Science and the Mortuary Landscape of Pylos

In chapter 5, I continue to pursue the autobiographical thread that runs through this book, referring to my earliest teaching experiences at the University of Illinois at Chicago as a new professor in the later 1970s. Classical and anthropological archaeology then had different approaches to archaeological science and definitions of what constituted science. Archaeologists faced challenges when they attempted to integrate components of a multidisciplinary project, which is still true today. I discuss the use of archaeological science at Pylos, particularly what we have learned from studying the skeletons of those who lived there at the start of the Late Bronze Age. Blegen was farsighted in retaining all human bones from graves that he excavated. The examination of these remains from Pylos and collaborations with archaeological scientists in Europe and North America have given us insights into the role the mortuary sphere played in competitive engagements among elites in Early Mycenaean times.

In 1977 I defended my doctoral dissertation and was hired to teach at the University of Illinois at Chicago. I wasn't entirely sure what was expected. In graduate school, I had learned nothing about teaching. The objective there was to produce researchers. The only advice I got about the undergraduate classroom was from a Classical art historian: "One per minute, fifty per class," he said when I asked for guidance—he was referring to numbers of slides. I had, however, been advised to tell any search committee that I could do whatever they wanted me to do.

I was first interviewed at the Waldorf Astoria hotel in Manhattan, where the annual convention of the Archaeological Institute of America was held in 1976, in the week after Christmas. I had not yet defended my doctoral dissertation. It was New Year's Eve and Guy Lombardo and the Royal Canadians were setting up for their annual performance. Two months later I was offered a job, without ever having gone to Chicago. On arriving at the University of Illinois in August,

I was shocked to find I would be teaching Latin, topography and monuments of ancient Athens, and ancient Greek and Latin literature in translation, in addition to archaeological science. They took me at my word! My new department had recently received a federal grant in hopes of creating an interdisciplinary archaeology program to bridge natural and physical sciences, the humanities, and the social sciences. Three trial courses were scheduled, and, as a newly minted Ph.D., I found myself co-teaching classes in ancient structural engineering, ancient ceramic technology, and ancient metallurgy, while participating in a seminar co-sponsored with the Department of Anthropology. A mechanical engineer who held patents for hip replacements became my mentor.

I had previously collaborated with several archaeological scientists to determine sources of pottery and metals found at Ayia Irini on Kea. I had studied the Greek temple architecture of southern Italy and Sicily. I had been exposed to anthropology in graduate school through my own devices. But why anyone thought a twenty-seven-year-old was qualified to instruct students in such a wide range of interdisciplinary subjects remains a mystery to me to this day. I suspect that it was my Latin that got me hired. Nevertheless, it was in Chicago that I came to understand the fundamental difference between an anthropological approach to science and that of Classical archaeology.

SCIENCE IN ARCHAEOLOGY AND CLASSICAL ARCHAEOLOGY

Science in archaeology has gone through various transformations in the decades since World War II, some determined by trends in the core disciplines of the archaeologists themselves. As a graduate student, bits of contraband leaked into our Department of Classics from our Department of Anthropology, including a chapter titled "Archaeology with a Capital 'S" by Kent Flannery. When recently I pulled the relevant book from our library shelf in Cincinnati, I found living proof of a continuing divide between Classical archaeology and anthropology. The book had been purchased for our Classics library in 2010 but had never been checