek emigrants got a closer look at those regions. Later, during the Early Iron Age, three of the Seven Wonders of the World had been erected on formerly Luwian territory, and practically all Greek scholars before Socrates hailed from what used to be Luwian states.

Yet, for reasons that will be explained in this book, the Luwians have remained completely unknown in terms of archaeological excavations. They do not appear on any political map of the Aegean Bronze Age, and there are still virtually no prehistorians who would publicly say that the Luwians ever wielded economic and political power.

The end of the Bronze Age in the Eastern Mediterranean is exceptionally complex. Research results from about a dozen natural sciences disciplines, and from at least another dozen in the humanities, all need to be taken into account. Even though the scope and depth of the required research extends beyond the limits of what seems feasible, I have tried to holistically reconstruct what might have happened at the end of the Bronze Age. Whenever possible, I have consulted up-to-date literature, in which earlier works are quoted. However, I have also found many valuable and stimulating ideas in publications dating back to the 19th century or even earlier and have indicated these as well, hoping that they may not become entirely forgotten.

The sections of this book consist for the most part of three elements. First, I summarize the current state of knowledge on the respective topic as objectively as possible, much as it is done in Wikipedia. For each topic, there is an alternative interpretation of the known facts (called "Suggestions") offering new working hypotheses and ideas for future research. These are meant as hints for others to start looking for clues along new avenues of thinking. It is not the intention to replace petrified paradigms with other paradigms. Finally, a box provides quotes from other scholars regarding the issue at stake. If the original publications from which these quotes are derived were not in English, I took the liberty to translate them. For the most part, these quotes reinforce my suggestions. Some, however, may argue against my ideas in order to show the spectrum of opinions.

Previous pages: Using a Geographic Information System, researchers at the Luwian Studies foundation recorded and evaluated 340 settlements of the 2nd millennium BCE in western Turkey.

3. The Luwians

3.1 Who Are the Luwians?

Current state of knowledge

Possibly due to its vast extent and complicated topography, for thousands of years the majority of western Asia Minor was politically fragmented into many petty kingdoms and principalities. This certainly weakened the region in its economic and political significance, but it also delayed the recognition of a more or less consistent Luwian culture.

From a linguistics point of view, however, the Luwian culture is relatively well known. From about 2000 BCE Luwian personal names and loanwords appear in Assyrian documents retrieved from the trading town Kültepe (also Kaniš or Neša). Assyrian merchants who lived in Asia Minor at the time described the indigenous population as *nuwa'um,* corresponding to "Luwians." At about the same time, early Hittite settlements arose a little further north at the upper

Sea Peoples with feather crowns bear the name Tekker, which is reminiscent of "Teucer," a term commonly used for the Trojans after 1200 BCE.

The region where Luwian was spoken at the end of the Bronze Age was much larger than the one where Hittite was spoken.

Kızılırmak River. In documents from the Hittite capital Hattuša written in Akkadian cuneiform, western Asia Minor is originally called Luwiya. Hittite laws and other documents also contain references to translations into "Luwian language." Accordingly, Luwian was spoken in various dialects throughout southern and western Anatolia. The language belongs to the Anatolian branch of Indo-European languages. It was recorded in Akkadian cuneiform on the one hand, but also in its own hieroglyphic script, one that was used over a timespan of at least 1400 years (2000–600 BCE). Luwian hieroglyphic ranks, therefore, as the first script in which an Indo-European language is transcribed. The people using this script and speaking a Luwian language lived during the Bronze and Early Iron Age in Asia Minor and northern Syria.

The kidney-shaped settlement mound Tavşanlı Höyük in the center is 400×300 m in size and was settled until 1200 BCE.

Suggestions
A gap between linguistics and prehistory

Thanks to the over 33,000 documents from Hattuša, the capital of the Hittite Kingdom, linguists have been able to gain a comprehensive insight into Luwian culture. Some fundamental publications include the book *Arzawa,* by Susanne Heinhold-Krahmer (1977); *The Luwians,* edited by H. Craig Melchert (2003); and *Luwian Identities,* edited by Alice Mouton and others (2013). Field-oriented excavating archaeologists, on the other hand, never mention Luwians in their explanatory models. The current knowledge regarding the Aegean Bronze Age has been summarized in a number of recently published voluminous works, without attention to any Luwian culture.

For a number of reasons discussed later, recognition of a Luwian civilization seems to have been delayed. The gap between linguistics and prehistory regarding the investigations of the Luwians has existed for almost a century, since Emil Forrer, the Hittitologist who first

identified the Luwian language in the tablets from Hattuša, recognized the significance of the Luwians as early as 1920.

Today, the term "Luwian" is well-established to denote a language, a script and an ethno-linguistic group of people who commanded either one or both of them. Since most Luwian hieroglyphic documents have thus far been found in Early Iron Age Syria and Palestine, the term Luwian is often used to denote people at the eastern end of the Mediterranean during the 10th and 9th century BCE. However, Luwian hieroglyphic script occurs as early as 2000 BCE in western and southern Asia Minor as well. Therefore, the term Luwian is also applied to the indigenous people who lived in western and southern Anatolia – in addition to the Hattians – prior to the arrival of the Hittites and during the Hittite reign. In the context of this book, the term Luwian is used in a third sense – in a geographic and chronological context. It comprises the people who lived in western Asia Minor during the 2nd millennium BCE between the Mycenaeans in Greece and the Hittites in Central Anatolia, and who would not have regarded themselves as belonging to either one of the aforementioned cultures. This definition is no different from the ones we use today. Every person belongs to an ethno-linguistic group, and everyone lives in a certain jurisdiction – but of course, the two do not have to be identical. In the context of this book, the jurisdiction – Middle and Late Bonze Age western Asia Minor – and the people living within it are the focal point of attention, and not their ethnic provenance.

"It turns out that the Luwians were a far greater people than the Hittites … It is becoming increasingly apparent that the culture of the Hatti Kingdom had been established in all parts by the Luwians and taken over by the Hittites." Emil Forrer on 20 August 1920 in a letter to his PhD advisor Eduard Meyer (Oberheid 2007, 93)

"Asia Minor in pre-Hittite times was clearly divided into a western and an eastern half each with its characteristic culture. Both halves were ethnically and linguistically different. The western cultural area, with which we are most concerned, was eventually to be occupied by the Luwians." Leonard R. Palmer 1961, 249

"It is generally assumed that western Asia Minor was to a large extent – if not completely – Luwian." Robert Beekes 2003, 47

"Luwians must have been as important for the history of Bronze Age Anatolia as were the Hittites." Ilya Yakubovich 2010, 3

"The Luwians played at least as important a role as the Hittites in the history of the Ancient Near East during the second and first millennia BCE, but for various reasons they have been overshadowed and even confused with their more famous relatives and neighbors." Harold Craig Melchert 2003 (back cover)

"The Luwians [are] one of the most important yet elusive peoples of the ancient Near East." Itamar Singer 2011, 727

"The beginning of the new millennium brought a sharp increase in interest in Luwian Studies." Alice Mouton *et al.* 2013, 6

"Already in 1986, [Harvard professor of linguistics Calvert] Watkins interpreted the names of leading Trojans (Priam, Paris) in the *Iliad* to be Luwian." Michael Reichel 2011, 40

"On the tenth day, at the moment of the last watch of the night … in the stable I make a libation and I invoke the gods Pirinkar and Ishtar. In Hurrian I pronounce these words: 'For the horses … O Pirinkar and Ishtar.' And in Luwian I pronounce the words, 'For the horses! May all go well.'" Inscription on an altar in Kom al-Samak in western Thebes dating to the time of Amenhotep III, after Arielle P. Kozloff 2012, 165

3.2 Habitat and Natural Resources

Current state of knowledge

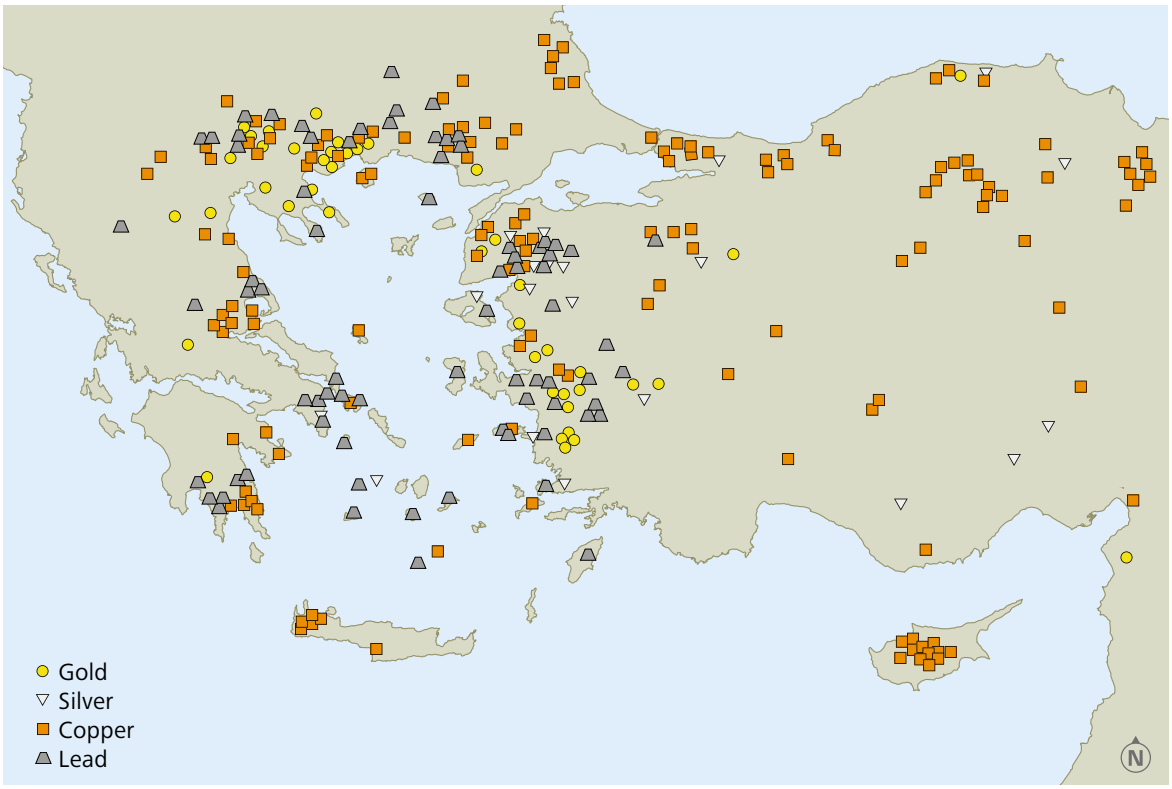
Asia Minor is often called a bridge continent between Asia and Europe, but this does not sufficiently emphasize its uniqueness. Africa is so close that it seems justifiable to claim that in Asia Minor, land routes of three continents connect with the coasts of four seas: the Caspian Sea, the Black Sea, the Aegean and the Eastern Mediterranean. A similarly privileged geostrategic constellation cannot be found anywhere else in the world; this is even more valid considering that the climate is extremely favorable for human settlement.

The abundance of natural resources may have been one reason why it was in Asia Minor that humans founded their first settlements, first raised crops and livestock, and why metal processing and later coinage had their origins in this region. Before the emergence of knowledge work in the 20th century, a region's natural resources were crucial to the success of the societies on its soil. These resources include the geopolitical situation, mineral deposits, natural stone, year-round precipitation, rivers, forest resources and agricultural land. Asia Minor, thanks to its geological history and geographical location, was well-endowed in each of these categories.

Suggestions
The wealthiest person in the history of the world

No region around the Eastern Mediterranean offers such a large, contiguous stretch of fertile land as does the region west of present-day Turkey. Nowhere else in the Eastern Mediterranean do navigable waterways reach so deep into the interior, nor are there so many natural harbors, expansive fertile flood plains and endless forests (with the latter being only relics today). A vast area of fertile soil covers the west of Asia Minor. The expansion and lushness of the Gediz valley (called Hermos valley in antiquity) is even somewhat reminiscent of the Nile Delta. Also with regard to mineral resources, there is hardly any other

Right page: Asia Minor lies at the intersection of the continents of Europe, Asia and Africa. Inspirations, ideas and goods from all directions met and merged there.



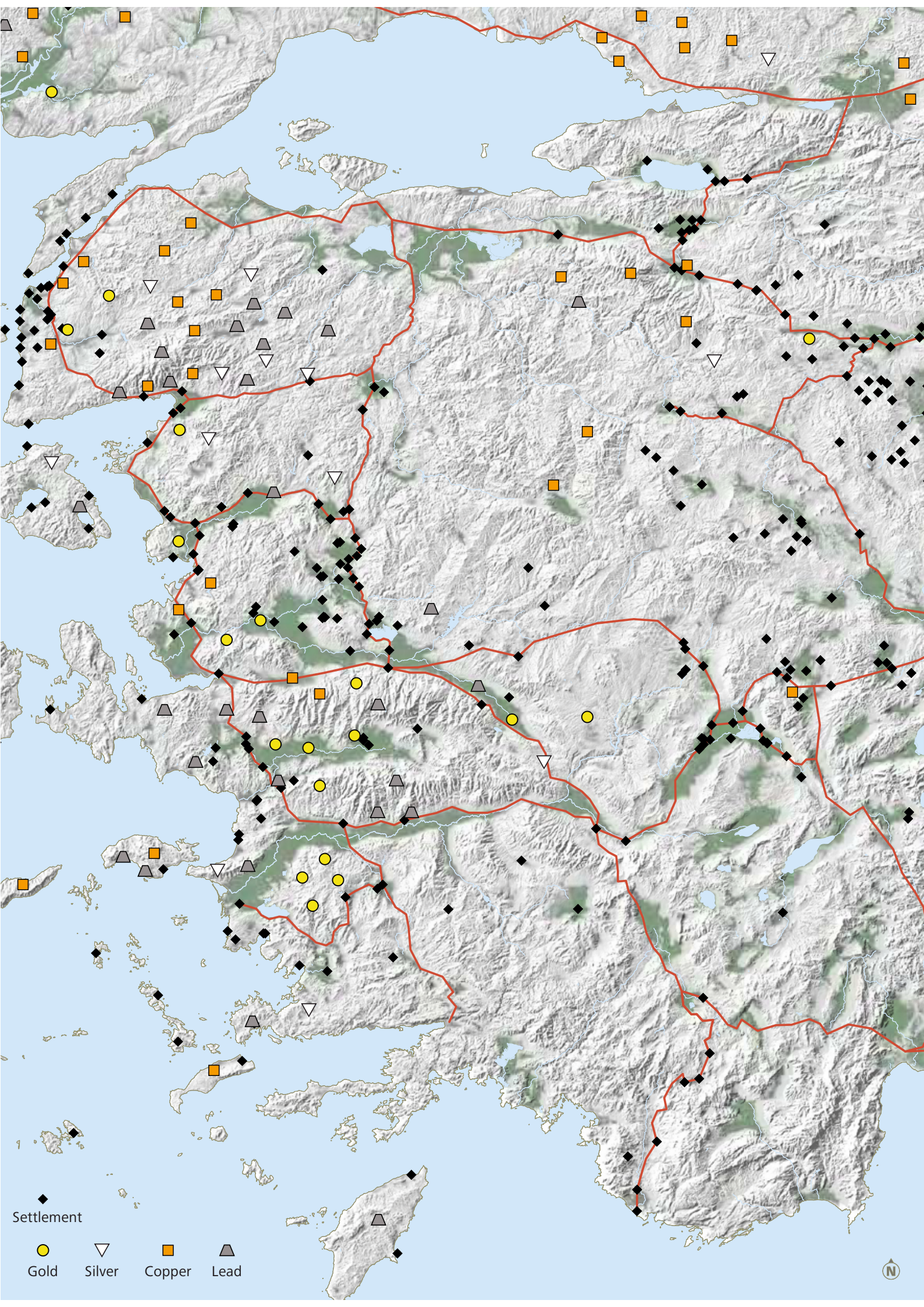
The Luwian core territory in the west of modern Turkey is particularly rich in ore deposits.

part of the Eastern Mediterranean that is as mineral-rich as western Asia Minor. The ridges east of Troy contain lead/zinc as well as copper and gold deposits, which were already exploited in prehistoric times. Even more famous for its gold was Sardis, a little further south. It was in Sardis that Croesus, proverbially the richest man on earth, ruled.

Today, the distinction between rich and poor is facile. Those with a lot of money are rich, those without are poor. But how was this distinction made before money was invented? Until then, the possession of metals had been generally accepted as a measure of wealth. Metal processing had already begun in the 8th millennium – again it was invented in Asia Minor. The value of metals depended on their rarity and the difficulty of smelting. Lead is widely available and melts at low temperatures. Early on it was processed primarily for jewelry, and later also used as a substrate for correspondence. Copper combined with about 10 percent tin makes bronze, the eponymous metal for the Bronze Age (ca. 3000–1200 BCE in the Eastern Mediterranean). Bronze was used for weapons and tools. Silver came from both silver mines as well as

Archaeological excavations at Küllüoba have uncovered several meters of stratified settlement remains dating to the Early Bronze Age.

At all times, Mount Ida south of Troy was blessed with dense forests.


Settlement
Gold
Silver
Copper
Lead
N

Artist's reconstruction of parts of the Neolithic settlement Çatalhöyük.

from the lead and copper processing and was used for jewelry, as it still is today. Gold production was directly overseen by the royal courts. Even more valuable than gold was iron, whose value around 1800 BCE was forty times that of silver. Brass (copper and zinc), too, may have been regarded as particularly valuable. The natural amalgam (e.g. the mineral aurichalcite) occurs only rarely. Small objects made of brass (*orichalkos* in Modern Greek) that contained up to 17 percent zinc were in use on the island of Lesbos, just south of the Troad, as early as the 3rd millennium.

It comes as no surprise that some kings with rich mineral resources in their realms were able to become famous and powerful. The comprehensive map showing the distribution of mineral resources available during the Late Bronze Age, both in Greece and in Asia Minor,

Left page: The trade routes and alluvial plains in western Asia Minor determined the settlement pattern in the 2nd millennium BCE.

indicates three regions that were particularly rich: the Troad, the region around Sardis and Greek Macedonia. Each of these regions produced a ruler who occupied a special place in history: Priam, Croesus and Alexander the Great.

"It is clear that nowhere did cross-cultural contacts play out more dramatically than in western Anatolia in the second millennium."
Billie Jean Collins *et al.* 2008, 4

"Anatolia is a land blessed with abundant natural resources, including a wealth of mineral deposits and abundant forests, the two elements necessary of a major metal industry." James D. Muhly 2011, 858

"The increasing use of metal as a material for weapons, tools and jewelry implies the possibility of its hoarding, and thus the accumulation of wealth as an essential basis of the emergence of a social upper class."
Andreas Müller-Karpe 1994, 180

"A large number of copper, lead and gold deposits is known from the Biga peninsula [Troad] and along the Anatolian west coast."
Günther Wagner *et al.* 1985, 77

"In the Troad, above the territory of Abydos is Astyra [27 km NE of Troy], which now belongs to the Abydeni, a city in ruins, but it was formerly an independent place, and had gold mines, which are now nearly exhausted."
Strabo, *Geography* 13.1.23 (Jones)

"Near to Andeira [80 km SE of Troy], there is a stone that becomes iron when burned, and then, if it is heated with a certain earth in a furnace, zinc separates out, and this, when copper is added, give the 'mixture,' which many call orichalcum." Strabo, *Geography* 13.1.56 (Jones)

3.3 Late Bronze Age Archaeological Sites in Western Asia Minor

Current state of knowledge

Along the Aegean coast of Turkey, a number of famous archaeological sites have become major tourist attractions. Ephesus, Pergamon, Miletus, Sardis, Aphrodisias, Didyma and Iasos are widely known. At almost all of these sites, however, archaeological scrutiny does not extend further back than the Greek colonization in the 8th century BCE. The reason for this is that preserved archaeological remains would have to be removed to gain access to the Bronze Age settlement layers underneath. As a result, some archaeological excavations only reveal the uppermost Byzantine structures. Little is known about the preceding Bronze Age settlements, whose remains, despite significant archaeological activity above, remain hidden a few meters below.

Several hundred Late Bronze Age settlements are already known today in the region stretching from Antalya, in the southeast, to Troy, in the northwest. Only two of these have been extensively excavated with the results published in a western language: Troy and Beycesultan. Both initial excavators – Heinrich Schliemann and James Mellaart – were given a hard reception by their peers; both were even forbidden from doing further fieldwork in Turkey. The research interests of prehistorians have thus far been focused on settlements located on the southwestern Aegean coast of Turkey that were clearly influenced by the Mycenaean or Minoan culture. These include Miletus, Iasos and Müsgebi. In recent years, Turkish archaeologists launched excavations at about two dozen settlement sites dating to the 2nd millennium BCE. To date, their mostly preliminary results have been published almost exclusively in Turkish, so that new discoveries and insights have not yet been internationally recognized. In the absence of further systematic studies, knowledge of the Late Bronze Age in western Asia Minor remains limited. What we know mainly comes from documents of the time that archaeologists found during excavations in Egypt, Greece and Hattuša. Obviously, these documents were written in different scripts and languages, they use different names for regions, nations and cities, and usually have a specific local view and intention.

The former Luwian dwellings are often preserved in the form of stratified settlement mounds, so-called tells: Büyük Höyük near Aşağikepen; Kozluca Höyük at Boğaziçi village in the province of Burdur; Çaltılar Höyük near Fethiye in the district of in Muğla; Çandır Höyük, 70 km southwest of Afyon; Doganci Höyük near Alpu; Karapazar near Eskişehir; Iskele Höyük on the eastern shore of Lake Eğirdir; Akın Höyük, 19 km SW of Seyitgazi; Küçükhüyük in the county town Sinanpaşa; Keskin northwest of the city center of Eskişehir.

Suggestions
Many hundred uninvestigated archaeological sites

As part of the work of the Luwian Studies foundation, 340 Late Bronze Age settlement sites in western Asia Minor have been systematically recorded. As a result we were able to produce, for the first time, a map of the currently known Late Bronze Age sites surrounding the Aegean Sea. Even the 25-year long research project of the German Research Foundation (DFG) "Tübinger Atlas des Vorderen Orients" (TAVO) did not present a map of the Late Bronze Age settlements in Asia Minor. It is evident from the distribution that all the sites that we know today from Minoan Crete, Mycenaean Greece and the Hittite Empire taken together hardly come close to the number of already known Luwian sites. Even more impressive than the number of settlements, however, are their individual sizes and the density of artifacts at each site. To see a freshly plowed field at a site such as Çandarlı on the Aegean coast, densely dotted with artifacts and remains of dry stone walls, would

The concentric elliptical rings in the middle of the aerial photography are the massive walls of Kaymakçı, an over 2000 m^2 wide Late Bronze Age fortress.

The settlement mound in Kadıkalesi has exposed Byzantine foundations on top. The more than 15 m thick deposition layers below hide the living quarters of Luwians.

leave any archaeologist speechless. The same is true when one realizes the size of the citadel at Kaymakçı for instance.

The location and size of these settlements appear directly related to the natural resources. Rivers, fertile floodplains and mineral deposits attracted people and helped them accumulate wealth. Digging prehistorians, however, were attracted mainly by architectural remnants or the chance of finding documents near the surface. They focused on mainland Greece and central Asia Minor, regions that are relatively poor in mineral resources. If one combines the distribution of ore deposits with the distribution of known archaeological sites, it turns out that archaeological interest thus far has focused on the poorer regions. During the clashes that led to the end of the Bronze Age in 1200 BCE, however, the struggle for access to the metals — and thus to wealth — could very well have played a central role. In any case, mineral-rich areas are specifically mentioned in the old documents. The Sea Peoples' invasions were preceded by naval battles involving Cyprus. And troops from the

A freshly plowed field in Çandarlı reveals an exceptionally high artifact density.

Troad, from Macedonia, and from the region around Sardis are cited by Homer as opponents of the Greeks in the Trojan War.

So far, archaeologists have considered the presence of Mycenaean artefacts on the Aegean coast of southwest Asia Minor as evidence of increasing Greek power. However, taking into account the distribution of mineral resources, an alternative view becomes possible. The Luwians initially withheld the knowledge of writing from the Mycenaeans for several centuries. Then they only permitted Mycenaean access to areas which were poor in mineral resources, while keeping the truly mineral-rich regions for themselves. One could even go a step further by looking at the distribution of metal resources and combining this with the contingents (listed by Homer) in the Trojan War. It appears as if those who had little access to wealth (the Greeks) rebelled against those possessing great riches (the Luwians).

"Hittite was spoken only in a relatively small region, especially inside the bend of the Halys. It was the language of the extended royal clan and by all means a diplomatic language. The most widespread indigenous Anatolian language was Luwian." Anne-Maria Wittke *et al.* 2007, 22

"Once the formal features of the Luwian language are identified, one can see that it was used in a vast area stretching from the Sangarios river basin in northwestern Anatolia to the Euphrates valley in present-day Syria." Ilya Yakubovich 2010, 3

"By the 13th century BCE, the Hittite texts emanating from the royal chancery are liberally interspersed with Luwian foreign words. By contrast, the Luwian texts from Hattuša or the Neo-Hittite states contain no embedded Hittite material." Alice Mouton *et al.* 2013, 3

"Why did Hittite totally vanish after the fall of the Empire, whereas Luwian continued to flourish for another five hundred years?" Itamar Singer 2011, 719

"It is, however, precisely because so many of the major issues are still being hotly debated, and because there is still [room] for new approaches and new solutions that the field of Luwian culture and 'Luwian Identities' is at the moment such an exciting field, and we confidently expect it will continue to be for many years to come." Alice Mouton *et al.* 2013, 20

3.4 Petty States in Western Asia Minor

Current state of knowledge

The western neighbors of the Hittites are fairly well-known by name. The term Luwiya in Hittite documents soon disappears and is seemingly replaced by the largely synonymous use of the name of the most influential Luwian kingdom: Arzawa. The latter can be broken down into its main constituents, the petty kingdoms of Wiluša, Šeha, Mira, Hapalla and Arzawa in the narrower sense. The mainland of Arzawa lay in the valley of the Büyük Menderes River (Maeander in antiquity). Most researchers assume that its capital, Apaša, was the predecessor of ancient Ephesus and as such was located near the modern town of Selçuk. It is evident from the personal names used at the time that Luwian was spoken in Arzawa. Arzawa reached the peak of its political power during the 15th and early 14th century BCE, at a time when the Hittite Empire was insignificant. Letters in the Amarna archives reveal that Arzawa then ranked as the leading power in Asia Minor; its kings even cultivated contacts with Egypt.

The Hittite documents mention another dozen Luwian kingdoms in west and south Asia Minor, which sometimes were vassals of the Great Kings of Hatti and sometimes enemies. These include, in addition to those already mentioned, Lukka, Karkiša, Pedasa, Tarhuntašša, Kizzuwatna, Walma and Maša. For the past fifty years or so there has been a dispute amongst scholars about the relative positions of these petty kingdoms. In particular, the identity of the western Asia Minor state of Wiluša remains unclear. According to Hittite sources it was a vassal of Hatti during a short period (1290–1272 BCE). A number of researchers today would equate Wiluša with Troy, while others argue that Wiluša must have been located in southwestern Anatolia.

Suggestions
A knowledge gap of 1600 years

Although the Late Bronze Age kingdoms in western Asia Minor have been known for over a century thanks to the Hittite cuneiform texts, thus far this knowledge seems to have had almost no significance for a reconstruction of the political situation and the trade relations during

The Luwian petty states (red) between Mycenaean Greece and Hittite central Asia Minor are well known from the documents found in Hattuša.

the Aegean Bronze Age. The two dozen Luwian kingdoms, large and small, hardly appear on any historical maps dealing with Late Bronze Age Aegean civilizations. On the contrary, most maps currently show a vast Hittite Empire covering almost all of Asia Minor. This situation refers to the time after 1300 BCE, when it was valid for a relatively short period. The Bronze Age, however, lasted for 2000 years, while the Hittite Empire existed for only about 400 years – and even then it was essentially limited to central Asia Minor. In addition, from about 1450 to 1380 BCE, the Hittites were powerless.

The maps showing the huge expansion of the Hittite Empire give the impression that the Hittite kings were overpowering – and disguise our lack of knowledge. In reality, the neighboring states in the west caused a lot of trouble for the great Hittite kings. Not once, but twice, they even contributed to the downfall of the Hittite Empire. In any case, regional expansion of a realm does not always correlate to strength. For example, a map showing the extent of the German Empire in 1918 would not necessarily indicate that this nation had just lost a world war.

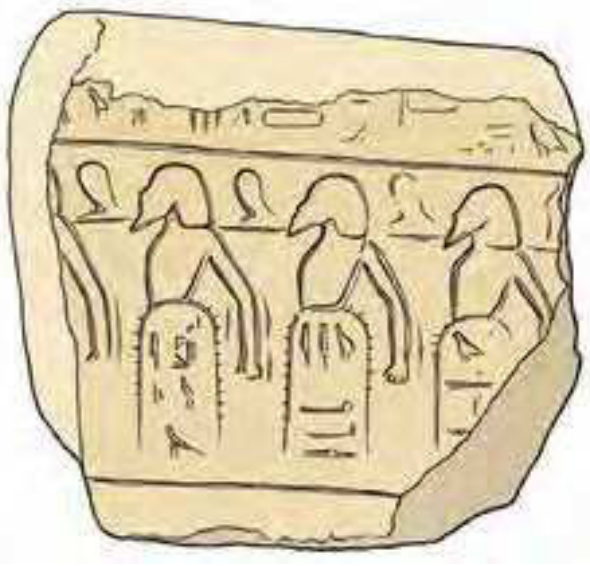
Beyköy, a particularly promising tell site north of Afyon.

Some of today's open questions are: Who lived in Asia Minor during the 1600 years of the Bronze Age prior to the formation of the Hittite Empire? Who brought about the decline of the Hittite Old Kingdom around 1450 BCE? And who called the shots in Anatolia afterwards? It is known that the Old Hittite Empire lost importance at approximately the same time as the Minoan civilization. Small kingdoms of Mycenaean origin benefited from the loss of power of Crete, and petty states in western Anatolia most likely took advantage of the temporary decline of Hatti. Although these changes in power occurred almost at the same time, this does not necessarily mean that they were causally connected – but then again, has the question been posed that they might have been?

Little remains of the mortuary temple of Amenhotep III, known in modern times as Kom el-Hettan on the west bank of the Nile, apart from the Colossi of Memnon – two massive 18-meter stone statues of Amenhotep that stood at the gateway. The temple was used as a quarry already during the reign of Merneptah (1213–1203 BCE).

During the excavation campaign 2004/05, engineers and workers under the direction of the archaeologists Hourig Sourouzian and Rainer Stadelmann retrieved a block weighing almost 20 tons from the swamp deposits. It contains representations of captured men, with their heads surmounting oval name rings representing foreign countries and fortified towns allegedly subdued. Depicted are a Syrian, a Mesopotamian, a Hittite and two other folks of more likely "Asiatic" type, as the excavators state. All are bound together with a papyrus tied around their neck. The beardless Hittite is followed by a longhaired person representing Isywa and a bald headed one from Arzawa. The excavators argued that Isywa might be an early form of Asia, at the time a coastal region in western Asia Minor.

A real sensation was the discovery of new blocks of quartzite bases from the northern Portico of the Peristyle Court. On these blocks, representations of foreign folks are depicted, which resemble the Aegean people found in the last century. The figure, head, body and the name are exactly carved, but not modeled in detail. The excavators interpreted the names as Luwian, Great Ionia, and Mitanni. Other researchers have suggested Arawana, Maša, Maeonia for these terms. In any case, all proposed readings reflect regions in Asia Minor and thus show that the Egyptian people of the 14th century BCE had a good understanding of the political geography of western Asia Minor.



This block of a quartzite base from the mortuary temple of Amenhotep III may depict a Luwian on the left.

"The Luwian area, however, comprises the Arzawa countries which all scholars, regardless of differences in detail, locate on the Mediterranean coast of Asia Minor; on the basis of proper names preserved in the Greek and Roman inscriptions it can be assumed to have extended from Lydia in the west to the confines of Syria in the east." Albrecht Goetze 1940, 8

"Prominent among the western Anatolian territories was a land called Arzawa. This land appears a number of times in Hattuša texts, often in conflict with the kingdom of Hatti." Trevor Bryce 2011, 363

"Once upon a time labarna, my ancestor, had conquered the whole country of Arzawa and the whole country of Wiluša. Therefore the country of Arzawa later waged war; since this happened a long time ago, I don't know any king of the land of Hattuša, from whom the country of Wiluša had separated. But (even) if the land Wiluša had separated from the land of Hattuša, from the distance the kings of the land of Hattuša would have been considered close friends and would have been sent diplomatic representatives regularly."
Letter of the Hittite king Muwatalli II to Alaksandu of Wiluša, 1280 BCE. According to Hubert Cancik 2002, 75

"And if you hear in advance about some evil plan to revolt, and either a man of the Seha River Land or a man of Arzawa carries out the revolt … but you do not write about it to My Sun [me], … you will violate the oath."
Muwatalli II: Alaksandu Treaty, after Gary Beckman 1999, 89–90

"In Greek historical times the name 'Asia' was initially tied to Lydia, but the expansion of the term Asia by the Ionian geographers to describe a continent was only possible because in the memory of the inhabitants of western Anatolia, a once larger 'Asia' lived on. This country Asia, as it was called by the population already during the second half of the 2nd millennium BCE, was referred to as Aššuua [an alliance of Luwian petty kingdoms] by the Hittites of the great kingdom and it included at times almost the entire west coast of Anatolia. It was an entity to be considered a mighty power that maintained active trading relations with distant Egypt and was not afraid of armed raids against the Hittites. … The Mycenaean Greeks, whose immigration into western Asia Minor began around 1500 BCE, heard the name 'Asia' from local people at a time when it referred to a great realm whose extent to the east could not be fathomed by the first Greek settlers near the sea." Helmut Theodor Bossert 1946, iv

3.5 Luwian Scripts

Current state of knowledge

For the representation of their language, the Hittites assumed a northern Syrian variant of the Akkadian cuneiform writing that was originally invented in Babylon. Using Akkadian cuneiform, Hittite scribes recorded texts in different languages: Nešili, the language of the Hittites; Hattili, the language of the indigenous people of Hatti, Luwili (Luwian), the language of the south and west of Asia Minor, and Palaic, spoken in the north and represented by only a few texts.

In addition to Luwian texts written in cuneiform, an independent Luwian hieroglyphic writing existed. Already in 1812, the Swiss traveler Jean Louis Burckhardt, who was the first European to visit Petra and Mecca, noticed in the Syrian city of Hama blocks of stone marked with unknown hieroglyphics. The English philologist Archibald Henry Sayce suggested in 1876 that these inscriptions should be regarded as Hittite. In the first half of the 20th century, many more such inscriptions

Luwian hieroglyphic script is found in Hattuša. The Luwians had known the script for almost 600 years before writing became introduced at Mycenaean royal courts.

Nişantaş ("marked rock") in Hattuša is with 8.5 m width and eleven lines the longest thus far known inscription in Luwian hieroglyphs.

were discovered, mainly in Carchemish and Hattuša. In 1917, the Austrian-Czech linguist and orientalist Bedřich Hrozný succeeded in deciphering the cuneiform tablets of the Hittites. Thereafter, in 1919, the Swiss Assyriologist and Hittitologist Emil Forrer was able to read documents from the archives in the cuneiform Luwian language for the first time. But only after 1953, when the Luwian cuneiform texts from Hattuša were published, could documents in cuneiform and in hieroglyphic script of Luwian origin be brought into relation to one another. Consequently, the Luwian hieroglyphic script, with its 520 symbols, could be largely deciphered and understood.

The hieroglyphic script can be tracked back to at least 2000 BCE when its symbols appeared on a seal found at the archaeological site of Beycesultan. Early evidence of hieroglyphic writing is recorded particularly in official seals, in which the name and title in the center were written in hieroglyphics but surrounded by cuneiform texts. More lengthy hieroglyphic inscriptions became common during the last century of the Hittite Empire. These include the 8.5-meter wide Nişantaş

inscription in Hattuša, in which the last Great King Suppiluliuma II reported his conquest of Cyprus. After the cuneiform script had disappeared in Asia Minor with the collapse of Hittite Empire around 1190 BCE, Luwian hieroglyphic writing started to spread. In southeast Asia Minor and Syria up to 600 BCE, substantial evidence of Luwian hieroglyphic writing can be found, especially in monumental royal inscriptions, but also in the form of correspondence written on strips of lead.

Suggestions
Preserving the knowledge of writing for 1400 years

The origins of Luwian hieroglyphic writing are still obscure. The Dutch linguist Fred Woudhuizen has argued for quite some time that the Luwian hieroglyphic script was already common during the Middle Bronze Age (2000–1700 BCE). The knowledge of writing has long been regarded to have developed out of economic need. Western Asia Minor possessed abundant natural resources – and therefore may have required a script early on. On the other hand, ancient orientalists now see a connection between religious-cultic practices and the earlierst forms of writing, and this may indeed apply to the first Luwian inscriptions too. In any case, evidence for hieroglyphic writing in western Asia Minor has often been considered proof of the presence of Hittites, because the Luwian hieroglyphic script was initially called "Hittite hieroglyphs." This terminological confusion may have contributed to the fact that, on maps, the Hittite Empire is shown to have grown westward until it even had a common border with Mycenaean

A clay tablet with Akkadian cuneiform script from Hattuša.

territory. Linking the finds of Luwian hieroglyphs to Hittite domination, however, is neither plausible nor justified.

After the fall of the Hittites and the apparently gradual disappearance of the cuneiform script, only the hieroglyphic form of writing was maintained. It has been preserved primarily in the form of monumental rock inscriptions in public, often executed on orthostats or stelae. However, inscriptions on lead indicate that the script was also used on perishable and reusable material. The stone inscriptions usually describe the founding of a city and the achievements and honors of rulers, even their servants are included. The German classicist Hubert Cancik (2002, 79) says the following about the scribes:

> "Some of these so-called writers were personalities of high rank who knew diplomatic practices, many languages and multiple scripts in different media (stone, clay, lead, wood). They mastered the forms, topics from building reports to accounts of glorious victories, and were able to create archaistic texts by reusing archaic templates found in their libraries."

"From about the beginning of the 1880ies an awareness arose that next to or rather between the two great cultures of the Euphrates-Tigris countries and the Nile valley a third one situated in Asia Minor and Syria had to be distinguished. Albeit not being of equal rank of importance with the two others, the development of its own writing system [Luwian hieroglyphs] warranted a certain independence. It also forced us to look at the peoples who bore this culture with somewhat different eyes, compared to most others that we know from cuneiform or Egyptian reports." Hugo Winckler 1913, 3

"By whom and for what language was the hieroglyphic writing developed? By Luwians, for Luwian, in Luwian lands." Hans G. Güterbock 1956, 518

"The speakers of Luwian inhabited a vast area stretching from the eastern shore of the Aegean Sea to the Euphrates valley." Ilya Yakubovich 2008, 124

"Although the Luwians played at least as important a role as the Hittites in the history of ancient Anatolia, Luwian studies have traditionally been considered a relatively insignificant appendix to Hittitology. … The situation begins to change with the growing realization among Hittitologists that most of the groups called Hittites by themselves or in foreign traditions were either Luwian speakers or included Luwian language communities."
Ilya Yakubovich 2011, 534

"There is actually no reason to claim a connection of the hieroglyphic inscriptions of western Anatolia with the Hittite presence in the region and regard them as a 'grip of the Empire.' On the contrary, the extant material, however scanty it is, strongly speaks for the view that they are products of the independent vernacular scribal tradition or, rather, traditions."
Rostislav Oreshko 2013, 401

3.6 Linear A Script

Current state of knowledge

Beginning in the 20th century BCE, a hieroglyphic script had appeared on Crete that remained in use until the 15th century BCE. Later the so-called Linear A script developed from it. Cretan hieroglyphs are known from about 150 seals and seal impressions as well as from about 120 other, especially archival, documents. These documents come from sites in Malia, Knossos and Petras. Outside of Crete, Cretan hieroglyphic writing has thus far been found only on the island of Samothrace in the northeastern Aegean Sea. The 137 characters of the Cretan hieroglyphic script are pictorial. Most certainly it is a syllabary, which has yet to be deciphered.

The Linear A script was customary and widespread in the Eastern Mediterranean from about 1635 to 1450 BCE. It consists of 70 syllable signs, various numbers and 200 signs with word meaning. The surviving documents are incisions on clay tablets which probably served administrative purposes. In addition to over 30 locations on Crete (including Knossos, Phaistos, Chania) objects with Linear A have been found on the Greek mainland (Mycenae, Tiryns), in Palestine (Lachish, Tel Haror), in Egypt (Avaris), on Kythera, the Cyclades and Samothrace, as well as in western Asia Minor (Miletus). Linear A was the precursor in the development of the Greek Linear B script and the Cypro-Minoan script. Since the latter are syllabaries, it is assumed that Linear A is also syllabary.

Suggestions
Greek-Luwian relations

In 1961, British linguist Leonard Robert Palmer, a professor at Oxford University and president of the British Philological Society, published a book called *Mycenaeans and Minoans*, in which he used the previous decipherment of Luwian hieroglyphic to draw further conclusions about Aegean prehistory. He argued that the language record in Linear A was indeed Luwian. Another one of his key arguments was that Luwian people had advanced into Greek territory during the 3rd millennium BCE, where they also introduced their language. The German

linguist Paul Kretschmer originally developed this model in his *Introduction to the History of the Greek Language* in 1896. Kretschmer recognized that local names ending with *-nthos* (such as *Tirynthos*) and *-assos* (such as *Parnassos*) were of pre-Greek origin. In 1928, Carl Blegen (excavator of Troy 1932–38), along with the linguist Joseph Boyd Haley, picked up on this theory in an article entitled "The Coming of the Greeks."

This clay tablet with Cretan hieroglyphic writing was found at Phaistos in a Late Minoan I context.

Cypro-Minoan is an undeciphered syllabic script used on the island of Cyprus during the Late Bronze Age.

Accordingly, there are a number of indications that Luwian terms have been preserved even in the Greek language – in particular in toponyms that are known to be long-lasting. In addition, there are indications that both the Cretan hieroglyphic writing and the Linear A script were connected with western Asia Minor. However, until now almost no excavations have been conducted in the relevant layers of the 16th to 13th century BCE, hence these assumptions remain hypotheses.

"It is submitted that the archaeological evidence from Beycesultan combined with the above linguistic pointers lends some measure of plausibility to the working hypothesis that the language of the Linear A inscriptions is Luwian."
Leonard R. Palmer 1958

"It would appear that Greece and Crete were twice invaded by Indo-European peoples during the second millennium B.C. First came the Luwians, causing the Middle Helladic revolution; they were followed by the Greeks, who caused the less violent archaeological break at the beginning of Late Helladic."
Leonard R. Palmer 1961, 26

"In 1965, Leonard Palmer [professor of Comparative Philology at the University of Oxford] advanced the hypothesis that the language of Linear A should be identified as Luwian." Margalit Finkelberg 2005, 52

"It is presumed that Crete was deliberately colonized by people from south-west Anatolia. If so, the Minoan language may have developed from one of the languages of that region, perhaps Luwian."
John G. Younger & Paul Rehak 2008, 176

"Indeed it cannot be denied that Anatolian languages are rapidly gaining in popularity in scholarly publications dealing with Linear A."
Alice Mouton *et al.* 2013, 5

"The Cretans abandoned their hieroglyphs; they recorded their assets in the syllabic Linear A script, less handsome than the hieroglyphs, but quicker to write. It seems that the language they used in these documents was Luwian, an Indo-European language related to Hittite, which was also spoken along the west coast of Anatolia and, if an inscribed seal discovered there is any indication, in twelfth-century Troy." David Abulafia 2011, 27

"From Hieroglyphic Luwian, which still overlaps with cuneiform writing in Anatolia, through Cypro-Minoan, Cypriot Syllabic and samples of other epichoric scripts in the Levant, to Cretan Hieroglyphic, the script of the Phaistos Disk and the syllabaries of the Aegean, we have a continuum of non-cuneiform scripts the limits of whose dispersal roughly coincide with those of the dispersal of the [Luwian] suffixes *-nth-* and *-ss-*." Margalit Finkelberg 2005, 57

3.7 The Phaistos Disc

Current state of knowledge

The Phaistos Disc consists of fired clay and is about 15 centimeters in diameter. It was found on 3 July 1908 during excavation of the Minoan palace of Phaistos, near the south coast of Crete. The excavations, conducted by Italian archaeologists, were directed by Luigi Pernier. However, Luigi Pernier was not present at the site when the clay disc was discovered. The disc is one of the most famous Bronze Age finds and one of the great mysteries of Mediterranean archaeology. It contains over 240 spirally arranged human, animal and plant motifs that were printed with individual stamps. Its sophisticated manufacturing technology with movable type is in direct contrast to the uniqueness of the find. The use of reusable stamps only makes sense if used several times or even frequently. Practically everything that concerns the disc is controversial; this even includes the orientation of the writing and the language used.

Suggestions
A Luwian letter to Nestor

Reputable scholars usually tend to avoid controversial issues that have been tackled by too many amateurs. Hardly any subject is more notorious than the Phaistos Disc, because of the countless attempts that have been made to decipher it.

The Dutch linguists Jan Best and Fred Woudhuizen have independently come to many conclusions during the past few decades that confirm the model put forward in this book. One of these is a most remarkable decipherment of the Phaistos Disc. The team's epigraphic investigation shows that the writing direction is from the outside to the inside and that side A was inscribed first. Based on the context of the find, 1350 BCE has been determined as the date of the disc's production.

In her extensive research on Linear B the American linguist Alice Kober found that various characters appeared over and over in the same order and that each sequence was completed with different alternating characters. Kober assumed that the same sequences corresponded

The Phaistos Disc (shown here side A) is a disk of fired clay with about 15 cm in diameter.

to the root of a verb or noun and that the final characters marked case endings or inflections. This finding led to the decipherment of Linear B by the British architect Michael Ventris shortly after Kober's early demise.

The Phaistos Disc, too, includes such fixed sequences with different endings, and the same applies to Luwian hieroglyphs. Of the 47 different characters used on the disc, a total of 29 can be correlated with Luwian hieroglyphs. The similarities go so far that whole words on the

disc are immediately readable in Luwian, including a-su-wi-ya (B11) for "Aššuwa." Best and Woudhuizen, therefore, came to the conclusion that the script of the disc is not that unique, but rather represents a local variant of Luwian hieroglyphic writing. When these circumstances are taken into consideration, the text becomes fully legible.

According to this interpretation, a number of places are mentioned that still bear the same name today: Messara, Phaistos, Lasithi and Knossos. Other geographical names that are familiar from the Late Bronze Age appear as well, including Achaea, Arzawa and Aššuwa. Some words are also found in Akkadian, Linear B or Egyptian hieroglyphic texts. Two personal names even appear more than 500 years later in Homer in a similar context: Nestor of Pylos and Idomeneus of Crete.

The Bronze seal of Troy VIIb, from the 12th century BCE, is still the only piece of writing found at Bronze Age Troy.

Not only the script but the language, too, is very similar to Luwian. If the above reading is correct, the text on the disc intends to settle an ownership dispute in a place called Rhytion near Pyrgos in the southwest of the plain of Messara: The Greek king Nestor has a principality in Crete that includes Knossos and parts of the plain of Lasithi and of the Messara. In the name of Nestor, Idomeneus reigns from his court at

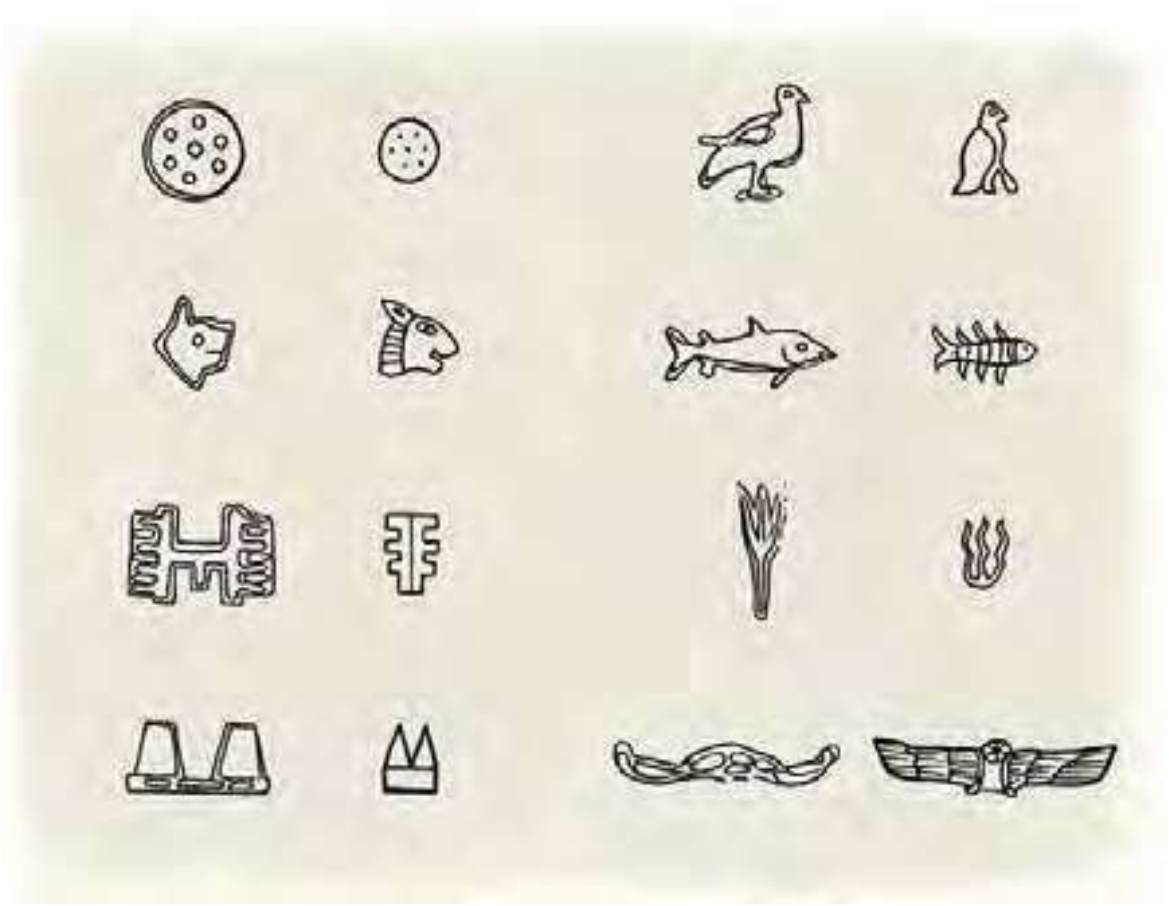
This Late Bronze Age golden ring with Linear A script was found in royal tomb IX at Mavro Spelio near Knossos in 1926.

This lead disc was found in Magliano near Grosseto in Tuscany (Italy) in 1883 and bears an Etruscan script dating to the 5th or 4th century BCE.

In 1909, Arthur Evans found a cup with this ink-written Linear A inscription around the inner surface.

Knossos as viceroy of Lasithi and as governor of the Messara. His sphere of influence includes the local petty kings Kuneus for Phaistos and Uwas for the hinterland of Phaistos. Uwas is in a dispute with another vassal king about the control of Rhytion and wants Nestor to make a decision concerning this matter. Nestor apparently contacts the Great King of Arzawa, probably the most important Luwian state. The king of Arzawa tells Kuneus to inform Uwas about his right to rule.

The Phaistos Disc is therefore a copy, intended to remain with Kuneus in Phaistos. Uwas, too, should have received a copy. The creation of multiple copies would explain the use of stamps. In this case, the disc was probably produced at the court of the king of Arzawa, that would be in Apaša, near Ephesus, and it was written in the local dialect spoken in the Luwian part of Crete. Consequently, the Luwians would have had a lot of influence on Crete before the Mycenaeans seized power over the



Luwian hieroglyphs (left columns) are similar to the pictograms on the Phaistos Disc (right columns).

island. According to this hypothesis, parts of Crete even belonged to the Aššuwa league, an association of Luwian petty states.

Future excavations in Apaša, the former capital of Arzawa, could possibly bring to light other documents of similar style to the Phaistos Disc.

"In the Mesara is Phaistos.
: To Nestor: great (man) in Achaia,
What Nestor (has), what you (have) under [you],
in my (territory), Lasithi,
in yours and (that) of your king.
In you Tarchunt [Luwian storm god] and His Majesty bring hail.
: Knossos (is) yours, (it is) part of the kingship of the oath of Lasithi,
in whatever (territory) where a yoke of two oxen ploughs for
the town of Lasithi.
: Knossos (is) yours, (it is) part of the kingship of the oath of Lasithi,
In what territory of yours, what (is) part of my dominion, (namely:) Lasithi.
In the Mesara (is) yours and for you: Scheria,
in whatever (territory) where a yoke of two oxen ploughs,
(in) the Mesara, (for) Scheria.

In (the territory) of this, what Nestor (has).
Haddu [Phoenician storm god] brings you life.
Phaistos is of your (territory by) oath, and the Mesara.
Governor of the Mesara [is] Idomeneus.
Of the Assuwian Phaistos Kuneus (is) king.
Of the oath (bound) territory behind Phaistos Uwas (is) king,
and for my father Acharkis (was) king.
Yours under you, : under me : for Nestor, this (is) yours under you.
What Rhytion was of it, of it for Nestor, that (is) yours of it.
This is of you under you (was) of it of the man, of it for my father.
: Rhytion (is) for Nestor."

Text of the Phaistos Disc according to Lia Rietveld 2004

3.8 The Missing Link

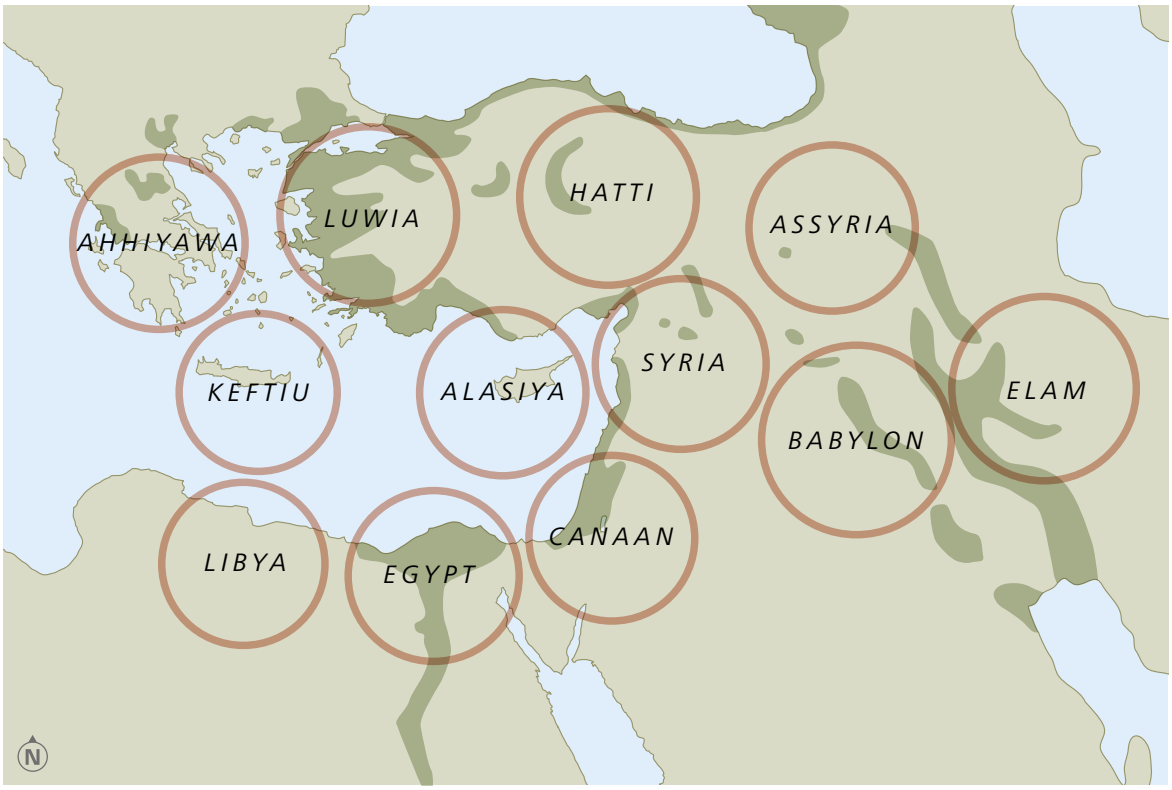
Current state of knowledge

The study of the Luwian culture falls within the remit of at least three disciplines in archaeology. Hittitology, a branch of the ancient Near Eastern studies, is based on the study of documents from excavated Hittite sites. In these documents, some 2000 towns and at least two dozen neighboring states of the Hittite Kingdom are mentioned. Early on Hittitologists proposed maps of the political geography indicating at least the relative positions of the petty kingdoms. These attempts still remain controversial.

The second discipline that deals extensively with the Luwians is the linguistic branch of ancient Near Eastern studies, which also relies on the scrutiny of Hittite documents. Since ancient Anatolia was a melting pot of early European languages, this field of research is particularly well advanced.

The Hittite Empire is today often shown at its maximum extent including all vassals. However, this condition existed only for a short time.

According to current paradigms the entire area around the Eastern Mediterranean was exploited during the 2nd millennium BCE – except for the region with the most arable land (dark areas) in western Asia Minor.



There must have been a culture in western Asia Minor as well: the Luwians.

Region	People	City	Script	Name
Egypt	Egyptian	Thebes	hieroglyphic	Misraim
Upper Tigris	Assyria	Aššur	cuneiform	Aššur
Central Anatolia	Hittite	Hattuša	cuneiform	Hatti
Syria/Palestine	Canaanite	Kadesh	cuneiform	Amurru/Retjenu
Greece	Achaean	Mycenae	Linear B	Tanaja
Crete	Minoan	Knossos	Linear A	Keftiu
Cyprus	Cypriot	Enkomi	Cypro-Minoan	Alasiya
Western Anatolia	*Luwian*	*Apaša, Troy, Millawanda*	*Luwian hieroglyphic*	*Arzawa, Wiluša, Mira, Lukka*

Overview of regions, nations, cities and scripts at the end of the Bronze Age. In each column one element remains unaccounted for – together they amount to one culture: the Luwians.

The study of material remains, however, is the responsibility of excavating Aegean prehistorians. In their field, Luwian culture has been completely absent, despite decades of advances in Hittitology and linguistics, and although twenty-five Luwian sites have been excavated in recent years. No map of the political situation (from an Aegean point of view), no monograph on the Aegean Bronze Age, no anthology of scientific papers, and no conference proceedings in Aegean prehistorians make much of the Luwians.

In 2008, a book entitled *The Cambridge Companion to the Aegean Bronze Age* was published, which contained over 450 pages that represent today's knowledge on the subject. None of the articles deal with cultures on Turkish soil. An even more voluminous book, *The Oxford Handbook of the Bronze Age Aegean*, appeared in 2010. Only a single article with a mere 12 out of a total of 930 pages briefly touches on western Asia Minor. *The Oxford Handbook of Ancient Anatolia* (2011) also dedicates just 12 out of 1174 pages to western Asia Minor. The most recent work on the subject, *1177 B.C. – The Year Civilization Collapsed* (2014), lists various attempts to explain the end of the Bronze Age but never mentions the Luwians. All of the aforementioned books were patchwork composites that were unable to provide a plausible, comprehensive explanation for the collapse of the Bronze Age cultures in the Eastern Mediterranean.

The tell site of Sarhöyük on the northern edge of Eskişehir is one of the largest in western Asia Minor.

Suggestions
Reasons for the lack of inquiries

Every now and again one comes across an explanation for the lack of interest in the Late Bronze Age of western Asia Minor. It is the assumption that the area was mainly inhabited by semi-nomadic horse peoples. As civilization presupposes an organized society, urban agglomerations and a knowledge of writing, the western neighbors of the Hittites would therefore have been deemed uncivilized. Thus, there was no real need to explore the region. The many extensive and artifact-rich settlement sites, however, show that people have most certainly lived in these places for millennia. The absence of evidence for the existence of a remarkable civilization by no means invalidates the existence of such a thing. We simply do not know enough about the Luwians because there have not been enough large-scale, deep excavations to date.

"There is no evidence from the Hittite texts for a great power existing in the 13th century BCE on the western Anatolian mainland … There is no hint in the Hittite texts of the late 13th century BCE of a revival of the Aššuwa league. And there is no evidence that Hatti was threatened in that period from western Anatolia." Wolf-Dietrich Niemeier 1998, 45–46

"In the west, Hittite control over the vassal states was becoming ever more shaky … Closer to home, the people of Lalanda in the Lower Land, 'notorious trouble makers', broke out in rebellion … In the west, Tudhaliya faced a rapidly deteriorating situation … We learn of military operations conducted by Tudhaliya against the Lukka Lands. Lukka also figures in another text of Tudhaliya's reign as enemy territory … Some time after Tudhaliya's treaty with Kurunta there was a fresh outbreak of rebellion in the Seha River Land … This suggests a new power-sharing arrangement in the west." Trevor Bryce 2005, 299–308

"The assumption that there was an advanced civilization in northwestern Anatolia, whose development level and significance could be put on a level with the Minoan or Mycenaean culture, is not tenable." Hermann Genz, Alexander Pruß & Joachim Quack 1994, 343

"Zangger's effort to attribute the cultural and political status of a big power to western Anatolia appears downright convulsively forced … It can hardly be explained with European arrogance and a helenocentric view of the world that American, European and Oriental archaeologists doing fieldwork in the Orient have thus far not recognized any trace of an allegedly overlooked independent high culture in Northwest Anatolia." Hermann Genz, Alexander Pruß & Joachim Quack 1994, 343 & 346

"The westernmost Hittite site identified so far seems to have been Şarhöyük-Dorylaion, where a Hittite bulla was found. Further to the west evidence for Hittite influence in western Anatolia is surprisingly limited."
Hermann Genz 2011, 303–304 [More than 300 settlement sites are known west of Şarhöyük-Dorylaion.]

"Therefore, the time has come to introduce a new civilization into Aegean prehistory. Based on the predominant language and script, it is self-evident that it should be called Luwian."
Eberhard Zangger, Serdal Mutlu & Fabian Müller 2016, 69

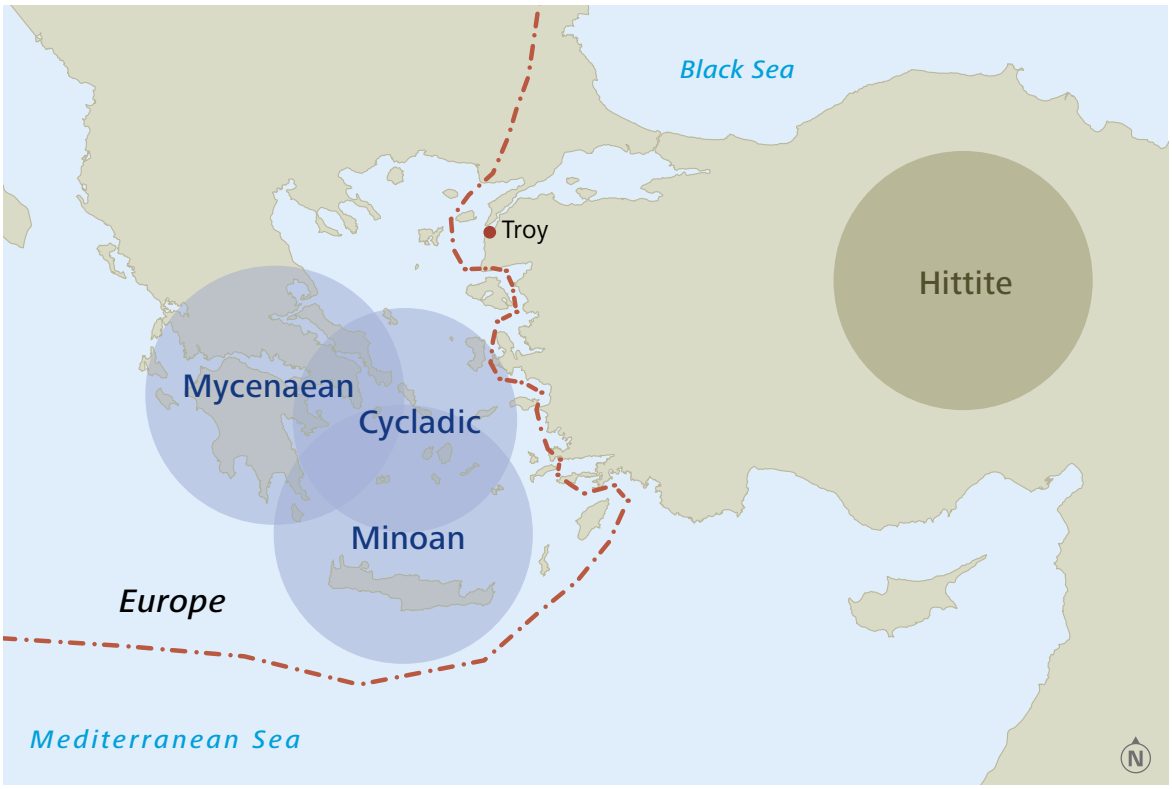
3.9 Why are the Luwians Missing?

Current state of knowledge

Between 1870 and 1910, western European scholars and adventurers discovered a number of important archaeological sites in Turkey and Greece whose habitation predated the beginning of European historiography by about a thousand years. Funded and directed by German businessman Heinrich Schliemann, excavations on the hill Hisarlık (Turkish for "settlement hill with castle") began in northwest Asia Minor, where various geologists and amateur researchers thought that Troy must have been. Encouraged by his early successes in Turkey, Schliemann then launched excavations in Greece as well.

After Crete gained autonomy from the Ottoman Empire in 1898, around a dozen excavations began on the island. Chief among them was the investigation of Knossos, led by the British archaeologist Arthur Evans. In 1906, Berlin-based Assyriologist Hugo Winckler initiated excavations in Hattuša located in central Asia Minor. Through the exploration of Troy, Mycenae, Knossos, Hattuša and many other sites, cultures came to light that had existed over a millennium prior to classical antiquity.

Soon archaeologists faced the task of structuring the newly acquired knowledge concerning these early Aegean cultures. In his publications after 1920, Arthur Evans created a still largely valid, three-part chronology (Early, Middle, Late) for the 3rd and 2nd millennium BCE, and thus laid the very foundation for the new discipline Aegean prehistory. Evans set out to cover three large regions: Asia Minor, mainland Greece and Crete. For each of these regions, a cultural center was already well known: Troy, Mycenae, and Knossos respectively. Evans also ended up defining three civilizations; however, only two of those coincided with the regions and centers listed above. Knossos was, of course, the center of the Minoan civilization, and Mycenae the one of the Mycenaean. But Troy remained isolated. Instead of assigning a civilization to Troy, Evans gave the Aegean islands their own culture, even though they had no capital and were not really powerful during the 2nd millennium BCE. For the time being, Hattuša was also left out of the equation.



When Arthur Evans in his publications laid the foundation for Aegean prehistory, he only included cultures within the borders of Europe.

Suggestions
A philhellenist defines Aegean prehistory

Fierce fighting raged between Greece and Turkey around 1920, when Arthur Evans conceived the chronology for Aegean prehistory. Given these circumstances, it would not have occurred to a philhellenist like Evans to direct scholarly attention to any culture on Turkish soil. As a result, even though Troy was and is by far the world's most famous stratified archaeological site, it remained isolated.

Because of this omission almost a hundred years ago, there is virtually no other place in the world today to match the potential for discovery inherent in western Asia Minor. All this time, an entire culture has remained largely hidden from the eyes of archaeologists. The memory of the Luwians, however, has been preserved in many documents in Greece, Asia Minor and Egypt. Many hundred archaeological sites are now waiting to be systematically explored.

Distribution of Middle Bronze Age sites according to a textbook of Aegean prehistory from 1994. Western Asia Minor is still *terra incognita*.

The Luwians played a key role in the development of Western Europe. Their culture provided the breeding ground for Greek philosophy, poetry and science. For over a thousand years, Western Europeans tried to trace their roots back to the royal family of Troy. Hundreds of cities in Europe – including Rome, Paris and London – claimed to have been built according to the model of Troy.

This enthusiasm for all things Trojan gradually transformed into complete rejection after the Ottomans conquered Constantinople (1453) and even besieged Vienna (1683). After that, the intellectual elite

of Central Europe no longer wanted to be regarded as descendants of the Trojans. Instead, they came up with a new historical role model – Ancient Greece and Rome – most likely because these cultures once ruled over large regions in the Eastern Mediterranean. Suddenly anyone who did not speak Greek was considered a barbarian.

Since the end of the Second World War, such ideologies founded on racial prejudices have been considered unacceptable. Subliminally, however, they have subtly persisted, holding back research on early Anatolian civilizations. As a result, distortions and knowledge gaps arose that are now gradually being filled.

"From the mid-19th century the romantic philhellenism was joined by an ideological hard core of Euro-centric racism, whose formation in Europe accompanied the colonial reaching out to overseas: Only Europe could and may have produced the roots of Western civilization, this was the general belief."
Michael Sommer 2005, 1

"I don't choose to be told by every barbarian I meet that he is a man and a brother. I believe in the existence of inferior races, and would like to see them exterminated." Arthur Evans 1877, 312

"In archaeology, Evan's word was law … The few scholars who dared to question him met with swift and certain professional punishment."
Margalit Fox 2013, 79–80

"The for centuries rotting peoples and states of the Semites and Egyptians, despite their ancient culture, had nothing to leave to the Greeks apart from a few manual skills and techniques, vulgar costumes and utensils, outdated ornaments, disgusting fetishes for even more disgusting false gods."
Ulrich von Wilamowitz-Moellendorff 1884, 215

Previous pages: A reconstructed wall section of Hattuša, the Hittite capital 150 km east of Ankara.

4. Bronze Age

4.1 Late Bronze Age Shipwrecks

Current state of knowledge

In 1982, a sponge diver near Cape Uluburun in southern Turkey, 8.5 kilometers southeast of Kaş, discovered copper items in about 60 meters of water. The objects were part of a Late Bronze Age wreck that was subsequently excavated between 1984 and 1994 as the so-called ship of Uluburun under the direction of the U.S. underwater archaeologist George Bass and his Turkish colleague Cemal Pulak. The ship had a length of 15 to 16 meters and a width of 5 meters. Its planks and keel consisted of cedar trees from Lebanon that, according to dendrochronological analysis, were felled after 1305 BCE. The stone-made anchor as well as the ceramic kitchen wear used by the crew suggested that the homeport of the ship was Canaan located near the present border between Israel and Lebanon.

The ship of Uluburun had a capacity of at least 20 tons. It mainly carried raw materials but also some finished goods. The main commodities were about 1 ton of tin and 10 tons of copper in the form of 354 large oxhide ingots with an average weight of 24 kilograms. The remaining cargo included 175 disc-shaped glass bars in at least four different colors that most likely were supposed to imitate lapis lazuli, turquoise, amethyst and possibly amber. Over a hundred pots on board contained mastic or pistachio resin, constituting the second largest consignment

Looking south from the Palace of Nestor in Epano Englianos towards the artificial port.

after the metals. Mastic is known to kill certain bacteria and has been used as a preservative in wine since the 6th millennium BCE.

Many of the trade goods found on the ship of Uluburun were already known from tomb paintings or documents in Egypt, including the Amarna letters. Most of the merchandise had its origin in Syria, Canaan or Cyprus. The ship is therefore likely to have come from the east and to have traveled to the west. The crew consisted of Canaanite merchants and seamen. Some valuables such as swords and daggers indicate that the crew was accompanied by messengers or representatives of the buyers, who monitored the trade. Two of these were high-ranking Mycenaeans. A third person may have come from the northern Aegean.

Suggestions
Worldwide leadership in underwater archaeology

Was the third foreigner on board a Luwian? It is conceivable that Mycenaeans and Luwians, at least in some instances, jointly monitored the

The silted harbor basin at Pylos emerged as a rectangular field (center) from the landscape. Today it is built over with a golf course.

long-distance trade and that in these cases ships were accompanied by representatives of both Aegean coasts. The main purchasers – in the south as well as in the north of the Aegean – may have also sent inspectors to watch over their goods. The high value of the cargo could imply that there was more than one recipient.

With the systematic and comprehensive excavation of the Late Bronze Age ship of Uluburun, Turkey has become world-class in underwater archaeology. We know of numerous trade objects thanks to this excavation. Since these in a large part had already been depicted in Egyptian grave representations in western Thebes, we know now that the artists there did not freely invent the content of these depictions. The port cities on the south and west coast of Turkey, however, where the ship should have made stops, remain unknown. Deep-reaching excavations in the right places would have the potential to turn Turkey into a global reference for land-based prehistoric archaeology as well.

In some locations in western Turkey, for example at Kesik Tepe near Hisarlık, silted-up harbor basins are clearly visible today. It seems

likely that in the sediments of these basins, contents could be found that had fallen overboard while loading and unloading. During the wars of Troy, entire ships could have sunk in the harbor. Because of the oxygen-deficient depositional environment at the bottom of such harbor basins, organic material, such as leather, might still be preserved there. With scientific prospecting methods, the most promising sites for first explorations could be identified. All it takes is the courage to launch excavations in a depositional environment – rather than on a citadel hill – and the knowledge of where to start those excavations.

"The fact that a correspondence between a king Tarhundaradu of Arzawa and the Egyptian Pharaoh is documented in the Amarna corpus suggests that independently of the Hittites a center of power of national importance had formed in the western part of Asia Minor." Jörg Klinger 2007, 53

4.2 The Mycenaean Culture on the Greek Mainland

Current state of knowledge

The Mycenaean civilization lasted from about 1600 to 1200 BCE. It is considered to have been the first civilization on the European mainland, and initially it was much influenced by the Minoan civilization on Crete. After widespread destruction of the Minoan palaces on Crete around 1430 BCE, the Mycenaean culture rose to become the leading power in the Aegean. Its long-distance trade expanded considerably, so that Mycenaean vessels were able to reach Cyprus, Syria and Egypt. Letters in the archives of the Hittite capital Hattuša indicate that the Mycenaeans actively participated in the international network of gift diplomacy. Linear B tablets found in Greece provide detailed insights into the movement of goods.

Excavations in Tiryns in 1907.

Photo of the west side of the citadel of Tiryns. The right angles and clean break lines in the bedrock show that the construction site also served as a quarry.

The remains of Mycenaean citadel of Tiryns are surrounded by an alluvial plain (view from the east).

At the main gate of the Mycenaean citadel in Tiryns, the massiveness of the up to 7 m thick walls is clearly noticeable (photo taken in 1984).

Most probably, there was never an actual Mycenaean empire on mainland Greece. Instead, several independent small states existed, including the kingdoms of Mycenae, Tiryns and Pylos. The ruling elite had built magnificent palaces and controlled not only politics, but also trade. Artisans settled around the royal courts who manufactured sought-after, high-quality ceramic vessels and delicate gold jewelry, among other things. Mainly women worked in veritable textile factories. The majority of the population lived from agriculture and animal husbandry and had to pay various taxes and to perform unpaid compulsory labor. It is conceivable that this suppression of the dependent population contributed to the decline of the Mycenaean civilization.

At about 1250 BCE, the kings of Mycenae and Tiryns expanded their citadels and fortified them with Cyclopean walls. Beginning in 1200 BCE, upheavals and local destructions led to the end of an era that roughly 500 years later, in the Homeric epics, is referred to as the "heroic age." Various cultural achievements that were closely linked to the palace administration – especially the script – were lost. Some places were destroyed, many completely abandoned, but new settlements came into being as well. There are many hypotheses about the causes of the widespread destruction, but no satisfactory explanation has thus far been furnished. The Mycenaean culture continued to exist at a rudimentary level for some time.

Suggestions
Politics, economics, and technology in the Bronze Age

The term "Mycenaean culture" first appeared at the end of the 18th century and is somewhat misleading because it implies a leadership role for the kings of the citadel of Mycenae. Homer and other ancient authors called their Bronze Age ancestors "Achaeans" for the most part, a term with which they referred to all Greek tribes. No ethnic group is singled out as being special. The 2nd millennium BCE on the Greek mainland is extremely well researched, hence the general conclusions drawn above are largely uncontroversial.

The investigation of the Mycenaean civilization is, like those of other ancient cultures, based on the three main pillars of archaeology: architecture, art history and philology. Consequently, archaeology primarily deals with ruins, artifacts and the Linear B texts from the Late Bronze Age and, with the help of those, reconstructs its society. Present day societies, however, are hardly influenced by architecture, art history and philology – we are much more affected by developments in politics, economics and technology. If one were to follow the principle of actualism ("The present is the key to the past"), Mycenaean culture could also have been driven by politics, economics and technology much like our modern societies are. As a consequence, scrutiny of the Mycenaean civilization might benefit if researchers would shift their attention towards these factors. As a matter of fact, hydraulic engineers have discovered sophisticated hydraulic infrastructures near virtually all major Mycenaean settlements. These include dams, river diversions, drainages as well as artificial ports. Unfortunately, fields

The construction of Cyclopean walls, including the Lion Gate at Mycenae, was directed by engineers from Asia Minor.

The Lion Gate at Mycenae, as shown in a 1854 edition of John Murray's *Handbook for Travellers in Greece* – 22 years before Heinrich Schliemann allegedly discovered it.

Bathtub in the Palace of Nestor in Messenia on the Peloponnese.

Linear B tablet.

such as hydraulic engineering, civil engineering, economic geography and nautical science still are not research priorities in archaeology.

According to Greek tradition, the characteristic Cyclopean walls of Tiryns and Mycenae were erected with the help of engineers from Lycia (Strabo 8.6.11, Bacchylides 10.77, Apollodorus 2.2.1, Pausanias 2.25.8). This argument is reinforced by the observation that this masonry was widely present throughout Asia Minor, as the Lion Gate in Hattuša indicates. The lion's relief above the Lion Gate at Mycenae is the oldest monumental sculpture in Europe and was unique during the time of its creation (1250 BCE) – as far as Greece is concerned. From Asia Minor, however, over 150 bas-reliefs from this period are known. Since Lycia was part of the core area of the Luwian territory, one might conclude that one of the main features of the Mycenaean civilization, the Cyclopean masonry, had its origin in Luwian lands, from where it came to Mycenae.

"In order to assess what happened in the past or will happen in the future, we only need to study the present." Georges-Louis Leclerc de Buffon 1750

"Mycenaean settlements on Rhodes and other islands of the Dodecanese may have been no more than merchant enclaves within a native population." Trevor Bryce 2011, 369

"Now it seems that Tiryns was used as a base of operations by Proetus, and was walled by him through the aid of the Cyclopes, who were seven in number, and were called 'Bellyhands' because they got their food from their handicraft, and they came by invitation from Lycia." Strabo, *Geography* 8.6.11 (Jones)

4.3 Minoan Crete

Current state of knowledge

The Minoan civilization on Crete is considered to be the earliest advanced civilization in Europe. At about 2000 BCE, palaces were erected at Knossos, Malia, Phaistos and Petras. They served as domiciles of the political and religious elites, administrative centers with ritual functions and reloading points for commodities. Actual cities with sophisticated drinking water and wastewater systems arose in densely populated areas. The complex society included distinct professions such as fishermen, rowers, captains, soldiers, writers, potters, painters, builders, architects and musicians.

The rise of the palaces was accompanied by the introduction of script and intensified trade relations with other regions in the Eastern Mediterranean. Archaeological finds indicate that the Minoan culture had an impact on the entire Eastern Mediterranean. Cretan influence is visible on the islands of Thera, Kythira, Milos and Rhodes as well as at Miletus in Asia Minor and, possibly, on Cyprus. Close relations also existed with Egypt: Until around 1400 BCE, images of Cretan delegations were painted on Egyptian tomb walls. Inscriptions in Mesopotamia testify to contacts with this region as well.

Minoan men on frescoes are depicted as athletic and toned.

The so-called Old Palace Period came to an abrupt end in the 17th century BCE. Most researchers suspect that an earthquake caused the destruction. The palaces were quickly rebuilt; only the settlement at Monastiraki remained deserted.

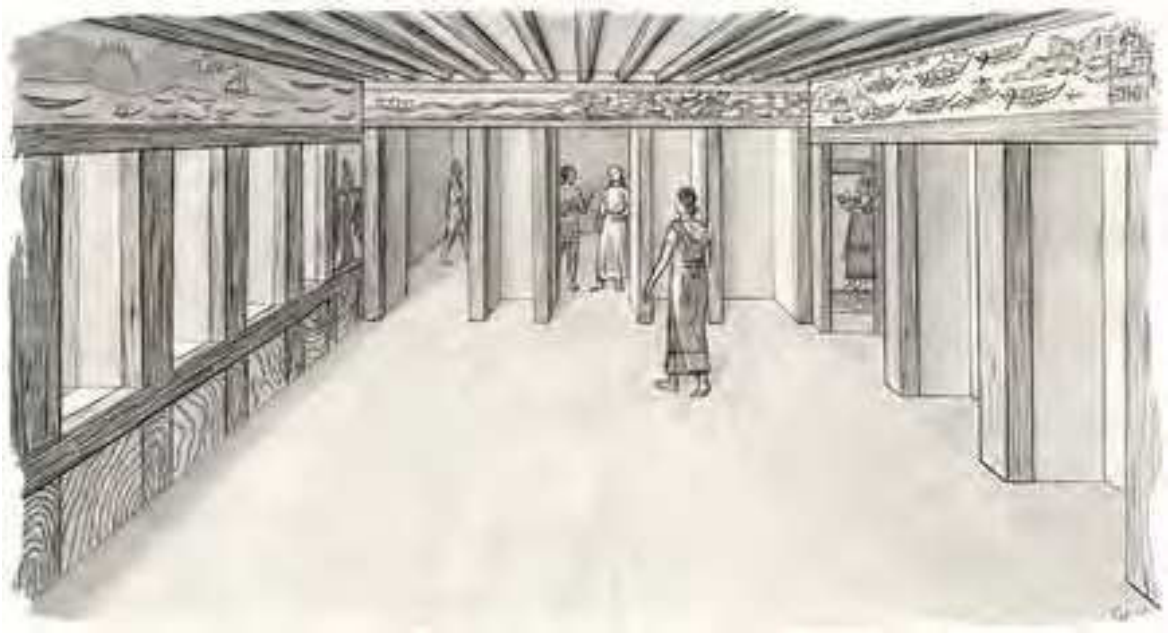
Two-meter tall dry stone walls have been preserved at the Minoan archaeological site of Apodoulou on Crete, indicating that no earthquake occurred at the end of the Old Palace Period.

Exceedingly well preserved buildings around the Triangle Square in Akrotiri demonstrate that there was no caldera collapse after the Minoan eruption.

Pumice layers from the Minoan eruption of Thera cover older rock formations without being tectonically disturbed. Hence, there could have been no caldera collapse after their deposition.

Street scene in prehistoric Akrotiri.

Around 1430 BCE, traces of fires and destruction once again appeared across all of Crete. The majority of researchers now assume that these were signs of conquest by Mycenaean forces. The once popular theory that the coastal cities fell victim to the volcanic eruption of Thera (Santorini) and, possibly, a subsequent tsunami, has now been ruled out. Alternative hypotheses – a number of major earthquakes, the loss of markets, or civil unrest – cannot be substantiated. It is, however, certain that Mycenaean rulers captured the palace of Knossos and continued to govern from there until at least 1375 BCE. The island was not spared from upheavals around 1200 BCE either. Nevertheless the Minoan-Mycenaean culture continued to exist until about 1050 BCE.



Artistic reconstruction of the upper floor of the West House in Akrotiri.

Suggestions
Invasions rather than natural disasters

The palace culture, featuring its characteristic architecture, hieroglyphic writing and sophisticated administration system including seals, appeared so suddenly on Crete that a transfer from Asia Minor and/or Syria/Palestine is likely. Apparently, the Middle Bronze Age civilization on Crete was not really homogeneous. The material culture, as revealed through excavations, often differs from site to site or from one region to the next. So it could very well be that the different settlements located on the island were used as bases or mainstays by different cultures from the surrounding mainland (including Luwian territories). Homer, too, speaks of Crete as a place with "peoples of various stems and various kinds of tongues," including noble Pelasgians (*Odyssey* 19.172–179) – a tribe whose core area some scholars assume to have been south of Troy.

Appealing to an earthquake to explain the destruction in 1700 BCE does not make sense for a number of reasons. There are no tectonic faults on Crete that would be sufficiently long enough to cause earthquakes across the entire island. In addition, the old palaces show no damage caused by liquefaction of soil, which would be typical for

The floral style of Late Minoan pottery

Facades in Akrotiri are largely intact, sometimes over several floors.

earthquakes. In Apodoulou, dry stone walls, more than two meters high, have remained perfectly intact. In Monastiraki, all valuable portable items, such as jewelry, bronze objects and seals, were removed, and some residents even sacrificed to the gods immediately prior to the disaster. Traces of fires suggest attacks by external or internal enemies, rather than a natural disaster, as the cause of the collapse.

The effects of the eruption of Thera that probably started during the spring of 1628 BCE have been overestimated. The volcanic eruption and the destruction of the Minoan civilization do not coincide. Less well known is the fact that the caldera of Thera could not have collapsed during the Minoan eruption – it probably formed as much as a hundred thousand years earlier. Older stratified sediments were found inside the caldera and the pumice that was ejected during the Minoan eruption is not tectonically disturbed anywhere. Furthermore, the settlement in Akrotiri would have been annihilated by a massive tectonic collapse. Without a collapsing caldera there is no trigger mechanism for a tsunami.

This broken staircase in Akrotiri is used as an argument for ground motion, but by far not sufficient to prove a caldera collapse.

"The Minoans were almost certainly descended from migrants who had arrived from Anatolia." David Abulafia 2011, 22

"It has long been recognized that during the Middle Bronze Age Asia Minor and Crete must also have been in contact. This is indicated by similarities in the architectural design of the palaces in both areas, the relationship between motifs on clay seals … and finally through the fact that the only surviving vessel made of precious metal dating to the Old Palace Period shows an Anatolian vessel type, which was also imitated on Crete in clay."
Wolf-Dietrich Niemeier 2009, 11

"Earthquakes … have had little, if any, serious influence on historical developments in the Middle and Near East. … They have never caused the ruin of a culturally advanced state, far less the end of a civilization."
Nicholas Ambraseys 1973, 230

4.4 Hatti – the Hittite Empire

Current state of knowledge

The exact origin of the Hittite people is unclear. They probably first settled in Central Anatolia about 2000 BCE and then mingled with the local Hatti people in the area. Until around 1700 BCE, the indigenous Hattian princes managed to preserve their supremacy, but conflicts with the Hittite newcomers frequently erupted.

The actual Hittite dynasty commenced around 1670 BCE. From the mid-16th century BCE the capital of the Great Kingdom was Hattuša in northern Central Anatolia. The city has been excavated since 1906 and became famous for its archives. Archaeologists recovered over 33,000 clay tablets and fragments which originated there.

The Hittite Great Kingdom was ruled by an emperor, under whom were a large number of vassal kings. These belonged, for the most part, to the dynasties reigning over the surrounding regions; they had to swear an oath of loyalty to the Hittite emperor. The rulers of Egypt, Babylonia and Assyria mostly considered the Hittite emperor as their peer, with whom they maintained diplomatic contact and trade relations, but with whom they also, if necessary, fought for supremacy. Since the Hittite Empire had a common border with Egypt on Syrian soil, friction between Hatti and Egypt arose too.

Members of the Hittite people possess a pale skin and a classic profile. Men wore loincloths and coats that had to be knotted around the shoulders.

The Hittite Great Kingdom ultimately collapsed around 1190 BCE. Documents suggest that the military situation had worsened on several fronts and that the country suffered from famine. Uprisings of the population or power struggles among the vassal kings are likely to have occurred as

The Lion Gate at the southwest side of the upper city of Hattuša.

Hittite street in front of the Great Temple at Hattuša (photo taken in 2014).

The two sphinxes on the inner doorway at the highest and southernmost point in the city fortifications of Hattuša.

well. With the fall of the Hittite Empire, the cuneiform writing tradition ended in Asia Minor and no new power center emerged in Central Anatolia. People living in the region returned to a simple agricultural, even partly nomadic lifestyle.

Suggestions
The Hittite leadership caste

In virtually all publications on ancient Anatolia, the Hittite civilization is taken to represent the Bronze Age. However, the Bronze Age lasted for nearly 2000 years, from about 3000 to about 1200 BCE (perfectly coinciding with the time when Troy thrived), whereas the Hittite civilization lasted only 400 years.

Hittite aristocrats appear to have essentially been a leadership caste that defined itself on a political and administrative system. The indigenous, largely Luwian and Hattian population, continued to use their

Reconstruction of the inside of the King's Gate of Hattuša. It is a double gate, showing a half-relief of an armed warrior, 2.25 m tall, on one side.

languages and customs, even under Hittite dominion. The nature of Hittite rule can thus be compared to the administrative system of the Ottoman Empire, to Yugoslavia under Tito or to the former Soviet government. Central administrations come and go, but languages and customs of the local population are rarely affected by such changes.

A third caveat concerns the size of the Hittite Empire. In recent years, maps typically show the maximum expansion of the empire during the 13th century BCE. However, the kingdom reached this extent only through treaties with vassal states and even then only for a short time. Hittite rule was characterized by the fact that neighbors were enemies most of the time. In particular the petty kingdoms in the west caused enduring friction. In the north, the Kaška too were archenemies who repeatedly raided Hittite territory to plunder.

The architectural style used for the Mycenaean citadels (shown here the eastern gallery of Tiryns) resembles the one customary in Asia Minor.

A Hittite cult vessel – it is to be filled from the bottom and then turned upside down.

It is quite conceivable that within the core area of the Hittite Kingdom, the original Hattian and Luwian people were gently coerced to form a state that was united by a central management and policy. Even so, they preserved their languages and customs – which may be why so many Luwian loanwords and texts appear even in the capital. Petty kingdoms on the periphery were tied through vassal treaties to be loyal supporters. In all likelihood, neither the native local people nor the vassal states were always happy about this situation. This may have caused constant political friction – and thus contributed to the two demises of the Hittite Empire – of which the second one was forever.

"From the way Hittite scribes use Luwian words in Hittite texts, it appears that Luwian largely served as a colloquial language within the Hatti kingdom."
Bernhard Rosenkranz 1938, 265

"It seems to be sure that the rule of the Hittites never reached the western borders of Asia and certainly not up to the Hellespont."
Aleksander Krawczuk 1990, 201

"The Mediterranean was never the focus of the interests of the great kings of Hatti further to the east, which were firmly directed towards the mountainous, mineral-bearing interior of western Asia." David Abulafia 2011, 21

"Formerly the Hittite land was laid waste by the enemy. The Kaška came from one direction and made Nenašša the border. Arzawa came in the direction of the Lower Land and also laid waste the Hittite land. It made Tanuwa and Uda the border. Arawanna came from a third direction and laid waste all of Kaššiya. Azzi came from a fourth direction, laid waste the Upper Land, and made Šamuha the border. Išuwa came from a fifth direction and destroyed Tegarama. Armatana came from a sixth direction, devastated Hittite lands and made Kizzuwatna city the border."
Decree of Hattušili III (ca. 1267–1237) after Richard Beal 2011, 585–586 (KBo 6.28 Obv. 6–14, Goetze 1940, 22)

4.5 The New Kingdom in Egypt

Current state of knowledge

Egypt has always played a special role in the early historical development of the Mediterranean countries. Its isolated geographical location and the fertility of the Nile valley permitted a cultural-historical development that was unique in the ancient world and followed its own rules. The land northeast of the Sahara was safe from enemies on almost all sides.

As the Nile valley became more arid at the end of the 4th millennium, the Egyptians began to artificially irrigate their fields. The earliest image of a rural scene – from the 31st century – shows a king at the opening of an irrigation channel. Both the country's economy and its people were so dependent on the Nile that a government system was conceived that took care of water distribution, land survey, as well as control of taxes and property. Since the end of the 4th millennium, a distinct civilization with kingship, administration, script, art and religion prevailed in Egypt.

The mortuary temple of Queen Hatshepsut at western Thebes.

The New Kingdom, from 1549 to 1069 BCE, was a golden age in the history of Egypt. At the same time, the country became increasingly involved in external conflicts. With the assumption of power by Ramesses I in 1290 BCE, the 19th dynasty was founded. During his regency, there were clashes with the Hittites, against whom Ramesses II in 1274 BCE lost the famous Battle of Kadesh. Around 1200 BCE, Egypt became involved in disputes with Libya and later experienced the Sea Peoples' invasions, at least on the periphery. At that time, internal disputes over the succession to the throne weakened the empire. After Seti II, who reigned from 1203 to 1193 BCE, several rulers followed at short intervals. In 1185 BCE, Sethnakhte ascended to the throne, founding the 20th dynasty. The circumstances of his takeover, even his origin, are largely unknown. Just three years later, he was succeeded by his son Ramesses III, who was able to restore some stability and who became the last pharaoh to execute Egyptian supremacy in the Mediterranean.

Egyptian warriors are depicted as tall, lean and broad-shouldered. The land of the Nile had a professional army that was divided into infantry and charioteers.

Since the country opened up more than ever to other cultures of the Middle East, and the pharaohs conducted extensive correspondence with all the major contemporary rulers, royal and private inscriptions provide evidence of the events before, during and after the upheavals around 1190 BCE.

The first pylon of the Luxor Temple, one of the monumental buildings from the time of Ramesses II. The second obelisk has been at the Place de la Concorde in Paris since 1836.

Suggestions
The questionable historic accuracy of Egyptian temple inscriptions

Egyptians started using hieroglyphic script as far back as around 3200 BCE. They were thus able to record events and to pass these descriptions on without variation for generations to come. The Greeks permanently acquired a knowledge of script only 2500 years later. Consequently, when Greek writers met with Egyptian temple priests and chatted about history, the priests tended to compare their visitors to precocious children (Dio Chrysostom, Speech 11.1; Plato, *Timaeus* 22b).

The ability to record historical events permanently makes Egypt an indispensable resource for the reconstruction of events at the end of the Bronze Age. We know about the so-called Sea Peoples' invasions primarily from Egyptian temple inscriptions. The homeland of the Sea Peoples is now thought to have been in western or southern Asia Minor and in the Aegean area. Egypt happened to be on the periphery of the

raids – and ended up surviving the upheavals as the only region of the Eastern Mediterranean that was largely unscathed. The pharaohs were unable to actively intervene, because at that time dynastic turmoil had led to chaotic conditions.

Representatives of the Nubian people are consistently depicted as dark-skinned at the time of the Egyptian New Kingdom.

Probably the most important source, certainly the most graphic one, for an understanding of the events at the end of the Bronze Age are the inscriptions on the mortuary temple of Ramesses III in Medinet Habu, western Thebes, Upper Egypt. It is one of the few well-preserved temples of its kind. Most of the others were used as a supply of building material already during the New Kingdom and have therefore disappeared. The Egyptian scribes provide the names of the people who attacked the countries around the Eastern Mediterranean, they also depict them in elaborate engravings, and they tell the story of the raids including the year of the events. Unfortunately, however, the accuracy of the information is more than questionable. Egyptian scribes tended to glorify their pharaoh, rather than to transmit historic truth. Ramesses II had the Battle of Kadesh depicted in his mortuary temple, in Karnak, Luxor, Abydos and Abu Simbel as a mighty victory in which he slew the Hittites and killed a brother of the Hittite king Muwatalli II. The Hittite king only had one brother, he fought in the battle as a general, survived it unharmed, later assumed the throne as Hattušili III, made peace with Egypt – and enforced pressure on the

pharaoh to rectify the mistaken propaganda inscriptions, of which the contents the people of Hatti were well aware of.

Much has been written about the notion that Ramesses III made use of battle descriptions already transmitted from one of his predecessors, Merneptah. The date provided for the main naval battle against the Sea Peoples, the eighth reignal year of Ramesses III, is almost twenty years off the mark, since Ugarit was destroyed in 1192 BCE while Ramesses's III eighth reignal year would have been 1174 BCE.

"The land of Egypt was overthrown from without, and every man was (thrown out) of his right; they had no chief mouth for many years formerly until other times. The land of Egypt was in the hands of chiefs and of rulers of towns; one slew his neighbor great and small. Other times having come after it, with empty years, Yarsu, a certain Syrian was with them as chief. He set the whole land tributary before him together; he united his companions and plundered their possessions. They made the gods like men, and no offerings were presented in the temple." Papyrus Harris I, *Biblioteca Aegyptiaca* V, 91 after James Henry Breasted 1906, 198

4.6 Petty Kingdoms in Syria and Palestine

Current state of knowledge

The region stretching south of the mountains of Anatolia towards the Euphrates and the Mediterranean Sea was called Syria in antiquity. Further south it extends into Palestine, forming the bridge between Egypt, the Jordan River and the Mediterranean. Due to its location, Syria served as a connection from Mesopotamia to the Mediterranean. The land itself was sought after for the durable cedars that grew on Mount Lebanon, which were required for shipbuilding and accordingly

Known Late Bronze Age settlement sites in the Middle East.

The semi-nomadic Shasu bedouins lived in Syria and Palestine. Their weaponry consisted of two spears or a curved sword.

transported by water to Egypt and by land to Mesopotamia. Evidence of trade contacts of the major commercial and cultural center Ugarit, located on the Syrian Mediterranean coast, shows connections to Egypt and further inland as well as to Cyprus and to the Aegean area.

Palestine had a similar geostrategic importance as a bridge between Egypt and Arabia, Anatolia, Mesopotamia and Syria. From the 16th century BCE, Palestine was recognized as an Egyptian province. The ruling power, however, was left to local dynasties, of which there were several hundred.

During the Late Bronze Age, the interests of the great powers Egypt, Assyria and Hatti collided in Syria and Palestine. Documents from Ugarit show that the city was at first a vassal of Egypt. From 1330 BCE, after several military campaigns by Suppiluliuma's troops, however, Ugarit took the side of the Hittites. In 1274 BCE, conflicts between Hatti and Egypt triggered the Battle of Kadesh in Syria. The outcome was somewhat more favorable for the Hittite ruler, but Ramesses managed to consolidate his position on the coast of Palestine.

In the wake of the Sea Peoples' attacks and the subsequent turmoil around 1190 BCE, law and order seem to have been lost in Syria and Palestine. Documents mention the sighting of enemy ships. A call for help by the Ugaritic king remained unsent. The ruins of towns in the Syrian heartland and in the Euphrates valley cannot be directly attributed to invasions from the sea, but must be seen in relation to subsequent migrations and invasions as well as the collapse of the state.

Suggestions
Rivalry and fragmentation

Neither the Hittite kings nor the Egyptian pharaohs were interested in having the small states in Syria/Palestine overcome their rivalry and fragmentation. The tense situation in the Middle East at that time served the great powers as a useful congregation of tax-paying vassals.

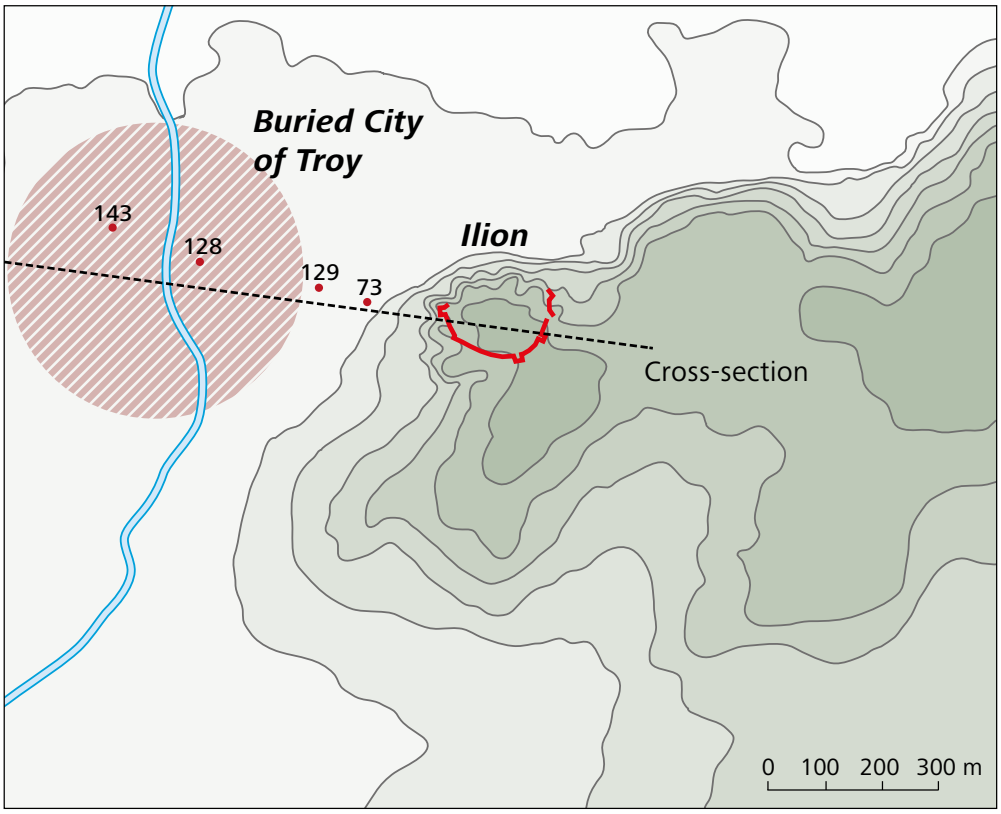
Within the chain of events that ultimately led to the downfall of the Hittite Empire, a key role seems to have been played by Syria. Both the small states in the west and southwest of Asia Minor as well as the Kaška tribes in the north were considered to be notorious troublemakers. In Syria, around 1200 BCE, however, the Great King of Hatti had a loyal vassal. That the Sea Peoples specifically attacked Ugarit first might therefore be construed as an attempt to weaken the Hittite king.

The influence of Mycenaean civilization in this region does not seem to have been very great. Ugarit received large quantities of Mycenaean pottery, but not a single Linear B document was found there. Also, among the approximately 2000 people mentioned in written sources from Ugarit, not a single Mycenaean name has been identified.

"The arrangement of historical material is intimately connected with the view and the judgment of the historian." Georg Friedrich Creuzer 1845, 89

"No historical account is so enduring that it would not have to be tackled again and again." Beat Näf 2010, 180

"Professional historians develop peculiar preferences for self-limitations on excerpts of historical matters that are promising advantages at present." Beat Näf 2010, 17


Buried City of Troy
Ilion
143
128
129
73
Cross-section
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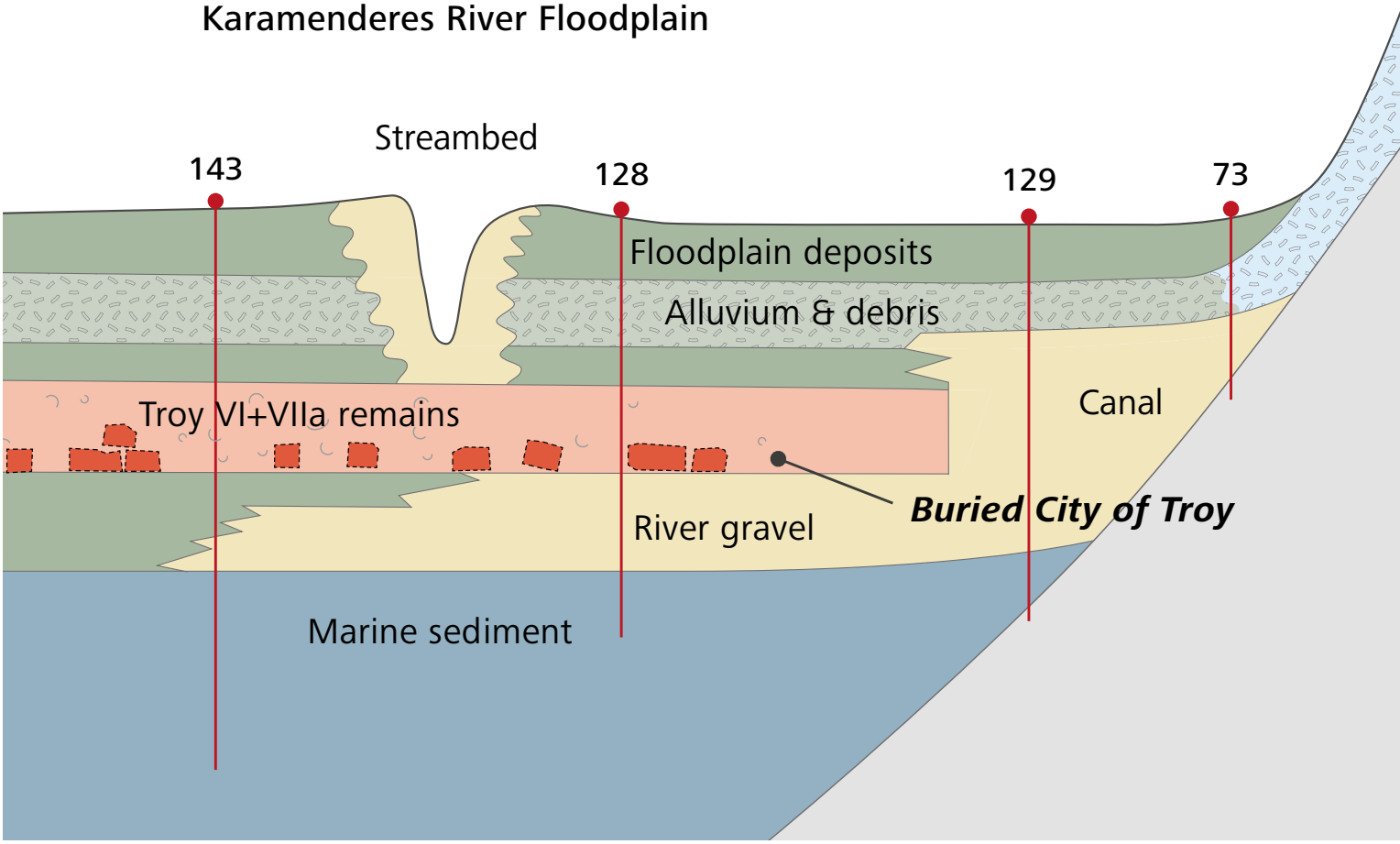
Karamenderes River Floodplain
Streambed
143
128
129
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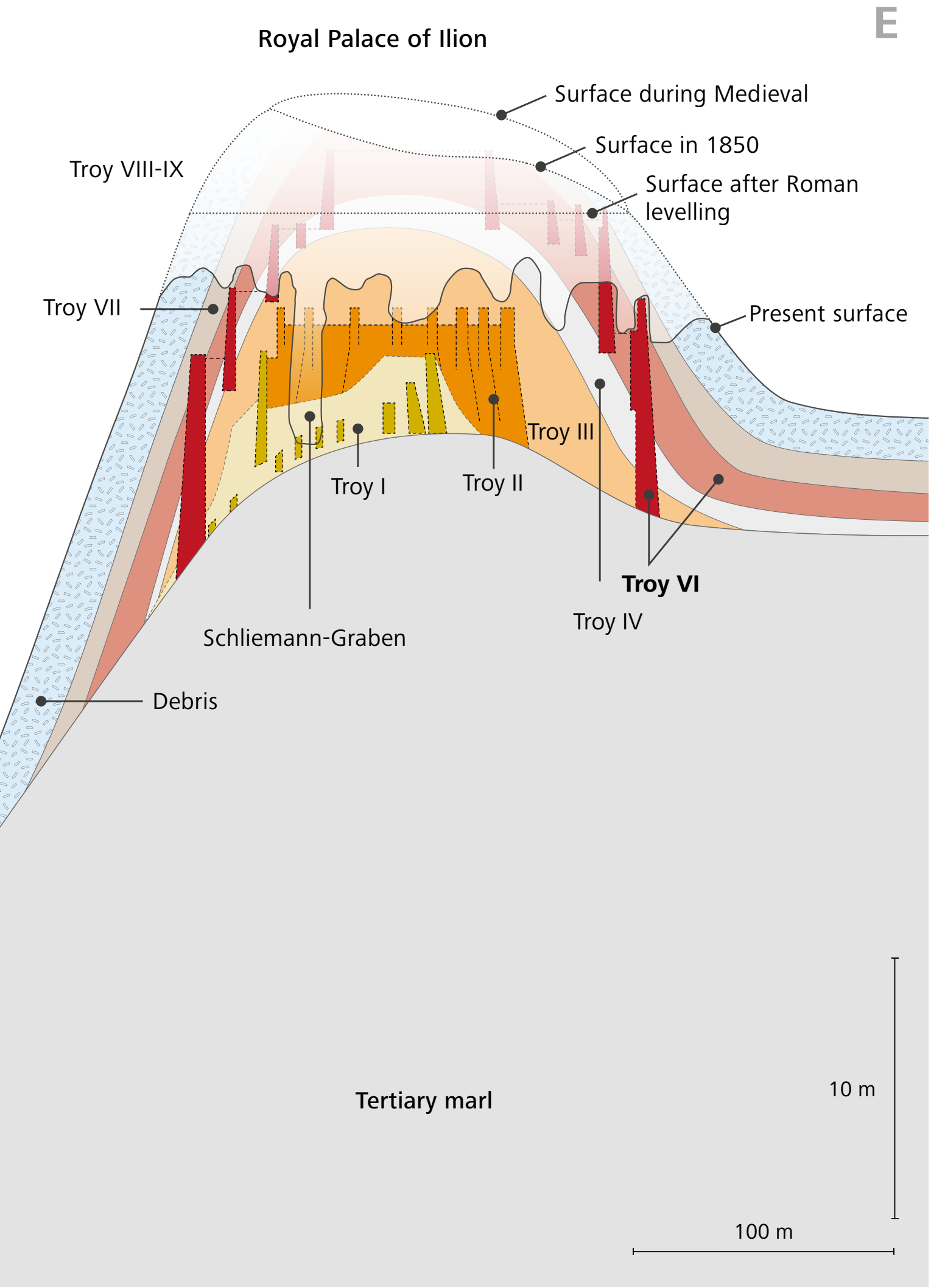
Floodplain deposits
Alluvium & debris
Troy VI+VIIa remains
Canal
Buried City of Troy
River gravel
Marine sediment


Royal Palace of Ilion
Surface during Medieval
Surface in 1850
Surface after Roman levelling
Present surface
Troy VIII-IX
Troy VII
Troy III
Troy I
Troy II
Troy VI
Troy IV
Schliemann-Graben
Debris
Tertiary marl
10 m
100 m

Previous pages: A cross-section through Troy and Ilion shows how much has been removed from the citadel knoll – and how much of the city still lies buried and hidden in the floodplain.

5. Troy

5.1 The History of Troy

Current state of knowledge

For a long time the existence and location of Troy ranked among the most controversial topics in archaeology. Today the majority of researchers assume that the settlement mound on Hisarlık, located at the southwest entrance of the Dardanelles, matches the Troy sang of in the Homeric poems. As early as the 3rd millennium BCE a fortified citadel arose on this hill. The settlement reached its peak of prosperity

The northeast gate of Troy VI (photo taken in 1991).

between 1700 and 1200 BCE. Later, during the Roman Empire, Troy and its heroes were still highly revered. At the beginning of the medieval period, however, the place fell into oblivion and its location was eventually forgotten.

To this day, the size and importance of Troy is still fiercely debated. Some researchers think that the settlement was of regional significance only, while others see Troy as an important commercial center with far-reaching relations. The Troy debate between the former excavator

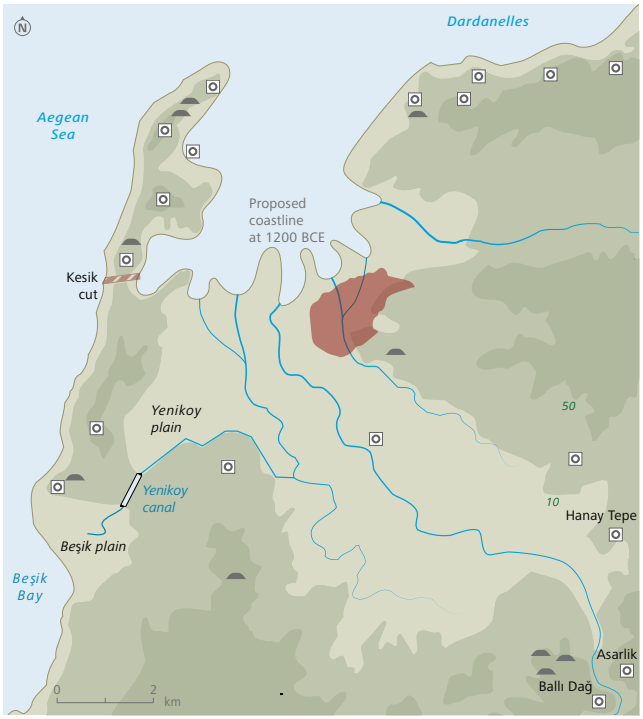
The circle indicates the approximate expansion of the kingdom of Troy according to Homer (*Iliad* 24.546). The dots mark places destroyed by Achilles according to Homer, Apollodoros of Athens (*Epitome* 3.33) and Eustathios of Thessalonica (*Il.* 322.25).

Manfred Korfmann and his peer in Tübingen, historian Frank Kolb, a debate that was for the most part conducted publicly, ultimately did not result in any clarification.

The historicity of the Trojan War, as described by Homer in the *Iliad*, is uncertain as well. It is clear, however, that the settlement was destroyed shortly after 1200 BCE. Hittite documents indicate that both Hittite and Mycenaean kings were trying to expand their influence along the Aegean coast of Asia Minor. An attack by the Mycenaeans would, therefore, be plausible but cannot be proven.

Suggestions
The myth of a former city – Not a fiction

In principle, there are two ways to explain the outstanding significance of Troy in European cultural history. Most prehistorians and historians, including the longtime excavator of the archaeological site Manfred Korfmann and his assistant Peter Jablonka, attribute the importance of Troy to Homer's poetry. From their point of view, people have glorified Troy for thousands of years because of the *Iliad* – even though the place itself is not spectacular, as the excavations have uncovered only a settlement of relatively modest size.



If the extent of the fortified city of Hattuša is projected into the plain of Troy, it covers the area marked red in this map.

There is much that speaks against the idea that Troy's fame is derived from Homer's. First of all, Homer was a Greek writer who wrote a poem in Greek about Greek heroes that ended a mighty war through a victory brought about by their Greek

forces. How and why should subsequent generations (for over 2000 years!) glorify not the victors but rather the little place that was pummeled by the Greeks? If Homer's poems made the Trojan War famous, then Roman aristocrats and the people of Europe should have claimed descent from the victorious Agamemnon and his hometown Mycenae, rather than from the losers of the Trojan War. Secondly, many details transmitted about Troy during its heyday are not even related by Homer. So, there must have been other sources in addition to Homer. Thirdly, the Troy theme was especially popular during the medieval period, a time when Homer's work was not available and was considered lost.

The second possibility, and the one favored here, is that Troy became a myth because the location and its downfall actually were of great significance. Homer's work therefore benefited from the importance of Troy, not vice versa. Regarding the size and importance of Bronze Age Troy, there is scope for models that are quite different from the prevailing paradigms. It is conceivable that the city was much larger, even a hundredfold larger, than was assumed until 1992. Despite more than 140 years of excavation history, only the citadel hill has thus far been explored. According to various ancient texts, this residence of royal families was surrounded by a park. The actual city of Troy was located in the floodplain of the Karamenderes and Dümrek Rivers (Diodorus 4.75.3). The Trojan kings had engaged outstanding hydraulic engineers who channelized the rivers, so that their water could be used for irrigation as well as for cleaning the city (see the section on Guido de Columnis). During the Trojan War, the Greeks are likely to have destroyed levees and hydraulic installations. Since the war was fought in the dry summer months, their actions had no immediate effect. But when the winter came, with Troy already defeated and destroyed, the topographically low-lying ruins were buried under mud carried by the rivers. Thus, the remains of Troy are likely to be buried a few hundred meters west of Hisarlık, and remain hidden. Excavator Manfred Korfmann has said (in a personal conversation) that drill holes in the floodplain revealed pottery deep down below the present surface. The geoarchaeologist who investigated these deposits for almost forty years concluded, "some levels contain a great deal of archaeological material … Pieces of bricks, stones and mortar indicate the remains of a construction. … From an archaeological point of view, the area along the

foot of the northern slope of Troia is an important one … In the light of these findings we consider that it would be very useful to make an archaeological excavation about 7 meters deep."

In its heyday Troy was indeed the epitome of a thriving city – which is why it became such a symbol in European cultural history. Few visitors who had experienced Troy in its glory were likely to have ever seen anything to surpass it.

"I am extremely disappointed at being obliged to give so small a plan of Troy; nay, I had wished to be able to make it a thousand times larger, but I value truth above everything." Heinrich Schliemann 1875, 344

"A great number of the Bronze Age settlements in western Anatolia were probably Luwian foundations, or re-foundations, like Apasa, predecessor of Classical Ephesos, Beycesultan, and perhaps also Troy VI." Trevor Bryce 2003, 31

"To Erichthonius was born a son Tros, who called the people of the land Trojans, after his own name. To Tros were born three sons, Ilus, Assaracus, and Ganymedes. Ilus founded in a plain a city which was the most renowned among the cities in the Troad, giving it after himself the name Ilium." Diodorus Siculus (1st century BCE), *Library of History* 4.75.3 (Oldfather)

5.2 The Investigation of Troy

Current state of knowledge

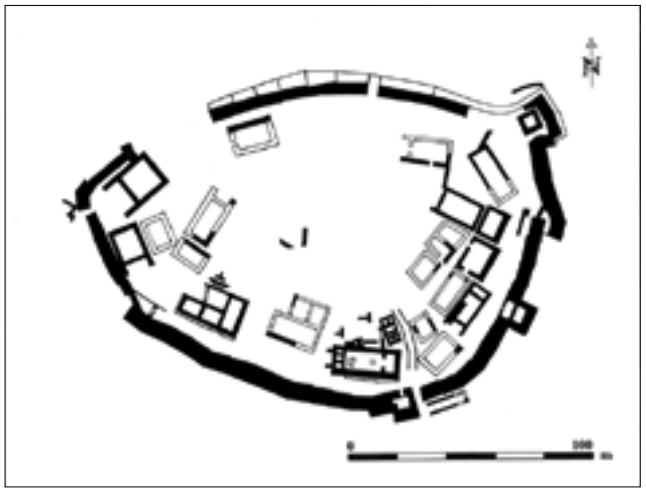
For a long time Heinrich Schliemann was thought to have discovered Troy. He claimed that as a boy his father showed him drawings of Troy in flames and that he then decided to search for the city. But it seems that Schliemann did not become interested in archaeology until he was in his forties, and even then it was just a fashionable thing to do. After a successful career as a businessman, Schliemann learned Latin and Ancient Greek, and traveled to Greece for the first time in 1868, where he searched in vain for the palace of Odysseus on Ithaca. Moving on to the Troad, and using the help of local workers, he dug some holes where Troy was supposed to have been. Schliemann searched in the wrong place, however, following the hypothesis of Jean Baptiste LeChevalier. When he could not find much of interest, he decided to leave. In Çanakkale, Schliemann missed his ferry – and unexpectedly came across Frank Calvert, the son of an English diplomat. Calvert was highly interested in Troy and a proponent of a new theory regarding its location: that the citadel had been on the hill called Hisarlık. Additionally, his family had purchased parts of this hill. This theory had first been put forward in 1821 by Charles Maclaren, a Scottish newspaper publisher and amateur geologist. Maclaren identified Hisarlık as the Homeric Troy without having visited the region. His theory was based to an extent on observations by the Cambridge professor of mineralogy Edward Daniel Clarke and his assistant John Martin Cripps. In 1801, those gentlemen were the first to have linked the archaeological site at Hisarlık with historic Troy.

Frank Calvert managed to win Schliemann over to undertake joint excavations on the Hisarlık hill. Schliemann later played down the importance of Calvert. After all, he was wealthier, more driven and better at self-marketing than Calvert. In retrospect, however, he was also more irresponsible: Without permission, he drove a 40-meter wide and 15-meter deep ditch through the middle of the hill, without paying attention to more recent settlement layers. Later Schliemann would

Right page: This topographical map of the plain of Troy was published by Thomas Spratt and Peter Wilhelm Forchhammer in 1850.

Straße der Dardanellen
HELLESPONTOS.
AEGAEISCHES
MEER.
Sigeum
Korn-
Felder
Neu-Ilion
Thymbrios
SIMOEIS
Korn-
Felder
MENDERE
TSCHAI
SIMOEIS
Tenedos
Bemerkungen.
Die Namen der alten Geographie sind in gradstehender
INITIAL und Rotunda Schrift.
Ankergrund
Richtung des Laufs der Flüsse und Meerströmung
heutige Landstraßen, nur für Reiter und Fußgänger

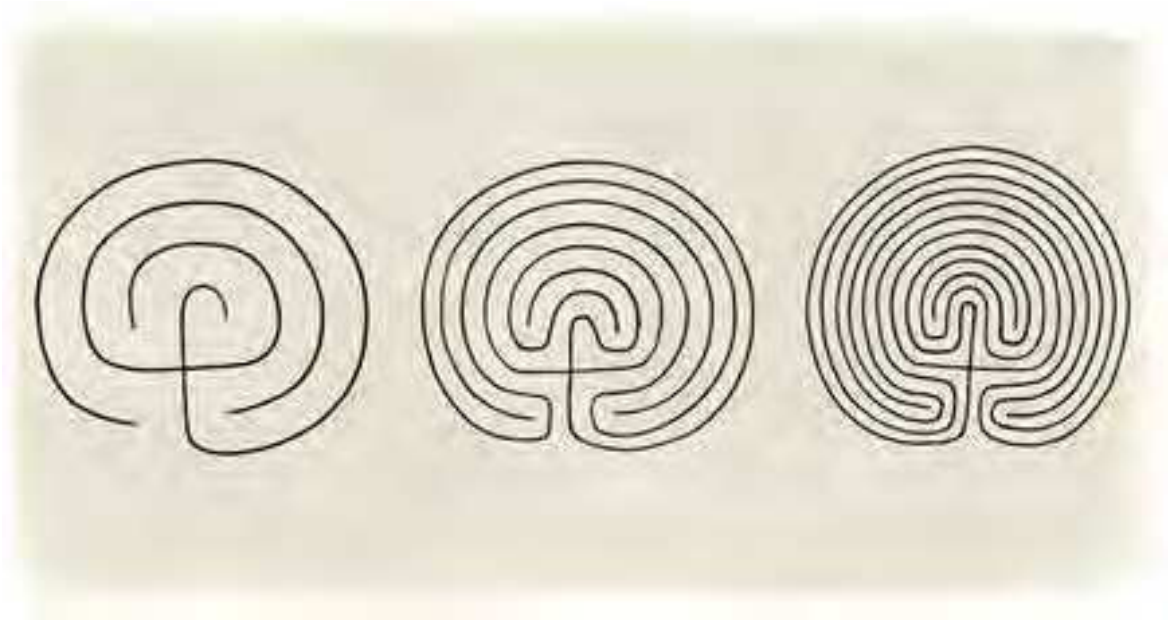
be much criticized for his crude methods. German scientists denied him the professional recognition he coveted, even after he had become a celebrity with the discovery of the so-called Priam's Treasure in 1873. Today, however, Schliemann is considered one of the pioneers of modern archaeology, despite his initially rough approach.



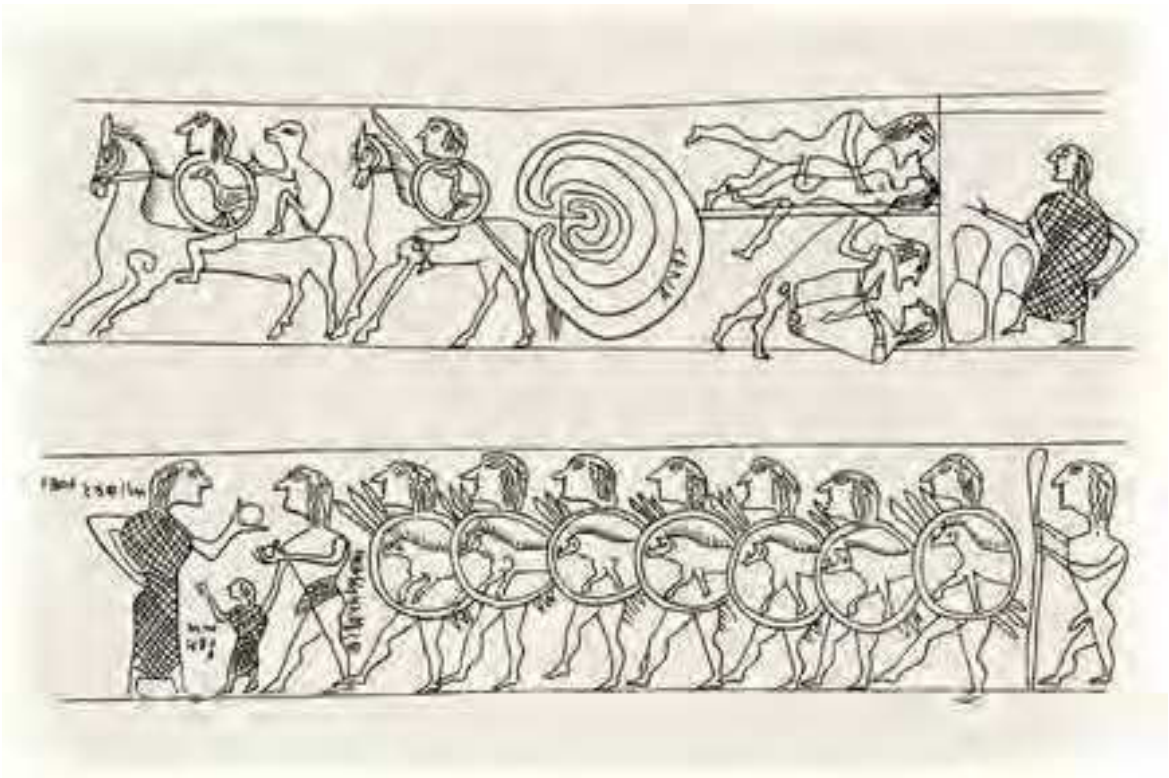
The citadel of Troy VI covered an area of about 20,000 m² and was enclosed by a 522 m long fortification wall.

All in all, ten main phases of habitation have been recognized on Hisarlık, suggesting a continuous settlement from the 5th millennium to late antiquity. The excavations between 1988 and 2012 were directed by scientists from Tübingen in Germany, initially by Manfred Korfmann.

The overgrown Schliemann Trench in Troy makes space for a view towards the north to the Dardanelles.

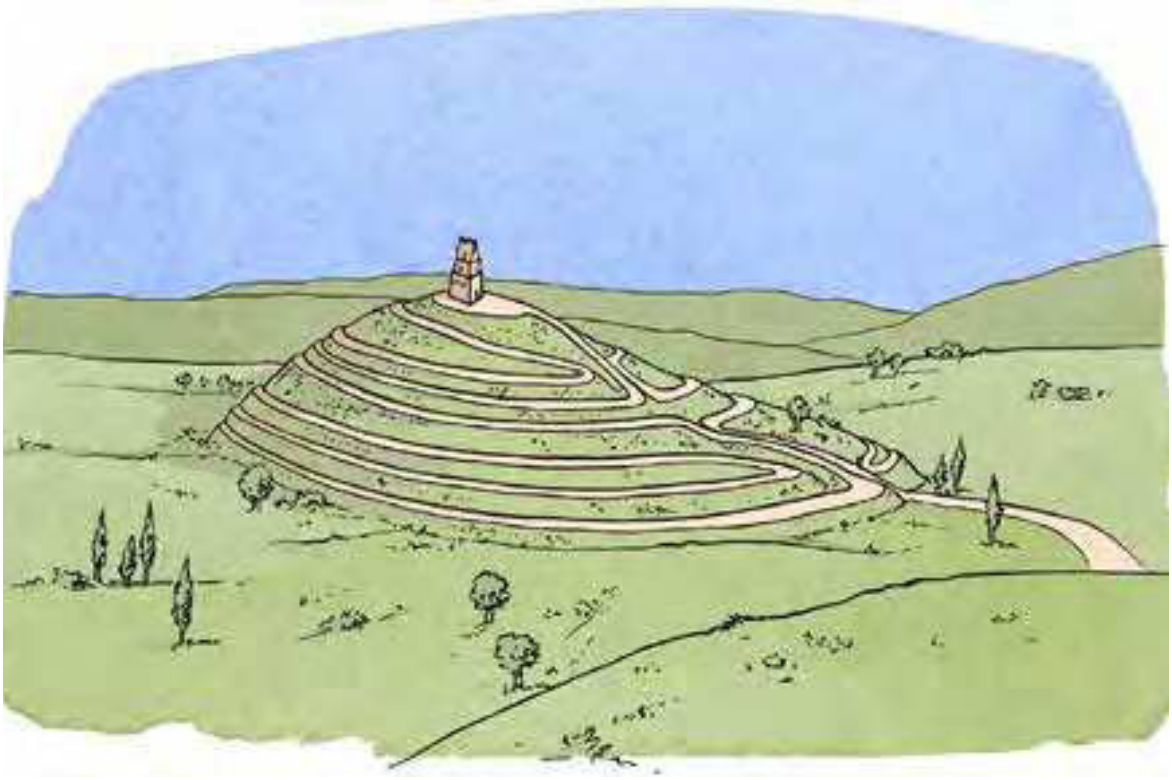


Of the classic labyrinth (center), a simplified and a more complex form exist.



Graffito on the so-called wine jug from Tragliatella. It shows a labyrinth that is inscribed as "Truia."

After his death, the chief natural scientist of the project, Ernst Pernicka, took over. The German Research Foundation discontinued its financial support in 2009, but some work did continue as it was funded by donations. At the end of 2012, the University of Tübingen's excavation permit



Labyrinth on a castle hill. The trenches on Hisarlık may have had a similar arrangement.

expired. Since 2013, Rüstem Aslan from the University of Çanakkale has been the new director of excavations. He too had been part of the previous project and received his PhD at the University of Tübingen.

Suggestions
A look below the temples of antiquity

The strong criticism of Schliemann's initial brute force has made legislators and excavators in Turkey and Greece overly cautious. Because excavations potentially destroy cultural heritage, today archaeologists are increasingly regarded as conservators rather than researchers. They are allowed to dig down to the first preserved architectural floor plans and expose these, but removing them is often not permitted. The underlying layers thus lie hidden forever. Precisely for this reason, the Luwian culture remains undiscovered to this day. In the case of a 20-meter high settlement mound, like the one in Kadıkalesi on the Aegean coast of Turkey, archaeologists know little more than the top

In the 1960s, Vladimir Milojčić directed an excavation of a complete stratigraphic profile at the edge of the settlement mound of Pefkakia Magoula in Volos, Greece.

buildings dating to the Byzantine period. Layers recording thousands of years of settlement history remain invisible below, despite ongoing excavations. In order to explore those earlier deposits, one would have to remove some of the walls above.

What is much needed in western Turkey are deep soundings and profile trenches extending all the way down to the bedrock. Only by creating such sections can the sequence of settlements be determined. In this respect, western Turkey is lagging behind the research on Crete and mainland Greece by more than a century. The Yugoslav-German archaeologist Vladimir Milojčić has exposed an exemplary profile showing thousands of years of habitation at Pefkakia Magoula, near the Greek city of Volos. Exactly such cross-sections are needed from settlement sites in western Asia Minor. We know where it would be most promising to start. Since finds are recovered and exhibited, and walls are carefully drawn and restored using virtual reality, therefore nothing would be destroyed. Also, many hundred settlement mounds are known in western Turkey alone. The partial removal of one hill would

not cause any damage. Modern day science could benefit from having more of the courage and pioneering spirit of former times.

"Next April I intend to lay bare the entire hill of Hissarlik, for I consider it certain that I will find there Pergamos, the citadel of Troy." Heinrich Schliemann, August 22, 1868, Letter to his brother Hans and his sister Doris

"This does not mean that outsiders are necessarily wrong. Heinrich Schliemann, the German tycoon who first excavated at Troy and Mycenae in the 1870s, made a naïve but fruitful conjunction of legends, historical documents and topography, showing that much as academics might like it to be so, the obvious is not always false." Martin Bernal 1987, 5

5.3 The Lower Town

Current state of knowledge

Heinrich Schliemann came to the conclusion early on that prehistoric Troy was precisely limited to the extent of the excavations he led himself. The limited size of just 180 by 160 meters, however, strongly contradicts all historical descriptions of the city. As a consequence, Schliemann was much criticized throughout his life; scholars outright rejected the identification of the archaeological site with the vision of Troy as celebrated by Homer.

After Schliemann's death in 1890, more people started believing that Troy could indeed have been modest in size. In the 1960s, Kurt Bittel, then president of the German Archaeological Institute and longtime excavator of Hattuša, even argued that Troy had merely been a pirates' nest. The British archaeologist John Bintliff went further still and claimed that Troy was only a fishing village, inhabited by no more than a hundred souls. Manfred Korfmann followed the prevailing zeitgeist when he became excavator of Troy in 1988. At conferences, in personal conversations, in media interviews and in scientific publications, he played down the importance of Troy and echoed Bittel's notion of a "pirates' nest."

In April of 1991, Korfmann fundamentally changed his mind regarding the size of Troy. From then on, until his death in 2005, the size and importance of Troy grew in his point of view, in several steps, until the known parts of the settlement had become as much as twenty times larger than previously imagined. The excavator argued that a densely populated lower town extended right outside the fortress walls of Troy VI, even though excavations had revealed very few building remains there. It was these assumptions regarding the size and importance of Troy that provoked much controversy and eventually led to a fierce scholarly dispute. This controversy was fought out primarily between Korfmann on one side and his peer in Tübingen, historian Frank Kolb, on the other.

In 1993, during geophysical prospecting, Helmut Becker, a geophysicist from Munich, discovered an anomaly that Manfred Korfmann initially interpreted as a mudbrick wall with wooden defense towers belonging to Troy VI. From his perspective, it was built as a proof of

power and had collapsed after a disastrous fire. Excavations conducted during the following year, however, showed that the anomaly was caused by nothing more than an artificial incision into the bedrock, a ditch. This nearly 4-meter wide trench lies about 400 meters outside the acropolis. Soon a second similar trench was found still further outside. The investigation of the trench monopolized the excavators' capacity for almost twenty years, without leading to significant new insights. Manfred Korfmann and his successor Ernst Pernicka interpreted it as an obstruction for approaching chariots.

Suggestions
Twenty years of excavations in the palace garden

Korfmann's about-turn regarding the size of Troy in April 1991 coincides with the first meeting he and I had. At that time, I was a Senior Research Associate in the Department of Earth Sciences at Cambridge University and Korfmann had invited me to give a lecture in his department about the geoarchaeological research I had done in the Argolid on behalf of the German Archeological Institute. After my talk, we spoke in private for several hours about the potential former extent of Troy and its investigation. He had already assigned the task of reconstructing the landscape to Ilhan Kayan, a professor from Izmir University. Thus, he saw no opportunity for me to get involved in the project.

That summer, Korfmann encouraged Ilhan Kayan to investigate the artificial trenches and canals that were known in the landscape around Troy. He also began searching for a lower town outside the citadel using geophysical prospection. The function of the trenches that were soon found during the prospection can be guessed by their contents. If the contents were arrowheads, bronze weapons, bone fragments and remains of chariot wheels, they would argue in favor of defense as a purpose; but the excavators did not find such things on Hisarlık. Instead, they found pollen from many different, even exotic plants in the trenches. Also, a complete skeleton of a bull was preserved in one place inside the trench. It is thus conceivable that the citadel of Troy VI was indeed surrounded by a large palace garden – this would explain why hardly any traces of buildings were found outside the citadel. The

trenches may then have kept sacred bulls (which were allowed to roam around freely in parts of the park) from running away. They could also have provided symbolic protection and may have been meant to keep evil spirits away. This would explain why in Homer's *Iliad*, Achilles dragged the corpse of Hector around the city walls, because in doing so he broke the spell over Troy and the city was henceforth destined to fall.

The royal residences of the sixth and seventh city of Troy stood on concentric terraces, so that the innermost district was of a circular construction. This round structure continued in the trenches outside the fortress walls. In antiquity, concentric rings in the form of a labyrinth were in fact closely connected with Troy. Engravings on a wine jug from the Roman city of Tragliatella (around 620 BCE) depict a ceremonial "Troy dance" that was mainly performed when cities in early Italy were founded, and then, significantly, before the city walls were to be erected. Hundreds of stone labyrinths in England and Scandinavia bear names related to Troy, ranging from Troy Town to Trelleborg. Half a century ago, some experts assumed that a maze-like structure would eventually be discovered in the city plan of Troy. It is quite possible that this circular city plan also continued in the floodplain below the castle – and down there the trenches could have taken the form of navigable canals.

The symbol of the labyrinth was the guiding principle of my book *The Future of the Past* (2001). Since 2002, it has also been my company's logo (science communications GmbH). After Manfred Korfmann died in 2006, his collaborators dedicated a memorial booklet to him entitled *The Last Ring*, which had a cover that also pictured concentric rings in the shape of the primordial Labyrinth. Today this symbol is reflected in the logo of the Luwian Studies foundation.

Texts from antiquity to the late Middle Ages indicate that the actual city of Troy extended into the plain beneath the citadel of Ilion (Diodorus 4.75.3; William Gell 1804, 121). The living quarters of the population, craftsmen's workshops, garrisons and port districts are likely to have been located down there. Various sources describe how the remains of the city, after its destruction by the Greeks, literally disappeared under water and mud (Strabo 1.3.17; Dio Chrysostom 11.76; Quintus of Smyrna 14.646–652; Homer, *Iliad* 12.16–33; see also Plato, *Timaeus*

25d). During almost 150 years of research history in Troy, however, all excavations have been restricted to the hill of Hisarlık, which due to its elevation was never affected by mudflows. In other words, the actual lower city of Troy may indeed still lie hidden in the plain underneath a layer of gravel and alluvial silt. Approximately 300 drill holes that were made by Ilhan Kayan to investigate the plain's stratigraphy produced thick layers with artifact-rich deposits. Accordingly, the buried lower city of Troy may already have been found in the floodplain. Archaeologists looking for the remains of the actual city of Troy may only need to dig a mere 5- to 6-meter trench 300 meters west of Hisarlık – and they are likely to make a breakthrough discovery surpassing that of Heinrich Schliemann.

"I now therefore assert most positively that Troy was limited to the small surface of this hill; that its area is accurately marked by its great surrounding wall, laid open by me in many places." Heinrich Schliemann 1875, 18

"Before the house near the courtyard was an enclosure, widespread, four acres of trees heavy with fresh fruit … Such was the shady garden. Hard by, a brook divided in two runnels; from this the people drew their drinking, from that the gardener cut up the water into many curving channels and carried it from plant to plant." Nonnos, *Dionysiaka* 3.140–165 (Rouse)

"In the reign of Ericthonius, the city of the Trojans was either in another situation, or covered only the upper part of the hill; … but when Tros, his son, ascended the throne, the people were so multiplied that they began to overspread the declivity, and the additional town was called Troy, in honour of that prince." William Gell 1804, 120–121

"They say the old radius (wall) of Troy had amounted to 60 stadia."
Carl Gotthold Lenz 1798, 305, quoting *Codex Venetus A* (22.208), which in turn refers to Diocles (probably of Peparethus, 4th century BCE). Accordingly, Troy would have been about 180 times larger than the citadel of Troy VI.

"It appears then that both the Salian dance and the Troia [dance] were meant by their intricate armed movements to strengthen the defence of a city by supernatural means … The actions must have been thought to create an additional and abstract wall of power to exclude hostile influence."
W. F. Jackson Knight 1932, 452

"I might not be far wrong should I describe Troy as a pirate fortress which exercised control over the straits. … The representation of Troia sketched above definitely corresponded to what was thought about it then."
Manfred Korfmann 2003, 8

"The city was indeed unusually large for its time (!)."
Manfred Korfmann 2003, 8

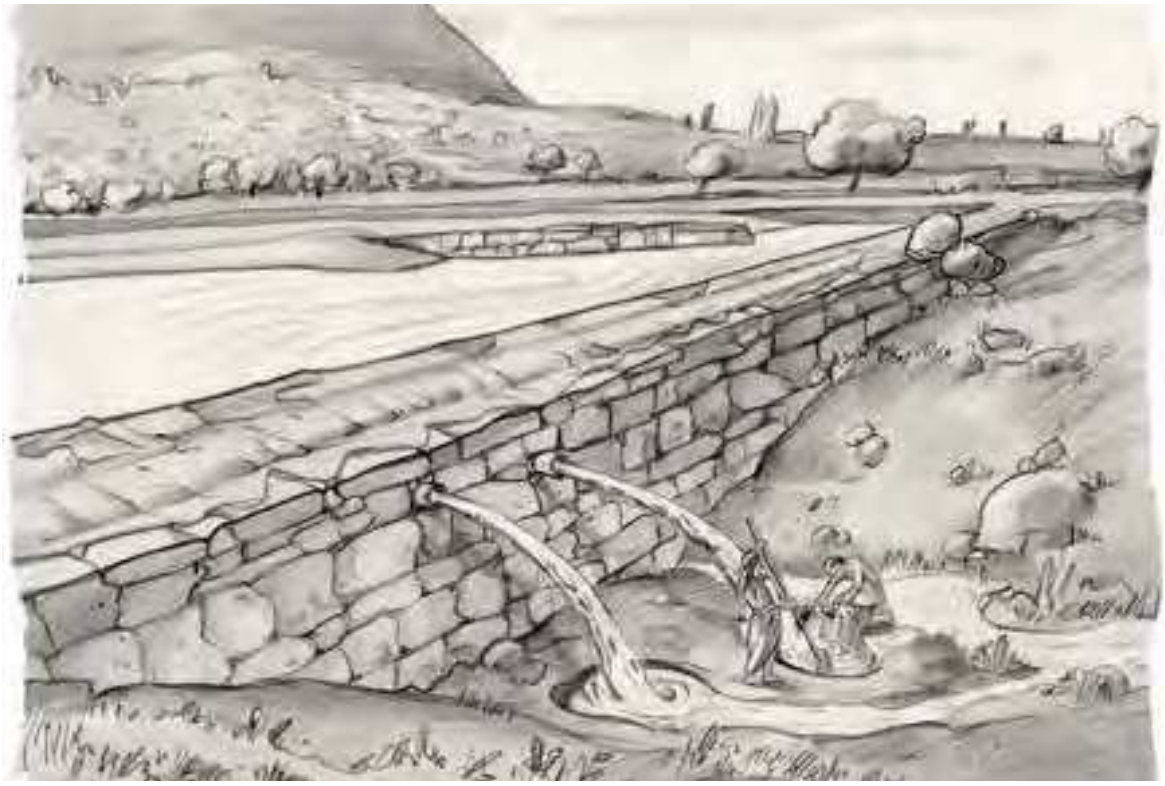
"How important the symbols of Troy's power were, even a voluble tongue cannot easily describe: kings were terrified when they heard its name, generals trembled before its command. Wealthy, an empire with many districts, royal castle of the kings, famous residence of noble men, parade of generals. Who would have thought that a city defended with so many peoples and towers would be taken by siege? The invincible collapsed completely and there was nothing left of her; burned she lies on the ground, they did not even have a name for her [anymore]. She collapsed, giving the world a tremendous example that the present hour is not safely reliable. For it is now a tilth where Troy once stood, and the rich soil that needs to be processed with the sickle, is bristling with Phrygian blood." Albert von Stade 1249, *Troilus* 6.5.841–854

5.4 Hydro Engineering During the Bronze Age

Current state of knowledge

Excavator Manfred Korfmann was convinced that Troy's success was partly based on its favorable strategic location at the entrance to the Black Sea. Strong northern winds prevail at the Dardanelles, which would have rendered the strait impassable for Bronze Age ships. According to Korfmann, skippers had to wait for favorable conditions in the port of Troy and, most likely, paid port and pilot fees. The excavator and his former team's ancient philologist, Joachim Latacz, thought that the natural beach in Beşik Bay, around 10 kilometers south of Hisarlık, had served as the port. According to them, even trade vessels were simply drawn up onto the beach.

Geomorphological studies of the plain of Troy have shown that the current bed of the Karamenderes River is not identical with its old course. The whole plain is crisscrossed by dry river beds and artificial canals. Peter Wilhelm Forchhammer, at the time professor of geography at Kiel University, and Thomas Spratt of the Royal Navy had conducted



Artistic reconstruction of the dam in Mycenae.

Artificial reservoir dating back to the Hittite period (re-excavated) near Alaca Höyük.

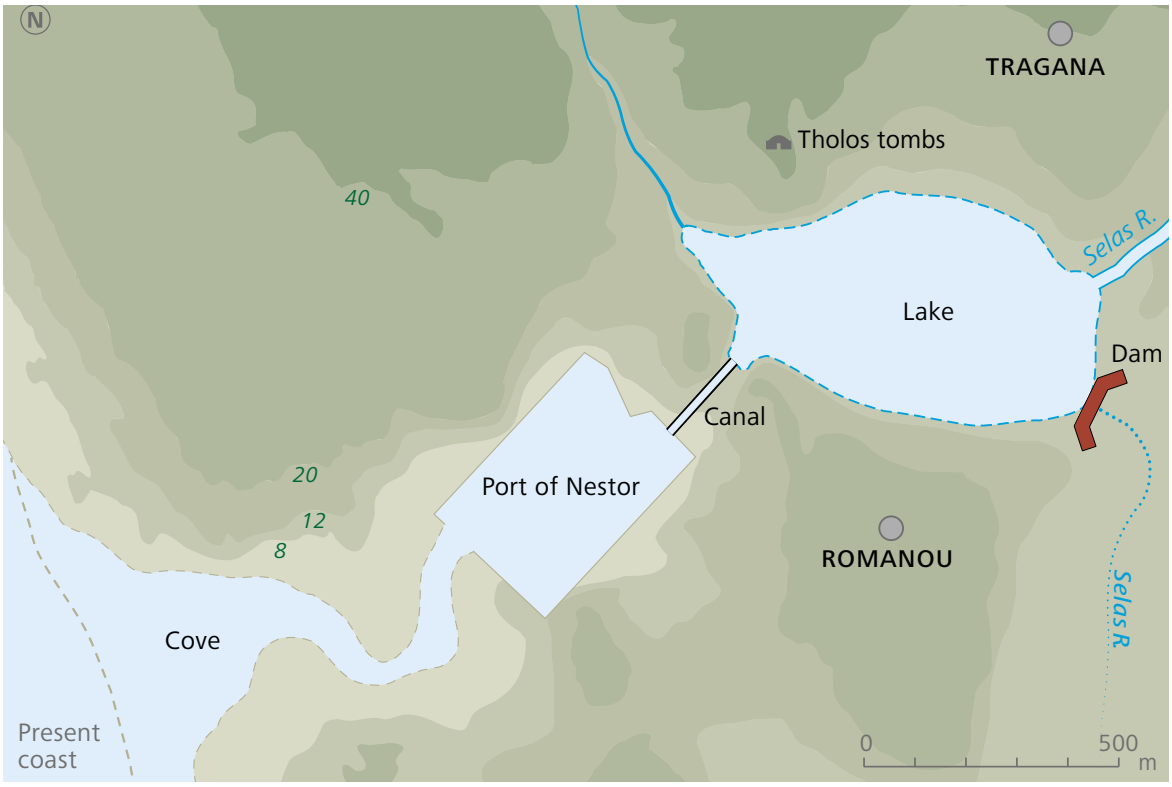
The artificial ponds within the southern citadel of Hattuša are now silted up. The stone row indicates the outline.

The artificial harbor of Alexandria Troas, approximately 30 km south of Troy, is partially silted up but still visible.

surveys in the plain as early as 1839. Forchhammer's records, along with the map of the area prepared by Spratt, provide excellent insights into the topography of the landscape in the middle of the 19th century. It contained various silted-up waterways and heaps of spoil from digging. Schliemann, too, was convinced that the Trojans had diverted the Karamenderes River in order to prevent ephemeral flood.

Suggestions
Artificial ports and underground waterways

A thousand years after the end of Late Bronze Age Troy, a sprawling city sprung up again in the same region: Alexandria Troas. Situated 30 kilometers south of Hisarlık, it possessed an important feature: two artificial port basins that are still visible today and even filled with water. Constantine the Great (272–337) is said to have considered making Alexandria Troas the capital of the Roman Empire, but eventually



After the collapse of the Mycenaean Kingdom the Port of Nestor and the artificial reservoir silted up quickly.

Schliemann's sketch indicates the border between Ilion and the plain. He identified the old course of the Scamander River, a small harbor basin and a sand heap (with spoil from digging canals).

he opted for Byzantium – which later grew into Constantinople and ultimately became Istanbul.

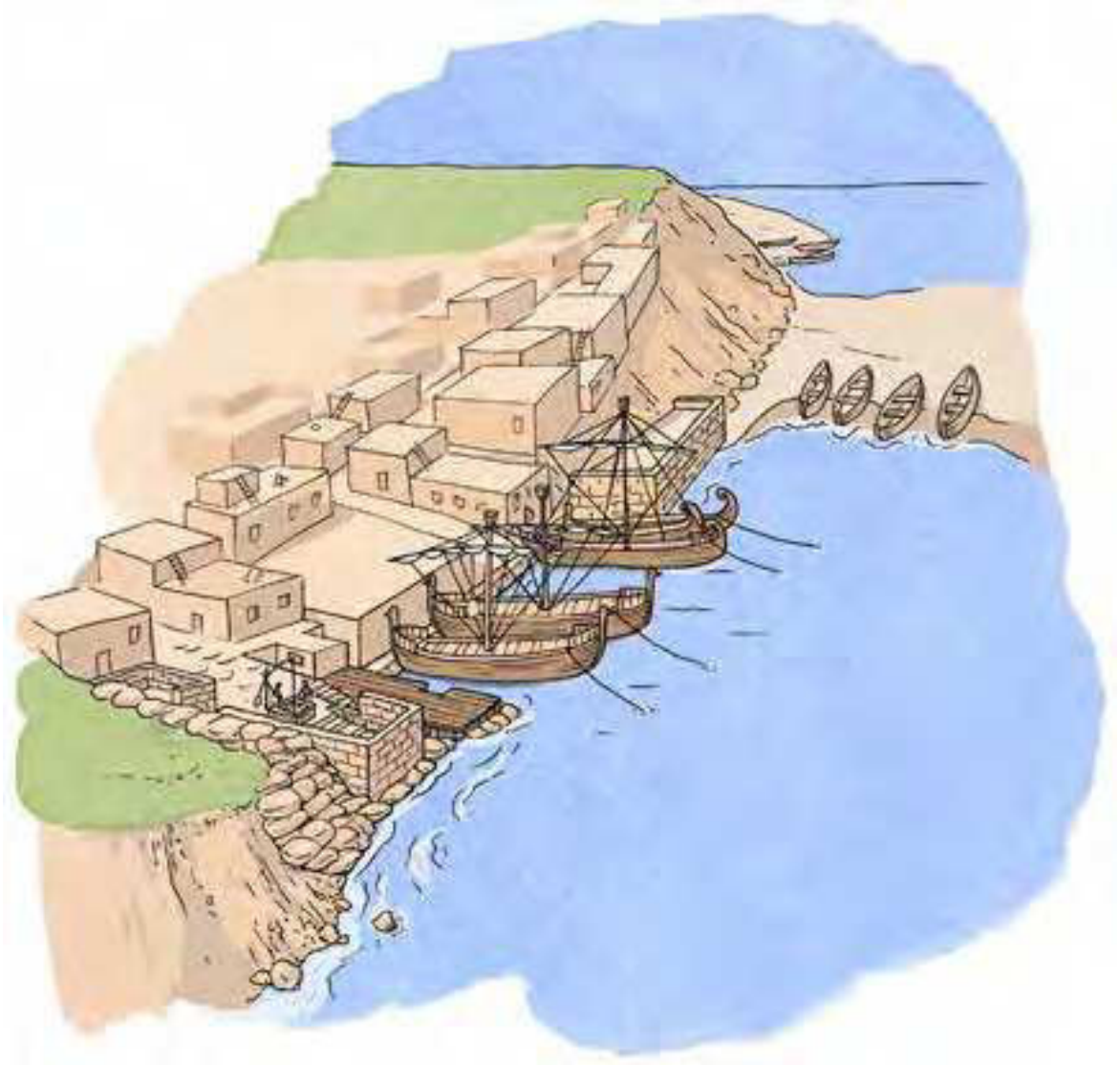
Such elaborate hydraulic constructions are also known from the Late Bronze Age. These include artificial ports in Syria and Palestine that remained sediment-free due to skillful channeling of the water flow. In the 14th century BCE, in western Thebes on the Upper Nile, Pharaoh Amenhotep III ordered the construction of an artificial port, two square kilometers in size. We also know numerous hydro-engineering installations from Mycenaean

Uniform rectangular incisions into the coast at important Minoan settlements on Crete suggest that wharves made of wood may have once been there. Pictured here is Gournia.

Greece. Chief among them are a still-functioning river diversion near Tiryns, the drainage system of Lake Copais west of Thebes and the Port of Nestor at Pylos.

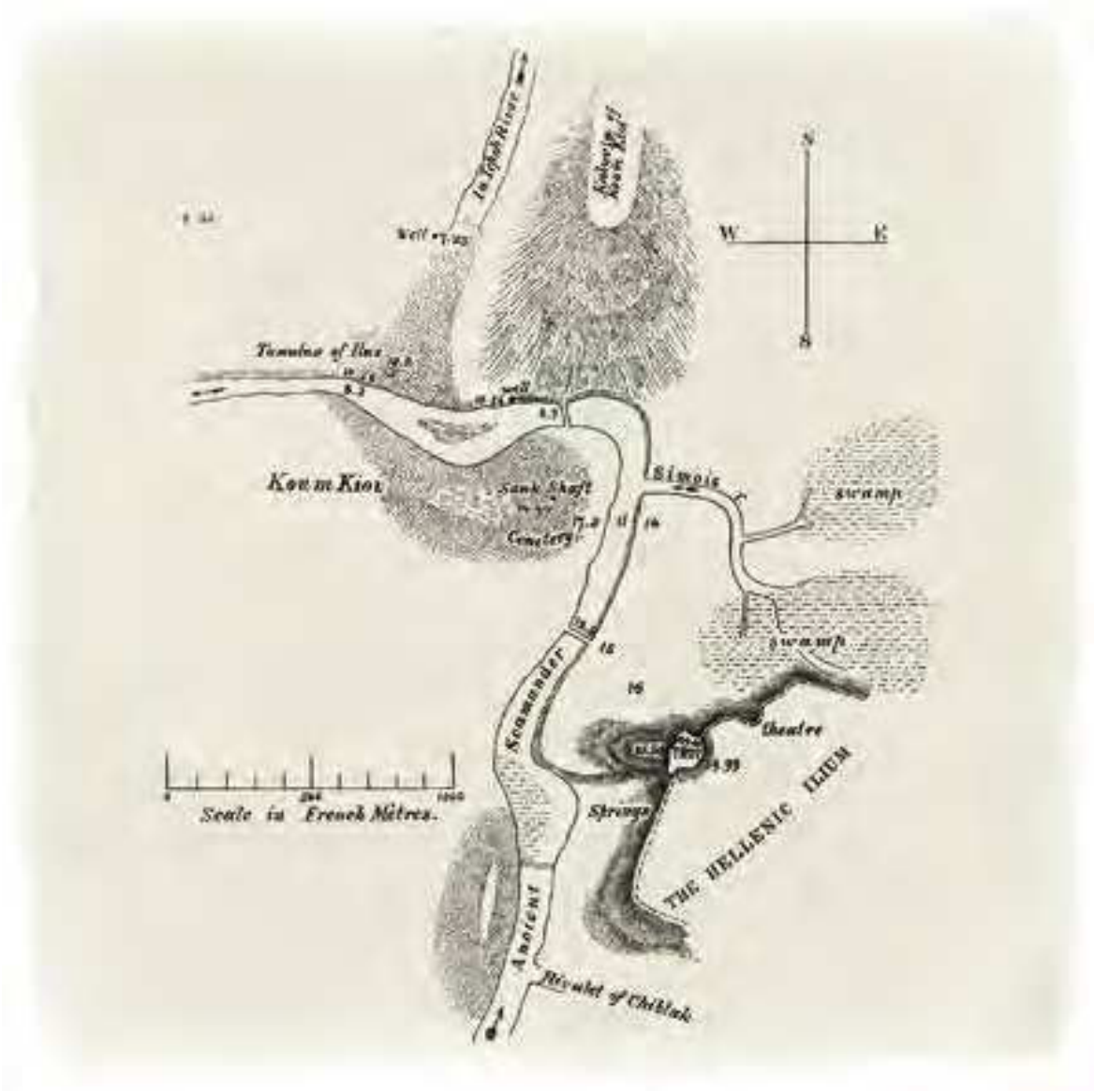
However, nowhere is there greater evidence of human intervention in the natural courses of rivers as those which can be found at Troy. Characteristically, the river crossing the alluvial plain bore two names in antiquity. The gods called it Xanthos ("yellow river," *Iliad* 20.74). Later, the inhabitants of Troy are said to have diverted the river artificially, so that it was henceforth called *Skamma Andros* (Skamandros, Scamander), "because the digging (*skamma*) of the man (*andros ekeinou*) siphoned the Xanthos out of the earth" (Eustathius, *Commentarii ad Homeri* 20.74).

It is absolutely possible to determine what the ancient course of rivers and the structure of port facilities of Troy looked like and how they



Late Bronze Age harbors are likely to have existed on the coast of Minoan Crete.

functioned. Such a technical reconstruction would have to be based on canals and basins that are still recognizable in today's landscape. These could then be compared with the Late Bronze Age hydraulic installations known from Greece, with the information provided by Spratt's map, and with the general knowledge of hydrology. Accordingly, the following scenario would be possible: The main input of water always came from the south through the Karamenderes River (Scamander). This river was channelized and diverted to exit into Beşik Bay. An artificial canal a few meters wide but as much as ten meters deep rendered high water velocity and thus ensured that most sediment would be



This map from Schliemann's *Ilios* shows the Scamander flowing past the foot of Hisarlık.

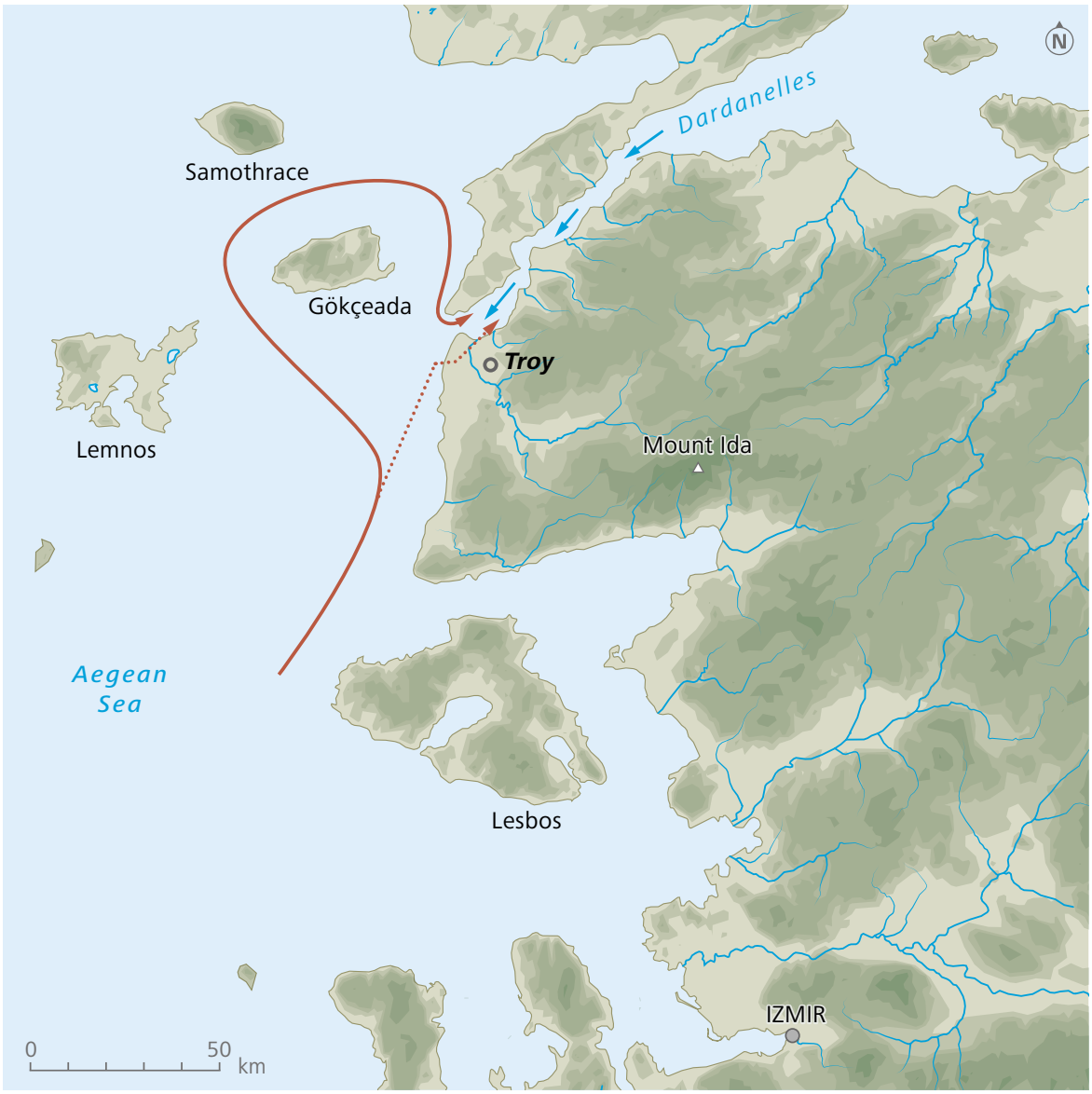
carried out of the plain. As a result, the sediments making up the beach of Beşik Bay consist of material that was transported there by the Karamenderes River, as has been known for seventy years.

The Dümrek River (Simoeis in antiquity), coming from the east, was diverted in such a way that it circled the citadel. At the bottom of the Hisarlık hill was a small haven. A canal extended from there towards the western side of the plain, right through the city itself which was located in the floodplain. In sections, the navigable canal could have even been built over. All in all, it would have looked much like the

The Bronze Age water regulation systems of Troy have long since silted up. Sometimes during spring, bodies of standing water appear on them, so that the outlines of the basins become visible again.

canals in Amsterdam from an aerial view. Trojan aristocrats and their visitors were able to pass through the city by boat and would thus reach the main seaport without having to use roads.

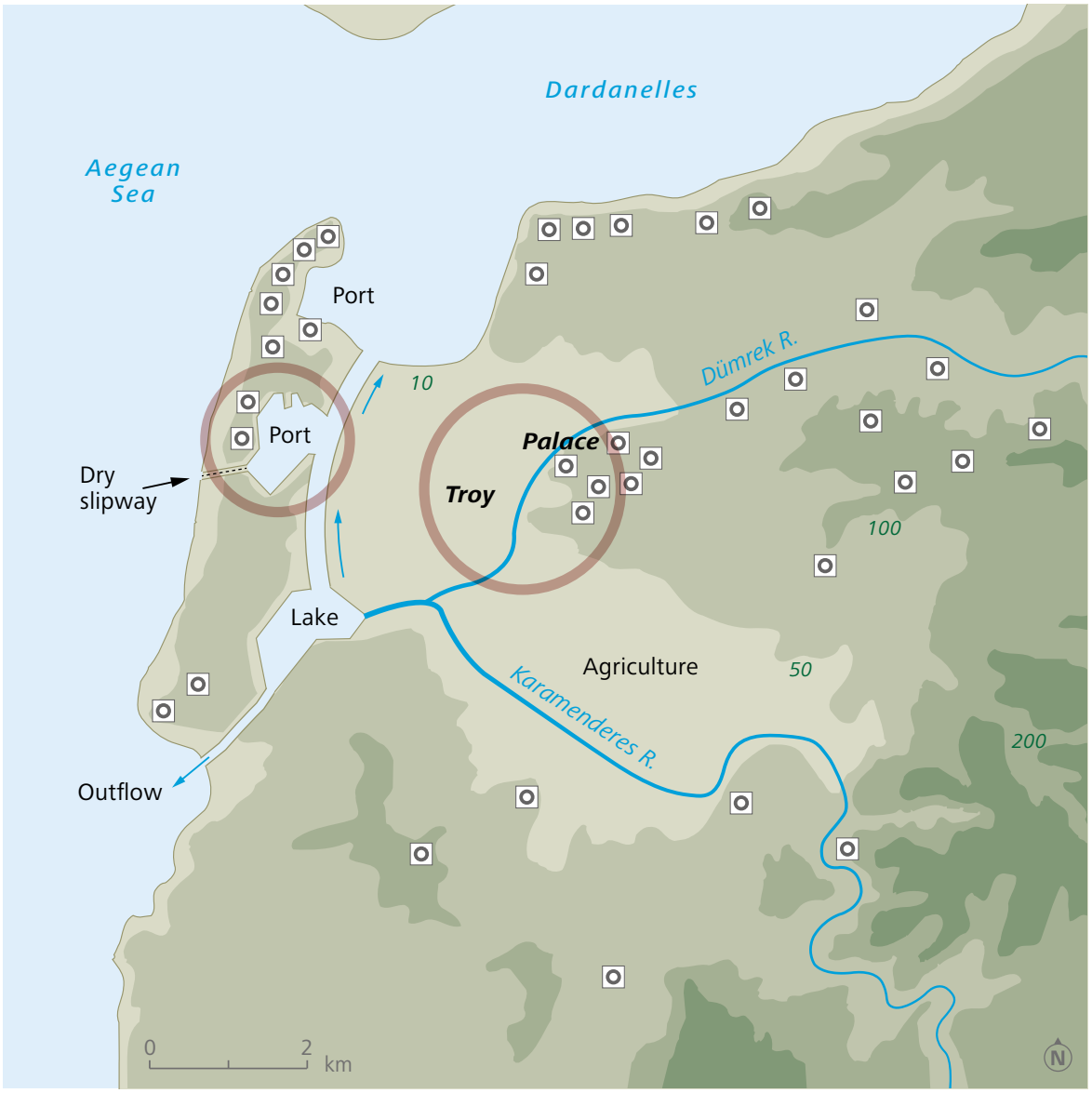
The most impressive feature of the port facility, however, was a 30 meters deep incision into the coastal ridge, one whose remains are still visible today. Through this, ships were pulled about 500 meters over land to an inland port basin inside the floodplain that was filled with sediment-free freshwater. After unloading and loading, the skippers could wait for favorable wind conditions and then leave the port towards the Dardanelles by using the main westward current to get to the Aegean or by picking up a counter-current along the south shore of the Dardanelles that would carry them eastwards towards the Sea of Marmara. The entire system required no movable parts; levee walls of different height provided overflows when runoff was high.



A few hundred meters of transport overland at Troy would have saved 50 km journey at sea when entering the Dardanelles.

With such a system, the Trojan engineers would have achieved the following goals:

1. The rivers supplied water for the city and for the irrigation of fields in the floodplain.
2. Water supply was guaranteed, even during dry seasons.
3. The city was protected from ephemeral floods.
4. The city had three sheltered ports at its disposal.
5. Entering the Dardanelles by boat became feasible.



Hypothetical reconstruction of the water management system in the plain of Troy at the end of the Bronze Age.

6. Freshwater in the main port basin repelled worms and algae away from the hulls.
7. Concentric canals offered additional defense.
8. Using boats, aristocrats could cross the city quickly and discreetly.

Perhaps the engineers had even set up the system in such a way that the streets of the city could periodically be rinsed with water to rid them of debris and feces, as is claimed by Guido de Columnis (5.177).

Assuming Troy is identical with the Wiluša mentioned in Hittite texts, a contract between Hittite king Muwatalli II and the king of Wiluša, Alaksandu, provides an additional hint concerning the existence of hydro engineering works. The text refers to a god of Wiluša named KASKAL.KUR (KUB 21.1 iv 27–28) which may stand for natural or artificial underground waterways.

"Their ships were drawn up far away from the fighting, moored in a group along the grey churning surf – first ships ashore they'd hauled up on the plain [sic!]." Homer, *Iliad* 14.32 (Fagles)

"Everything tends to suggest that these channels must belong to a period of more remote antiquity than has generally been supposed … Such excavations are among the earliest works of mankind."
Peter Wilhelm Forchhammer 1842, 38

"On low but steeply sloping coasts, it was almost impossible to beach ships without damaging them. Thus, installations were required which enabled the former and prevented the latter. For these purposes, channels were dug – actually being cuts into the coast – which gradually dipped towards the sea, and through which ships could easily be pulled without risk of becoming damaged." German engineer and major Müller about the locality of the *Iliad* in Carl Gotthold Lenz 1798, 139

"In fact, there is neither in Greece nor in Asia Minor a plain which experiences the influence of the water as much as the Plain of Troy."
Peter Wilhelm Forchhammer 1850, 17

"Indeed, while a farmer was digging an irrigation ditch for his fields in 1989, a pithos was found next to Roman (!) concrete wall at a depth of 3.5 m (!) below the surface of the plain approx 1,8 km north of Troia in the direction of Kumkale." Manfred Korfmann 2003, 11

5.5 Descriptions of Ancient Troy

Current state of knowledge

During the 6th century CE, Hisarlık apparently was completely abandoned; the name of Troy, however, remained connected with the surrounding area. From the 12th century onward, we have notes and descriptions of visitors whose ships anchored near Troy. Even though they landed in different places, the locals always referred to it as Troy – no matter where they set ashore; this is why the whole area became known as the Troad.

Ramon Muntaner, governor of Gallipoli from 1305 to 1309, stated in his memoir that the city of Troy had a circumference of three hundred miles. The gates of Troy were located both in Cyzicus at the Sea of Marmara and near the Gulf of Edremit – about 100 kilometers apart.

In the fall of 1437, the Spanish nobleman Pedro Tafur rode from Chios to the north until he reached Adramyttion at the Gulf of Edremit, where he had seemingly reached "Troy." He then followed the coast further north to "Ilion," located opposite the island of Tenedos.

In 1599, Thomas Dallam reached the Troad as part of the entourage of Sultan Mehmet III. He first anchored on the west coast opposite Tenedos and could see from there what were considered to be the ruins of Troy. He then went on towards the north and landed at Sigeion, from there he could see the ruins "up close." Obviously, he believed that he was dealing with a single, massive archaeological site.

Suggestions
In 1103, ruins were visible over many miles

There is not much of a discrepancy between these descriptions and the working hypothesis put forward here. The references to an entire region named Troy, covering today's Troad, should not be taken entirely at face value, but they should be taken seriously and investigated. The term Troy may well have referred to more than the city, as if the case for New York City and New York State today. The kingdom could have stretched from the Marmara Sea all the way south to the Gulf of Edremit. If ancient sources speak of gold, copper and even brass from

"Troy," they are clearly referring to the rich mines in the hinterland of the Biga peninsula – and not to the settlement on Hisarlık that is now considered Troy.

A layperson might be surprised to find that today nothing is left of the remains of Troy outside the citadel itself. This is partly due to erosion and deposition, which have changed the topography over the past 3000 years. Settlement layers on hills have been eroded, whereas those in the plain were covered by subsequent sedimentation. Millennia of agricultural use are responsible for increasing these effects beyond their natural extent – especially after the invention of tractors with plows that reach almost one meter into the soil. Human-made erosion can go so far that survey points from the 1960s tower a few meters above today's surroundings.

The bedrock around the floodplain of Troy consists of Tertiary marls, a soft sediment that can be plowed without difficulty. In such a fragile geological substrate, landslides occur frequently. Frank Calvert, who had made Heinrich Schliemann aware of Hisarlık's potential, described landslides from the marl in which over one million cubic meters of material was moved, though he saw them on the steep banks of the southern coast of the Dardanelles and not around the floodplain.

To complicate matters further, since the 16th century, people from the region have used the Bronze Age ruins as a quarry to get building stones for bulwarks on the Dardanelles and even for the Hagia Sophia. In 1819, when Philip Barker Webb arrived on Hisarlık, he watched the last remnants of the former city wall of Troy being carried away and said: "Future travelers will not even see the meager remains of it [the famous city] that a favorable fortune allowed us to meet."

Nevertheless, the city of Troy still exists and the ruins left after the destruction (of Troy VIIa) are potentially exceedingly well-preserved. If one draws a cross-section through the royal citadel on Hisarlık and extends it into the plain, it turns out that the remains of the lower town lie 5 to 7 meters below the surface of the modern floodplain. Stratified deposits full of artifacts, even entire building remains, have been identified in drill cores stretching several hundred meters apart.

"And you, my lord – I understand there was a time when fortune smiles upon you also. They say that there was no one to compare with you for wealth and splendid sons in all the lands that are contained by Lesbos in the sea, where Macar reigned, to Upper Phrygia and the boundless Hellespont."
Achilles addressing Priam, Homer, *Iliad* 24.546 (Rieu)

"Ilios … refers to the besieged city, Troie, however, was not only the town but also the landscape bearing the same name, as well as the country and the kingdom of the Trojans." Karl Strobel 2008, 13

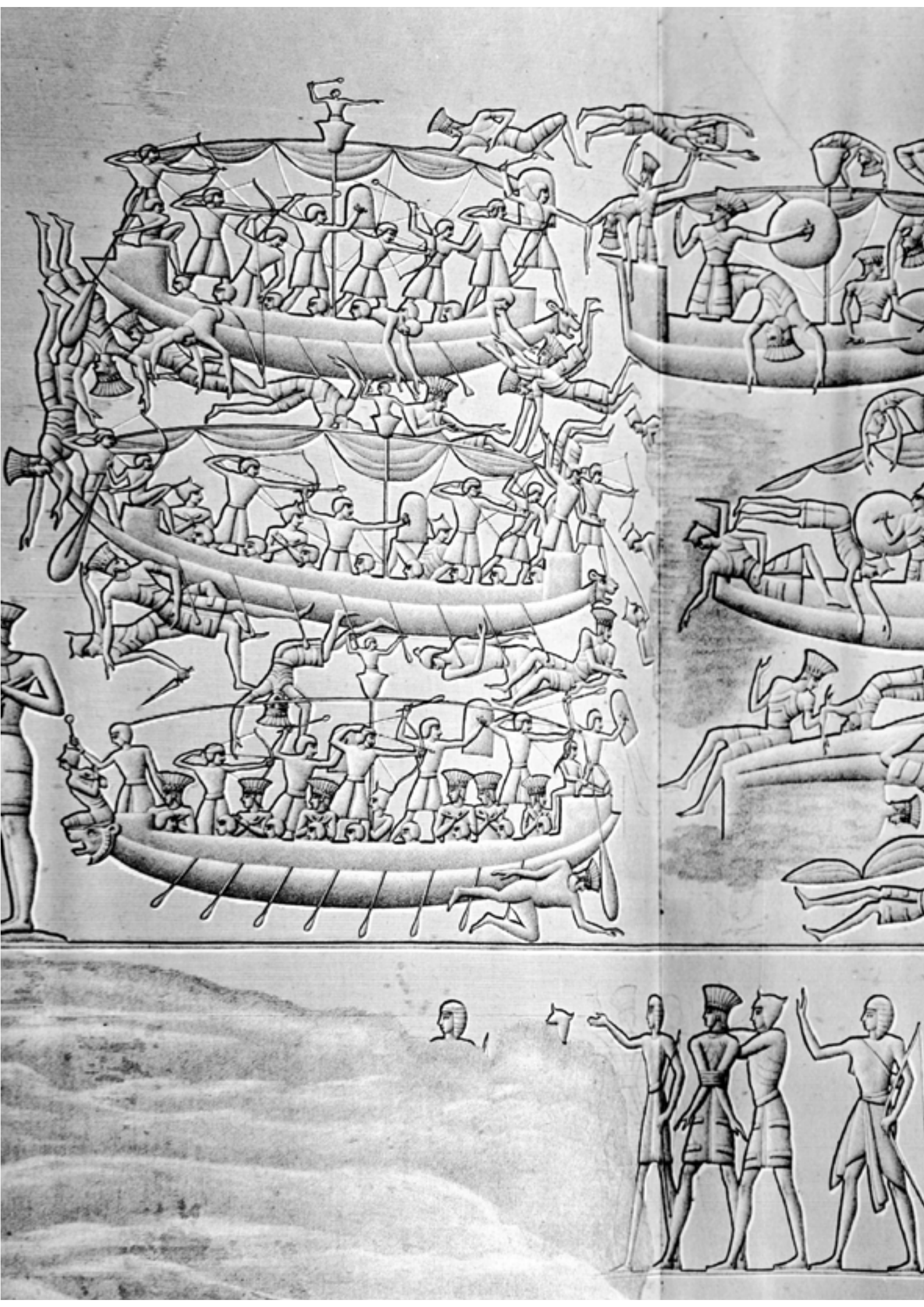
"Originally the term Troy denoted the wider region, in which the city of Ilios is located." Michael Reichel 2011, 41–42

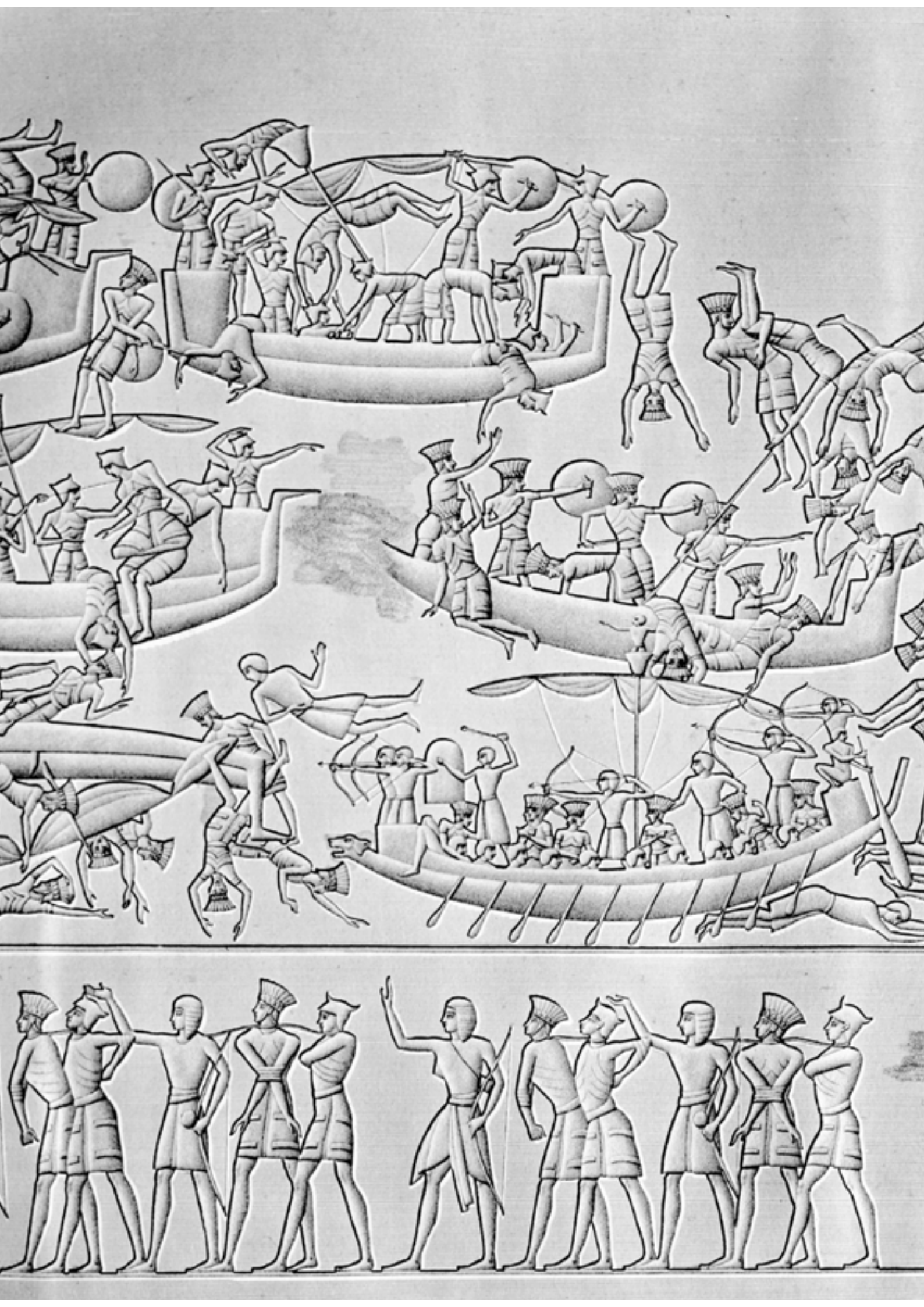
"Thus behind the apparently rival claims [of the local people] lay a belief that the ruins of Troy were not restricted to one site, but covered a wide area. The notion of an outsize Troy, even one that had occupied the whole of the Troad, is actually made explicit in other sources." Donald Easton 1991, 112

"In ancient days settlements of the city of Troy occupied the whole space of countryside between this spot and the land down even to Cape St. Mary [Baba Burun] … which is a plain of some sixty miles in extent."
Ruy Gonzalez de Clavijo 1403 (reprint 1928, 54 and 58)

"[We] came to the island of Tenit [Tenedos], near which … was the very ancient and famous city of Troy, the ruins of which the Greeks say, are still apparent over a space of many miles." Saewulf 1103 (Thomas Wright 1848, 49)

"If one wants to believe in the *Iliad*, then the king [Priam] not only ruled in the city and its surroundings, but in a larger area. In the south, his empire stretched as far as the mountain range of Ida and in the east to the land of the Phrygians, which means up to today's Sea of Marmara." Aleksander Krawczuk 1990, 147





Previous pages: The battle against the Sea Peoples on the northern wall of the temple at Medinet Habu – according to Charles-Louis-Fleury Panckoucke, *Description de l'Egypte* (1830).

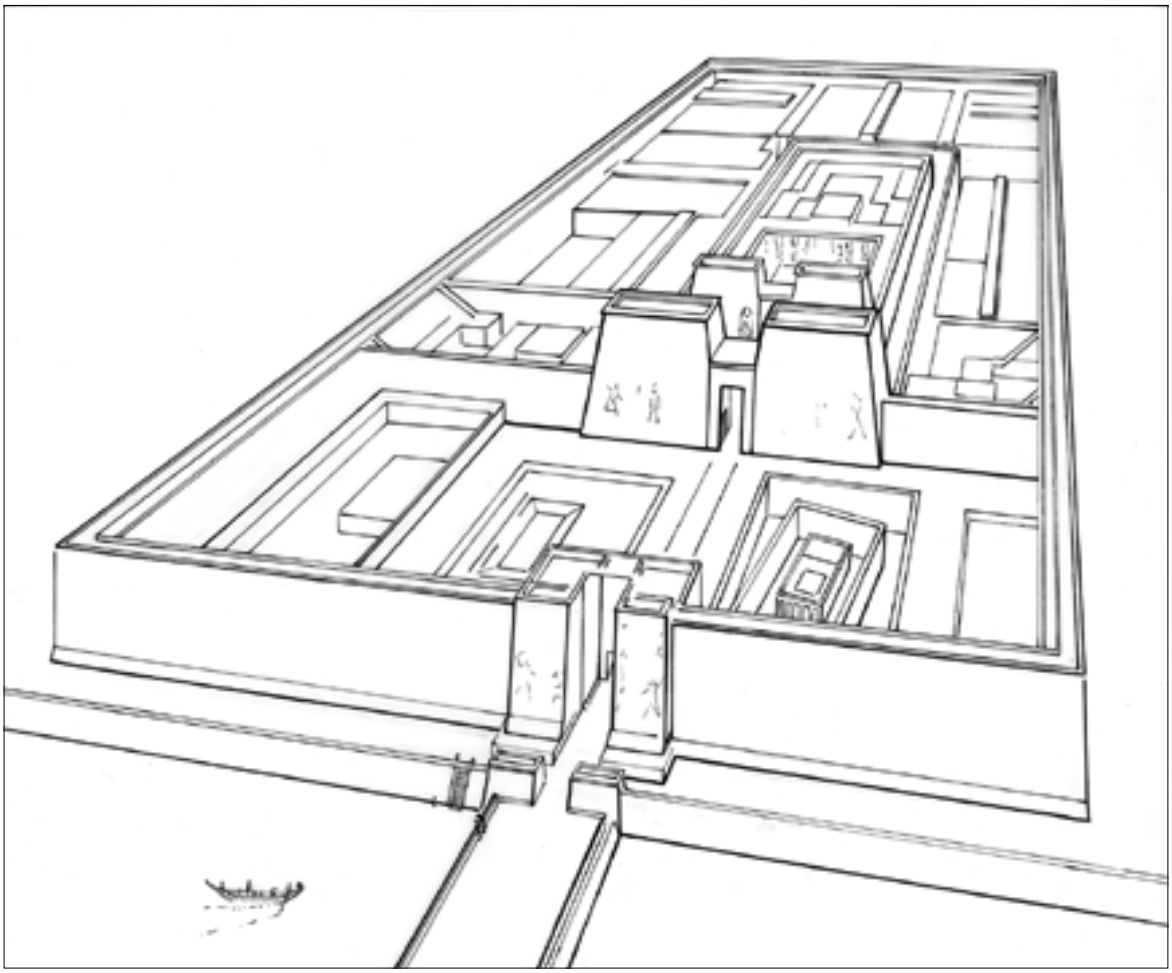
6. The Sea Peoples

6.1 The Sea Peoples' Inscriptions and Excavation Results

Current state of knowledge

Temple inscriptions at Karnak and a stele of Athribis from the fifth year of Merneptah (ca. 1213–1203 BCE) were the first to mention conflicts between a coalition of Libyans and so-called Sea Peoples, culminating in the battle of Saïs. However, the now-famous Sea Peoples' invasions first and foremost came to be known from the inscriptions and representations on the walls of the mortuary temple of Ramesses III at Medinet Habu. According to them, during the eighth year of the pharaoh's reign, a coalition of foreign states that originally lived "on the islands in the middle of the sea" attacked Egypt. The attackers are said to have

The Sea Peoples' inscriptions appear on the walls of the mortuary temple of Ramesses III in Medinet Habu.



Reconstruction of the mortuary temple of Ramesses III in Medinet Habu.

defeated a number of countries in the Eastern Mediterranean, including Hatti and Arzawa. Ramesses III claims to have victoriously fought the Sea Peoples in a naval battle that is described in much detail.

Based on the horizons of destruction in Syria and Palestine, the Sea Peoples' invasions can now be precisely dated. In the Egyptian city of Tell el-Fara, a storage vessel marked with a cartouche of Seti II was found that evidently had still been in use when the city was attacked. Thus the attack must have taken place during or after the reign of Seti II, i. e. after 1200 BCE.

One of the last letters from Ugarit, a letter from the Egyptian kingmaker Bay to Ammurapi, allows for an even more accurate dating as the two had to have been contemporaries. It is safe to assume that Ugarit fell during the first half of Siptah's and Twosret's term, when Bay was still alive, i. e. between 1193 and 1189 BCE. From the same time

At the end of the Bronze Age, Libyans had been among the most dangerous enemies of Egypt. They were tattooed and wore their hair fringed and in small braids.

period, we also have a broken fayence vessel with the cartouche of Queen Twosret. It was found in the destruction debris of Tell Deir Alla, Jordan, next to pieces of pottery from the LH IIIB period.

Meanwhile, even the exact day of the raid on Ugarit was able to be determined. On 21 January 1192 BCE (according to the Julian calendar) at midday, there was a total eclipse of the sun. The path of the central shadow ran in a line from Libya/Egypt towards Cyprus/Turkey through the Eastern Mediterranean – directly across Ugarit. An Ugaritic scribe took the eclipse as an occasion to write a message on a cuneiform tablet that was intended for the royal palace. Unfortunately it could not be delivered because the Sea Peoples had raided the city.

Suggestions
Sea Peoples and Luwians are one and the same

The times specified in the Sea Peoples' inscriptions of Medinet Habu seem to be condensed in a telescope-like manner. This has been common practice in inscriptions of earlier pharaohs. Ramesses III apparently took over leadership of the country on 7 March 1182 BCE. The eighth year of his term, when he and his army reportedly fended off the Sea Peoples, would have been 1174 BCE. However, the upheavals that are indeed documented archaeologically and historically took place almost twenty years earlier.

A copy of the peace treaty between Hatti and Egypt is located on one of the outer walls of the Karnak Temple.

Nevertheless, the reports are still useful. Firstly, they contain various original observations that are unlikely to have been invented by the scribes. Among them is the emphasis that the foreigners formed an alliance. Obviously a new political and military power had formed in the Eastern Mediterranean, one that was dangerous for the other long-established states. And fortunately, the scribes indicated the provenance of the attackers and even provided their peoples' names. The Egyptians used the term Hau-nebut for the Sea Peoples, which stands for the "inhabitants of the Aegean." The names of the individual tribes are to a large extent identical with those of the mercenaries who fought alongside Muwatalli II during the Battle of Kadesh in 1274 BCE. At the time, the Hittite king had gathered 12,000 Hittite soldiers as well as 8,000 mercenaries. Inscriptions in the Luxor Temple state who these allies were – the neighbors of the Hittites in the west and in the southeast. As a consequence, in recent years the majority of scholars appear to accept the view that the starting point of the unrest during the Sea Peoples' invasions was the Aegean Sea, in particular western and southern

The provenance of the Hittite mercenaries during the Battle of Kadesh. Several of these ethnic groups were listed as being members of the Sea Peoples.

Anatolia. A number of the tribes listed in the Egyptian inscriptions can be located in western Asia Minor, for instance the Lukka at the south-western tip of Asia Minor – and this is indeed the area where the Sea Peoples' ships were first sighted. In fact, there are numerous hints that the so-called Sea Peoples were a military alliance of western Anatolian petty states.

"Now the northern countries which were in their islands were quivering in their bodies. They penetrated the channels of the river mouths [the Nile Delta]. They struggle for breath, their nostrils cease. His Majesty is gone out like a whirlwind against them fighting on the battlefield like a runner, the dread of him and the terror have entered their bodies, they are capsized and overwhelmed where they are. Their heart is taken away and their soul is flown away, their weapons are scattered upon the sea."
Sea Peoples' inscriptions in Medinet Habu dating to the time of Ramesses III (Breasted)

"The speaker (Ramesses III?) couches a smattering of details in a metrical structure larded with high-flown figures of speech, and clearly strives for rhetorical effect rather than reasoned argument. A superficial reading which takes metaphors, simile and metonymy at face value can only result in eggregious error attempting to reconstruct the event." Donald B. Redford 2000, 7

"There is some evidence that some of the people involved in the [Sea Peoples'] migrations had been at home in western Asia Minor, while other groups joined in during the course." Jörg Klinger 2007, 117

6.2 Hypotheses Regarding the Sea Peoples' Invasions

Current state of knowledge

The Sea Peoples are among the most discussed, most complex and most difficult topics in archaeology. Numerous multidisciplinary conferences have been devoted exclusively to this subject. The following theses are still being discussed:

1. An overly long drought deprived Bronze Age societies of their economic and nutritional basis and triggered migrations. (Carpenter 1966)
2. The Trojan War marks the beginning of a chain reaction. The Sea Peoples were veterans of the battle of Troy and refugees from collapsing Greece in search of new settlement areas. (Hello & Simpson 1971)
3. The agriculture of the Mycenaean civilization was oriented almost exclusively towards grains and was therefore extremely vulnerable to bad harvests. Destruction or a series of crop failures provoked raids on neighboring regions and triggered an escalation. (Betancourt 1976)
4. The Sea Peoples came from Central Europe. They destroyed the Mycenaean civilization in Greece and subsequently ravaged Troy, Hattuša and the places in the Eastern Mediterranean mentioned by Ramesses III. (Schachermeyr 1982)
5. The first attacks of the Sea Peoples took place under Merneptah, followed by the Trojan War and the collapse of the Mycenaean civilization. Finally, a second Sea Peoples' invasion caused the destruction of Hatti. (Taylour 1983)
6. The Sea Peoples came from the Adriatic Sea and Central Europe. Within an interval of about one generation, they brought first the Aegean and later the Levant under their control. (Bouzek 1985)
7. The Sea Peoples were a loose confederation of scattered pirates and corsairs that had formed after the collapse of the great civilizations. (Sandars 1985)

8. The end of the Bronze Age began with earthquakes that, with some delay, destroyed central trading settlements in Egypt, Syria and Greece over hundreds of kilometers. At the same time, wandering Sea Peoples threatened coastal towns in the Eastern Mediterranean. To fend them off, Greek kingdoms built their great fortresses and, because of huge expenses, went bankrupt. As a result, social unrest erupted and triggered the collapse of long-distance trade as well as famine. (Helck 1987)

The Sherden appear in the records of Merneptah as mercenaries of both Egypt and their opponents.

9. A sequence of earthquakes at the end of the LH IIIB period extended from Pylos to Kastanas in Macedonia all the way to Troy. (Kilian 1988)
10. A change in warfare technology caused the disruptions. Before the crisis years, military conflicts had been fought with battalions of chariots. Later, the focus was on mobile infantry units. (Drews 1993)

The most recent attempt by U.S.-based archaeologist Eric H. Cline to provide an overview of the events also resulted in raising more questions than providing answers.

A number of captured Shasu bedouins from the reign of Seti I.

Suggestions
The crisis years comprised three wars

Possibly, the end of the Bronze Age could not be explained because one important factor had been missing – the Luwians. Much as the function of a three-legged kitchen stool cannot really be understood if one leg is missing, the end of the Bronze Age remains incomprehensible if only the Hittites and Mycenaeans are taken into account without the Luwians.

During the period between 1200 and 1180 BCE, archaeological excavations from Greece to Asia Minor to Egypt reveal the same findings, and that is destruction. However, this does not mean that the agent of destruction was always the same.

Over twenty years ago, I proposed a chronological reconstruction of the political and economic development in the countries around the Eastern Mediterranean during the 13th century BCE. It causally links three wars comprised of reciprocal attacks. First, the so-called Sea Peoples' invasions took place, during which the navy of allied Luwian petty states from the Aegean region advanced to the southeast. The Luwians who had emanated from the eastern shore of the Aegean Sea were then attacked a few years later by allied Greek forces – and this is

The artisans working on the royal tombs in western Thebes lived under strict surveillance in this excavated settlement at Deir el-Medina.

memorialized in the tradition of the so-called Trojan War. And finally, a civil war – without any external influences – broke out in Greece. This model explains the information transmitted in excavation results, contemporary documents and later traditions. The three phases of this Zeroth World War are described separately in the following sections.

"It has often been remarked that the more we learn the less we know and this certainly applies to our understanding of the end of the Late Bronze Age and the role of the Sea Peoples. It is one thing to call attention to all the problems raised by past historical reconstructions, but quite another to create a new reconstruction to replace those found wanting." James D. Muhly 1984, 54

"Clearly what is needed is a new way of looking at 'The Crisis Years' and the Bronze Age/Iron Age transition in the Aegean and the eastern Mediterranean." James D. Muhly 1992, 19

6.3 The Initial Sea Peoples' Raids

Current state of knowledge

After the Mycenaeans had wrested control of maritime trade from Minoan Crete around 1430 BCE, a time of prosperity began for the Greek mainland lasting nearly 200 years. Around 1250 BCE, however, political unrest became evident. Large citadels were built and old residences were fortified, not just in Greece but also in Asia Minor, possibly in anticipation of imminent hostilities.

A wave of destruction spread across the Eastern Mediterranean sometime thereafter, and many urban centers and in particular their palaces fell victim. Dozens of port cities in Cyprus, Syria and Palestine were destroyed. Apparently the capital Hattuša was wiped out overnight – and with it the Hittite Empire. And yet, the Sea Peoples' invasions marked only the beginning of the great upheaval. Later, Troy went up in flames and despite partial reconstruction was condemned to insignificance thereafter. The Mycenaean palaces of the kings in Mycenae, Tiryns, Pylos and other locations in mainland Greece also perished in the seemingly all-encompassing devastation.

The destruction recorded in archaeological remains is also reflected in documents that originated at the time. Well known is a letter from the king of Ugarit to his royal colleague on Cyprus:

> "The enemy ships are already here, they have set fire to my towns and have done great damage in the country. Did not you know that all my troops were stationed in Hittite country, and that all my ships are still stationed in Lycia and have not yet returned? So that the country is abandoned to itself …" after Nancy Sandars 1985, 143

In one of the last inscriptions from Hattuša Suppiluliuma II boasts how he defeated the attackers:

> "I, Suppiluliuma, the Great King, immediately reached the sea. The ships of Alasiya met me in the sea three times for battle, and I smote them; and I seized the ships and set fire to them in the sea. But when I arrived on dry land, the enemies from Alasiya came in


N
BLACK SEA
Ciconia
Thrace
Paeonia
Maša
Denjen
Phrygian
Arawanna
Wiluša
Teker
Trojan
Hapalla
Mira
Šeha
Serden
Mysian
Pitasa
Lower Lands
Karkiša
Arzawa
Carian
Lukka
Lukka
Lycien
Tarhuntašša
Kizzuwatna
Kaška
Pala
Paphlagonia
Istidina
Halizon
RAIDS
1192 BCE
Hatti
Hittites
Mitanni
TROJAN WAR
1182 BCE
Ahhiyawa
Danaya
Achaea
Mycenaeans
Keftiu
SEA PEOPLES'
INVASIONS
1192 BCE
Luwians
Alasya
Ugarit
Amurru
MEDITERRANEAN SEA
Meshwesh

multitude against me for battle." KBo XII 38 (CTH 121) III 1'–13', after Trevor Bryce 2005, 332

In the end, however, it was the Hittite Kingdom that fell. A causal connection between enemy attack and the demise of the Hittites seems therefore likely.

Depiction of the Sea Peoples' invasions at the mortuary temple of Ramesses III.

Suggestions
The Luwian petty states formed a coalition

The political situation in Asia Minor around 1200 BCE is usually visualized in the form of a map in which almost all of Anatolia was controlled by the Great King of Hatti, either directly or through vassal treaties. The Great King himself would have been overjoyed if this had really been the case. In fact, the core Hittite Kingdom and the region where Hittite was spoken were actually quite small.

Left page: The Sea Peoples can be traced back to the Aegean. Apparently, they consisted of Luwian petty kingdoms, who had formed an alliance and attacked Hatti from the south.

Most importantly, Hatti had always been surrounded by neighbors who tended to be oppositional and hostile. Towards the end of the 13th century BCE, the situation threatened to get out of hand. The north was constantly dangerous because of the hordes of Kaška and Azzi, who were never well-disposed towards the Great King. In the east Mitanni pressed on towards Hittite territory; at times they seized control of the major copper deposits of Ergani Maden in Išuwa near the upper Euphrates. The situation in the south was particularly challenging. Kizzuwatna had been a devoted vassal for generations. Now, it rebelled against the empire and was openly hostile. And finally, in the west, it was necessary to use a kind of chief vassal to lead the petty kingdoms. Perhaps the king of Mira assumed this task because Mira was then the largest and most influential country in the west. The Great King of Hatti thus became highly dependent, because if his chief vassal refused allegiance it could mean the end of the empire. And this is exactly what appears to have happened.

Most Sea Peoples' warriors are depicted wearing a feather crown as their characteristic headdress.

Perhaps the trigger for the decision to engage in war was the conquest of Cyprus. Tudhaliya IV unexpectedly attacked the island, possibly to get access to its copper resources. For the first time the Hittite army was using ships for its raids. The Luwian kingdoms in western Asia Minor played an active role in long-distance trade and may have depended on Cyprus as a port of call. At the same time they were rarely truly loyal to the Hittite king, even when they were committed as

Right page: Representation of captured Sea Peoples (feather crown bearers) at the mortuary temple of Ramesses III in Medinet Habu in western Thebes.

vassals. Hatti may have gone too far by conquering Cyprus and throwing long-distance trade into disarray. None of the Luwian petty kingdoms could stand against the Hittite forces on their own, but united they had a chance to throw off their oppressors.

The Luwians therefore entered into a military alliance and built a fleet of fast, agile vessels for invasions. Instead of moving against the Hittite forces over land, they now dashed across the sea and quickly reached the important Hittite borderlands of Cyprus and Syria. Seemingly overnight, the acclaimed mercenary armies of the Lukka and Sherden had become marine forces which no longer fought alongside the Hittite king but against him – they had formed the coalition known as the Sea Peoples.

Suppiluliuma II now led the government in Hatti. He found himself exposed to large, well-prepared attacks in the south, something he could hardly have been ready for. For the first time in the history of the Hittite Empire, the king's forces had to engage in naval battles, even three in succession. These may have ended undecidedly, because the two opponents later faced each other on land. The marauding Luwian "Sea Peoples" eventually received support from the Black Sea region. A wave of destruction rolled from the north towards Hattuša. The Kaška had taken advantage of the preoccupation of the Hittite armies and were themselves blazing a trail towards the capital. When they arrived, the city had been evacuated: If nothing else, the smoke caused by conflagrations on the horizon should have warned the inhabitants. They had escaped, and carried with them whatever was portable. All the conquerors could do was to set fire to the temples and government buildings.

Of course, the Hittite troops fighting in the south heard that the capital had been captured. Somewhere on the battlefield the Great King may have fallen, whereupon his soldiers lost their fighting spirit. In this way, the Hittite hegemony over central Asia Minor reached an unspectacular end. It had lasted a little over 400 years – and it would be 3000 years before it would resurface again.

"As for the foreign countries, they made a conspiracy in their islands. All at once the lands were on the move, scattered in war. No country could stand before their arms, from Hatti, Kode [Kizzuwatna], Carchemish, Arzawa and Alashiya. They were cut off. A camp was set up in one place in Amurru. They desolated its people, and its land was like that which has never come into being. They were advancing on Egypt while the flame was prepared before them. Their league was Peleset, Tjeker, Shekelesh, Denyen and Weshesh, united lands. They laid their hands upon the land to the very circuit of the earth, their hearts confident and trusting: 'Our plans will succeed.'"
Sea Peoples' inscriptions in Medinet Habu (Breasted)

"The Lukka Lands and Arzawa were the focus of the unrest. In the strong Egyptian phrase they 'quivered in their bodies'." Nancy Sandars 1985, 140

"The Arzawan countries may sometimes have combined their forces for large-scale military operations, particularly against powerful enemies like the Hittites." Trevor Bryce 2011, 366

"Indeed it is quite possible that all groups listed in the Egyptian records originated in Anatolia, particularly western Anatolia." Trevor Bryce 2005, 338

"It is also a known fact in the history of ancient Asia Minor that neighbors or vassals of the Hittite Empire often became particularly dangerous if changes in domestic politics were looming in Hatti." Susanne Heinhold-Krahmer 1977, 47

"There is, however, one document that seems to indicate that a western Anatolian state achieved approximate parity with the Hittite Empire in the last years of its existence." Ilya Yakubovich 2010, 85, referring to KBo 18.18 (CTH 186.4)

"Nevertheless the western Anatolian region may well have provided the genesis for the movements of the 'Sea Peoples'. For this seems to have been the region where the political structures established by the major Bronze Age powers first began to crumble and disintegrate." Trevor Bryce 2005, 338

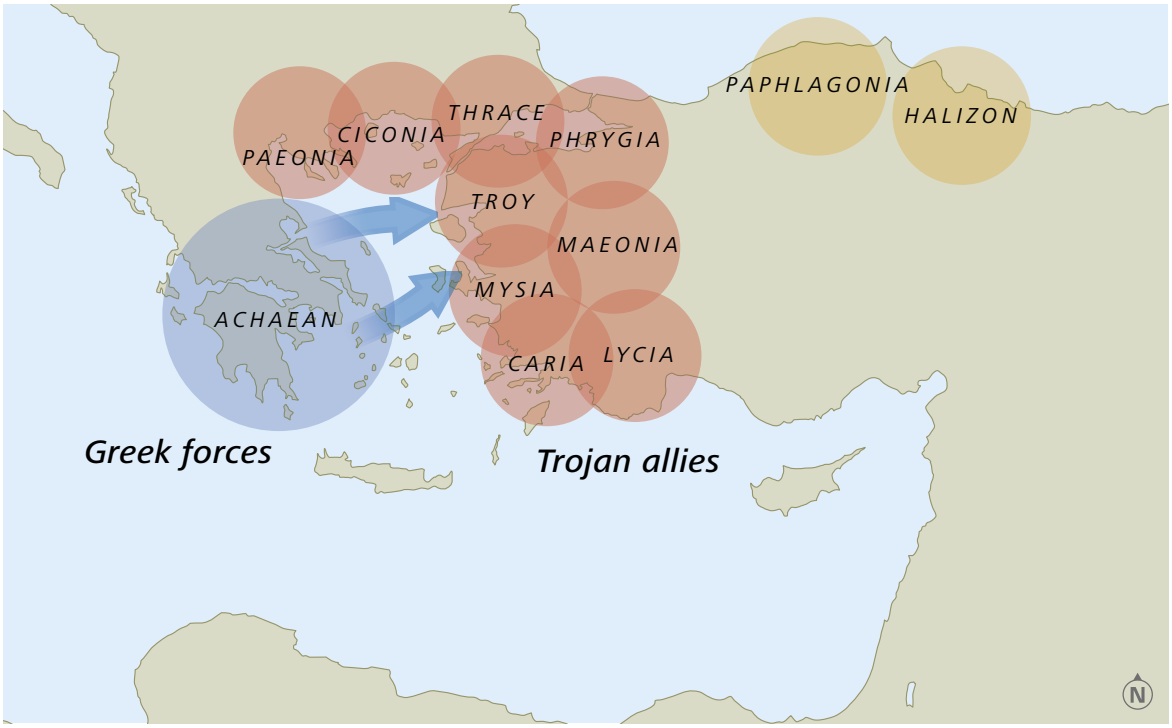
"Starved and exhausted by the futile struggle against the sea-borne enemy in the south, she [Hattuša] became an easy prey for the hordes of the Kaška and the Muški sweeping from north and west." Itamar Singer 2011, 373

6.4 The Trojan War as a Mycenaean Counterattack

Current state of knowledge

No written records have survived describing the events after 1192 BCE. Hattuša was abandoned, not just by the Great King but also by his scribes, and the ruling caste in Egypt became entangled in dynastic turmoil. In Greece, the knowledge of writing was not used for political purposes. Memories that have been transmitted to us from this eventful period originated much later.

Subsequent generations in Greece unanimously attributed the cultural demise at the end of the Bronze Age to the Trojan War. Among Greek historians there was broad agreement that this caused the end of the so-called heroic age. Homer tells of his ancestors facing an alliance of petty states stretching from Macedonia in northern Greece over the whole of western Asia Minor to Cilicia and even gaining support from peoples in the Black Sea region (*Iliad* 2.816–877). The Greek memory



After the Hittite Empire was defeated, united Greek contingents engaged in a war against a coalition of western Anatolian states.

of the Trojan War thus seamlessly integrates into the archaeologically documented wave of destruction after 1200 BCE.

Suggestions
A prophylactic counterattack

Once the Luwians had secured southeast Asia Minor, Cyprus and the coast of Syria, and when even Hattuša was defeated and the Hittite ruling class removed, the petty states from western Asia Minor suddenly controlled an area stretching from Macedonia across Anatolia to Syria and Canaan, where it touched upon the Egyptian dominion. The Luwian attacks had focused on the centralized elite to crush Hittite hegemony, while the domestic population in the interior – who spoke Luwian for the most part – was not really harmed. Therefore, the economic base of the region, agriculture, crafts and the mining of mineral resources, remained largely intact. Together with this vast territory, the Luwians now dominated almost all ore deposits in the Eastern Mediterranean, as well as the trade routes on land and at sea.

It appears that the Mycenaean kingdoms on the Greek mainland were not attacked by the Luwians. Some Mycenaean ports of call on the coast of western Asia Minor – especially Miletus – could have been affected or changed sides. But in general the Greeks had no clear reason to intervene. However, both the access to the Black Sea region as well as the connection through Cyprus and Syria to Mesopotamia were now under Luwian control. Considering the distribution of mineral resources, arable land, the path of the perennial rivers and of the trade routes, the Mycenaeans were about to face a superior force for an extended period of time. To avoid complete dependence, and after careful consideration and extensive preparation, they seem to have engaged in a coalition themselves with the ultimate purpose to raid western Asia Minor. Homer says many Greek aristocrats, including Odysseus, had initially refused to become involved in this war. When everybody finally joined in, it took another two years to build the fleet. Deploying almost 1200 ships, the Greek troops fell upon the coasts of western Asia Minor and destroyed dozens of Luwian coastal cities, long before they

set sail for Troy. The Luwians were unable to defend such a large territory as well as their hometowns.

This was then the reason why the wave of destruction continued soon after the Sea Peoples' invasions and with reversed opponents. Both main waves of attacks went in the same direction from west to east. However, the driving forces were different. The united troops from western Asia Minor stormed against Syria in the form of the Sea Peoples' invasions. About ten years later, united Greek forces attacked western Asia Minor – and this was later remembered as the "Trojan War." The Trojan War described by Homer and other ancient authors was thus a counterattack against the previously victorious Sea Peoples. As a matter of fact, the Trojan allies listed by Homer in the *Iliad* coincide well with the most likely provenance of the Sea Peoples. In addition, the question why the Sea Peoples were unable to make more of their victory, for instance by settling in the conquered territories, can now also be answered. Many had to return to their homelands to defend themselves.

In the inscriptions of Medinet Habu, one of the countries explicitly identified as a victim of the Sea Peoples' raids is Arzawa – a heartland of the Luwians in western Asia Minor. This would make no sense if the Sea Peoples were themselves Luwians. But Arzawa did not fall in the initial wave of destruction, it was only destroyed by subsequent counterattacks by the Mycenaean Greeks. Fifteen years later, Egyptian writers did not pay much attention to historic accuracy. They may not have even cared much about who exactly was fighting whom. In the end, both Hatti and Arzawa suffered – much like when both Pearl Harbor and Hiroshima

Laomedon, the father of Priam, is killed by an arrow shot by Heracles during the first Trojan War, here shown in the east pediment of the Temple of Aphaia II, Glyptothek, Munich.

Artist's impression of a scene from the Trojan War.

fell victim to World War II. Since some previously powerful opponents and partners of Egypt were swallowed up by the earth, Ramesses III could easily claim that their defeat was his military triumph.

The exact determination of the date of the Sea Peoples' invasion of Ugarit (after January 1192 BCE) now permits additional calculations with respect to the duration of the crisis years. Dares of Phrygia (44), according to Isidore (1.42) the oldest chronologist after Moses, reports exactly how long the Trojan War lasted: ten years, six months and twelve days. According to Homer (*Iliad* 12.15), the entire conflict lasted ten years. Eusebius of Caesarea dates the destruction of Troy, and hence the ultimate end of the conflict, firmly to the year 1182 BCE. Supposedly the decisive attack, during which the city of Troy finally went down, took place during the night of the seventh full moon, as some have said; it would have been 13 July 1182 BCE. If this was the case, the

A Greek warrior chases a Trojan. The latter wears a feather crown, the characteristic headdress of the Sea Peoples.

Sea Peoples' invasions and the Trojan War combined lasted about ten years and six months altogether.

"If the Assuwa confederation was really centered in the northwestern part of the peninsula [of Asia Minor], as seems probable, it corresponded strikingly in make-up and geographical extension to the Trojan confederation of the *Iliad*. Moreover, it was just such a political alignment which may reasonably be supposed to have blocked further Mycenaean expansion toward the east and southeast, thus greatly reducing Mycenaean trade with the east between c. 1240 and c. 1220 BCE." William Foxwell Albright 1950, 169

"We have to understand Troy as western Asia Minor at the time of the Trojan War." Gerald Avery Wainwright 1959, 206

"For it is related in our records how once upon a time your State stayed the course of a mighty host, which … was insolently advancing to attack the whole of Europe, and Asia to boot." Plato, *Timaeus* 24e (Lamb)

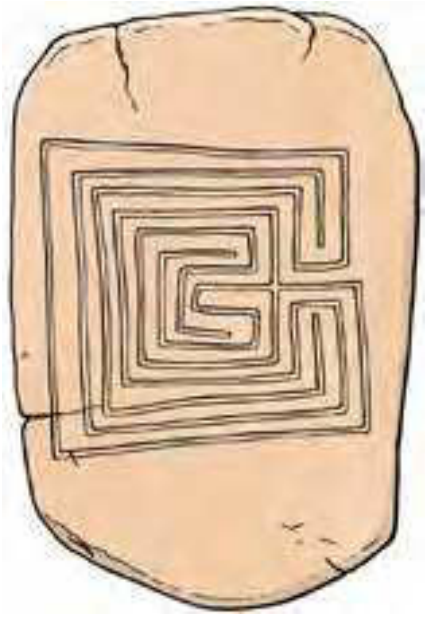
"Twelve cities of men I've stormed and sacked from shipboard, eleven I claim by land, on the fertile earth of Troy. And from all I dragged off piles of splendid plunder, hauled it away." Achilles in Homer, 9.398 (Fagles)

6.5 Civil War on the Greek Mainland

Current state of knowledge

After 1200 BCE, upheavals and local destruction on the Greek mainland initiated the end of the heroic age. In many places, various cultural achievements that were closely linked to the palace administration – especially writing – were lost. Some places were destroyed, many completely abandoned, but in areas at a distance from the former power centers new settlements were established. Archaeological excavations indicate that after 1180 BCE several new noble residences were built in the lower city of Tiryns, of which at least one was attached to the outer wall of the citadel. Also, in the center of the Argive plain new residences appear completely unprotected on open ground. The Mycenaean civilization continued for some generations without direction before it eventually disappeared from the scene.

Numerous hypotheses have been advanced to explain the Mycenaean demise, but so far none has been truly convincing. After writing was lost, people transmitted memories for centuries in the form of oral tales, the great Epic Cycle of which only relics are preserved today. Homer used excerpts from this material as a basis for his poetry.



After Troy had fallen, a scribe at the Palace of Nestor at Pylos scratched a labyrinth into the wet clay on the back of a Linear B tablet.

Suggestions

The Mycenaeans could not take advantage of their victory

The Trojan War was not fought to release a kidnapped woman, as Homer tells his audience in such an appealing fashion, but more likely

The Mycenaean Warrior Vase from around 1100 BCE reflects a memory of warfare.

to gain access to mineral resources and trade routes. Troy may not even have been the focal point of the encounter; instead it was merely the scene of the last battle in this great conflict.

Although the Mycenaean Greeks ultimately prevailed against the Luwians, even by capturing Troy, their culture too was doomed to disappear. Parts of the Epic Cycle (*Homecomings* or *Nostoi*) tell what happened back home while the Mycenaean kings were fighting at Troy. Their wives and less competent deputies had taken their thrones. When the surviving victorious kings returned, many of these deputies did not want to give up their power. A civil war broke out and progressively consumed one citadel after another.

Books 1–4 and 13–24 of the *Odyssey* would thus provide a graphic and accurate description of the political conditions prevailing on the Peloponnese around 1175 BCE. Homer suggests that the kingdoms in the Argolid had already fallen into the hands of the rioters. At the royal court of Odysseus in Ithaca, chaos prevailed, since 108 men

Captured Sea Peoples at Medinet Habu.

simultaneously courted queen Penelope in competition for the succession of the legitimate ruler. In Pylos, on the other hand, Odysseus's son Telemachus was still able to see how Nestor ruled in the traditional manner.

Even in Greece the wave of destruction appears to have continued advancing from east to west. Thus, Pylos – and later Ithaca – may have been among the last palaces to fall into the hands of the insurgents. Linear B tablets from the last days at the Palace of Nestor indicate that people were preparing themselves against an attack. In the *Odyssey*, the prophet Theoclymenus, who first had fled from Argos to Pylos (and later to Ithaca), described how the last defenders of Pylos may have felt.

> "There is a sound of mourning in the air; I see cheeks wet with tears. And look, the panels and the walls are splashed with blood. The porch is filled with ghosts. So is the court – ghosts hurrying down to darkness and to Hell. The sun is blotted from heaven and a malignant mist has crept upon the world."
> Homer, *Odyssey* 20.353 (Rieu)

"The sun is blotted from heaven" has been interpreted as referring to a total eclipse of the sun that occurred in Greece on 16 April 1178 BCE.

"They besieged Ilium for ten years, and during this period the domestic affairs of the individual attackers took a turn for the worse. The younger generation revolted, and the ugly and criminal reception they gave the troops when they returned to their own cities and homes led to murder, massacre and expulsion on a large scale." Plato, *The Laws* 3.678 (Saunders)

"For also after the Trojan War the Grecians continued still their shiftings and transplantations; insomuch as never resting, they improved not their power. For the late return of the Greeks from Ilium caused not a little innovation; and in most of the cities there arose seditions; and those which were driven out, built cities for themselves in other places."
Thucydides, *History of the Peloponnesian War* 1.12 (Hobbes)

Previous pages: Pergamon (shown here the Roman sanctuary of Trajan) has been intensively investigated since 1871. Yet, little is known about the Late Bronze Age occupation of the site.

7. Iron Age

7.1 Migrations at the Beginning of the Iron Age

Current state of knowledge

During and after the attacks of the Sea Peoples, extended migrations took place. The relief at the mortuary temple of Ramesses III in Medinet Habu shows migrating families carrying their belongings on oxcarts. Many scholars presume that these wandering groups formed coalitions with the Sea Peoples. The explanation of the cause of migration usually depends on the motives assumed for the Sea Peoples' invasions.

On the Greek mainland, 80 percent of all settlements were completely abandoned. While some palaces show traces of violent destruction, others seemed to have remained unthreatened but were emptied nevertheless. The Mycenaean culture continued to exist on a significantly reduced level for another 150 years or so until it vanished completely.

While the former centers of power in Greece were largely depopulated, the population density grew elsewhere, in particular at the periphery and in regions to which long-distance trade relations had previously been maintained. Such regions included, among others, Euboea, Rhodes, Cyprus as well as the Levant coast from Syria to Canaan. Even Sicily, Sardinia and large parts of Italy soon profited from the collapse of the Bronze Age kingdoms.

Suggestions
A new beginning in distant lands

The invasions of the Sea Peoples resulted in an unparalleled fall from the peak of wealth of aristocratic leaders in the heroic age to a simple

After years of destruction shortly after 1200 BCE, many residents moved away from the Aegean to regions they knew because of the long-distance trade.

agricultural society. The people returned to their indigenous, independent and decentralized way of life. Many left their ancestral homes and settled in distant lands. After such a complete collapse of a political system, the survivors often have little more than their lives and skills to take with them, so it made sense to make a fresh start in distant lands that were known from the maritime trade.

Migrations led to a profound mixing and cross-fertilization of different ethnic groups and eventually to the formation of completely new centers and cultures. As a consequence, the transition from the Bronze Age to the Iron Age can be seen as something other than just a cultural setback. The political systems of the Late Bronze Age had been extremely simple. Rival city states and petty kingdoms that had controlled and fought each other defined the political landscape. Agriculture had always been the main pillar of the economy, while international trade was virtually limited to metals and luxury goods. Only the rulers, who

ultimately profited from tributes paid by the rural population, became wealthy. Thus only the highest echelons of the strictly hierarchical society benefited from cultural progress. The writing system, especially that common in Greek palaces, was highly complicated and downright incomprehensible to the uninitiated. The development of general education or the emergence of a literary tradition would hardly have been possible within these structures of the Bronze Age society.

Given these circumstances, Mediterranean cultures had probably reached the zenith of their cultural development in the 13th century BCE. Any further progress would have required a destruction of existing structures and a completely new beginning. Therefore the crisis years during the 12th century BCE – as brutal as they were – could be seen as a cleansing thunderstorm that prepared the ground for a comprehensive political and economic restart. Many cultural developments of fundamental importance that are relevant to our society today sprang up soon after this cultural incision. Among them are the alphabetic writing systems, the oldest texts of western culture (including the Old Testament and the Homeric epics), monotheism and the minting of coins.

"There is a lot of evidence, both archaeological and linguistic, for a southward shift of Anatolian people from the plateau to northern Syria, with groups from Caria, Lycia and perhaps Arzawa carving out new small states on the fringes of the old Hittite Empire." Nancy Sandars 1985, 143

"In any case, Luwian elements amongst the Late Bronze Age peoples of Anatolia continued with some vigor beyond the end of the Bronze Age through the succeeding 'Dark Age', and figured prominently in the Iron Age civilizations of the first millennium." Trevor Bryce 2005, 349

"After the taking of Illium, certain Trojans, escaping the hands of the Grecians, landed with small boats in Sicily; and having planted themselves on the borders of the Sicanians, both the nations in one were called Elymi."
Thucydides, *History of the Peloponnesian War* 6.2 (Hobbes)

"Because iron, copper and mineral workings in general had been overlaid with sludge and had been lost to sight, so that it was virtually impossible to refine fresh supplies of metal. Even if there was the odd tool left somewhere on the mountains, it was quickly worn down to nothing by use. Replacement could not be made until the technique of mining sprang up again among men."
Plato, *The Laws* 3.678 (Saunders)

7.2 Caria

Current state of knowledge

The mountainous coastal landscape south of the Meander (Turkish: Büyük Menderes) is called Caria. The area offers a wealth of natural harbors, but is only poorly connected to the hinterland. With the exception of Xanthos and Indos, most rivers drain into the Meander and not towards the coast, so that only a few fertile floodplains and coastal plains exist. Nevertheless, in ancient times Caria was at the intersection of major trade routes. This southwest corner of Asia Minor is where the land and sea routes from the Orient reach the Aegean Sea – an area that has been of great strategic importance for thousands of years.

The prime archaeological site in Caria is Miletus. Because Miletus has been explored systematically by archaeologists since 1899, its settlement history is well documented. During the first half of the 2nd millennium BCE (1900–1400), Miletus thrived under Minoan influence. At least the upper class of the society appears to have come from Crete. During this time, rulers and merchants of the old palaces on Crete established trade routes primarily to gain access to metals. Trading posts and colonies around the Aegean were used to protect these routes. After Crete had been taken over by Mycenaean Greeks, Miletus, too, came under Mycenaean influence around 1400 BCE. At about 1300 BCE, the city suffered from a massive conflagration. Hittite documents tell that the Great King Muršili II (1318–1290 BCE) in his second year of reign, i. e. around 1316 BCE, had sent his army to fight against the Luwian core state Arzawa and its two major cities Millawanda and Apaša. Archaeologists today equate Millawanda with Miletus and Apaša with Ephesus.

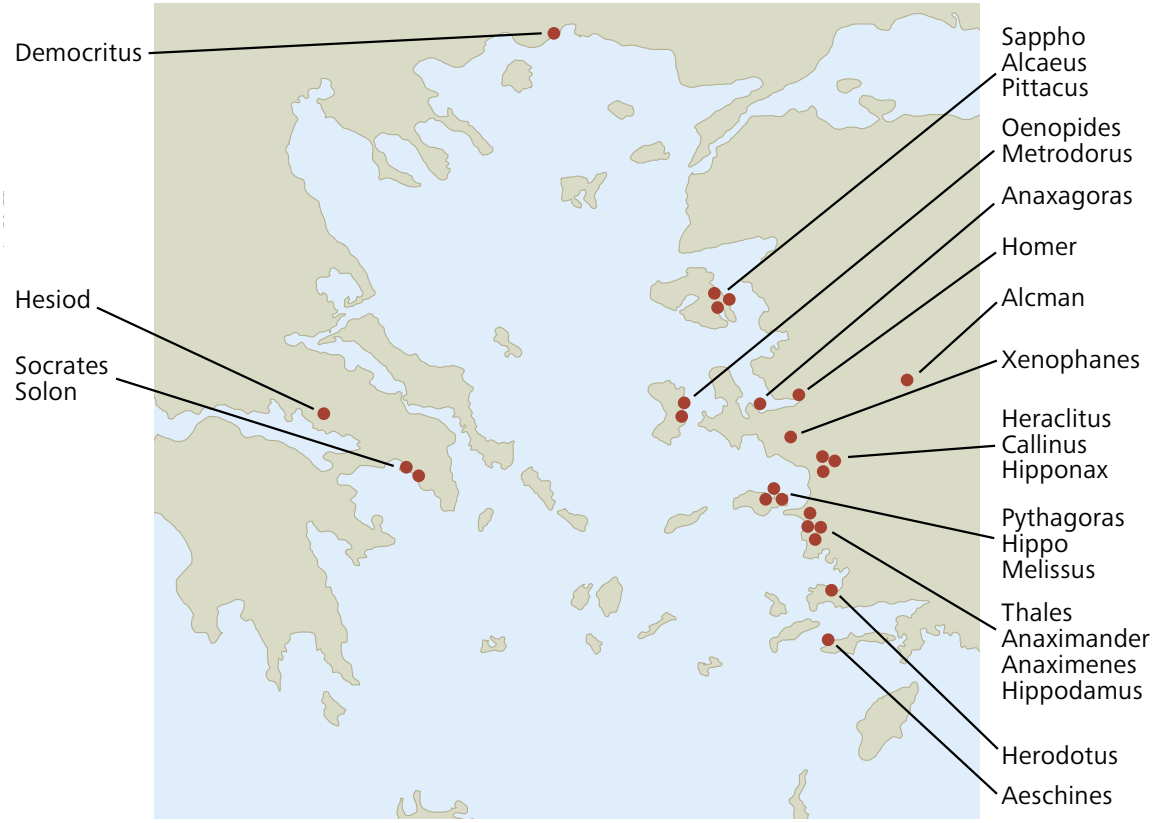
After Miletus had been rebuilt, the city walls appeared similar to Hittite fortifications, suggesting that the days of Mycenaean influence were over. Later, Great King Hattušili III (1266–1236 BCE) complained in the so-called Tawagalawa letter to the king of Ahhiyawa about a certain Piyama-Radu of Arzawa, who, from Millawanda, led war against western vassals of the Hittites. Researchers are now of the opinion that Ahhiyawa refers to Mycenaean Greece. Thus, it seems that Arzawa, in the middle of the 13th century BCE, had seriously harassed those petty states in western Asia Minor that had clearly sided with the Hittite

king. Remarkably, Miletus does not seem to have suffered from the upheavals during the crisis years (1192–1182 BCE).

Suggestions
A Carian domination of the Aegean

The name Caria is derived from the Luwian word Karuwa for "steep land." In Hittite times, this region was called Karkiša. In ancient Greece, it was called Καρία (Caria) and today in Turkish, Karya. According to the Greek historian Herodotus (1.171), who was from the Carian port city of Halicarnassus, modern Bodrum, "the Carians themselves suppose that they are dwellers on the mainland from the beginning."

The interpretations of the excavations at Miletus widened the gap in which the Luwian culture had disappeared, for one can hardly find the word Luwian in reports that have accumulated for over a century. The Heidelberg-based archaeologist Wolf-Dietrich Niemeier, who directed



Almost all Greek poets, mathematicians, philosophers and historians before Plato came from Asia Minor.

excavations of Bronze Age Miletus after 1994, as a matter of principle only distinguished between Minoan, Mycenaean and Hittite civilizations. As a consequence, political maps of the 13th century BCE show an extension of the Hittite Empire to the west all the way to Miletus. There, and only there, it borders seamlessly with the Mycenaean sphere of influence. Such a situation may have existed for a short period of time, but it could hardly have been typical for the Bronze Age. Even during times when Miletus was under Minoan or Mycenaean influence, this influence would only have applied to the geographically isolated city, and not to the surroundings. The Bronze Age lasted for almost 2000 years. During this time the Carian hinterland had, in all likelihood, been settled by predominantly endemic Anatolian peoples who spoke Luwian or a language derived from it at least during the 2nd millennium BCE. Like almost all other regions of Asia Minor, from time to time Caria had been subjected to hegemonic claims of the Hittite central government, only to look for ways to shake it off again.

Today we know more about the actual Carians from historical documents than from archaeological fieldwork. The latter has almost exclusively been done on coastal sites that showed a clear Minoan or Mycenaean influence (Miletus, Müsgebi, Iasos) and/or concentrated on centers or settlement layers from the period of Greek colonization (Stratonikeia).

Greek-Carian mythical creature.

In Hittite documents, Karkiša (next to Lukka and Wiluša) counts among the twenty-two Luwian kingdoms of the Aššuwa alliance. It had formed during the 15th century BCE to defend its members against hegemonic claims of the Hittite Empire. Although Great King Tudhaliya I (ca. 1460–1420 BCE)

convincingly claims to have defeated this alliance, it was the Hittite Empire that disappeared for good 200 years later, while the Luwian culture continued to thrive.

In the *Iliad* (2.869), Homer stated that the city of Miletus belonged to Caria, that the Carians spoke a language of "barbaric pharynx sounds" and that they were allies of the Trojans. Both Herodotus (1.171) and Strabo (7.2) state that the Carians had previously been called Leleges. According to Strabo (13.59) they had founded eight cities whose ruins display a characteristic masonry and were partly still visible back then. One of these settlements, located a few kilometers inland from Halicarnassus, is named Pedasa (6.20). In Hittite times, the region in the far eastern hinterland of Caria was called Pitasa. During the 6th and 5th century BCE, Pedasa was even more significant than Halicarnassus, its neighboring city.

Carians are often associated with Phoenicians. The terms "Carian" and "Phoenician" seem to be synonymous with foreign and oriental in Homer and Herodotus. Carians were considered enterprising, courageous and sea-savvy. Their maritime achievements were so renowned that they were also known as "sea people," a fact that makes one think of the Sea Peoples of the Egyptian temple inscriptions. Greek historian Diodor (5.84.4) as well as church writer Eusebius of Caesarea mention a Carian naval supremacy during the late 8th century BCE.

According to Herodotus (1.146) there were no women from Greece involved in the founding of the Greek colonies in western Asia Minor; only men had come and subsequently married Carian women. This means that famous Greek citizens of Carian cities, such as Thales and Herodotus, were half Carian and had Carian ancestors. Therefore, it is not surprising that Herodotus (1.171) considered Carians "by far the most respected of all nations." Although during his time Greeks ruled the Carian coastal cities, a large part of the population was still of Asian Minor descent and communicated in their native language.

Herodotus (1.171) also states that "the Carians were those who first set the fashion of fastening crests on helmets." Such crests were the perhaps most important characteristic of the Sea Peoples' representations at Medinet Habu.

"Of these, the Carians have come to the mainland from the islands; for in the past they were islanders, called Leleges and under the rule of Minos … Since Minos had subjected a good deal of territory for himself and was victorious in war, this made the Carians too at that time by far the most respected of all nations." Herodotus, *Histories* 1.171 (Godley)

"It was the Carians who originated wearing crests on their helmets." Herodotus, *Histories* 1.171 (Godley)

"For Minos was the most ancient of all that by report we know to have built a navy. And he made himself master of the now Grecian Sea, and both commanded the isles called Cyclades … expelling thence the Carians and constituting his own sons there for governors."
Thucydides, *History of the Peloponnesian War* 1.4 (Hobbes)

"The only recently deciphered Carian [has] developed very likely … from Luwian." Jörg Klinger 2007, 24

"The Carians, as well as their neighbors, the Lycians, could very well have been a part of the Sea Peoples." Alexander Herda 2013, 434

"After Troy was taken, the Carians steadily increased their power and became masters of the sea." Diodorus Siculus, *Library of History* 5.84.4 (Oldfather)

"In Asia Minor and even in Libya, the Carians and Lelegians dwelled on for some time. The Lydians, Phrygians, Mysians and Lycians, which had been considered in antiquity to be branches of one and the same nation … founded certain states in Asia, which lived on for centuries." Johann Uschold 1836, xv

7.3 Phrygia

Current state of knowledge

During the 13th century BCE, western central Asia Minor was part of the Hittite Empire. According to administrative documents from Assyria, a group of people named Muški seems to have existed on the territory of the collapsed Hittite Empire for several centuries. A certain Mita of the Muški has been repeatedly recognized as powerful potentate in central Asia Minor at the end of the 8th century BCE. According to Greco-Roman historiography, the influential king Midas reigned over the Great Kingdom of Phrygia at that time.

Royal residence and capital of the Phrygian kingdom was Gordium, which was located close to where the Porsuk drains into Sakarya River (the ancient Sangarius). The town, which had been settled over the entire Bronze Age, was located at an important east-west route that had already been frequented intensively during the Late Bronze Age. When the Hittite Empire was destroyed in the early 12th century BCE, Gordium

The Artemis of Ephesus probably represents a transitional form of the former Phrygian mother goddess Cybele to the Greek and later Roman goddess.

The large tumulus of Gordion is about 50 m high and 300 m wide. The grave contained the remains of a 60- to 70-year old noblemen; probably King Gordios.

was abandoned by its residents. Soon after, however, new populations settled there. In the 10th century BCE, a citadel protected by ramparts went up, and a palace district was built in the same place during the 9th century. Around 800 BCE the palace fell victim to a fire. At that time, other cities in central Asia Minor (Ankara, Alişar, Hacıbektaş) displayed a Phrygian presence. In Hattuša, a Phrygian city was built that covered the entire area of its Hittite predecessor. During the 8th century BCE, the Phrygian kingdom of Dascylium in northwestern Asia Minor extended to Tyana in Taurus. The kingdom's central locations were Gordium and Midas city. Near Gordium, a royal necropolis with large tumuli went up, of which the most famous one, the so-called Midas Mound, was built around 740 BCE. Archaeologists were able to explore the intact grave, which also contained a great number of valuable burial gifts. They found the skeleton of a 60- to 70-year old unidentified man.

The Phrygian language clearly does not belong to the Anatolian language group. In order to write Phrygian, an alphabetic script was used that had been transferred from Phoenicia and resembled Greek.

Gordion, the capital of Phrygia, was located at the intersection of a trade route to Babylon and the valley of the river Sangarius.

Suggestions
In Midas's hands everything turned to gold

A Homeric Hymn (no. 5, *To Aphrodite*) mentions that Phrygia possessed many fortresses. In the *Iliad*, Homer states that the Phrygians were "aggressive" (2.864) and riding on horses (10.432), which apparently was rare or even unique at the time. Strabo (12.4.4; 14.5.29) describes Phrygians as "barbarians and warriors" who had migrated to Central Asia from Macedonia and Thrace around the time of the Trojan War. According to Homer, during the Trojan War the kingdoms of the south-eastern Balkans had fought on the side of the Trojans. If troops from these regions had actually been involved in the Sea Peoples' invasions and had thus contributed to the fall of the Hittite Empire, their migration to central Asia Minor would make sense: The victorious powers would have taken over key trade routes that previously had been on Hittite territory. One counter argument against possible immigration from the Balkans, however, is that the Phrygian language is not related to Thracian.

The Midas Monument in Phrygian Yazılıkaya, about 50 km from Afyon, includes on the right margin a Phrygian inscription whose last word can be deciphered as Midas.

The city of Gordium, supposedly named after its founder Gordias, has been explored archaeologically since 1950 and is considered the only extensively researched city of influence during the Early Iron Age in Asia Minor. The excavations demonstrate that the location has been inhabited since at least 2500 BCE. The Bronze Age settlement layers of Gordium, however, are not well known, because they are hidden under the foundations of the Phrygian era. Findings of Luwian hieroglyphic writing indicate to which civilization this place belonged.

Gordium's development as a city peaked only after the fall of the Hittite Empire. The immigrants did not completely oust the local population, but rather complemented them. Apparently, the immigrating Phrygians kept in touch with their country of origin, which contributed to the empire's enormous economic success. The Phrygian kingdom was likely composed of a coalition or confederation of various principalities. The American prehistorian Machteld Mellink described the west Phrygian culture as "incredibly powerful," and expressed the opinion that many of its achievements rooted in the previous – almost unknown – Late Bronze Age culture. Behind these words, one might

argue today, lies the hidden Luwian culture. Those who want to learn more about the Luwians would only need to dig one to two meters deeper into the ground at Gordium.

The fabulous wealth of Phrygian kings, among whom the names of Gordias and Midas were apparently common over several generations, has been preserved in the legend of king Midas, in whose hands everything turned to gold. When Midas bathed in the Pactolus River (today Sart Çayı), he transferred this gift to the river, thereby turning the Pactolus into the richest gold-carrying river and the kings of Sardis on its banks into the wealthiest rulers of Asia Minor at the time.

According to Herodotus, even the Egyptians considered Phrygians to be the most ancient people:

> "When Psammetichos [II] having become king desired to know what men had come into being first, they suppose that the Phrygians came into being before [the Egyptians]." Herodotus, *Histories* 2.2 (Macaulay)

"It is possible that the Phrygians were among the 'People of the Sea,' who also have been credited with the destruction of Hattuša."
Martha Sharp Joukowsky 1996, 368

"Many features of the West Phrygian Culture were undoubtedly inherited from the West Anatolian culture of the Late Bronze Age." Machteld Mellink 1965, 323

7.4 Lydia

Current state of knowledge

According to Hittite documents, the Šeha River Land – which later became Lydia – was one of the most prominent Luwian petty states of the Late Bronze Age. Researchers agree that its center was located in the valley of the Gediz (the Hermus River in antiquity). It is equally certain that Sardis was a place of central importance to this region. Sardis was situated on a major east-west route, more specifically, the one that stretched from Ephesus on the Aegean coast to Susa at the Persian Gulf 2500 kilometers away. Goods, and with them most likely a great deal of knowledge, traveled along this road from Babylonia to western Asia Minor and further onward from there, to the coastal cities of the Aegean. Consequently, architectural monuments and rock facades in Lydia that have survived display an idiosyncratic blend of oriental and Aegean traditions.

Excavations by American archaeologists at Sardis prove that a settlement in this location has existed since at least the 3rd millennium BCE and that Late Bronze Age traditions continued during the so-called dark centuries of the Early Iron Age. In addition to the thriving east-west trade, Lydia's unbelievable wealth was based primarily on rich mineral resources, but also on their high-quality artisan crafts, the production of fine fabrics and on the possession of abundant livestock.

Since 2005, the area around Lake Gyges (today Lake Marmara) about 10 kilometers north of Sardis has been systematically explored by archaeologists. As part of a survey conducted by Christopher H. Roosevelt and Christina Luke from Boston University, archaeologists discovered at least four (two large and two smaller) citadels, which probably had been built around 1700 BCE and were inhabited until 1200 BCE. The two smaller citadels (Kızbazı Tepesi and Gedevre Tepesi) were each 1 hectare in size. The second largest citadel (Asartepe) extends over 3.8 hectares. In Kaymakçı, the largest and most complex of the four citadels, the fortress walls enclose an area of 8.6 hectares. This is almost five times the size of the citadel of Troy VI. Kaymakçı covers the entire lower peak of the Gül-Dağ mountain ridge on the western shore of Lake Gyges. The citadel consists of terraced, eccentric rings around an almond-shaped central platform of 35 by 60 meters, which lies in

the most elevated and best-protected area. Within the fort, numerous remains of walls have been preserved, including a megaron-like building that covers an area of 14 by 18 meters. A far-reaching scatter of pottery outside the citadel is interpreted as evidence for a sprawling lower city. Because of its size and level of complexity, Kaymakçı is considered a central location as well as a center of power for the local settlement network and the whole region; thus, according to the investigating archaeologists, it would likely be the center of Šeha River Land.

Suggestions
Impressive castles on mountaintops

Despite all the excitement about the discovery of Kaymakçı, one should not forget that the castle and its neighbors, in terms of their location, have little in common with other Luwian settlements. Nowadays it is even possible to prove with statistical methods that Luwians had almost exclusively settled in fertile flood plains and in the immediate vicinity of running waters – and often inhabited these sites continuously for more than a millennium. Kaymakçı, however, did not evolve gradually, but appears to have been a soberly planned building complex, on a mountain top to boot, nowhere near a source of running water. Its construction is evidence of central planning (knowledge), the potential to implement this plan (power) and a need for protection (i. e. the existence of a threat). It is not a tell site, in which numerous settlement layers have been piled on top of one another. On the contrary, in many areas the bare rock is covered by only a few centimeters of dust. Thus, Kaymakçı could hardly have been the only center of the region over a long period of time. Maybe it was an alternative or temporary seat of government in times of threat, a kind of Camp David, or a refuge stronghold for the inhabitants of a region that was located at the junction of two major mountain passes. – I, for one, am convinced that even greater discoveries could be made in this geographical area, perhaps even discoveries including the actual royal residence.

In some statements of questionable reliability, Herodotus claimed that Lydian dynasties were first established at the time when Agamemnon at Mycenae became king (around 1216 BCE) and had ruled for

twenty-two generations, until their last ruler – the unfortunate Croesus – ascended to the throne. Croesus reigned from about 555 to 541 BCE. According to Herodotus (1.3), Lydian dynasties lasted for 505 years. One of the most famous ancestors was Gyges, a king who usurped the throne most likely in 680 BCE. The sum of years from Gyges's first year of government plus the number of years mentioned by Herodotus brings us to 1185 BCE. From this follows that, at the time of Herodotus, memories were apparently still in existence that reached all the way back to the beginning of the Dark Ages.

Linguistically speaking, the names of Lydian kings (i. e. Sadyattes, Alyattes) belong to the same type as the names of Luwian dynasties (Maduwatta) from the time of the last Hittite king. This means that Early Iron Age societies in western Asia Minor took up traditions from the Bronze Age.

> "Of course we must not say, on the basis of what we proposed, that 'the Lydians were Luwians' … The name Luwian was only maintained as a designation of the Lydians, who proved to be the stronger ones. The new interpretation provides a welcome confirmation of the former existence of the name Luwians in the West." Robert Beekes 2003, 48–49

7.5 The Philistines in Canaan and Palestine

Current state of knowledge

During the 12th century BCE, the Philistines settled on the fertile coast of Palestine. They founded five city states (Ashdod, Ashkelon, Ekron, Gath and Gaza) which then formed a confederation. At first, these city states were still under the auspices of Egypt. When Egyptian power waned at the end of the 12th century, the Philistines assumed the hegemony in the region. Palestine is named after their inhabitants as "Land of the Philistines."

The origin of the Philistines has not yet been fully clarified. The majority of researchers consider them to have been among the Sea Peoples, where they appear as "Peleset." The Philistines could thus have come from the Aegean islands or the Greek mainland. Other researchers consider the Philistines to be a Sea People, too, but assume the west and south coasts of Asia Minor as their areas of origin.

The Peleset belonged to the Sea Peoples. It is believed that the Philistines were derived from them.

Suggestions
Friends of Egypt

The name Palestine already appears in Luwian stone inscriptions in the North Syrian city of Aleppo during the 11th century BCE. It is therefore virtually impossible to derive the topographic term from the arrival of the Peleset. It is possible that researchers will disentangle the terms Palestine,

Philistine crater from Tel Zippor, Israel, dating to the 11th century BCE. The shape and the careful decoration in one color are similar to Mycenaean potters from mainland Greece.

Philistine and Peleset in the near future.

Philistine ceramics are very similar to contemporary Greek pottery. And the Old Testament says that the Peleset came from Crete. This would suggest that Mycenaean Greeks were involved in the Sea Peoples' invasions. However, the Peleset were given the right to settle in the most fertile and thus most valuable areas of Palestine that had until then been under Egyptian control. Not only did the Egyptian government let the Peleset settle, but it also gave them rights and responsibilities. It is hard to imagine that barbarian people, who had launched a hideous attack on Egypt shortly prior to that, would have been granted these benefits. Also, a Greek participation in the actual Sea Peoples' invasions is not consonant with the generally amicable relations between the New Kingdom in Egypt and Mycenae.

It is quite conceivable that the Philistines derived from the Peleset and that those in return were Mycenaean Greeks from Crete and from the Greek mainland. Since the Mycenaeans fought against the coalition of Luwian states, they were likely to be political allies of Egypt. Hence, they may have received the best settlement sites in Canaan as a reward for their vigor and victory. The Peleset thus did not belong to the coalition of Luwian petty states. The reason that they are still counted among the Sea Peoples is that their retaliations contributed massively to the destruction during the crisis years.

"The time has come when all our ideas about the so-called Sea Peoples should be set aside and the text re-examined in a fundamental way, as a whole."
Alessandra Nibbi 1972, Preface

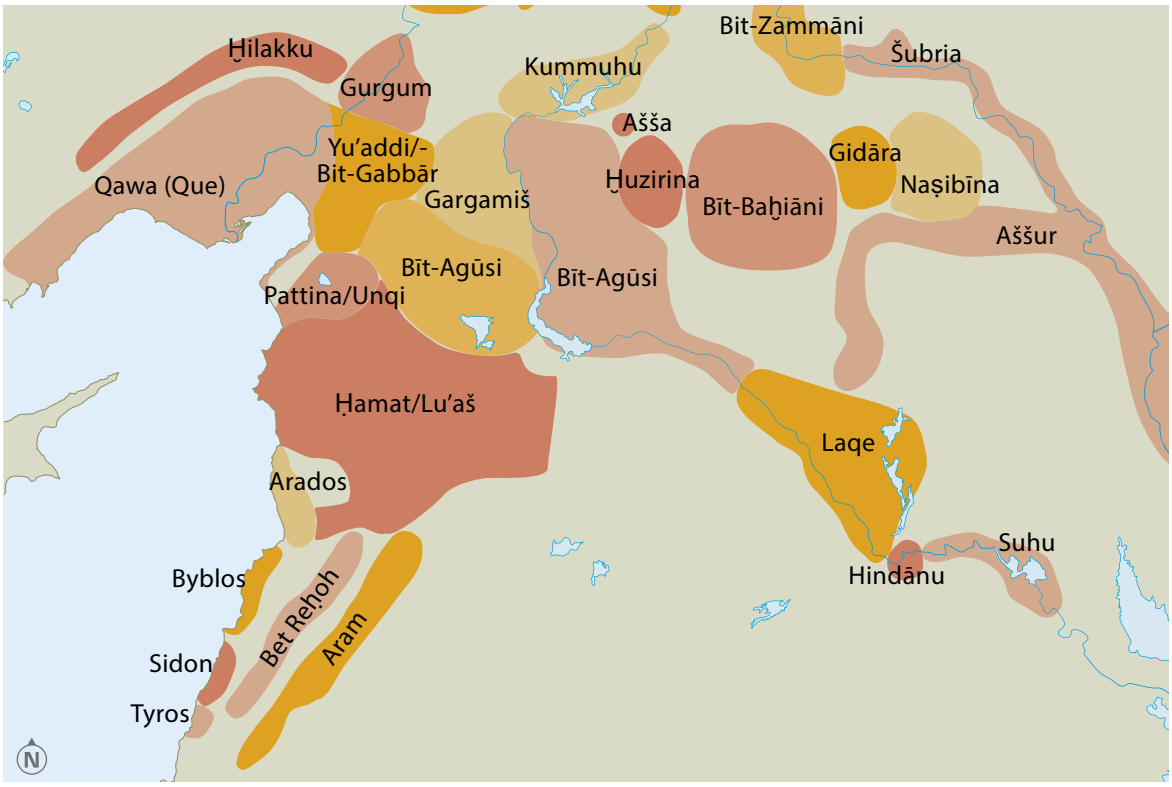
7.6 Phoenicians

Current state of knowledge

The Phoenician culture stands out, among other reasons, because it had almost no territory. Its heartland was only a narrow, rugged strip of river valleys along the Syrian, Lebanese and Canaanite coast of the Mediterranean Sea. After the destruction during the crisis years shortly after 1200 BCE and subsequent reforms, Phoenician merchants conducted their business with the few commodities available at the time. However, it soon dawned on them that arts and crafts would generate the highest margins. It was then that the Phoenician population began to produce textiles, furniture, ivory carving, glass and metal goods that were valued throughout the Middle East and the Mediterranean. In regard to the processing of precious metals, Phoenician artisans set new standards. Thus metals were also transported over long distances, together with luxury goods and spices. In the 12th and 11th century BCE, iron gradually replaced bronze.

The Phoenicians founded maritime bases abroad to help them control the largest possible sections of the trade routes. These settlements developed into manufactories and factories. The Phoenician maritime trade followed routes that were already used during the Late Bronze Age. Its primary focus was on ore deposits in Cyprus, Sicily, Sardinia, Etruria and southern Spain, as well as on several islands in the Aegean.

This Syrian nobleman features thick black hair that is held back by a dark hairnet. A cape is wrapped around his robe.



After the Sea Peoples' raids, around 900 BCE, the Fertile Crescent consisted largely of Luwian-Aramaic principalities.

The Phoenicians were also excellent hydraulic engineers. Near Dor, Israel, one can still find docks built of ashlar masonry as well as paved platforms. In the port city of Haifa, north of Achziv, the inhabitants had carved semicircular basins out of submarine platforms created by abrasion that reached far off into the sea. In Sidon, they had developed a hydraulic system of basins and channels in which the wind largely determined the water supply. It channeled sediment-free water into the basin and prevented the ports from silting up.

Suggestions
Impulses from Luwia

The texts on the walls of the Egyptian mortuary temple at Medinet Habu and various documents show that some of the Sea Peoples settled in Canaan. These immigrants had great skill in navigation and ship-building and were likely to have acquired a certain audacity during

many years of conflict. In contrast, the traditional inhabitants of Canaan regarded themselves as solid artisans and specialists of maritime trade. Both populations together would have been predestined to create a culture such as that of the Phoenicians.

British archaeologist John Manuel Cook realized that the coasts of Lebanon and the locations of its port cities showed great similarity to the Aegean coast of western Asia Minor. In both cases, the coastal cities are not only far away from the relatively landlocked country, but also isolated from one another.

It is possible that, after the crisis years, some of the survivors from kingdoms of western Asia Minor moved to what is now Lebanon and contributed to the foundation of Phoenician cities there. Consequently, maritime trade routes of the Phoenicians followed the ones previously established during the Late Bronze Age. Of the Carians, a Luwian people, it is said that they maintained an outpost in Libya (Pausanias 3.1.1 and 4.1.1). In turn, settlers from the Phoenician city of Tyre founded the trading post of Carthage, located in modern Tunisia, in the 9th century BCE, which later achieved great power. The close connection between Luwians and Libyans during the Sea Peoples' invasions may have been renewed during the Early Iron Age in the form of the axis Phoenicia-Tunisia.

"Obviously, the trade routes of the 2nd millennium BCE never fell completely into oblivion during the so-called Dark Age that fell between Bronze and Iron Age." Hans Georg Niemeyer 1990, 47

"For Minos was the most ancient of all that by report we know to have built a navy. And he made himself master of the now Grecian Sea, and both commanded the isles called Cyclades … expelling thence the Carians and constituting his own sons there for governors."
Thucydides, *History of the Peloponnesian War* 1.4 (Hobbes)

7.7 The Etruscan Culture

Current state of knowledge

The origin of the Etruscans, who lived in north-central Italy, is still a subject of discussion. The Etruscan culture probably formed locally, but it is unclear whether it originated from the indigenous population or through immigration. The origin of its language, too, has not been clearly determined.

Already in ancient times there were two different hypotheses to these questions: Some writers argued that the Etruscans originated from Lydia in Asia Minor, and had migrated after 1000 BCE to the territory of modern day Tuscany. This thesis is supported by apparent similarities in the languages and arts. Genetic research, too, strengthens this view: gene sequences have shown that even some of the Tuscan cattle are related to those from northwestern Asia Minor.

Other researchers assume that the Etruscan culture developed in central Italy from the Villanovan culture. This theory is supported by the seamless transition of the Villanovan into the Etruscan culture. Dionysius of Halicarnassus advocated this theory as early as the 1st century BCE. Today it is a common assumption that the Villanovan culture emerged from local farmers, Phoenician seamen and Indo-European Italians. When immigrants from Asia Minor (Tyrrhenians) mixed with this population, the Etruscan culture developed.

Suggestions
Roots in western Asia Minor

In ancient Greece it was commonly believed that the Etruscans originated from northwestern Asia Minor. Herodotus wrote (1.94) that emigrants from Lydia had founded the later Etruscan settlements in central Italy. They were reported to be well-versed in seafaring, trading, arts and crafts and thus laid the basis for the Etruscan and, subsequently, the Roman culture. Aeneas, a descendant of the ruling dynasty of Troy, is considered to be the founder of the ancient Roman dynasty that succeeded that of the Etruscan in ruling on Italian ground.

The hypothesis that, after the crisis years, some of the Luwians settled in today's Italy can be substantiated by archaeological finds. Especially when it comes to the monumental tomb architecture and burial gifts, there are clear parallels with Asia Minor. Burial customs change particularly slowly; and the impressive burial mounds in central Italy show a striking resemblance to the extensive tumulus fields near the old Phrygian and Lydian capitals. Like their Late Bronze Age predecessors, individual Etruscan cities never formed a union. They remained independent city states, which at best formed a loose confederation.

Etruscan engineering was of the same caliber as the hydraulic engineering during the Late Bronze Age. In Italy, entire schools were devoted to the study of hydraulic engineering. Even after Etruria had been subjected to Roman rule, the Romans consulted graduates of these schools for difficult technical projects. The main task consisted of drying up wetlands in floodplains and coastal plains. The surplus water was then redirected to arid fields via a sophisticated drainage system. Near Orbetello, in the Tuscan province of Grosseto, a unique coastal regulation was installed that still works today, which included well thought-through artificial canals and tunnel route currents and counter currents alternately to prevent silting.

Above all, the Etruscan language seems to be so closely related to the Indo-European languages of Asia Minor that linguists have even interpreted Etruscan as a "colonial Luwian language." A number of Etruscan words and personal names correspond to Luwian counterparts. Such a relationship is also suggested by the so-called Disc of Magliano, a circular lead disc 8 centimeters in diameter, which came to light around 1883, most likely through illegal excavations in the province of Grosseto in Tuscany. It was probably found in a burial ground dating to sometime between the 7th to 3rd century BCE and is now exhibited in the Archaeological Museum in Florence. The disc is engraved on both sides in a spiral arrangement running towards the center using Etruscan script. With about seventy words, this is one of the longest Etruscan texts. The form and type are reminiscent of the Phaistos Disc.

"So the King divided the population in two groups and determined by drawing lots which should emigrate and which should remain at home. The lots were drawn and one section went down to the coast at Smyrna, where they built vessels, put aboard all their household effects and sailed in search of a livelihood elsewhere. They passed many countries and finally reached Umbria in the north of Italy." Herodotus, *The Histories* 1.94 (de Selincourt)

"About this time two brothers, Lydus and Tyrrhenus, were joint kings in Lydia. Hard pressed by the unproductiveness of their crops, they drew lots to see which should leave his country with part of the population. The lot fell upon Tyrrhenus. He sailed to Italy, and from him the place wherein he settled, its inhabitants, and the sea received their famous and their lasting names." Velleius Paterculus, *Roman History* 1.1.4 (Shipley)

"The city of Rome, according to my understanding, was at the outset founded and inhabited by Trojans, who were wandering about in exile under the leadership of Aeneas and had no fixed abode." Sallust, *Bellum Catilinae* 6.1–3 (Rolfe)

"I am amazed that the Italians are allied against me, given the fact that we have common origins in the Trojans and they have as much interest as I in avenging the blood of Hector on the Greeks." Sultan Mehmed II to Pope Pius II according to Michel de Montaigne (1580), *Essays* 2.36 (Screech)

J. Goeree Invent. et fec.

DICTYS
CRETENSIS
ET
DARES PHRYGIUS
DE BELLO TROJANO,
In uſum Sereniſſimi Delphini
CUM INTERPRETATIONE
ANNÆ DACERIÆ.
Accedunt in hac Nova Editione Notæ Variorum integræ,
Nec non
JOSEPHUS ISCANUS,
Cum Notis SAM. DRESEMII.
Numiſmatibus & Gemmis, Hiſtoriam illuſtrantibus exornavit
LUD. SMIDS, M. D.
Diſſertationem de Dictye Cretenſi præfixit
JAC. PERIZONIUS.

AMSTELÆDAMI,
Apud GEORGIUM GALLET.

M. DCCII.

b

Previous pages: In 1702, Jakob Perizonius established the paradigm that is still valid today claiming that the supposed eyewitness accounts of Dares and Dictys are purely fictitious.

8. Sources

8.1 The Homeric Epics

Current state of knowledge

Homer is considered to have been the first poet of the West. The prevailing scholarly consensus places him in the 8th century BCE. His epics, the *Iliad* and the *Odyssey*, revolve around the Trojan War. Homer derived the subject of his poetry from the great Epic Cycle that had been preserved in the collective memories of the heroic era of the Late

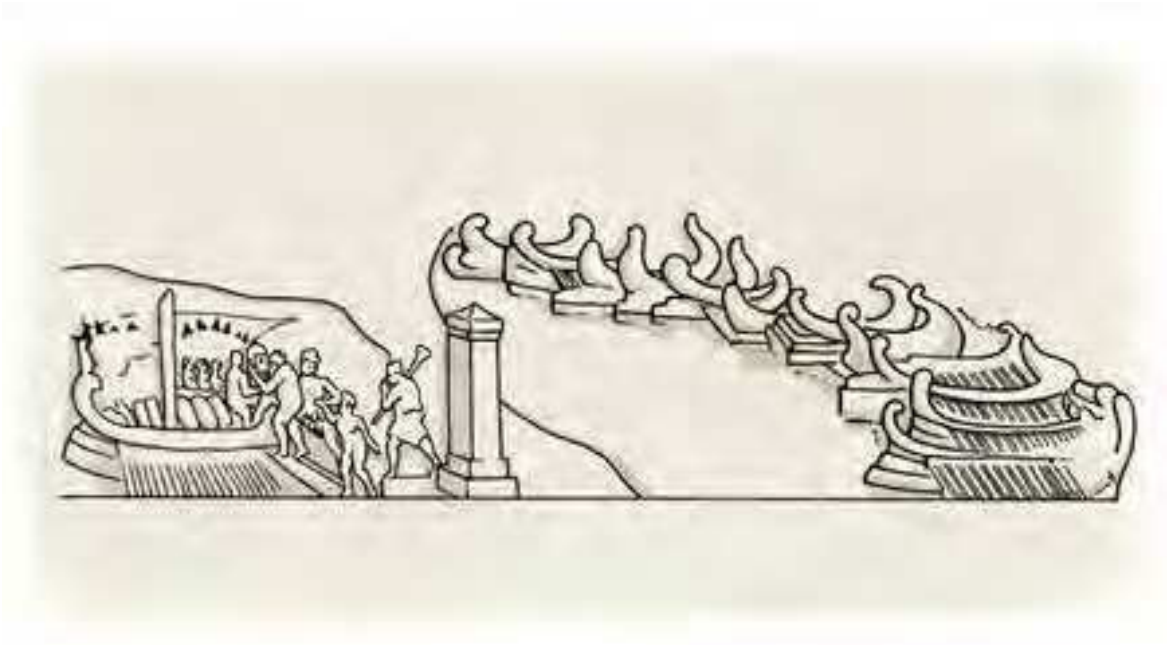
Medieval buildings close to the surface are carefully restored at many sites in Turkey – as seen here in Laodicea. The settlement remains of the Luwians lie several meters below.

Bronze Age. The Epic Cycle was passed down orally from generation to generation after the knowledge of writing had been lost among Greek peoples.

When writing was reinvented in its alphabetic form, Homer used it to preserve his poems for posterity. Because of its outstanding literary quality, his work soon became a huge success. Homer had thus taken a well-known story as the basis for his poetry. Using his literary brilliance to provide sophisticated entertainment and intellectual stimulation to his audience, he decided to modify these well-known tales. His subjects and his narrative

The so-called Midas Monument was probably part of a place of worship dedicated to the goddess Cybele.

Greek colonies of the Early Iron Age.



The Greek ships in front of Troy next to a column at the entrance to the port, according to a relief that relates the story of the *Little Iliad* in pictures.

form had to be chosen so as to capture his audience's attention. Accordingly, Homer's epics consist of numerous heroic sagas and love stories. Thus it was not Homer's ultimate goal to provide historical facts. Yet, the popularity of the *Iliad* and the *Odyssey* caused the memory of the orally transmitted events to fade into the background, while the stories told by Homer attracted the limelight.

Some elements of Homer's poetry can, with much certainty, be traced all the way back to the Bronze Age. Among them are phrases and expressions that already could be found on the Linear B tablets of the Greek palaces. The so-called catalogue of ships too, that lists the Greek armed contingents heading for Troy, reflects the political geography at the end of the Bronze Age. Even the heroic battles between various battalions of chariots (which could be found in the Eastern Mediterranean only up to about 1200 BCE) had been occasionally mentioned in the Hittite texts in a similar form.

Suggestions
After the heroic age civil war broke out

The two works commonly attributed to Homer may not have been written by a single author. Passages such as Odysseus's re-conquest of his palace in Ithaca seem almost like eye-witness accounts – only the bard was spared from death so that he could transmit the events for posterity. Descriptions of the landscape of Troy, however, seem to have been written in the 8th century BCE or had undergone extensive rewriting, for Homer never mentions any outskirts of Troy. Entire passages of text, such as the aforementioned catalogue of ships and, most importantly, the travels of Odysseus (*Odyssey*, Books 9–12), may have been taken as a whole from external sources.

The American classicist Gregory Nagy of Harvard University and his team argue in favor of this approach. They notice that there is no memory of Homer as a person. Had he actually lived in the 8th or 7th century BCE, anecdotes would have preserved an account of him, as was the case with Hesiod. Homer, however, seems more like Hercules – a personification of outstanding achievements, to make these more human, more understandable and easier to communicate.

The Troy excavator Wilhelm Dörpfeld argued that Homer had lived in the 12th century BCE, about a generation after the Trojan War. In this case, he may have been one of the original poets contributing to the Epic Cycle, but not the author of the complete *Iliad* and *Odyssey*, which were written down only 400 years later. A fragment by Diodorus (7.2) says that Homer died "before the return of the Heraclides." Since Diodorus dates the Trojan War to 1184 BCE and, according to him, 80 years had passed until the return of the Heraclides, Homer would have lived before 1100 BCE (see Wirth 1993, 519 and 524).

The core of the Epic Cycle was undoubtedly conceived by brilliant poets. Perhaps they or their parents still knew the royal courts of the heroic age from personal experience. Those who orally preserved these epics over many generations deserve admiration, too. Finally, there were the actual authors who wrote down the work in the 8th century BCE. Perhaps they did a large amount of research or traveled extensively in order to transmit the events accurately. Another thousand years separate the first written version from the oldest surviving fragments

of the Homeric epics, to which the Homer papyrus in London (from the first half of the 2nd century CE) and the Homer papyrus in Berlin (from the 3rd century CE) belong. The oldest surviving manuscript that reproduces the complete text of Homer's *Iliad* dates back to the 10th century CE.

"It seems fairly clear that no one used the name 'Homer' to refer to an individual person until c. 500 BC, Xenophanes and Herakleitos created him to find fault with him." Emily Vermeule 1986, 86

"It could be that there were a number of 'creative geniuses' who contributed significantly to the development of the epics. Quite possibly this part of the process began long before the late eight century." Trevor Bryce 2005, 370

8.2 Non-Homeric Accounts of the Trojan War

Today, most people think that the stories surrounding the Trojan War were transmitted in only one epic: Homer's *Iliad*. But this view is less than 200 years old. A number of comprehensive reports of the Trojan War still exist today, the so-called non-Homeric accounts on Troy. As it turns out, Homer had used only small parts of the Epic Cycle for his poetry. The plot of the entire *Iliad* only treats, in detail, events over the course of fifteen days and five nights. In order to appreciate Homer's episodes, the audience had to know the whole framework of legends. These had to be transmitted in one way or another. This and the fact that a number of people were concerned that the quality and popularity of Homer's work could distract from what really happened spurred other authors to produce comprehensive accounts of the Trojan War. However, when it comes to examining ancient texts, there seems to be an imbalance between the attention that Homer's work received on the one hand and the little interest in the non-Homeric accounts of Troy on the other.

Homer is generally considered to have offered the Greek perspective of the conflict, while many of those non-Homeric Troy reports relayed a rather Troy-friendly version of events. During the Middle Ages, it was those stories that became popular and common knowledge, not the Homeric epics. They had a lasting impact on European thinking. For over a thousand years, aristocratic families, royal dynasties and entire nations traced their family lines back to Troy. Some historians have considered Troy "the common heritage of Europe" and "the idea of a genealogical relationship within Europe," but these notions are not related to Homer, because during the peak of the European enthusiasm for Troy, Homer's work had been neglected and was only known from hearsay.

Apparently, not a single attempt has been made so far to compare the content of non-Homeric reports on Troy with the findings made during 140 years of excavations. At the same time, numerous studies link Homer's work to the archaeological findings at Troy. On the 462 pages of his textbook entitled *Troy and Homer* the retired Hellenist Joachim Latacz mentions the existence of non-Homeric sources on Troy only once and with only one word: he calls them mythographs. The


ΟΜΗΡΟΥ ΙΛΙΑΣ

ΣΤΝ ΤΟΙΣ ΣΧΟΛΙΟΙΣ.

HOMERI ILIAS

AD VETERIS CODICIS VENETI FIDEM RECENSITA.

SCHOLIA IN EAM ANTIQUISSIMA

Ex eodem Codice aliisque nunc primum edidit cum Asteriscis, Obeliscis, aliisque Signis criticis,

JOH. BAPTISTA CASPAR D'ANSSE DE VILLOISON

UPSALIENSIS ACADEMIÆ, SOCIET. LATINÆ JENENSIS &c. SODALIS.

In 1788, Jean-Baptiste Gaspard d'Ansse de Villoison published the first edition of the *Iliad Codex Venetus A,* including its scholia.

term suggests that those stories involve divine forces. But the opposite is true: the non-Homeric sources contain virtually no mythology. It is Homer's account in which the gods determine the course of history. The poet even claimed to know what gods talked about in conversations. How did he find out? Precisely for these reasons, Homer was considered non-authentic, at least until the Enlightenment. Homer had not been around at the time of the Trojan War, and he claimed that gods intervened in human affairs. Both these considerations made his work seem unreliable.

To date, much inspiration in Aegean prehistory has its source in Homer's poetry. Charles Maclaren was able to locate Ilion based on the information provided by Homer. And when, during the excavations, geophysicists unexpectedly discovered trenches in the bedrock, Manfred Korfmann and his head philologist, Joachim Latacz, interpreted these as "obstacles against approaching chariots," because the digging of a trench is indeed mentioned in the *Iliad* (although on the Greek side).

The interest in Homer was only revived at the end of the 18th century and soon turned into an obsession because the works of Homer

supported the thinking of the new humanism in the 18th and 19th century. In this respect, it was helpful that in 1788 a manuscript of the *Iliad* from the 10th century was published; the Codex Venetus A with numerous scholia and marginalia. Since then, for about seven generations, Homer's work has received major attention in the curricula of Western schools, possibly causing today's scholarship to lose the necessary distance. The identification of Luwians and their role in the Sea Peoples' movements and in the Trojan War now provides a welcome opportunity to look at some neglected ancient texts from a new perspective.

"Up until the 16th century the Trojan War is seen as a real event of world-historical importance." Elisabeth Lienert 2001, 204

"Everyone should be a Greek in his own way! But he should be a Greek nonetheless!" Johann Wolfgang von Goethe 1831, 83

"The first German philhellenes borrowed their ideals – self-cultivation, disinterested contemplation of the beautiful, good, and true, admiration of the ancients – from aristocratic models; but the incorporation of nineteenth-century philhellenism into the founding ideals of Prussia's new research universities, secondary schools, museums, and art academies after 1810 universalized these values and in effect imposed them on generations of middle-class Germans." Suzanne L. Marchand 1996, xviii

8.3 Dio Chrysostom

Current state of knowledge

Greek poetry was almost non-existent during the first two centuries CE. Consequently, Dio Chrysostom, who was born in Prusa (today Bursa) in northwestern Asia Minor in 40 CE, had almost no contemporaries on par with him when it came to rhetorical skill. Dio hailed from one of the most respected and wealthiest families in Prusa and enjoyed an exquisite education in dialectic, rhetoric and philosophy. He had the opportunity to travel extensively. Initially these were voluntary trips; later, however, he was forced to travel, for he had been expelled from Rome, all of Italy, and his native Bithynia for four decades. Of Dio's entire body of work, eighty speeches have been preserved; however, two extensive historical works were lost. He earned his nickname Chrysostom, "golden mouth," quite rightly, through his astute literary essays, moral philosophical teachings, subtle anecdotes and intelligent wordplay.

Suggestions
Hieroglyphic columns in Egypt tell of the Trojan War

In his eleventh speech, Dio provided a detailed description of the events leading up to the Trojan War, which in some respects differs from the popular version. The way he derived the story is noteworthy, too:

> "I, therefore, shall give the account as I learned it from a certain very aged priest in Onuphis, who often made merry over the Greeks as a people, claiming that they really knew nothing about most things … My informant told me that all the history of earlier times was recorded in Egypt, in part in the temples, in part upon certain columns … He added that these stories about Troy were included in their more recent records."
> Dio Chrysostom, 11.37–38 (Cohoon)

Onuphis is situated in the Nile Delta in the immediate vicinity of Saïs; that is exactly where Solon, six centuries before Dio, first learned

from a wise temple priest about hieroglyphic columns describing a glorious victory of his Greek ancestors over a power in the distant past (Plato, *Timaeus* 21e–22b).

ΔΙΩΝΟΣ
ΤΟΥ
ΧΡΥΣΟΣΤΟΜΟΥ
ΛΟΓΟΙ

ΛΟΓΟΣ ΠΡΩΤΟΣ
ΠΕΡΙ ΒΑΣΙΛΕΙΑΣ

Orations of Dio Chrysostom edited by Johann Jakob Reiske, 1784.

Dio goes on to describe the city of Troy as the "the greatest of all in Asia" (11.57). He continues to say that "of all cities, Troy was the wealthiest" (11.63) and that during the war against Greece, more and more allies had flocked to support the Trojans (11.79). The Greeks had a hard time during the fighting at Troy. They were plagued by famine and pestilence, and a serious conflict broke out amongst their leaders (11.79). Such statements can also be found in Plato's report of the Saitian priests about the downfall of a powerful enemy of the Greeks (*Timaeus* 24e, *Critias* 120e, *Timaeus* 25c). Even this city's historically unique burial under mud (*Timaeus* 25d) can be found in Dio's description of Troy: Apollo and Poseidon allowed the rivers to flood the city and to wash it away (11.76).

Dio tells this story to prove that Homer's *Iliad* is historically incorrect and therefore misleading. According to Egyptian records, Greeks and Trojans had even agreed on a ceasefire and peace, after they had worn each other down. The surviving Trojan princes Hector and Aeneas later left their homeland to establish colonies elsewhere and rise "to become master of all Europe" (11.141).

It is clear that, parallel to the Greek tradition of the Trojan War, another line of transmission had been preserved in Egypt.

"In an era without greatness … Dio, who for good reasons was later called 'golden mouth', was besides Plutarch probably the most fascinating figure, clever and amiable, destined to escape from the world and yet committed to action." Winfried Elliger 1967, 44

"When I asked him [the Egyptian priest] to give this account, he hesitated at first, remarking that the Greeks are vainglorious, and that in spite of their dense ignorance they think they know everything."
Dio Chrysostom, *Discourses* 11.37–39 (Crosby)

8.4 Dictys Cretensis

Current state of knowledge

The *Ephemeris belli Troiani* of Dictys of Crete (Dictys Cretensis) is a Latin novel consisting of six volumes about the Trojan War. It is based on a Greek text from the 1st or 2nd century CE that had been lost, except for two papyrus fragments. The Latin version was composed by Lucius Septimius during the 3rd or 4th century CE. The *Ephemeris belli Troiani* claims to be based on the eyewitness account of the Cretan Dictys, who fought on the Greek side in the Trojan War. His recordings are said to have been discovered by accident in his grave in the year 66 BCE. But it is by no means proven that the account of finding the Dictys originals is authentic. The chronicler, the Cretan Dictys, is said to have accompanied his king, Idomeneus of Knossos, to Troy and to have taken the Greek side, while writing about the siege and conquest of Troy.

Unlike Homer, Dictys makes no reference to divine intervention. This gives his report a more modern and authentic character. The work was rediscovered in the 12th century and it played a pivotal role in the reception of the story of Troy during the Middle Ages up until early modern times. For Byzantine scholars, Dictys was the leading authority on Troy, followed by Homer, Euripides and Virgil. In Western Europe, the ranking was: Dares, Dictys, Virgil and Ovid.

From late antiquity onward, the story of Dictys's journal, in amusing prose addressed to a knowledgeable and sophisticated audience, came to be taken literally. During the Middle Ages, when Homer's *Iliad* was considered lost or was known only in an abridged version, Dictys's account, together with that of Dares, formed the basis of historical knowledge about the Trojan War. In 1702, however, not quite 20 years after the Ottomans had threatened to conquer Vienna for the second time and 170 years before Troy was rediscovered on Hisarlık, the Dutch classical scholar Jakob Perizonius established the paradigm still accepted today that Dictys's and Dares's works were entirely fictitious.

Suggestions
The Greeks attacked Luwian port cities

According to Dictys, Troy and not Mycenaean Greece initiated the Trojan War. He says that Priam's sons had intended to "carry the entire war to Greece" (2.8; Frazer). The idea that Greece, in early times, had been threatened by an aggressor, runs contrary to Homer, but can also be found in Plato (*Timaeus* 25b).

The Greeks responded by attacking coastal towns in the northwest of Asia Minor. The Greek hero Ajax assaulted neighbors who had friendly relations with Troy. He ravaged the rich cities of Pitya and Zelea, and, "not being content with these, laid waste Gargarum, Arisba, Gergitha, Scepsis and Larissa with marvelous swiftness" (2.27). Ajax also "made an attack against Phrygia, capturing cities and causing general destruction. Within a few days, he returned to camp, victorious laden with booty" (2.41).

According to Dictys, Troy had been embedded in an environment of friendly and prosperous neighboring cities – Late Bronze Age settlements which for the most part have yet to be located. Dictys says that the island of Lesbos was part of Troy's sphere of influence. Lesbos today belongs to Greece and has been researched archaeologically. Excavations show that the material culture of the Late Bronze Age indeed corresponds with that of Troy. If the historical details mentioned in Dictys's report were fictitious, with regard to Lesbos they were really well-invented.

Allies from Ethiopia and even India are said to have come to the aid of Troy (4.4). "Many men followed each of the leaders we have listed; their different customs and different languages caused them to fight in disorder and turmoil" (2.35). Coming from the east, the ships of the allies first went to Rhodes "which they soon discovered to be an ally of Greece" (4.4) – another fact that has been verified through archaeological research.

Dictys lists the Trojan allies and distinguishes between political allies, who were contractually obliged to support Troy, and mercenary armies, who had been hired for large sums of money. This type of mutual aid was common practice in the Late Bronze Age, as documents from Hattuša, Ugarit and Thebes indicate.

In his report, Dictys also mentions (2.18) that the Greeks had taken along special trade vessels for taking home booty. The distinction between agile warships that could be drawn onto the beach and bulbous cargo ships is particularly revealing. Many classical scholars have thus far assumed that commercial vessels had been drawn onto the beach, like the ships of the invaders in the *Iliad*. Actually, heavy commercial ships such as the one known from Uluburun must have moored at a quay, as they would have broken apart had they been pulled onto the shore.

"Achilles and his army, seeing at the outset that the inhabitants of Ilium were enclosed by walls, tried to carry on the war outside and, by making raids all round, to take away from them all the surrounding places."
Strabo, *Geography* 13.1.7 (Jones)

"Meanwhile Achilles suspected that the states bordering on Troy were Trojan allies and, so to speak, a Trojan arsenal. Accordingly, taking some ships, he attacked Lesbos and easily took it by storm … Then, as all of his soldiers demanded it, he attacked the wealthy cities of Scyros and Hierapolis with all of his forces; and these he utterly destroyed without any trouble in a few days. Wherever he went, the country was completely pacified and plundered, and everything was thrown into turmoil; anything that might be helpful to Troy was either overturned or destroyed … But Achilles was by no means content with what he had already done. Therefore, he attacked the Cilicians and, within a few days, took Lyrnessos by storm. He filled his ships with much wealth."
Dictys Cretensis, *Journal of the Trojan War* 2.16–17 (Frazer)

8.5 Dares Phrygius

Current state of knowledge

The *Iliad* mentions a Dares of Phrygia, who was a priest of Hephaestus (5.9, 5.27). Under the pseudonym Dares Phrygius a Latin novel entitled *Acta diurna belli Troiani* appeared in the 5th century CE that allegedly provides an eyewitness account of the Trojan War. Historians today tend to think that this Latin version was based on a Greek original, since the Roman sophist Claudius Aelianus (*Varia Historia* 11.2) in the 2nd century CE and the Greek writer Ptolemaeus Chennus in the 1st century CE testify to the existence of a Greek book by Dares.

Isidore, bishop of Seville and historian (ca. 560–636), compiled the knowledge of antiquity of the Mediterranean that still existed in the West around 600 CE in his fundamental work *Etymologiae*. He mentions Dares in one breath with Moses and Herodotus:

> "The first authors of history: Among us Christians Moses was the first to write a history, on creation. But among the pagans, Dares the Phrygian was first to publish a history, on the Greeks and Trojans, which they say he wrote on palm leaves. After Dares, Herodotus is held as the first to write history in Greece."
> Isidore of Seville, *The Etymologies* 1.42 (Barney)

The content of *Acta* differs from that of the *Iliad* in some important ways. It can be considered a counterpart to the *Ephemeris belli Troiani* by Dictys Cretensis; the latter looks at the same historical events, but from a Greek perspective. Dares, being Phrygian, represents the Anatolian point of view and therefore tends to be more supportive of the Trojan side. Some important moments of the plot in Homer's epic, such as the wrath of Achilles, the main theme of the *Iliad*, can be better understood thanks to the background that Dares provides.

Achilles falls in love with Polyxena, daughter of the Trojan king Priam, and asks her mother for permission to marry her. The queen turns to the king, and Priam says that he would only grant permission if a formal peace treaty is signed beforehand; something that obviously did not happen. The description of events is more rational, and history takes its course without intervention from heroes or even gods, which

makes it similar to the report of Dictys Cretensis. According to Dares, Troy was ultimately defeated because the city had been betrayed by Antenor and Aeneas. The two had opened a gate at night so that the Greek forces could enter the citadel.

Suggestions
The Luwian states formed an alliance and built a fleet

For nearly a thousand years, widespread enthusiasm for the Anatolistic depiction of Dares prevailed in Europe. Then suddenly, shortly after the Ottomans had besieged Vienna for the second time, this passion disappeared. In 1702, the Dutch classical scholar Jakob Perizonius established "once and for all" that the works of Dares and Dictys were "irrefutably" forgeries. This paradigm has since become firmly anchored in humanities textbooks. Perizonius, however, was in every way a philhellene; he had replaced his original Dutch name Voorbroek with a Greek one and would only mention Turks in cases where they were directly involved with Europe. Nevertheless, he was open-minded in many ways and firmly believed in the historicity of the Trojan War. Considering his approach to use more than one source and to find a compromise between unbelief and gullibility, Perizonius probably would have been the first to admit that his findings were only tentative. – What would happen if scholars in ancient philology reconsidered their paradigms from time to time, in particular when new evidence has come up? After all, the physical sciences have gone through quite some transformations since 1702 – and have greatly benefitted as a result.

Possibly one of the most informative passages in the work of Dares is a rather casual remark in Chapter 6:

> "Europe had bred many warlike men who would come to Greece's aid, while they themselves, who lived in Asia, had spent their time in idleness and built no ships." (Frazer)

Edition of Dares from 1569.

We now know that the reference to Minoan sea power (thalassocracy) in Thucydides (1.4; 1.8), Herodotus (3.122) and Diodorus (5.84.1) can claim to be historically justified. Should Dares's statement that the Asian side – that is the Luwian side, probably with the exception of Troy – had no ships turn out to be historically correct, it could illuminate a few pending issues for which excavations alone could thus far provide no answers. Dares says (7): "And so they unanimously decided to ready a fleet and set out for Greece."

The Luwian states may have possessed thriving economies based on agriculture, metals and trade along domestic routes. The sea routes, however, had been controlled initially by Minoan lords, and after 1450 BCE by Mycenaean, who apparently hired at least in part Canaanite ships, as indicated by the wreck of Uluburun. If the Asians (i. e. the Luwians) had jointly decided to build a substantial fleet in a short period of time around 1200 BCE, it might explain some peculiarities of the Sea Peoples' inscriptions in Medinet Habu: first and foremost the surprise repercussions that these raids obviously had, and also the fact that the invaders were known by name as former foot soldiers.

The remarkably sophisticated type of ship that the Sea Peoples were using might also be explained in this way. We may safely assume that the Kingdom of Troy had built its wealth in part by controlling the trade through the Dardanelles. Such control could only be exercised militarily. Consequently, the Trojans must have possessed agile ships and excellent nautical skills in order to navigate the straits, if necessary even against the current. Should the Luwians decide to form a military alliance and to build a fleet, it would be fitting to do so under Trojan supervision and using a Trojan ship type as a model. In this way the Kingdom of Troy would have assumed some sort of leadership as far as naval actions were concerned. And this, in turn, could explain why the combined Greek and Luwian armies had gathered, of all places, before the gates of Troy in order to fight the decisive battle. Depictions of the Sea Peoples' invasions indeed show that many invaders wore feather headdresses. They also bore the name Tkr – for Teucer. Both elements are closely linked to Troy.

Dares attempts to present hard facts – up until the last sentence of his work:

> "The war against Troy lasted ten years, six months, and twelve days. The number of Greeks who fell, according to the Journal that Dares wrote, was 886,000; the number of the Trojans 676,000."
> Dares, 44 (Frazer)

Even though the specific numbers regarding the victims of the war may have been invented, their order of magnitude is still remarkable.

8.6 Quintus of Smyrna

Current state of knowledge

Quintus of Smyrna was an ancient Greek poet who probably lived in the 3rd century CE. He produced just one epic that is still extant. His work is mostly referred to by its Latin title *Posthomerica*, and thus the poet's name is also rendered in the Latin form Quintus Smyrnaeus. Quintus transmitted the stories about Troy using a variety of sources without identifying them.

His work is a sequel to Homer's *Iliad* and begins exactly where, according to Homer, the Trojan War ends. In 14 books with a total of 8772 verses, Quintus relates the legendary events that had taken place during the last few weeks of the war, from the fall of Troy to the beginning of the *Odyssey*. His work is divided into many successive, more or less independent stories, and these are each largely self-contained. The only surviving manuscript of Quintus's epic was discovered around 1460 by Cardinal Basilios Bessarion in Otranto, Calabria, and the first printed edition of the work attributed to the workshop of the Venetian printer Aldus Manutius appeared in 1504.

Suggestions
The ruins of Troy disappeared beneath the mud

Quintus intends to close the chronological gap between the events that had been recounted in the *Iliad* and those described in the *Odyssey*. He therefore mimics Homer in terms of vocabulary, language, syntax, meter and rhythm, parables, narrative style and construction. Like Homer, Quintus also focuses on the people, their dialogues and actions. Evidence that would allow conclusions to be drawn about the topography of the city of Troy and its surroundings are rare and appear primarily in the form of attributes. It is said of Troy that it was "strong-walled" (9.539) and had "enormous walls" (12.89).

Still, some parallels to excavational finds from Troy can be found in Quintus, which raises the question as to where the poet may have received his information. For example, it is said that the Mycenaeans, in order to protect themselves from attacks by Trojans, erected fortification

walls and towers at their homes (14.633). This could be regarded as a hint at the construction of the Cyclopean citadels in Mycenaean Greece around 1250 BCE. Elsewhere Quintus explains how the Trojan citizens prepared themselves for siege:

> "Nor do we have any lack of food and drink.
> In the palace of wealthy Priam abundant supplies
> Are safely stored away, so that even greater numbers
> Gathered for a lengthy period would enjoy
> Sufficient food, supposing another army three times
> As large should come here eager to help us in our need."
> Quintus, 10.20–25 (James)

These lines correspond with the architectural realignment of Troy VIIa after the destruction of Troy VIh which may have occurred around 1250 BCE (some archaeologists now favor a date around 1300 BCE). At that time, large storage jars were created under the floors. Quintus also describes in dramatic terms how the victorious Greeks "brought the women of Troy from all directions" (14.11). The latter statement matches information that was found in the Linear B tablets from Pylos, where women from western Asia Minor are mentioned specifically as workers in textile factories.

However, the most striking parallel does not concern excavation findings, but Plato. In the last lines of his work, Quintus describes what happened to the ruins of Troy after the city had been ravaged by the Greeks:

Quintus Smyrnaeus (*Kointou Kalabrou paraleipomenōn Omērou*) from 1505, printed by Aldus Manutius in Venice with handwritten notes by Conrad Gesner.

"Poseidon himself tore open
The bowels of the earth and caused a great upward gush of water
Together with slime and sand. With all his might he shook
Sigeion, making the beaches rumble, and Dardania
From its foundation. So that enormous fortress vanished
Under the sea and sank down into the ground
When it yawned asunder. Only sand could still be seen,
When the sea had retreated."
Quintus, 14.646–653 (James)

Something quite similar to such torrential floods can also be found in Plato's *Timaeus* 25d.

"In a sad way the old age of the heroic epic turned childish and prostituted itself in form of the *Posthomerica* of Quintus of Smyrna. He transmits trivial passages of the heroic saga, which had been read at school, into Homeric verses, and the barren parroting would euthanize if the follies would not sometimes become so strong that one breaks out in laughter."
Ulrich von Wilamowitz-Moellendorff 1905, 216

"Among the late Greek epic poets Quintus is by far the worst. The anaemic pastiche served up by Quintus is utterly devoid of life."
Hugh Lloyd-Jones 1969, 101

"What a blunder of the Muses, that they, like Quintus indicates (12.308), appointed just him to be the epic poet, him – we may summarize the opinions – the worst poet of antiquity." Ernst Günther Schmidt 1999, 141

"To begin a book about a poem by discussing negative views of it, only to rebuff these views by means of one's own innovative scholarship, has become clichéd practice in the re-evaluation of traditionally non-canonical Classical texts." Calum Alasdair Maciver 2012, 24

"The neglect of this poem has been remarkable."
Calum Alasdair Maciver 2012, 26

8.7 Eusebius of Caesarea

Current state of knowledge

Eusebius of Caesarea (about 260–340 CE) was a late ancient Christian theologian and historian. He had access to many sources, public records, church libraries and private collections including works that no longer exist today. Eusebius wrote a work in Greek entitled *Chronicle* that for centuries was regarded and widely appreciated as the source of all historical knowledge. The first part of the *Chronicle* contained a collection of chronologies of different peoples from the earliest times up to the year 325 CE. The second part (the Canons) provides a historical overview from the "creation" up to 325 CE in parallel columns, including a chronology of regnal years and Olympic Games. Hieronymus later translated this Book 2 into Latin.

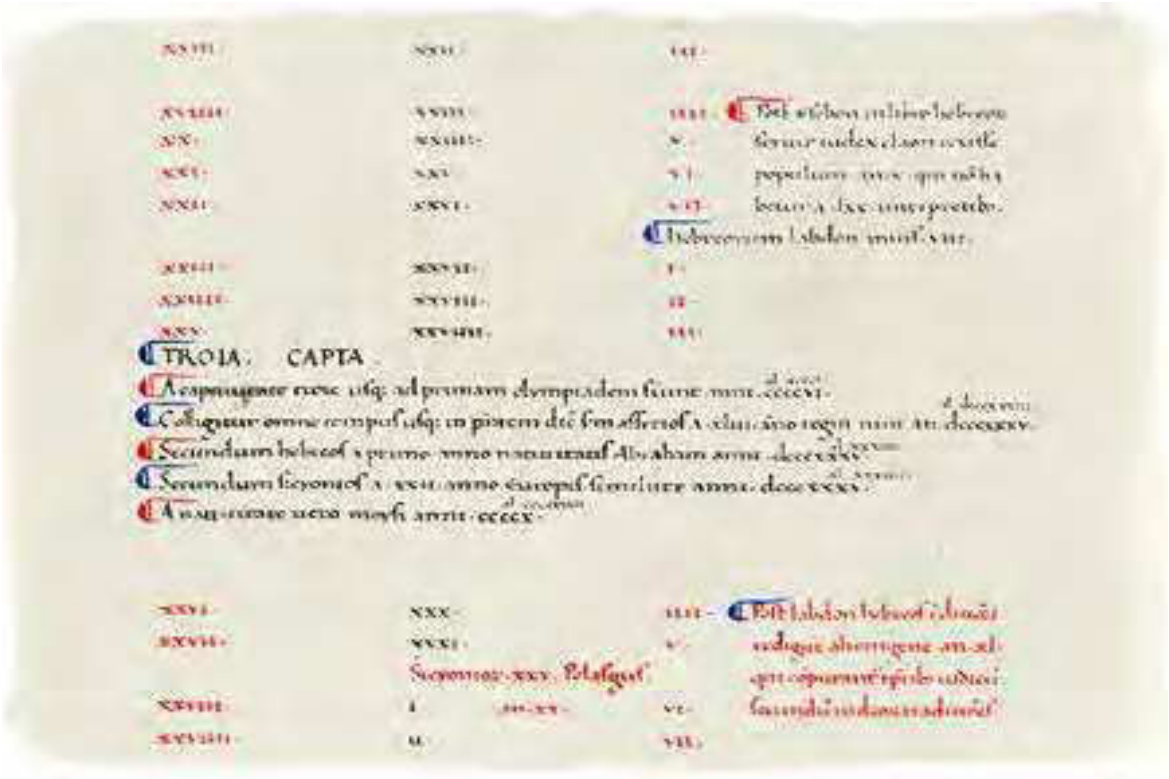
In one column for each, the chronologies of the respective peoples are listed, including the Assyrians, Hebrews, Sycionians, Argivians, Athenians and Egyptians. In the best manuscripts, all these columns are interrupted across the entire sheet in the year 1182 BCE to make room for the statement "TROIA CAPTA" – Troy was taken.

Apparently, for the chronicler and church father Eusebius it was evident that the Trojan War was a momentous historical event. The fall of Troy is highlighted even more than the birth of Christ. Eusebius's guide to chronology was used by medieval clerics again and again.

Suggestions
The overarching historical event

The above entry in Eusebius's chronology might be expected to put an end to the debate about the historicity of the capture of Troy at the end of the Bronze Age. This, however, is not at all equivalent to the Trojan War as described by Homer. In antiquity, virtually no authors questioned the historic authenticity of the Trojan War, but for most the real conflict had little in common with the epics of Homer.

Among the ancient authors who mention the Trojan War in their writings are: Hesiod (8th/7th century), Stesichorus (630–555), Sappho (late 7th century), Alcaeus (7th century), Ibycus (6th century), Simonides



In the Chronicle of Jerome, as reproduced by Eusebius, all columns for the year 1182 BCE are interrupted by the words TROIA CAPTA ("Troy was taken").

(556–467), Epicharmus (550–460), Aeschylus (525–456), Bacchylides (5th century), Herodotus (5th century), Sophocles (496–406), Euripides (485–406), Thucydides (460–400), Philoxenus (435–380), Xenophon (430–354), Plato (427–347), Aristotle (384–322), Lycophron (3rd century), Timaeus (345–250), Livius Andronicus (280–207), Naevius (270–201), Seneca (4 BCE–65), Pliny (23–79), Plutarch (46–120), Pausanias (2nd century) and Proclus (412–485).

Given the overwhelming evidence, the tendency of some historians to view the Trojan War solely as an invention of Homer is not convincing. Many authors from ancient Greece mentioned the conflict, and almost without exception did not doubt its historicity. They were, however, highly critical of Homer's account of the events. Evidence suggests that a conflict involving Troy ended with the city being captured and that this was an event of great political and cultural significance.

> "The significance of the fall of Troy could not have been better displayed visually. What is more, this is the only historical event standing out like that in terms of the layout. Each reader had to wonder what the matter was regarding TROIA CAPTA, where one could read this story, and who the relevant historian would be." Marc-René Jung 2001, 14

8.8 John Malalas

Current state of knowledge

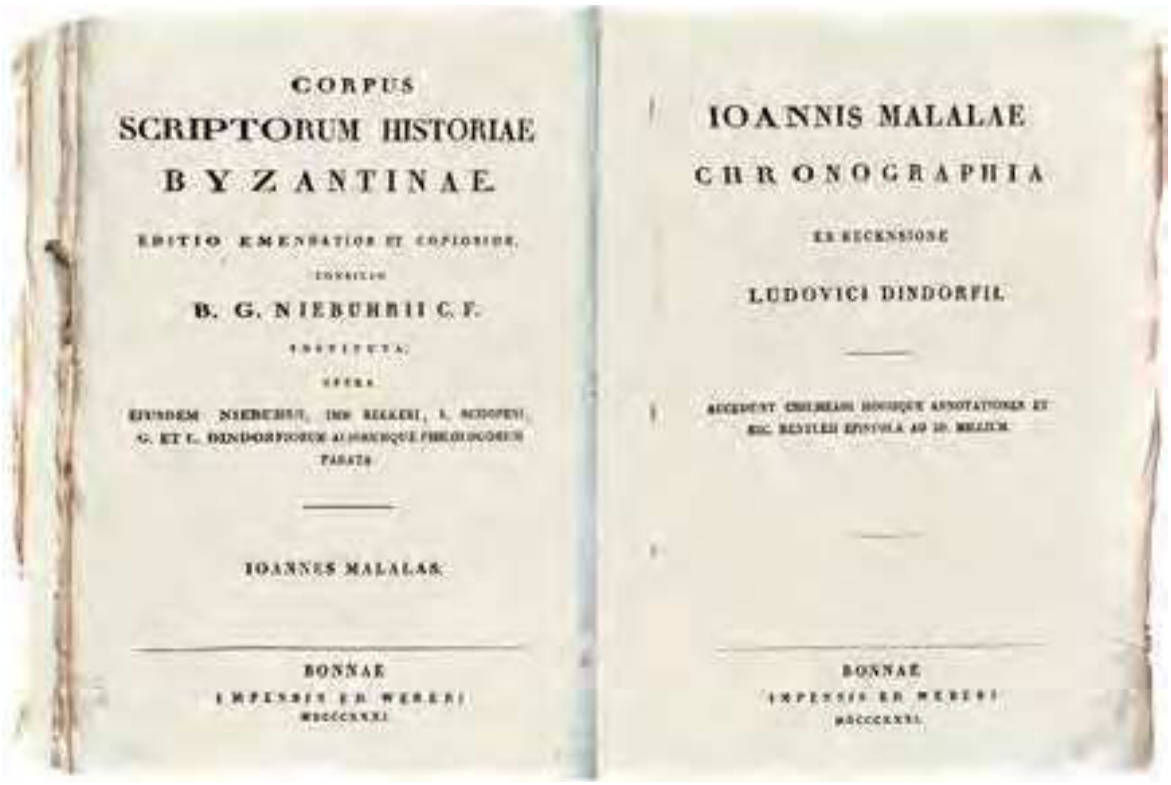
John Malalas was an East Roman historian in late antiquity. He was born around 490 CE in Antioch on the Orontes in Syria, where he most likely worked in the imperial administration or as a legal scholar in the service of the Antiochian Patriarch. Soon after the catastrophic earthquake that occurred in Antioch in 526, Malalas moved to Constantinople and thus into the center of the Eastern Roman Empire; there he died at the age of about 80 years. His name, Malalas, is Syrian and means rhetorician.

John is the author of the oldest almost completely preserved world chronicle. Consisting of eighteen books, it was written in Greek. The main manuscript from the 12th century is partially damaged and contains text that had been worked on by someone else and, furthermore, is no longer complete. The work enjoyed great popularity and, even centuries later, was imitated by many. Malalas used an almost colloquial writing style to make his work accessible and to entertain his audience. In his colorful account of the events, he mixes historical and mythological moments of the story without ever citing his sources. Since Malalas's source material could not be understood, researchers have treated his work with contempt and for a long time have deemed it inadequate.

Suggestions
Tros built two cities: Troy and Ilion

It cannot be stated clearly enough: No source can be regarded as historically accurate, regardless of whether it is the chronicle of a Byzantine historian, a hexameter by Homer, or an ancient Egyptian temple inscription. Ancient texts only become relevant and helpful when their contents can be matched with findings from archaeological excavations. Even then, ancient documents will not provide historical truth; they can, however, provide helpful suggestions for further research and ways of interpreting finds.

Excavations in Crete that have been conducted since 1900 revealed a horizon of destruction at the end of the Neopalatial period (around


CORPUS
SCRIPTORUM HISTORIAE
BYZANTINAE
B. G. NIEBUHRII C. F.
IOANNES MALALAS
BONNAE
IOANNIS MALALAE
CHRONOGRAPHIA
LUDOVICI DINDORFII
BONNAE

Edition of John Malalas's *Chronographia* from 1831.

1430 BCE) across almost the entire island. Palaces were destroyed and set on fire, most likely by Mycenaeans from the Greek mainland who had been conquering Crete. It is worth noting that the palaces had been abandoned prior to the destruction and that the fugitives had taken portable and valuable goods with them. It was long doubted that the Greeks would have been sufficiently powerful to conquer the whole island of Crete by themselves. But John Malalas provides a surprising explanation for the seemingly unopposed advance of the Greeks: He claims that the Cretan king Minos had an illegitimate son named Minotaur, who was to follow his famous father on the throne. The minor kings of the island considered the rule of a bastard to be an affront and were thus plotting against him. They invited Theseus, the king of Thessaly, the northernmost Mycenaean kingdom, to fight against Minos's successor. In the case of a victory, they would leave him not only Minotaur, but the whole country without a fight. "So Theseus went immediately to Crete to attack Minotaur, while all the [Minoan] senators and the army abandoned Minotaur and decided to flee to the city Gortyn" (4.23; Jeffreys).

If the events had actually happened in this or in a similar way, the voluntary surrender of the Minoan petty kingdoms may be regarded as one of the most unsound strategic decisions in world history. After this happened, Minoan domination of the sea trade was lost once and for all.

Malalas offers more stimulating information. For example, he states that the Mycenaeans went through the Hellespont and were suddenly attacked by the king of the region (4.12). Subsequently there was a naval battle, in the course of which the Anatolian attacker died. The Greeks then stormed his metropolis (possibly Maidos, located on the north shore of the Dardanelles). Many medieval authors consider this incident to have been the actual cause of the dispute between the Greeks and Trojans.

Furthermore, Malalas writes that the Kingdom of Troy extended all across Phrygia:

> "At that time Tros, the father of Ilios and Ganymede, reigned over Phrygia. He built two cities, one called Troy, after himself, and the other called Ilion, after Ilios his elder son. When he had completed the walls of the cities, he summoned all the toparchs, or rulers, of the land of Europe, except for Tantalos, emperor of the land of the Mykenaians." Malalas, 4.15 (Jeffreys)

Those who allow themselves to be inspired by the writings of ancient historians may recognize in this an echo of the Aššuwa league or of the Trojan contingents listed in the *Iliad*, whose territories extended all the way to the Axios River in Macedonia. Furthermore, there may have been a city called Troy in addition to the fortress Ilion on Hisarlık.

"Confused in content, mixing fable with facts, important events and minor incidents, it is clearly intended not for educated readers but for the masses." Alexander Alexandrovich Vasiliev 1952, 184

"Malalas's direct or indirect sources have not yet been established with certainty: they must have included official records and local chronicles of Antioch together with general histories and universal chronicles. Uncriticial, confused, and often childish, Malalas preserves many otherwise unknown facts." Arnaldo Dante Momigliano 1970, 641

"Malalas has preserved a great amount of the most important data which otherwise would have been lost." Albert T. Olmstead 1941, 22

8.9 Joseph of Exeter

Current state of knowledge

Joseph of Exeter (in Latin: Josephus Iscanus) was a cleric and writer of the 12th century who lived in Exeter and wrote poems in Latin. His best known work is a hexametric epic entitled *Daretis Phrygii Ilias De bello Troiano* ("The Iliad of Dares the Phrygian: On the Trojan War") that he completed around 1190. Subsequently he took part in the Third Crusade, from which he returned unharmed in 1194.

Joseph's epic presents the most widely-known version of the story of the Trojan War of his time, beginning with Jason and the Argonauts. In contrast to Dares, on whose account his work is based, Joseph displayed a vivid imagination and expressiveness; he embellished the historical original and added several episodes without naming his sources.

Suggestions
"The city twice reduced to ashes by destruction"

Certain statements in different medieval accounts of Troy correlate surprisingly well with the findings made during the excavations on Hisarlık – even though the city had been destroyed 2000 years before the medieval texts were composed. Drawing on Dares's report, Joseph of Exeter tells how Troy was attacked twice in relatively short intervals. This is how his poem begins:

> "My complaint is the tears of the Trojan Women and Troy given up to its fates, the two wars of the leaders, the city twice reduced to ashes by destruction." Joseph of Exeter, 1.1 (Bate)

Archaeologists have found evidence of two violent destructions at Troy, those of Troy VIh and Troy VIIa, but some still attribute the first one to an earthquake. – Joseph also says that a certain Aeacus of Aegina had been involved in the construction of the fortress wall. Aeacus had purposely implanted a predetermined breaking point into the wall, and had told his son Telamon of Salamis about it. Telamon belonged to Heracles's troops, who carried out the first attack on Troy:

> "But Telamon sneaks up stealthily and overcomes the hard resistance of the stones with his iron bar. And now, with the turned wall about to fall headlong, he steps back." Joseph of Exeter, 1.415 (Bate)

The vulnerability of the city wall of Troy in a particular place is hinted at in various ancient sources, including Homer, who says that Troy was most vulnerable "near the fig tree" (*Iliad* 6.431). Excavations by Wilhelm Dörpfeld indeed revealed a place where the fortification wall was less solidly built and had completely fallen over. Dörpfeld interpreted this as the result of an earthquake. The subsequent reconstruction (Troy VIIa) with narrow streets and numerous storage vessels is also mentioned in Joseph's account.

His verses also provide a vivid description of the partly artificial course of the river Dümrek. Whether the following passage is from the original Dares version or whether it comes from another source is not clear:

> "The river Simois irrigates nearby countryside as it travels from another world to see Troy. By its long journey through many kingdoms and cities it would like to have earned the right to flow out into the sea finally as a Trojan River. And while it gazes in unending amazement at Troy it delays its faltering course, slows down its already sluggish flow, and causes the whole city to be encircled. The sea is angry at the delay to its waters and presses in


DARETIS
PHRYGII POETARVM ET
Historicorum omnium primi, de bello
Troiano, in quo ipse militauit, Libri
(quibus multis seculis caruimus) sex, à
CORNELIO NEPOTE Latino
carmine Heroico donati, & CRISPO
SALLVSTIO dedicati,
nunc primùm in lucẽ
editi.

Item,
PINDARI THEBANI HOMERICÆ Iliados Epitome, suauissimis numeris exarata.

Adhæc,
HOMERI POETARVM PRINcipis Ilias, quatenus à Nicolao Valla, & V. Obsopœo carmine reddita.

BASILEAE

An edition of Joseph of Exeter (Joseph Iscanus): *Daretis Phrygii Ilias De bello Troiano* from Basel dating back to 1541.

> more violently, forcing the smaller river to move away so that it can get right up to the city. You would think they were striving to see who could get closer, such was the meeting of the two currents, such the continual roaring of the mutual strife." Joseph of Exeter, 1.524–536 (Bate)

It looks as though some accurate information from the time of the Trojan War was preserved through written records into the Middle Ages. In any case, Homer is not the only nor even the best source of suggestions concerning the possible appearance of Late Bronze Age Troy.

"He [Priam] soon reintegrates the scattered town and spreads it wide.
A sounder bastion keeps at bay the Greek division. First, the wounded walls are healed and breathe beneath his hand; the ramparts are content with just six openings. … He now is glad the towers fell, for now he has a greater tool – his loss is gain." Joseph of Exeter 1190, *Daretis Phrygii Ilias* 1.485 (Rigg)

8.10 Benoît de Sainte-Maure

Current state of knowledge

Benoît de Sainte-Maure (died 1173) was a French-language author from Sainte-Maure in the county of Touraine, which was one of the fiefdoms of the English Crown on French soil. By order of the English court of Henry II Plantagenet and his wife Eleanor of Aquitaine, around 1170 Benoît wrote the *Roman de Troie* (The History of Troy in Romance Language), a comprehensive narrative of 30,300 verses. It is based on the *Historia de Excidio Troiae* of Dares Phrygius and the *Ephemeris belli Troiani* of Dictys Cretensis, the two main sources on Troy in medieval times. From these, however, Benoît only took the basic framework which he then imaginatively and cleverly enriched with love stories, chivalrous battle scenes and scholarly digressions. The *Historia destructionis Troiae* by Guido de Columnis, published in Latin in 1287, is said to have been based primarily on the *Roman de Troie,* and from this numerous translations emerged in various vernacular languages of Europe.

Suggestions

No mortal has ever seen a city that was so vast and so prosperous

Benoît himself names Dares as his source for the material (verse 125–126) up until the destruction of Troy, but he says that this is a very rare book, although the traditional Dares text was readily available in Benoît's time. He also says that he would adhere strictly to the original, although his description goes far beyond the Dares text which is currently available. These are indications that a more detailed version of Dares existed in Benoît's day. About 500 years before Benoît (around 660), the chronicle of Fredegar was written. It contains a transcription of the chronicle by Eusebius, who in turn had lived almost another 400 years earlier (around 260–340). Fredegar mentions a text *Historia Daretis Frigii de Origine Francorum* that is not identical with the *Historia de Excidio Troiae* of Dares that we know. Thus Benoît may indeed have used a different version of Dares as his main source.


LE

ROMAN DE TROIE

BENOIT DE SAINTE-MAURE

TOME IV

PARIS

ROMAN DE TROIE

Benoît de Sainte-Maure composed the Roman de Troie in 1170 CE.

> "In Benoit's time a more detailed (Latin) Dares text still existed."
> Gustav Körting 1874, 70

In short, it is quite conceivable that several Greek and Latin versions of the *Historia* of Dares were extant during the Middle Ages. This would explain the discrepancy between the enormous respect that ancient historians held for Dares and the plain contempt with which historians of the 19th and 20th century treated the transmitted version.

Many passages of Benoît cannot be found in the versions of Dares and Dictys that we know of today. The level and preservation of detail in Benoît's writing is often remarkable. He wrote in medieval French; a translation into contemporary French was issued by Emmanuèle Baumgartner (1987). It reads (line 2863–3186):

> "Scholars read in their books what is still today a veritably accepted fact, namely that throughout the world there never existed a city that would have been comparable to Troy. This applies to its beauty, its size, the wealth of raw materials and

> simply its abundance. … The Trojans had found their city [Troy VIh] devastated, but they built it a hundred times better again by erecting a city [Troy VIIa] of perfect beauty and noble appearance. … High towers were raised around the whole city, made by mixing chalk and sand. … People had built more than a thousand houses, which were intended for the kings and aristocrats. The worst fortified would not have been afraid of all armed forces of the kingdom of France. … The population of the whole surrounding countries had been invited to come to the city and live there. And all these people populated the place so densely and covered it with houses that it would have cost you without a doubt three days and more to walk all around it."

This Troy has little in common with the Homeric Troy and almost nothing in common with the one that has been excavated on Hisarlık. It is a unique, vast and prosperous city – to this day, nothing like this has been found through archaeological excavations in the Troad. A simple explanation, of course, would be that nothing like this could be found because it had all sprung from Benoît's imagination. But Benoît never tires of referring to his source Dares, of whom he explicitly states that "he is not mistaken," for example when he gives the names of the six gates of Troy or when he describes the extraordinary richness of the altar in the palace of Priam.

"The title *Roman de Troie* is inaccurately translated as 'Troy novel'. *Roman de Troie* means: History of Troy in Romance language, i. e. French."
Marc-René Jung 1992, 12

"There is nothing in the works of Benoît that compels us to regard the work preserved to us under the name of Dares as the source. The sum of those places where Benoît significantly exceeds our Dares rather testifies a dependence on a more detailed template that would be identical with the original that in turn can be derived from the present Dares text." Rudolf Jäckel 1875, 63

"Offside rose Ilion, the main fortress of Troy. Priam had it built for his personal use and – so rest assured – never since then has there been a mortal who would have been able to build something similar. The citadel had been erected on the highest point of Troy, and who designed it really was a master architect! It looked like being carved from a single block of rock that was circular at its base and narrowing towards its tip. But even there its circumference reached five hundred toises [1000 meters] and more – so was Ilion. From there, you overlooked the whole country, and if you saw this rock from down below, it seemed to be so high that you might have thought it reached the clouds."
Benoît de Sainte-Maure 1170, *Roman de Troie* (Baumgartner)

8.11 Guido de Columnis

Current state of knowledge

Around 1271, the archbishop of Salerno, Matteo della Porta, encouraged the judge Guido de Columnis (around 1220–1290) from Messina, the capital of the Sicilian province, to write a work about the fall of Troy in Latin. The archbishop died after Guido had completed the first chapter, and without his encouragement, the work remained unfinished for fifteen years. Until finally in 1287, the author produced the remaining 34 chapters in less than three months. Guido explains that he based his work on the then generally recognized "eyewitness accounts" of Dares the Phrygian and Dictys the Cretan. However, there are such significant parallels to the *Roman de Troie* by Benoît de Sainte-Maure (around 1160) that it has long been assumed that this was indeed his main source.

Guido's work, entitled *Historia destructionis Troiae*, claims to be a truthful account of the historical events. It was a huge success, translated into many common languages and was still being printed centuries later. The first book ever printed in the English language, and the first book printed in England, was a translation of Guido's account: the *Troy Book* by John Lydgate, published in 1420. This was followed by publications in 1450 in French with the title *La destruction de Troye* by Jacques Miletus, in 1599 in German, entitled *Historische, warhaffte und eigentliche Beschreibung von der alten Statt Troia*, and finally in 1665, 400 years after the first publication, in Italian as *La storia della guerra di Troia*.

Suggestions
Sophisticated artificial watercourses

Had Heinrich Schliemann in 1868 aimed to prove the historicity of the Trojan War as described by Guido de Columnis rather than Homer, our view of Aegean prehistory today might be completely different. The adaptations of the Troy legend by Benoît de Sainte-Maure and Guido de Columnis were amongst the biggest publishing successes in medieval Europe; they remained popular for well over half a millennium. Both versions, however, contain extensive passages that are found neither

The judge and author Guido de Columnis in a German translation of his work, dating to 1450.

In medieval reports Troy is depicted as a contemporary city.

The artificial incision through the coastal ridge at Troy has the same dimensions as the ship trackway in Corinth: 40 to 50 m wide and up to 30 m deep. Guido de Columnis emphasizes the excavation work at Troy.

in the report by Dares nor in the one by Dictys, both of which Guido claims he had consulted for his work. Interestingly enough, Guido refers to a Greek version of Dares that had existed during Guido's lifetime and is no longer extant. Guido describes the architectural style and decorations of the houses, the craftsmen one met in Troy and games that were popular there. He paid special attention to the complex water installations:

This paved trackway enabled boats to be moved overland across the Isthmus of Corinth – for over 1000 years.

Today's sole of the 30 m deep artificial incision through the coastal ridge at Kesik, 5 km west of Hisarlık (Troy).

> "For its [Troy's] foundations were established in the depths of the earth, made with deep excavation and ample width. … Its avenues extended in a long and straight line, in the midst of which the brisk and invigorating air of dawn poured forth sweet and varied breezes … Through the middle of this city ran a river called Xanthus, which, by dividing the city into two equal parts, in its unfailing course offered many conveniences to the inhabitants of that city. … In addition, this river, flowing through hidden channels on account of the requisite abundant supply of water, purified the city by prearranged floods, by means of skillfully made canals and underground sluices, and by these baths the accumulated impurities were cleaned away." 5.114–179 (Meek)

Guido relates that Priam, in order to repopulate his city after it had been ruined during the first Trojan War and subsequently rebuilt under his reign, relocated people from the surrounding villages. In fact, the settlement of Hanay Tepe, a few kilometers south of Hisarlık, had been abandoned after the destruction of Troy VIh. It is conceivable that the

inhabitants of Hanay Tepe were resettled within the protecting walls of Troy.

A thousand years of enthusiasm for the Troy-friendly perspective as advanced by Dares culminated in Guido's work – and from there really took off for another 400 years. Its success suddenly faded when the Ottoman Empire expanded. A few years after the Ottomans reached the gates of Vienna for the second time, the work of Dares was declared a fake. Plato gradually moved to the center of philological interest through translations and adaptations by Thomas Taylor (1758–1835) and Friedrich August Wolf (1759–1824). Within one or two generations, Guido's work was forgotten. To this day, no one has noticed that the descriptions of Troy provided by Guido de Columnis and the one of a powerful prehistoric enemy of the Greeks in Plato's *Critias* (115c–117a) are largely identical – even including the mention of a unique artificial cut into the coastal ridge and subterraneous navigable channels.

"Likewise, we want to leave the question undiscussed whether Guido de Columna in his *Historia destructionis Troiae* really only paraphrased the *Roman de Troie* or whether he might not, as he confessed himself, have made use of a detailed Dares or Dictys text that was in his hands." Gustav Körting 1874, 71

"King Priam, however, for the location of his dwelling and a site for his own mansion ordered the great and famous Ilium, as his great palace was called, to be constructed in a higher place of the city out of the towering native rock in the city. And the master fortress of great security which was hewn by force from this native rock was glorious Ilium. From its foundation to the highest point which roofed it over in the shape of a sphere, its height reached a summit five hundred feet above the tops of the towers not far from it on the ramparts, which were themselves far higher than that same height. On account of their enormous height, the summits of its towers were concealed by a cloak of clouds streaming by continually, and from their very lofty summits the complete extent of adjacent regions in the whole province, and even distant spots, could be conveniently observed."
Guido de Columnis 1287, *Historia destructionis Troiae* 5.202–215 (Meek)

9. Luwian Studies and its Goals

9.1 Closing the Research Gap

Combining linguistic, archaeological, and geological research related to Western Anatolia around 1200 BCE, I have come to the conclusion that neither natural disasters nor outside invaders caused the end of the Bronze Age in the Mediterranean. Rather it was a result of three consecutive wars that went on in this area at the time. All three wars have been recorded in one way or another by ancient scribes.

At this stage, the reconstruction of the events at the end of the Bronze Age as presented here only forms a working hypothesis. It does, however, have the advantage that the end of the Bronze Age in the Mediterranean can be explained by bringing the seemingly unrelated Sea Peoples' attacks, as relayed by Egyptian scribes, the Trojan War and a subsequent civil war on the Greek mainland in one logical order.

In a nutshell, these are the main arguments put forward in this book:

- During the 2nd millennium BCE, western Asia Minor was home to a number of small- and medium-sized kingdoms. In their combined economic and political power, these were roughly equal to the Minoan and Mycenaean civilizations.
- I propose to call this civilization Luwian and its population the Luwians. This is meant to be an encompassing term for all people who would not have considered themselves to belong to either the Greek or the Hittite cultures. The Luwian states have thus far been largely overlooked as a potential regional power.
- Troy, too, belonged to the Luwian realm and the Kingdom of Troy at times gained region-wide political significance between 1800 and

1200 BCE. During the Late Bronze Age, Troy ranked as the grandest and most important metropolis among the people living around the Mediterranean. The archaeological site at Hisarlık, now commonly referred to as Troy, is only a small part of the former city. In principle, Hisarlık is to Troy what the Kremlin is to Moscow, a topographically elevated citadel with an expansive history of its own.

- The invasions of so-called Sea Peoples around 1200 BCE, as described in Egyptian temple inscriptions, and the Trojan War belong to the same chain of events. The Sea Peoples were a military alliance of Luwian petty states. They achieved considerable success within a short period of time and were a few years later themselves attacked and defeated in their home cities by a comparable alliance of the Mycenaean kingdoms.

I initially presented these arguments over twenty years ago in a book (*Ein neuer Kampf um Troia*) published in 1994 in German and known mostly by archaeology insiders. Since then, much evidence has come up to reinforce this reconstruction of events, and to my knowledge very little has been found that would argue against it. If the hypothesis is valid, a number of opportunities for future archaeological inquiries arise:

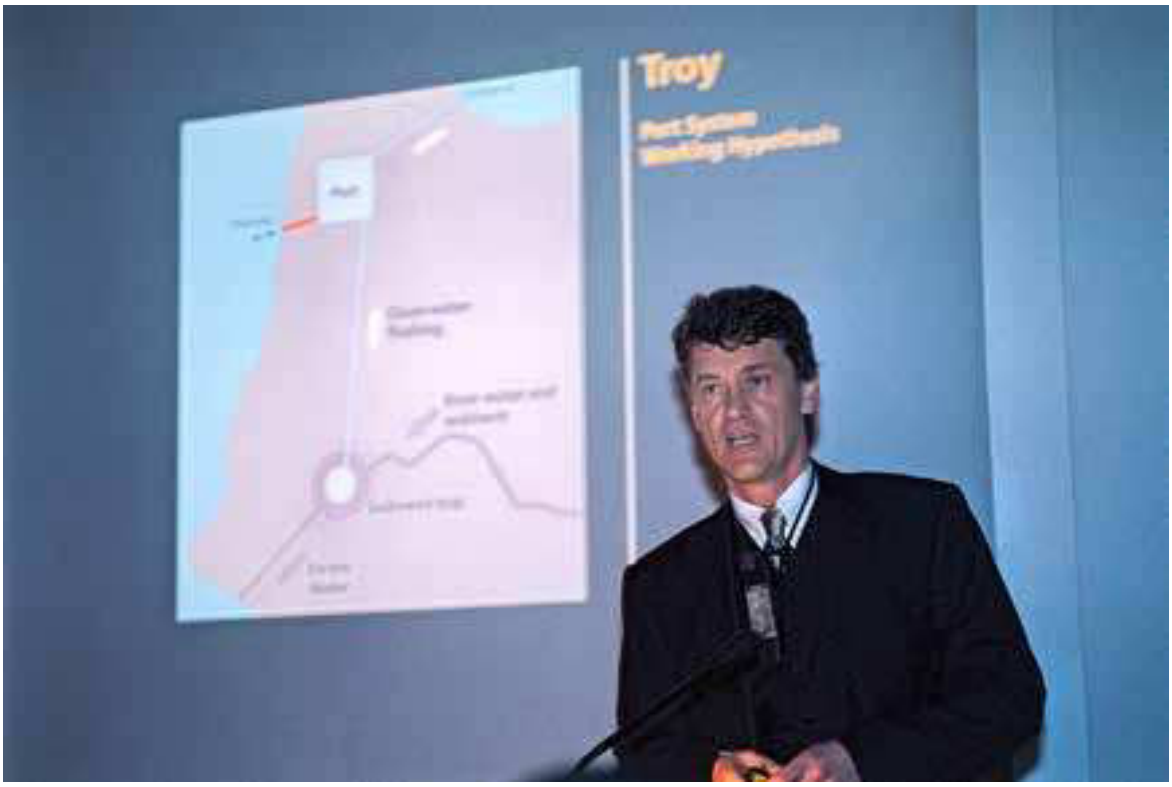
In 1984, in the ground-floor office of Geology Corner in the Old Quadrangle of Stanford University, those geoarchaeological investigations began that led to the founding of Luwian Studies in 2014.

- Archaeologists can investigate a thus far little-known civilization in western Turkey by using

Bore holes close to Tiryns (here in 1985) revealed a Late Bronze Age settlement 5 m under the surface. In the foreground: geoarchaeologist Prof. Tjeerd H. van Andel from Stanford University.

the most advanced natural scientific methods right from the beginning.

- From a pool of 340 well-defined settlements of the Luwian civilization dating to the 2nd millennium BCE a few can be selected for large-scale excavations.
- The Troy myth that existed from antiquity to the time of Shakespeare rests on genuine memories of the Bronze Age city, which have been preserved and transmitted in ancient and medieval texts up until today. The recognition of the Luwian civilization now offers a chance to reexamine and possibly reinterpret historiographic sources spanning over 2000 years.
- Past events much like those in the present are primarily determined by politics, the economy and technological advances. By examining these topics more closely, we might be able to better understand past cultures.
- Archaeology was conceived at a time when Europe fought the Ottoman Empire. Until the 20th century, paradigms were formulated to amplify European civilizations while belittling those on Turkish soil.



The author giving a lecture at the Heidelberg Academy of Science in April 2001.

> By finally overcoming these long outdated resentments, archaeology may help to bridge the rift between eastern and western cultures.

With respect to the city and Kingdom of Troy, there are numerous indications that during the 13th century BCE, the latter covered the entire Biga peninsula – from Edremit to the Marmara Sea. A city of the same name was located on the western edge of this region. It may well have been a hundred times larger than the archaeological site Hisarlık as known around 1990. A verification of this hypothesis would be desirable and promising. An excavation 6 to 7 meters deep, in a location about 300 meters west of the citadel knoll of Hisarlık (at the drilling site 128 of geoarchaeologist Ilhan Kayan) may suffice to determine whether the Late Bronze Age city of Troy is buried underneath floodplain sediments (see Zangger & Mutlu 2015). I thus encourage Turkish scholars to explore the alluvial plain of Troy, west of the citadel, in more detail and use physical scientific methods in order to identify hidden remains of the Late Bronze Age city.

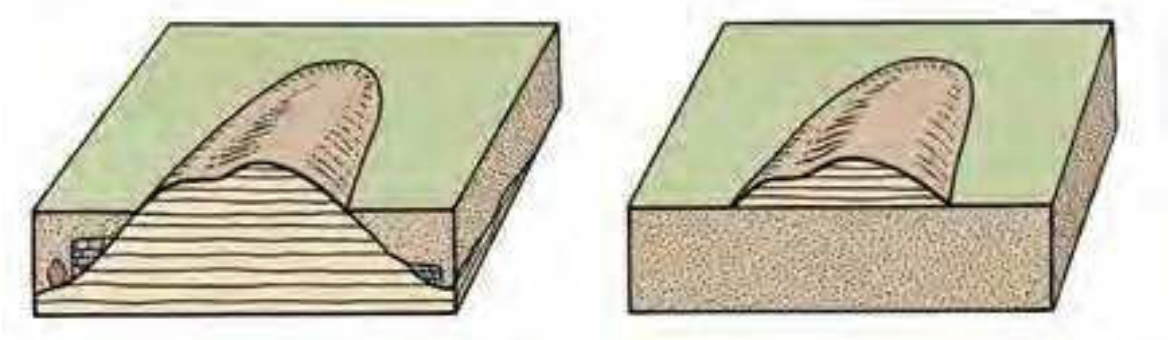
Below the foundations of the classical period, there often are Late Bronze Age settlements – as shown here in Olympia.

For over a century, intensive investigations have been almost completely absent in Late Bronze Age western Turkey. Addressing this knowledge gap is one of the most promising research opportunities in Mediterranean archaeology. To help bridge this gap, the non-profit foundation Luwian Studies has been established in 2014. It is based in Zurich, Switzerland. The sole purpose of the foundation is to promote the study of cultures of the 2nd millennium BCE in western Asia Minor. The foundation's research (as well as my own since 1991) is almost exclusively privately financed. Consequently, the perspectives presented are independent of national interests and research institutions. The foundation aims to encourage politicians and business leaders to stimulate further studies of Luwian sites by archaeologists from Turkey and abroad. Some deep soundings in the right places could suffice to complement the existing understanding of Aegean prehistory.

9.2 Proposed Methods

Archaeology is the study of the physical remains of people of the past. This includes organic matter (such as kitchen waste) and artificially influenced landscapes. If people possessed the knowledge of writing and produced documents, we call it historical time. The study of these texts is the task of historians. Due to the complexity of the matter, archaeological and historical research are divided by geographical or linguistic regions (Egyptology, ancient Greek, ancient Near Eastern studies etc.), time periods (prehistory, ancient history etc.) and content (architectural history, philology, art history etc.). The various sources are examined within each of these areas of research and according to specialized aspects. As a consequence, scientific insights which arise from related materials are subject to and influenced by different principles, doctrines and trends. The division does not favor the recognition of supraregional structures.

In addition, for over a century, there has been a trend in science towards greater specialization. The more specific the observation, the more accurate its scientific merit. The focus on details, however, makes it harder to recognize large patterns. In order to reconstruct complex chains of events, the compartmentalization and focus of one's own area of expertise needs to be overcome. Indeed, a number of individual specialists in Aegean prehistory and ancient Near Eastern studies have previously argued that a large hitherto unnoticed culture must have existed in western Turkey during the 2nd millennium BCE. All the same, the many indications pointing towards the existence of a Luwian culture have never been systematically pursued.



Floodplain sediments can be on top or below an archaeological site. Only drillings provide clarity.

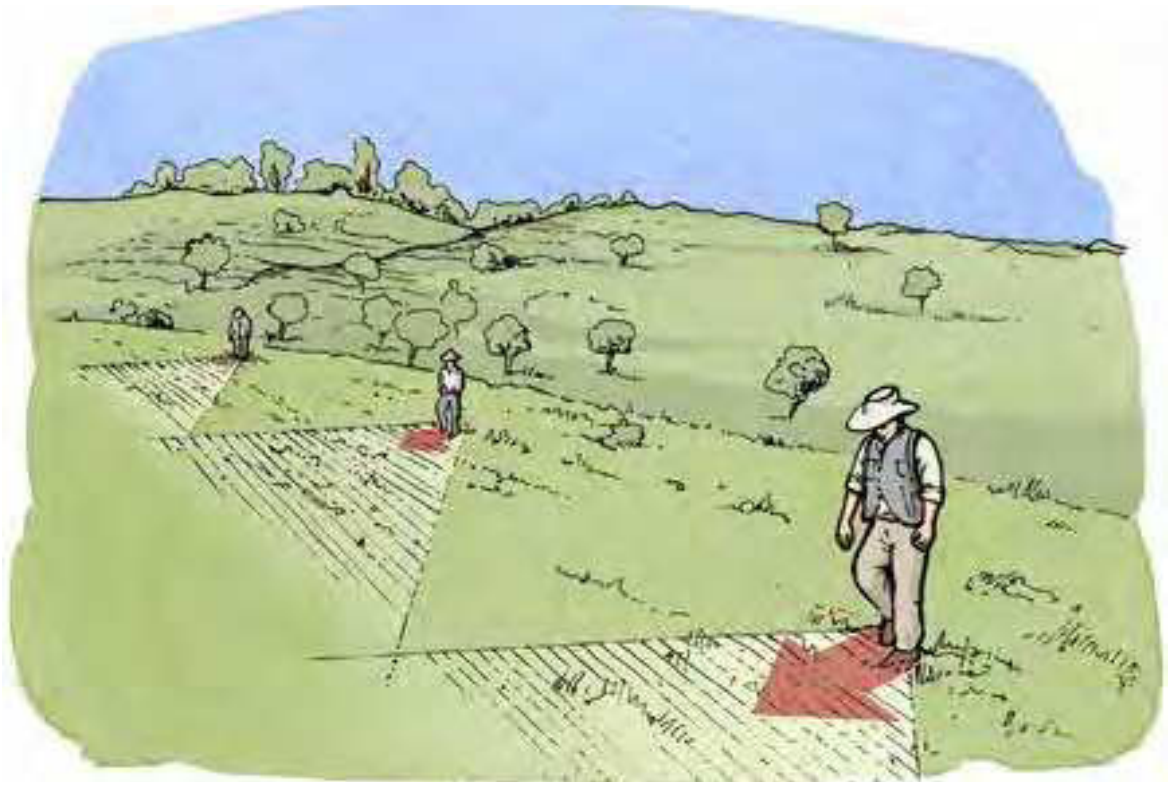
In helicopter geophysics, a so-called "bird" sends electromagnetic waves of different frequencies into the ground. They penetrate the ground at different depths, are reflected and then measured.

The ideas presented within the framework of Luwian Studies aim to encourage looking at the existing sources from a different perspective and to provide suggestions for future research. They are strictly hypotheses. Accordingly, the research program presented is primarily committed to a hypothetical-deductive methodology. A research program is hypothetical-deductive when it formulates hypotheses that are falsifiable, i. e. they must be able to be disproved by empirical findings. How the hypotheses were generated plays a subordinate role. As long as they are consistent, plausible and empirically verifiable, they must be regarded as scientific.

Luwian Studies uses a natural scientific methodology based on the following steps:

1. Formulation of plausible and well-founded hypotheses (deductive approach).
2. Collecting and analyzing observations from the widest possible range of physical scientific fields (empirical method).
3. Critical review of original observations and collecting new data.

This procedure is used to test the hypothesis that there has been a previously little-studied culture in western Asia Minor that played a key role in the downfall of the Hittite Empire. The thesis is in many respects



During archaeological surveys, surfaces are systematically screened by a number of field walkers.

diametrically opposed to the established textbook paradigm, but it is inherently consistent.

New discoveries in the transition from the prehistoric to historic period could also one day lead to supplementing the current methodology of Aegean prehistory. After all, the discovery of Aegean civilizations was essentially the achievement of an amateur, Heinrich Schliemann. By unearthing civilizations that were about a thousand years older than classical antiquity, he caused some embarrassment in those days among the opinion leaders of archeology. They eventually responded by extrapolating the knowledge that was already established for classical antiquity into the preceding prehistoric period. Even today, German-speaking opinion leaders for the Aegean Bronze Age are often trained as classical archaeologists or ancient historians. Thus, their core expertise lies in the time after the first Olympic Games at 776 BCE. It appears to have been overlooked thus far that a dramatic change took place between Mycenaean and Hellenistic times. The Eastern Mediterranean only became Hellenistic after the annexation

The Roman Empire, here in its expansion in the 2nd century CE, served as a role model for Europe during the Enlightenment.

by Alexander the Great in 334 BCE. For thousands of years prior, the stream of cultural innovations was not from west to east, but from east to west. Hence, patterns prevailing after the 4th century BCE can by no means be extrapolated into the 2nd and 3rd millennium BCE.

One closing comment to consider: Archaeological excavations almost never reach deep enough.

"Zangger has attempted to apply the rigors of scientific methodology to explaining the end of the Bronze Age in the Eastern Mediterranean."
Daniel Pullen 1994, 522

"Of all departments of mental capitalism science is the one with the most complete economy of attention. Science does not just generate knowledge; it also exploits its own knowledge production: scientists do not work for idealistic purposes, but for the sake of a career in which attention is the reward. One does not become a scientist to get rich, but rather to become famous."
Georg Franck 1998, 182

"Summing up this account of the development of classical archeology, a striking persistence in its main themes becomes visible. … A real change in the self-understanding of classical archeology is difficult to detect. … An era in which art had no central social value cannot be explored with the standards of classical archeology." Reinhard Bernbeck 1997, 24–25

"The amalgamation of prehistory and early history with Nazi ideology and policy showed consequences in the postwar period. In West Germany people were satisfied … with an almost entirely atheoretical archaeology. The collection of facts and their chronological and spatial order had become the top research goal." Reinhard Bernbeck 1997, 30–31

"Facts like words are by themselves useless. They must be combined as a means to an end. Their duty is at the lowest to provide the basis of a reasonable theory." John Pendlebury 1939, xxviii

"Any theory is justifiable which agrees with the greatest number of facts known at the time and neither contradicts a vital fact nor human nature and reason." Leonard R. Palmer 1961, 254

"It is [methodologically] inadmissible to assert that the Sea Peoples consisted of different peoples with similar habitus that were defeated in 1177 BCE by Ramesses III, just because this is how the texts of Medinet Habu relate it."
Eberhard Zangger 1994, 75

"1177 B. C. – The Year Civilization Collapsed", Eric H. Cline 2014 (book title)

"Academic politics is the most vicious and bitter form of politics, because the stakes are so low." Wallace Stanley Sayre (1905–1972)

10. Epilogue

As a natural scientist, I am trained to believe in the significance of facts. When it comes to physical scientific research, many scholars are convinced that what can be done should be done, because we are ultimately aiming to recapitulate how nature works. I remember a long, relaxed chat that I and a group of my fellow undergraduates had with a well-established physics professor. Our conversation revolved around the responsibility of the scientists in the Manhattan project (trying to develop the first atomic bomb). The professor was utterly convinced that scientists were obliged to find out what can be found out. Politicians then have to determine whether they utilize the available knowledge or not. I did not share this thinking back then, and I still don't.

Even if we accept that scientists are partially responsible for the way their discoveries are used, a natural scientist will inevitably encounter some friction when working on interdisciplinary projects with researchers in the humanities − and I count archaeology among these. This is because researchers in the humanities are more aware of how facts are inseparably linked with values. To them, the inherent value even shapes the fact itself. If a researcher makes a discovery – regardless of whether it's a physical scientist or an archaeologist – it immediately raises the question of the ultimate value of this new insight. Added to this is the fact that there is more than one form of value to be considered. Does the discovery reinforce or question existing scholarship? How is the peer community likely to react? Will the government I work for welcome the discovery? Will it boost or harm my career if I support the new view? Simply put, if no one sees a benefit, the discovery – no matter how momentous it seemed at first – will not be followed up on. Research in the humanities is much more oriented towards potential markets than the scholarly community is prepared to admit.

The argument I hear most frequently in discussions with archaeologists goes something like this: "I prefer a system that I know, whether

it is flawed or not, over a system that I don't know and whose flaws I can't even fathom." For a physical scientist, accepting this approach takes some getting used to, for we are trained to eat existing theories for breakfast every day.

In business, people running global enterprises have realized that their organizations are not ideally suited to promoting research. The processes required to keep a large organization on track limit the leeway that is indispensable in research; they also make it expensive and time-consuming. For this reason the development of a new drug, for instance, might be delegated to a small spin-off. After a number of years, when the drug is ready for market, this spin-off is then bought up by the original parent company. Steve Jobs put the team that developed the original iPod in a barn, "to protect it from my own organization," as he put it.

University-based research, however, has gone in the opposite direction, because it lies in the hands of governmental employees − some might call them bureaucrats. In 2013, I wrote to the Turkish Minister of Culture to inform his Excellency of the opportunities an enhanced investigation of the Luwians might bring. The reply was, I should "prepare an application file according to the Law Nr. 2863." There is no better way to sum up the feelings and fate an explorer has in today's world.

A clerk has to follow the rules, while a researcher has to question them. This leaves university professors in a somewhat ambivalent position. Should they follow the rules – or should they question them? After a while, most choose the path of least resistance and stick to the rules. This might explain why so many discoveries in archaeology – in particular in Aegean prehistory – were made by laypeople or outsiders rather than by university-based or government-funded archaeologists.

When confronted with a challenge, government officials tend to consult their superiors. This is even truer in a generation raised on political correctness. The result is that only the people with the most institutional power get to decide which principles in research are credible and which are not. Researchers are thus anxious to acquire as much institutional power as possible – rather than aiming to break new ground. And by the same token, those who do make discoveries are unlikely to gain institutional power.

These principles are particularly evident in Anatolian archaeology. Over the past century, a handful of pioneers have made momentous discoveries in Anatolian prehistory, but unfortunately many of these discoveries were not pursued further. How regrettable! Archaeology would benefit tremendously if we were more willing to question existing paradigms. After all, human cultures have benefitted from progress – why shouldn't archaeological research?

Glossary

A

Abu Simbel – rock temple in southern Egypt

Abydos – ancient city in the Troad

Abydos, Egypt – ancient city in Upper Egypt

Achaea – name for Mycenaean Greece; the southern Greek mainland from 1600 to 1100 BCE

Achaeans – collective name used by Homer for all Greek-speaking people

Achilles – hero of the Greek mythology and great warrior of the Trojan War

Acropolis – a city's citadel, mostly built on nearby elevated ground

Adramyttion – ancient city on the coast at the Gulf of Edremit in the north-west of Asia Minor

Adrasteia – ancient city in the Troad

Aeacus (also spelled Eacus) – Greek mythological figure, regarded as progenitor of the Aeacidae who had settled on Aegina; Achilles and Ajax are counted among the Aeacidae

Aegean prehistory – branch of archaeology that deals with the Bronze Age cultures around the Aegean Sea

Aeneas – Greco-Roman mythological figure and second most famous Trojan hero after Hector

Aeschines of Cnidus – astronomer and father of Eudoxos, a physician who studied with the followers of Socrates

Aeschylus – Greek tragedian (around 525–456 BCE)

Agamemnon – legendary king of Mycenae, leader of the Greeks in the Trojan War

Ahhiya, Ahhiyawa – Hittite name for Mycenaean Greece

Ajax or Aias – son of King Telamon, mythological Greek hero

Akkadian cuneiform – script system from the Middle East that was adopted by the Hittites

Akrotiri – excavation site and Minoan settlement on the volcanic island of Thera (Santorini)

Alaca Höyük – Neolithic and Hittite settlement in Alaca, central Turkey

Alaksandu – King of the Luwian state of Wiluša (possibly Troy) during the 13th cent. BCE

Alasiya, Alashiya – ancient name of Cyprus

Alcaeus of Mytilene – Greek lyric poet (7th cent. BCE) from the island of Lesbos

Alcman – an Ancient Greek choral lyric poet, assumed to have been born in Sardis

Alexander the Great – Alexander III of Macedon (lived 356–323 BCE), king of the Ancient Greek kingdom of Macedon

Alexandria Troas – ancient port city, located in the Troad about 30 km south of Hisarlık

Alişar – ancient Anatolian city in the modern Yozgat Province of Turkey

Alyattes – name of Lydian kings during the 7th and 6th cent. BCE

Amarna – ruins on the right bank of the Nile (more correctly Tell el-Amarna), capital and seat of government under Akhenaten (Egyptian name: Achet-Aton)

Amarna archives, Amarna letters, Amarna correspondence – large body of correspondence written in Akkadian cuneiform from the palace of the Egyptian Pharaoh Akhenaten (Achet-Aton)

Amenhotep III, Amenophis III – Egyptian pharaoh of the 18th dynasty; reigned approx. 1388–1351 BCE

Ammurapi – name of the last ruler of Ugarit (around 1200 BCE)

Amurru – kingdom in western Syria and northern Lebanon during the 14th–12th cent. BCE

Anatolia, also called Asia Minor – the territory of present-day Turkey with the exception of Thrace

Anaxagoras – a Pre-Socratic Greek philosopher (510–428 BCE), born in Klazomenai in Asia Minor

Anaximander – a Pre-Socratic Greek philosopher (610–546 BCE) who lived in Miletus

Anaximenes – a Pre-Socratic philosopher from Miletus who was active in the latter half of the 6th cent. BCE

Ancient history – the entire historical time span from 2000 BCE to 600 CE

Ancient Near East – Egypt and the Near East (synonymous for Middle East) until the time of the Persian conquest (539/525 BCE)

Ancient Oriental Studies – branch of historical research that covers the cultures of the Ancient Near East from the first emergence of cuneiform texts (4th mill. BCE) to their disappearance (around the birth of Christ)

Ancient times – historical term that covers the civilizations of the Mediterranean and the Near East from the end of prehistory (mid-4th mill. BCE) to the Middle Ages (from the 6th cent. CE)

Antandos – ancient city in the Gulf of Edremit on the south coast of the Troad

Antenor – aged Trojan hero; according to various sources traitor to the city of Troy

Antioch on the Orontes – ancient Syrian city (today city of Antakya, Turkey)

Antiquity – Greek and Roman history (also called classical antiquity)

Apaša – capital of the Luwian kingdom Arzawa, most likely predecessor of Ephesus

Aphrodisias – ancient city in Caria, a region in the southwest of present-day Turkey

Apodoulou – Minoan settlement in central Crete

Apollo – Olympian deity in Greek and Roman mythology

Apollodorus of Athens – a Greek scholar, historian and grammarian during the 2nd cent. BCE

Arawanna – Late Bronze Age kingdom on the southwest coast of the Black Sea

Argivians – people living in the Argolis in the northeast of the Peloponnese where the Bronze Age citadels of Mycenae, Tiryns, Argos, Mideia and Nafplio are located

Argolid – Greek region in the northeast of the Peloponnese, heartland of the Mycenaean civilization

Argonauts – group of heroes in Greek mythology who went on an adventurous sea voyage in search of the Golden Fleece

Arisbe/Arisba – ancient city in the Troad, mentioned by Homer

Aristotle – Greek philosopher (384–322 BCE), pupil of Plato

Arzawa – kingdom in the west of Asia Minor during the 2nd mill. BCE, alternating enemy or vassal of the Hittites

Arzawa provinces – the kingdoms of Šeha, Mira and Hapalla in addition to Arzawa itself

Asarlik – Late Bronze Age site in the Troad, located south of the Karamenderes floodplain

Asartepe – Late Bronze Age citadel near Lake Gyges in western Turkey

Ashdod – ancient port city on the coast of historic Palestine (present-day Israel)

Ashkelon – ancient port city on the coast of historic Palestine (present-day Israel)

Asia – term for the northwestern part of Asia Minor (possibly derived from Aššuwa)

Asia Minor – area of present-day Turkey without the European part (also called Anatolia)

Aslan, Rüstem – ethnologist and prehistorian, professor at Çanakkale Onsekiz Mart Üniversitesi, director of the Troy project

Assaracus – a son of Tros, the legendary founder of Troy

Aššur – a historical city on the upper Tigris in northern Iraq

Aššuwa/Aššuua league – short-lived confederation of petty states located in the northwest of Anatolia during the time of the Hittite emperor Tudhaliya I (15th cent. BCE)

Assyria – kingdom on the Tigris River in northern Mesopotamia, powerful during the 2nd mill. BCE, capital Aššur or Ashur

Athribis – ancient Egyptian city, located in the Nile Delta

Aurichalcite – rare mineral that consists mostly of copper and zinc, natural alloy of brass

Axios – river near present-day Thessaloniki in Greek Macedonia

Azzi – a Late Bronze Age confederation of kingdoms of the Armenian highlands

B

Babylon – region on the lower reaches of the rivers Euphrates and Tigris; major power in the Near East during the 2nd mill. BCE

Bacchylides – Greek lyric poet in the 5th cent. BCE

Ballı Dağ – hill south of the plain of Troy; in the 19th cent. assumed to be site of ancient Troy

Barker Webb, Philip – English botanist and geologist (1793–1854), visited Hisarlık in 1819

Bass, George – U.S. archaeologist and one of the early practitioners of underwater archaeology

Baumgartner, Emmanuèle – French philologist (1940–2005), specialist in medieval literature

Bay – Egyptian chancellor at the time of Siptah and Twosret (1193–1187 BCE)

Becker, Helmut – German geophysicist and geoarchaeologist, specialist for magnetometry

Benoît de Sainte-Maure – 12th cent. French-speaking author from Sainte-Maure in the county of Touraine, France, well-known for his *Roman de Troie*, a novel about the Trojan War

Beşik Bay – natural bay, approx. 10 km southwest of Hisarlık

Beşik plain – embayment and beach near Troy, formed during the Bronze Age through accumulation of sediment

Best, Jan G. P. – Dutch prehistorian

Beycesultan – large (> 1 km in diameter) archaeological site near Çivril in western Turkey, inhabited from the 4th mill. until 1700 BCE; excavated by James Mellaart between 1954 and 1959

Beyköy – tell settlement north of the Turkish city of Afyon

Biga peninsula – region in northwestern Asia Minor making up the ancient Troad

Bintliff, John – English landscape archaeologist, professor at the University of Leiden

Bithynia – Roman province in the northwest of Asia Minor

Bittel, Kurt – German prehistorian (1907–1991), former excavator of Hattuša and president of the German Archaeological Institute

Blegen, Carl – U.S. classical archaeologist (1887–1971), excavator of Troy and Pylos

Bronze Age – cultural era of the Old World whose begin and end differ from one region to the next, in the Eastern Mediterranean it lasted from 3000 to 1200 BCE

Burckhardt, Jean Louis – Swiss traveler, geographer and orientalist (1784–1817)

Büyük Menderes River – river in western Asia Minor, called Maeander in ancient times

Byzantine period – the continuation of the Roman Empire in the East during late antiquity and the Middle Ages

Byzantium – predecessor city of Constantinople (present-day Istanbul)

C

Caldera – a special sort of volcanic crater that forms when an emptied magma chamber collapsed

Callinus – an ancient Greek poet who lived in the city of Ephesus in Asia Minor in the mid-7th cent. BCE

Calvert, Frank – English amateur archaeologist (1828–1908) who drew Heinrich Schliemann's attention to the location of ancient Troy on hill Hisarlık

Canaan – historical term (common from 1500 to 1200 BCE) for the region along the Syrian-Palestinian coast

Çanakkale – provincial capital in Turkey, located on the southern shore of the Dardanelles

Çandarlı – town located on a spit of land at the Aegean coast in Turkey's Izmir Province

Cape St. Mary – the southwest corner of the Biga peninsula, the mainland cape that is facing Lesbos

Cape Uluburun (Grand Cape) – spit of land in the Antalya Province in southern Turkey; in 1982, the wreck of a merchant ship dating from around 1300 BCE was discovered off the coast of Uluburun

Carchemish or Karkemish – ancient Near Eastern city on the Euphrates River at the border between Syria and Turkey

Caria – ancient landscape in the southwest of Asia Minor

Carians – people who resided in southwestern Asia Minor; according to Homer allies of the Trojans

Carthage – ancient city on present-day's Tunisian coast, founded by Phoenician settlers in the 9th cent. BCE

Çatalhöyük – large settlement dating to the Neolithic, situated on the Anatolian plateau in present-day Turkey; since 2012 part of the UNESCO world heritage

Catalogue of ships – part of Homer's *Iliad* providing a list of Greek troops with ships, leaders and places of origin

Chania – Minoan port city in the north of Crete

Chronicle of Fredegar – world chronicle from the 7th cent. CE, written in Latin

Ciconia – province west of Thrace, mentioned by Homer as an ally of the Trojans

Cilicia – the south coastal region of Asia Minor in antiquity

Civilization – a society in which cities, a centralized government system, and trade relations had existed and which had also possessed the knowledge of writing

Clarke, Edward Daniel – English mineralogist (1769–1822), geology professor at the University of Cambridge

Classical archaeology – archeological sub-discipline that deals with the ancient cultures of the Mediterranean, especially the Greek and Roman

Claudius Aelianus – Roman author and teacher of rhetoric (175–235), provides numerous quotations from the works of earlier authors, which are otherwise lost

Codex Venetus A – most famous passed-down manuscript of Homer's *Iliad*, from the 10th cent. CE

Colophon – an ancient city in Ionia, said to have been destroyed in the Trojan War

Colossi of Memnon – two massive stone statues of Pharaoh Amenhotep III, west of the modern city of Luxor

Constantine the Great – Roman emperor (reigned 306–337)

Constantinople – predecessor city of Istanbul (also please see Byzantium)

Cook, John Manuel – a British classical archaeologist (1910–1994)

Corinth – Greek city on the Isthmus of Corinth, connects the Peloponnese with mainland Greece

Cretan hieroglyphs – still undeciphered Cretan script, in use ca. 20th–15th cent. BCE

Critias – unfinished work by the Greek philosopher Plato

Croesus – the last king of Lydia, famous for his wealth and generosity (reigned ca. 555–541 BCE)

Cuneiform Luwian – writing system used by the Hittites to write texts in Luwian; it differs only marginally from the usual Hittite cuneiform script

Cuneiform script – one of the earliest systems of writing, consisting of wedge-shaped marks on clay tablets, emerged in Sumer in the late 4th mill. BCE

Cybele – goddess who had originally been worshiped in Phrygia (Asia Minor), later in Greece, Thrace and Rome as well

Cyclades – Greek island group in the Aegean Sea

Cycladic culture – Early Bronze Age culture of the Cyclades in the Aegean Sea, ca. 3200–2000 BCE

Cyclopean masonry – Late Bronze Age architectural style used for fortification walls

Cyme – ancient city located on the coastline of Asia Minor, said to have been destroyed in the Trojan War

Cypriot syllabary – a syllabic script used on Cyprus ca. 11th–4th cent. BCE

Cypro-Minoan – an undeciphered syllabic script used on Cyprus ca. 1550–1050 BCE

Cyzicus – Greek city on the southern coast of the Marmara Sea; today called Balız, located near Erdek

D

Dallam, Thomas – an English organ builder (1575–1620), kept a diary of his travels through Turkey

Danaya – ancient Egyptian name for Mycenaean Greece

Dardanelles – strait between the Aegean Sea and the Sea of Marmara (ancient name: Hellespont)

Dares of Phrygia (Dares Phrygius) – author of a report on the fall of Troy, dating back to at least the 2nd cent. CE

Dascylium – Phrygian kingdom of Dascylium in northwestern Asia Minor during the 8th cent. BCE

Deir el-Medina – Egyptian artisan village near the Valley of the Kings in western Thebes

Democritus – an influential ancient Greek Pre-Socratic philosopher (ca. 460–370 BCE) from Abdera in Thrace

Denyen – one of the tribes making up the Sea Peoples

Dictys of Crete (Dictys Cretensis) – author of a report on the fall of Troy; Latin version since the 4th cent. CE

Didyma – ancient sanctuary with a famous Apollo temple, located in the west of present-day Turkey

Dio Chrysostom – Greek orator, writer and philosopher (1st cent. CE) from Prusa (present-day Bursa)

Diodorus Siculus – Greek historian (1st cent. BCE) from Sicily

Dionysius of Halicarnassus – Greek scholar and historian (1st cent. BCE)

Dodecanese – group of Greek islands in the eastern Aegean

Dörpfeld, Wilhelm – German architect and archaeologist (1853–1940); directed excavations in Troy after the death of Heinrich Schliemann

Dümrek – river (ancient name Simoeis) that runs through the Troad and flows into the Karamenderes near Hisarlık

E

Early Iron Age – the period after the Bronze Age, i. e. the first few centuries after 1200 BCE

Edremit – city on the Turkish Mediterranean coast (at the Gulf of Edremit) in the western province of Balıkesir

Egyptology – academic discipline that explores all aspects of the ancient Egyptian civilization until the end of Roman rule in the 4th cent. CE

Ekron – ancient Philistine city state in historic Palestine (present-day Israel)

Elam – ancient civilization in the far west and southwest of modern-day Iran

Eleanor of Aquitaine – wealthy and powerful woman during the High Middle Ages (ca. 1122–1204)

Epano Englianos – archaeological site of the Palace of Nestor at Pylos on the southern part of the Peloponnesian west coast

Ephesus – important Greek city on the Aegean coast of Asia Minor, near present-day Selçuk, about 70 km south of Izmir

Epic Cycle – collection of ancient Greek hexameter verses that tell the story of the Trojan War and have been passed down orally for a long time

Epicharmus of Kos – Greek comic playwright (550–460 BCE)

Ergani Maden – rich copper mines in the Diyarbakır Province of southeastern Turkey

Erichthonius – father of Tros, the legendary founder of Troy

Etruria – ancient landscape and heartland of the Etruscans in central Italy

Etruscans – ancient people that had settled during the 9th cent. BCE in Etruria in central Italy

Euboea – second-largest Greek island, separated from the mainland by the narrow Gulf of Euboea

Euphrates – the western of the two rivers that define Mesopotamia, flows south from the mountains of southeastern Turkey through Iraq and empties into the Persian Gulf

Euripides – Greek tragedian (485–406 BCE)

Eusebius of Caesarea – Christian theologian and historian of late antiquity, probably from Palestine (ca. 260–340)

Evans, Arthur – British archaeologist (1851–1941), considered to be the discoverer of the Minoan civilization, excavator of the Minoan palace of Knossos on Crete

F

Forchhammer, Peter Wilhelm – German philologist and archaeologist (1801–1894) at the Christian Albrecht University of Kiel, produced a map of the plain of Troy

Forrer, Emil – Swiss assyriologist and hittitologist (1894–1986), devoted himself to the decipherment of Hittite and Luwian writings

Fredegar – a term used for the so-called chronicle of Fredegar dating to the 7th cent. CE

G

Gallipoli – peninsula that is located in the European part of present-day Turkey, borders on the Dardanelles in the south and on the Gulf of Saros in the north

Ganymedes – according to Diodorus Siculus, a son of Tros, the legendary founder of Troy

Gargarum – a city on the foot of Mt. Ida, according to Dictys of Crete destroyed by the Greek hero Ajax

Gath – ancient city in historical Palestine (present-day Israel)

Gaza – ancient port city on the Mediterranean coast of historic Palestine (today located in the Gaza Strip)

Gedevre Tepesi – small Late Bronze Age citadel near Lake Gyges

Gediz – river in western Turkey that drains into the Gulf of Izmir about 30 km northwest of Izmir, it formed an about 20-km wide river delta

Geoarchaeology – research discipline dedicated to the reconstruction of ancient environments and the correlations between landscape development and human habitation

German Archaeological Institute – Deutsches Archäologisches Institut (DAI), archaeological research institution of the German Federal Foreign Office

German new humanism or Neuhumanismus – movement within the humanities that emerged in Germany in 1750; it revived the ideas of classical antiquity

German Research Foundation – Deutsche Forschungsgemeinschaft (DFG), federal German research funding organization

Gökçeada – island in the Aegean Sea, west of the Gallipoli peninsula; formerly called Imbros

Gordias – name of at least two members of the royal rulers of Phrygia

Gordium – the capital city of ancient Phrygia, modern Yassıhüyük, about 70–80 km southwest of Ankara

Gournia – ancient Minoan port city on the north coast of eastern Crete

Great Hittite Kingdom – term for the Hittite Kingdom at the time of its greatest expansion (ca. 1350–1200 BCE)

Greek Dark Ages – period ca. 12^{th}–8^{th} cent. BCE in ancient Greece, when the knowledge of writing had been lost

Grosseto – province in Tuscany, Italy

Guido de Columnis, Guido delle Colonne – judge and writer (ca. 1220–1290) from the Sicilian province capital of Messina

Gül-Dağ – mountain ridge on the western shore of Lake Gyges, crowned by the fortress of Kaymakçı

Gulf of Edremit – embayment south of Mt. Ida, forming the southern border of the Troad

Gyges – name of a Lydian king (reigned 716–678 BCE)

Gyges – today Lake Marmara, a lake in Manisa Province, western Turkey, in the alluvial valley of Gediz River

H

Hagia Sophia – Byzantine church that was built in late antiquity, today a landmark of Istanbul

Haley, Joseph Boyd – U.S. linguist, found out that hundreds of place names in Greece originated from a pre-Greek linguistic family during the 3rd mill. BCE

Halicarnassus – ancient Greek city, predecessor of modern Bodrum in Turkey

Halizon – an Anatolian tribe from the south coast of the Black Sea; according to Homer allies of the Trojans

Halys – please see Kızılırmak

Hama – Syrian city on the Orontes River that has been settled since the 5th mill. BCE

Hanay Tepe – Bronze Age settlement in the southeastern part of Troas, a few kilometers south of Hisarlık

Hapalla – Hittite name for a state located west of Central Anatolia

Hatshepsut – Egyptian queen (ruled 1479–1457 BCE)

Hatti – name of the Hittite empire

Hattians – people in Central Anatolia before the arrival of the Hittite tribes (also called Proto-Hattians)

Hattili – language of the Hattians, the indigenous population of Central Anatolia

Hattuša – capital of the Hittite Empire; near the present-day village of Boğazkale, 150 km east of Ankara

Hattušili III – Hittite king (reigned ca. 1266–1236 BCE)

Hau-nebut – Egyptian term for "inhabitants of the Aegean"

Hector – figure of Greek mythology; eldest son of Priam and commander-in-chief of the Trojan army

Hellespont – ancient name of the Dardanelles

Henry II Plantagenet – King of England (ruled 1154–1189), married to Eleanor of Aquitaine

Hephaestus – Greek god of fire and metal arts

Heracles – hero of Greek mythology

Heraclides – descendants of Heracles in Greek mythology

Heraclitus – Heraclitus of Ephesus, a Pre-Socratic Greek philosopher (ca. 535–475 BCE) from Ionia

Hermos – ancient name of the Gediz River

Herodotus – Greek historian (484–430 BCE)

Heroic age – the Greek heroic age, according to Hesiod, one of the five ages of man in mythology; the period between the coming of the Greeks to Thessaly and the Greek return from Troy

Hesiod – Greek poet (8th–7th cent. BCE)

Hierapolis – according to Dictys Cretensis, the name of a city that was attacked by Achilles during the Trojan War

Hieroglyphic Luwian – Indo-European language common in Asia Minor ca. 20th–6th cent. BCE that used pictorial script signs

Hieronymus – please see Saint Jerome

Hippo – a Pre-Socratic Greek philosopher (5th cent. BCE)

Hippodamus – ancient Greek architect (498–408 BCE) from Miletus, considered to be the father of urban planning

Hipponax – ancient Greek poet (6th cent. BCE) from Ephesus and later Klazomenai

Hisarlık – name of a tell on the eastern edge of the Karamenderes floodplain; since 1870 excavation site of the fortress of Ilion, royal residence of the kings of Troy

Hittite – also known as Nesite, extinct Indo-European language once spoken by the Hittites, recorded in documents from the 16th cent. to the beginning of the 12th cent. BCE

Hittite hieroglyphs – early, misleading term for hieroglyphic Luwian

Hittites – Hittite culture; ancient Anatolian people who established an empire centered in northern Central Anatolia that lasted from about 1600 to 1200 BCE

Hittitologist – a specialist in the study of the ancient Hittites

Homecomings – lost part of the Epic Cycle which told the entire history of the Trojan War in verse

Homer – first poet of the West, author of the epic poems *Iliad* and *Odyssey* (probably 8th cent. BCE); his actual existence is disputed

Hrozný, Bedřich – Austrian-Czech linguist and orientalist (1879–1952), decipherer of the Hittite script

I

Iasos – ancient Greek city in Caria

Ibycus – Greek poet (6th cent. BCE)

Ida – please see Mount Ida

Idomeneus – in Greek mythology a king of Crete and participant in the Trojan War

Iliad – epic tale by Homer that covers a time near the end of the Trojan War

Ilion, Ilios – name of the royal fortress of Troy as used by Homer

Ilus – son of Tros, said to have founded Troy in a plain, naming it after himself Ilium

Indo-European language – a family of several hundred related languages and dialects, predominant in ancient Anatolia and Mycenaean Greek

Iolcos – unexcavated Mycenaean citadel located beneath the modern town of Volos in Thessaly

Ionia – term for the central west coast of Asia Minor that had been settled by Greeks during Early Iron Age

Iron Age – cultural epoch of the Old World; here the time after 1200 BCE

Ishtar – goddess of the Sumerian and Akkadian pantheon, the divine personification of the planet Venus

Isidore of Seville – Roman Catholic bishop and historian of late antiquity, who gathered and compiled the knowledge of antiquity that had still been available (560–636)

Istidina – petty kingdom on the south coast of the Black Sea, contemporary with the Hittite empire

Išuwa – ancient kingdom, located on the upper Euphrates in Anatolia

Ithaca – island in the Ionian Sea off the western coast of Greece; home of Odysseus according to Homer

J

Jablonka, Peter – an Austrian prehistorian, participated for many years in excavations and fieldwork at Troy

Jason – Greek mythological hero, leader of the Argonauts

Joseph of Exeter (Latin Josephus Iscanus) – cleric and Latin poet of the 12th cent. from Exeter in Devon county, England

K

Kadesh, Qadesh on the Orontes – major Syrian city of the 2nd mill. BCE; site of an important battle between Hatti and Egypt in 1275 BCE

Kadıkalesi – settlement mound on the Aegean coast of Turkey

Kaniš – please see Kültepe

Karamenderes – please see Scamander

Karkiša – Late Bronze Age petty state in western Anatolia, later presumably Caria

Karnak – temple and main house of the God Amun-Ra in ancient Thebes, near present-day Luxor

Kaška – ancient Near Eastern people who had settled in northwestern Anatolia, perpetually hostile towards Hatti

KASKAL.KUR – group of cuneiform characters in Akkadian and Hittite that has been interpreted to designate underground waterways

Kayan, Ilhan – Turkish geoarchaeologist, retired professor at Ege University in Izmir

Kaymakçı – Late Bronze Age citadel, located west of Lake Marmara Gölü in the present-day Turkish province of Izmir

Keftiu – ancient Egyptian geographic term, possibly the name for Crete

Kesik – artificial incision into the coastal mountains 5 km west of Hisarlık, ca. 500 m long and 30 m deep (in Turkish "kesik" means cut)

Kesik Tepe – mound near Kesik

Kızbazı Tepesi – small Late Bronze Age fortress near Lake Gyges

Kızılırmak – Turkey's longest river; runs through eastern Central Anatolia in a great arc (ancient name: Halys)

Kizzuwatna – Hittite name for the Cilician plains

Klazomenai – ancient Greek city on the coast of Ionia

Knossos – Minoan city and largest Minoan palace on Crete

Kober, Alice – U.S. classicist who contributed to the decipherment of Linear B

Kom al-Samak – altar at the ancient Egyptian palace complex of Malqata on the west bank of the Nile at Thebes

Kom el-Hettan – modern term for the mortuary temple of Amenhotep III on the west bank of the Nile, opposite Luxor

Korfmann, Manfred – German archaeologist (1942–2005) specialized in prehistory; professor at the University of Tübingen, excavation director at Troy from 1988 until his death

Kretschmer, Paul – a German linguist (1866–1956), concluded in 1896 that people speaking an Anatolian language had settled in Greece before Greek-speaking people arrived there

Kültepe – important Bronze Age settlement and trading city in Central Anatolia (also called Kaniš or Neša)

Kythira, Cythera – Greek island opposite the southeastern tip of the Peloponnese

L

Labyrinth – an elaborate maze, most likely designed to keep evil spirits away

Lachish – ancient city in historic Palestine, around 40 km southwest of Jerusalem

Lake Copais – artificially drained lake at present-day Gla, an important Mycenaean settlement in Boeotia, Greece

Lalanda – an area within the Lower Land, to the southwest of the Hittite core realm

Laodicea – ancient city on the Lycus River in Phrygia, in the southwest of present-day Turkey

Laomedon – legendary king of Troy, father of Priam

Larissa, Larisa – name of an ancient city, mentioned by Homer, most likely located on the coast of the Biga peninsula southwest of Troy (also the name of a settlement at the mouth of the Hermus River)

Lasithi – region in the east of Crete

Latacz, Joachim – German classical scholar and expert on Homer, important supporter of Troy excavator Manfred Korfmann

LeChevalier, Jean Baptiste – a French scholar, astronomer and archaeologist (1752–1836), suggested that Troy was located near Pınarbaşı, at the southern end of the Scamander floodplain

Leleges – ethnic group of people in ancient Anatolia, according to Herodot and Strabo an early name for the Carians

Lemnos – an island of Greece in the northern part of the Aegean Sea, known for the Early Bronze Age settlement of Poliochne

Lesbos – Greek island in the Aegean Sea opposite the coast of Asia Minor

Levant – coasts and hinterland of the states located on the Eastern Mediterranean coast

Libya – in Late Bronze Age the land west of Egypt that had been settled by Libyan people

Linear A – script system that had been used on Crete ca. 17th–15th cent. BCE in parallel to the Cretan hieroglyphic script, from which it was probably derived

Linear B – Mycenaean syllabic script that was in use from ca. 15th to 12th cent. BCE, first in Crete, later on the Greek mainland as well

Lion Gate, Hattuša – southwest entrance in the 6.8 km long enclosure wall of Hattuša

Lion Gate, Mycenae – the main entrance of the Bronze Age citadel of Mycenae, southern Greece, dating to the middle of the 13th cent. BCE

Livius Andronicus – earliest known Latin poet (around 280–207 BCE)

Lower Land – Hittite term for the region to the southwest of the Hittite core realm

Luke, Christina – U.S. archaeologist at Boston University, conducts fieldwork around Lake Gyges

Lukka – Egyptian name of a people viewed as hostile by the Egyptians; they had settled in the southwest of Anatolia (presumably Lycia)

Luwia – proposed term for western Asia Minor during the Middle and Late Bronze Age

Luwian civilization – people who lived in western Asia Minor during the 2nd mill. BCE and possessed the knowledge of writing

Luwian cuneiform – please see Cuneiform Luwian

Luwian hieroglyphic – please see Hieroglyphic Luwian

Luwians – Indo-European people who lived in western Anatolia at least since 2000 BCE

Luwili, Luwian – term for the Luwian language

Luwiya – early Hittite name for the area inhabited by Luwian-speaking people

Luxor Temple – ancient Egyptian temple, located in present-day Luxor on the east bank of the Nile River

Lycia – ancient Greek name of an area in the southwest of Asia Minor (in Hittite probably Lukka)

Lycophron – Greek grammarian and poet from the city of Chalcis on the island of Euboea (ca. 320–280 BCE)

Lydgate, John – English monk and poet (1370–1451), composed an amplified translation of the Trojan history of Guido de Columnis, the first book to be printed in the English language

Lydia – an Iron Age kingdom in western Asia Minor

M

Macedonia – historical area, located on the southern Balkan peninsula, presently part of the territory of Greece and the Republic of Macedonia

Maclaren, Charles – influential Scottish publisher and lay geologist (1782–1866), published two books proposing that Troy is located on Hisarlık

Maeonia – according to Homer, the inhabitants of Lydia; allies of the Trojans

Magliano Disc – circular lead disc, 8 cm in diameter, engraved with Etruscan script in a spiral pattern, discovered in Magliano, present-day Tuscany

Maidos – tell settlement in present-day Eceabat, located on the north shore of the Dardanelles

Malalas, John – a Greek chronicler from Antioch (ca. 491–578)

Malia – Minoan palace, situated on the northern coast of Crete

Manutius, Aldus – leading publisher and printer of the Venetian High Renaissance (1449–1515)

Marmara Sea – inland sea of the Mediterranean (ancient name: Propontis), connects the Black Sea to the Aegean Sea via the Bosphorus and the Dardanelles

Maša – Late Bronze Age petty state in western Asia Minor (in antiquity probably Mysia)

Mastic – a resin obtained from the mastic tree *(Pistacia lentiscus)*, was used as a preservative in wine since the 6th mill. BCE

Meander – name in classical times for the Büyük Menderes River

Mecca – a city in the Hejaz in Saudi Arabia, birthplace of Muhammad and the site of Muhammad's first revelation of the Quran

Medieval, medieval period – the Middle Ages in European history, 5th–15th cent. CE

Medinet Habu – mortuary temple of Ramesses III in western Thebes, built around 1170 BCE

Mehmet III – Sultan of the Ottoman Empire (ruled 1595–1603)

Melissus – Melissus of Samos, Greek philosopher (5th cent. BCE) from the island of Samos

Mellaart, James – British prehistorian (1925–2012), discovered various Neolithic tells in Turkey, in charge of the first excavations in Çatalhöyük and Beycesultan

Mellink, Machteld – U.S. prehistorian (1917–2006), expert on ancient Anatolia

Merneptah – Egyptian pharaoh (ca. 1213–1203 BCE)

Meshwesh – an ancient Libyan tribe mentioned in Egyptian sources

Mesopotamia – name of the Tigris-Euphrates river system; Bronze Age Mesopotamia included Sumer and the Akkadian, Babylonian and Assyrian empires

Messara, Mesara – coastal plain in southern Crete

Messenia – region in the southwestern part of the Peloponnese

Metrodorus – a Pre-Socratic philosopher (5th cent. BCE) from the Greek town of Lampsacus on the eastern shore of the Hellespont

Midas – emperor of Phrygia in the 8th cent. BCE

Midas city – Phrygian Yazılıkaya, a Phrygian archaeological site 27 km south of Seyitgazi in western Turkey, containing the Midas Monument

Midas Monument – a rock-cut facade showing a temple front with incised decorations, located in Midas city, contains a dedication in Old Phrygian to Midas (MIΔAI FANAKTEI), dating to the 7th or 6th cent. BCE

Midas Mound – a tumulus, 53 m in height, about 300 m in diameter, on the site of ancient Gordion (modern Yassihöyük, Turkey)

Middle Ages – historical period from the end of antiquity to the beginning of modern times in European history (ca. 5th–15th cent.)

Middle Bronze Age – in the Eastern Mediterranean the time between 2000 and 1550 BCE

Middle East – southwest Asian subcontinent that includes Asia Minor, the Caucasus, Mesopotamia, Syria, Palestine, the Arabian and the Sinai Peninsula, and the Armenian and Iranian highlands

Middle Helladic – the Middle Bronze Age period on the Greek mainland (2000–1550 BCE)

Miletus – ancient Greek city on the west coast of Asia Minor

Millawanda – Hittite name for a city on the Anatolian coast of the Aegean, most probably Miletus

Milojčić, Vladimir – Yugoslav-German archaeologist (1918–1978), professor at the University of Heidelberg

Milos, Melos – Greek island in the Aegean Sea

Minoan culture – Bronze Age culture on Crete

Minos – Cretan king during Minoan times

Mira – Hittite name of a state west of Central Anatolia

Misraim – the Hebrew and Aramaic name for the land of Egypt

Mita – powerful potentate of the Muški in central Asia Minor at the end of the 8th cent. BCE, possibly identical with king Midas

Mitanni – late Bronze Age petty state in the north of present-day Syria

Monastiraki – archaeological site from Minoan times on Crete, abandoned after 1700 BCE

Mount Ida – mountain range, located in the Troad in northwestern Turkey (Turkish Kaz Dağı); also the name of the highest summit on Crete

Mount Lebanon – once densely forested mountain range in Lebanon

Muntaner, Ramon – governor of Gallipoli from 1305 to 1309

Muršili II – Hittite emperor (reigned ca. 1318–1290 BCE)

Müsgebi – Mycenaean settlement and burial ground on the Aegean coast of western Asia Minor

Muški – a group of people that existed for several centuries on the territory of the collapsed Hittite Empire and may have played a role in the demise of the Hittites

Muwattalli II – Hittite emperor (reigned ca. 1290–1272 BCE)

Mycenae – important Bronze Age site on mainland Greece

Mycenaean culture – term for the Late Bronze Age culture (ca. 1600–1100 BCE) on the southern Greek mainland

Mysians – according to Homer, allies of the Trojans from western Asia Minor

N

Naevius – Roman poet (270–201 BCE)

Nagy, Gregory – professor of Classics at Harvard University, specialized in Homer and archaic Greek poetry

Neo-Hittite – Luwian-, Aramaic- and Phoenician-speaking Iron Age petty states that arose in Syria following the collapse of the Hittite Empire

Neša – please see Kültepe

Nešili, Nešite, Neshite – one of a number of terms for the Hittite language

Nestor – according to Homer, the king of Pylos, fought on the Greek side in the Trojan War

New Palace Period – time period of the Minoan civilization (ca. 1700–1430 BCE), during which a highly sophisticated architecture had developed

Nişantaş inscription – 8.5-m wide and longest known Luwian hieroglyphic inscription so far, found in Hattuša (Nişantaş = marked rock)

Non-Homeric Troy reports – all written accounts of the Trojan War, except for the *Iliad* by Homer

Nostoi (Returns of the Greeks) – part of the Epic Cycle that covers the homecoming of major Greek heroes like Agamemnon and Menelaus after the Trojan War

Nubia – area in the south of Egypt, whose inhabitants had been of dark skin color

nuwa'um – term used by the Assyrian merchants of Asia Minor to describe the Luwian-speaking people

O

Odysseus – Greek mythological hero, king of Ithaca at the time of the Trojan War

Odyssey – epic tale by Homer, telling the adventures of Odysseus on his return from the Trojan War

Oenopides – an ancient Greek mathematician and astronomer, who lived around 450 BCE on the island of Chios

Old Hittite Kingdom – Hittite rule over central Asia Minor, ca. 1650–1430 BCE

Old Palace Period – epoch of the Minoan culture during which the first palaces had been established (around 1900–1700 BCE)

Olympia – sanctuary of Zeus in the northwest of the Peloponnese, Olympic venue of antiquity

Olympic Games – religious and athletic festivals held every four years (starting in 776 BCE) at the sanctuary of Zeus in Olympia, Greece

Onuphis – place in ancient Egypt, located in the Nile Delta

Orichalkos – Modern Greek word for brass

Orontes – river in Lebanon and Syria

Orthostats – in archaeology: squared upright-standing stone blocks

Otranto – port city in the region of Calabria, Italy

Ottoman Empire – empire of the dynasty of the Ottomans from about 1299 to 1923; in Europe also called Turkish Empire

Ovid – Roman poet (ca. 43 BCE – 17 CE)

Oxhide ingots – Late Bronze Age metal slabs of copper or tin resembling the hide of an ox

P

Pactolus River – today Sart Çayı, stream through Sardes, said to have been rich in gold in antiquity

Paeonia – the land and kingdom of the Paeonians, roughly coinciding with the present-day Republic of Macedonia; according to Homer, an ally of the Trojans

Pala – a region in Bronze Age Anatolia where the Palaic language was spoken; northwest of Hattuša

Palace of Nestor – major Mycenaean palace and administrative center on the hill of Epano Englianos north of Pylos in the western Peloponnese

Palaic – Indo-European language belonging to the Anatolian language group, of which only fragments have been preserved

Palestine – area between Syria and Egypt in the Levant

Palmer, Leonard Robert – English author and professor of comparative philology at the University of Oxford (1906–1984)

Paphlagonia – region north of the Hittite core territory, inhabited by the Kaška; listed by Homer among the allies of the Trojans

Papyrus Harris I, also called Great Harris Papyrus – one of the oldest and best preserved hieroglyphic papyri (40 m in length) reports, among other things, doings and achievements of Ramesses III (today exhibited in the British Museum in London)

Paris – Greek mythological figure; son of the Trojan king Priam

Pausanias – Greek writer of the 2nd cent. from Asia Minor, wrote a detailed travel report on Greece

Pedasa – ancient Greek town located a few kilometers inland from Halicarnassus

Pedasos – a town south of Troy that was attacked by Greek forces during the Trojan War

Pefkakia Magoula – archaeological site at the port city of Volos in the Thessaly region in mainland Greece

Pelasgians – term for prehistoric non-Greek-speaking groups in Greece, which may have come from the Troad

Peleset – one of the Sea Peoples' tribes

Peloponnese – peninsula in the south of mainland Greece, heartland of the Mycenaeans

Penelope – wife of Odysseus in Homer's *Odyssey*

Percote – town on the southern shore of the Dardanelles, ally of the Trojans

Pergamon – ancient Greek city in the west of Asia Minor near the Aegean coast

Pergamos – name of the royal citadel of Troy as used by Heinrich Schliemann

Perizonius, Jakob – original name Jakob Voorbroek, a Dutch classical scholar (1651–1715)

Pernicka, Ernst – an Austrian chemist, specialized in archaeometry

Pernier, Luigi – an Italian archaeologist and academic (1874–1937), now best known for his discovery of the Phaistos Disc

Persian Empire – imperial dynasties centered in Persia (Iran) starting in 550 BCE

Petra – a historical and archaeological city in southern Jordan, famous for its rock-cut architecture

Petras – Minoan site in northeastern Crete

Phaistos – Minoan palace on Crete

Phaistos Disc – circular clay disc of about 15 cm in diameter with a spiral arrangement of characters, retrieved from the palace of Phaistos on Crete

Philhellenism – intellectual movement influenced by German new humanism that evolved in the 1820s in Europe and enthusiastically embraced all things Greek

Philistines – Near Eastern people mentioned in the Bible that, most likely coming from the Aegean, had settled in the coastal areas of Palestine in the 12th cent. BCE

Philoxenus – Greek poet (435–380 BCE)

Phocaea – an ancient Ionian Greek city on the western coast of Anatolia, northwest of modern Izmir; said to have been attacked by Greek forces during the Trojan War

Phoenicians – ancient people who had lived mainly in Phoenicia in the area of present-day Lebanon and Syria on the Mediterranean coast

Phrygia – ancient name of a region in western central Asia Minor; named after the Phrygians, who had immigrated from the Troad and Thrace in the 12th cent. BCE

Pirinkar – winged deity in the procession of gods at Yazılıkaya, the Hittite rock sanctuary near Hattuša

Pitasa – petty state in western Asia Minor during Hittite times; located between Karkiša (Caria) in the west and the Hittite core realm in the east

Piteya – ancient city near the eastern entrance to the Dardanelles, said to have been destroyed by Greek forces during the Trojan War

Pittacus of Mytilene – an ancient military general (640–568 BCE) and one of the seven sages of Greece

Piyama-Radu – name of a man from Arzawa, mentioned in the so-called Tawagalawa letter to the king of Ahhiyawa; led a war against western vassals of the Hittites in the middle of the 13th cent. BCE

Plato – Greek philosopher (427–347)

Pliny – actually Gaius Plinius Secundus; better known as Pliny the elder (23–79); Roman writer, author of a natural history in 37 books

Plutarch – Greek writer (46–120)

Porsuk – river in western Asia Minor, drains into Sakarya River (the ancient Sangarius) at Gordium

Port of Nestor – artificial port basin near the Palace of Nestor at Pylos; discovered during the 1990s and dating to the 13th cent. BCE

Poseidon – in Greek mythology god of the sea and brother of Zeus

Prehistory – research branch of archaeology, deals with the history of humankind from the emergence of the first stone tools to the advent of written documents

Priam – Greek mythological figure, king of Troy during the time of the Trojan War

Priam's Treasure – extensive depot find from the 3rd mill. BCE, discovered and wrongly attributed to king Priam by Heinrich Schliemann

Proetus – a mythical king of Argos and Tiryns; according to Strabo, he ordered the construction of the Cyclopean walls through the aid of engineers from Lycia

Prusa – ancient name of the present-day city of Bursa in northwestern Turkey

Psammetichus, Psammetichos – the name of three Egyptian pharaohs of the 26th Saite Dynasty

Ptolemaeus Chennus – Greek writer (1st cent. CE)

Pulak, Cemal – professor of Nautical Archaeology at Texas A&M University, co-excavator of the shipwreck of Uluburun

Pylos – Late Bronze Age Palace of Nestor in the southwest of the Peloponnese; also name of a modern town in the vicinity

Pyrgos – town in the southwest of the Messara plain on Crete

Pythagoras of Samos – an Ionian Greek philosopher and mathematician (ca. 570–495 BCE)

Q

Quintus Smyrnaeus – ancient Greek poet (probably 3rd cent. CE); author of *Posthomerica*, an epos in which he drew upon the archaic stories of the Epic Cycle

R

Ramesses I – Egyptian pharaoh and founder of the 19th dynasty (reigned 1292–1290 BCE)

Ramesses II – Egyptian pharaoh of the 19th dynasty (reigned 1279–1213 BCE)

Ramesses III – Egyptian pharaoh of the 20th dynasty (reigned 1182–1151 BCE)

Retjenu – ancient Egyptian name for Canaan

Rhodes – Greek island off the southwestern coast of Asia Minor

Rhytion – city near Pyrgos, Crete, in the southwest of the Messara plain

Roman Empire – territories that had been dominated by Rome between the 8th cent. BCE and the 7th cent. CE

Romanou – Greek village on the southwest Peloponnese near the silted up Port of Nestor

Roosevelt, Christopher H. – U.S. archaeologist, professor at Boston University and specialist in the archaeology of western Anatolia

S

Sadyattes – Lydian king (624–619 BCE)

Saint Jerome – also known as Eusebius Sophronius Hieronymus, Roman church father, saint, scholar and theologian (347–420)

Saïs – Greek name of an ancient Egyptian town in the western Nile Delta; site of an important battle between Egypt and the Sea Peoples in 1208 BCE, capital during the reign of the 26th dynasty

Sakarya – the ancient Sangarius; third longest river in Turkey, runs through ancient Phrygia

Salian dance / Salic dance – traditional armed warrior dance and horse dance figure still practiced today

Samothrace – Greek island in the northern Aegean Sea near the Dardanelles

Sanctuary of Trajan – temple at the highest point of the acropolis of Pergamon

Santorini – archipelago in the south of the Cyclades, centered around the main island of Thera

Sappho – Greek lyric poetess (late 7th cent. BCE)

Sardis – capital of the ancient kingdom of Lydia in the west of Asia Minor

Şarhöyük-Dorylaion – ancient settlement in Asia Minor, near the modern city of Eskişehir

Scamander – river that originates in the Ida Mountains and crosses the Trojan plain (also called Skamandros or Karamenderes); according to Homer, the gods originally called the river Xanthos

Scepsis – an ancient settlement in the Troad, said to have been destroyed by Greek forces during the Trojan War

Schliemann, Heinrich – German businessman and archaeologist, conducted large-scale excavations at Hisarlık, where he discovered the ruins of Ilion, the royal citadel of Troy

Scyros – name of a place in Asia Minor that was attacked by Greek forces during the Trojan War; also name of an island in the Aegean

Sea Peoples – confederation of tribes who attacked Egypt in the late 13th and early 12th cent. BCE

Šeha (also Šeha River Land) – Hittite name for a state west of Central Anatolia

Seneca – Roman poet and writer (4 BCE – 65 CE)

Sesdos – ancient settlement on the north coast of the Dardanelles, said to have been attacked by Greek forces during the Trojan War

Seti I – Egyptian pharaoh of the 19th dynasty (reigned 1290–1279 BCE)

Seti II – Egyptian pharaoh of the 19th dynasty

Shasu – Egyptian name for semi-nomadic people who lived in Syria and Palestine

Sherden – one of the Sea Peoples' tribes

Sidon – archaeological site and modern town in Lebanon

Sigeion – port city during the 4th cent. BCE, located west of Illion

Simoeis, Simois – please see Dümrek

Simonides – actually Simonides von Ceos; Greek lyric poet (556–467 BCE)

Siptah – Egyptian pharaoh of the 19th dynasty

Skamma Andros – please see Scamander

Smyrna – ancient Greek city on the Aegean coast of Anatolia, known today as Izmir

Socrates – Greek philosopher and Plato's teacher (469–399 BCE)

Solon – Greek statesman und poet (ca. 640–560 BCE)

Sophocles – Greek tragedian (496–406 BCE)

Source convergence – the process of obtaining knowledge by combining different sources, e. g. documents and the results of natural scientific investigations

Source criticism – in history, the process of evaluating an information source

Sphinx – in the arts, mythological figure with the body of a lion and the head of a man

Spratt, Thomas – English vice admiral and geologist (1811–1888)

Stesichorus – Greek lyric poet (630–555 BCE)

Strabo, Strabon – antique Greek historian and geographer (ca. 63 BCE – 23 CE)

Stratigraphy – the investigation of layer sequences in archaeology and geology

Suppiluliuma II – last Hittite emperor (reigned 1205–1192 BCE)

Sycionians – people of an ancient Greek city state situated in the northern Peloponnese

Syria – area between Euphrates and Mediterranean Sea south of the mountains of Anatolia

T

Tafur, Pedro – Spanish traveler, historian and writer, visited Troy in the fall of 1437

Tanaja – Egyptian name for Mycenaean Greece

Tantalos – according to John Malalas, the emperor of the land of the Mycenaeans

Tarhundaradu – king of Arzawa who corresponded with Pharaoh Amenhotep III

Tarhuntašša – undiscovered city in the south of Central Anatolia, after the Battle of Kadesh (1275 BCE) it had temporarily become the capital of the Hittite Empire

TAVO – Tübinger Atlas des Vorderen Orients, a focal point of research of the German Research Foundation (DFG) from 1969 to 1993

Taylor, Thomas – an English translator and Neoplatonist (1758–1835), the first to translate into English the complete works of Plato

Tel Haror – Bronze Age archaeological site in the Negev Desert

Telamon – Greek mythological figure, king of Salamis and participant in the first Greek attack on Troy

Telemachus – Greek mythological figure, son of Odysseus

Tell – settlement mound created through repeated human settlement (Turkish: höyük)

Tell Deir Alla – settlement mound in present-day Jordan

Tell el-Fara – settlement mount in the Nile Delta

Tenedos – island off the coast of the Troad (today the Turkish island of Bozcaada)

Teucer, Teucrians – term commonly used for the people of Troy after 1200 BCE

Thalassocracy – state or group of states that bases its power on maritime trade and has a fleet at its disposal

Thales – a Pre-Socratic Greek philosopher, mathematician and astronomer (ca. 624–546 BCE) from Miletus in Asia Minor

Thebes – ancient and modern city in central Greece

Thebes – Greek name for the former capital of Egypt during the New Kingdom; present-day Luxor

Thebes – settlement most likely in the Gulf of Edremit, said to have been destroyed in the Trojan War

Theoclymenus – Greek mythological figure

Thera (Santorini) – volcanic island in the Aegean Sea; an outbreak, probably in spring of 1628 BCE, destroyed and buried the settlement of Akrotiri

Theseus – Greek mythological hero, king of the Mycenaean kingdom of Thessaly

Thessaly – geographic region and Mycenaean kingdom in northern Greece

Tholos tomb – a burial structure characterized by its false dome used in in several cultures in the Mediterranean and west Asia

Thrace – region on the European side of the Dardanelles

Thucydides – Greek historian (460–400 BCE)

Tigris – the eastern of the two rivers that define Mesopotamia, flows south from the mountains of southeastern Turkey through Iraq and empties into the Persian Gulf

Timaeus – title of a dialogue by the Greek philosopher Plato

Timaeus from Tauromenium – ancient Greek historian (345–250 BCE)

Tiryns – Bronze Age archaeological site and citadel, located in the Argolid, Greece

Tjeker – one of the Sea Peoples; please also see Teucer

Tragliatella – Italian town where an Etruscan wine jug, engraved with a labyrinth and the name "Truia" (Troy), was found

Troad, Troas – ancient name of the landscape around Troy southeast of the Dardanelles, separated from the rest of Anatolia by a mountain range

Trojan War – term for a fatal early-historical conflict between the united Greeks and a coalition of western Anatolian states in Greek mythology and ancient texts

Tros – king of Troy in Greek mythology

Troy – location in Greek mythology; since Heinrich Schliemann, Troy has been generally equated with the Bronze Age archaeological site on hill Hisarlık in the northwest of Asia Minor

Troy dance – ceremonial dance performed in early Italy when a city was founded, specifically before the city walls were to be erected

Troy debate – controversy among German prehistorians with respect to the exploration and significance of Troy

Tudhaliya IV – Hittite emperor (reigned 1236–1215 BCE)

Tumulus – grave mound or burial mound

Twosret – female Egyptian pharaoh of the 19th dynasty (reigned 1193–1185 BCE)

Tyana – an ancient city in Central Anatolia, capital of a Luwian-speaking Neo-Hittite kingdom in the 1st mill. BCE

Tyre – important Phoenician city on a small island off the coast of present-day Lebanon

Tyrrhenians – a people of northwestern Asia Minor that were closely related to the Etruscans, mentioned by ancient Greek historians

U

Ugarit – ancient trading hub, located at the Mediterranean coast on present-day Syrian territory, capital of a state by the same name

Uluburun shipwreck – sunken sailing ship from the Late Bronze Age, found in 1982 near Cape Uluburun off the southwestern coast of Turkey

Upper Land – Hittite term for the central realm around Hattuša

Uwas – Cretan petty king

V

Ventris, Michael – English architect (1922–1956) who in 1952 deciphered the Linear B script

Villanovan culture – earliest Iron Age culture of northern Italy that had its center in present-day Tuscany

Virgil – Roman poet (70–19 BCE)

W

Walma – Hittite name for a state west of Central Anatolia

Wiluša – late Bronze Age state in western Asia Minor, mentioned in Hittite texts; possibly Troy

Winckler, Hugo – a German archaeologist and historian (1863–1913) who uncovered the capital of the Hittite empire at Boğazkale, Turkey

Wolf, Friedrich August – a German philologist (1759–1824)

Woudhuizen, Frederik Christiaan – a Dutch linguist, produced substantial publications on Luwian and the ethnicity and language of the Sea Peoples

X

Xanthos – please see Scamander

Xenophanes – Xenophanes of Colophon, a Greek philosopher, theologian and poet (ca. 570–475 BCE)

Xenophon – Greek writer (430–354 BCE)

Z

Zeleia – the name of an ancient town or city in the Troad; an ally of the Trojans

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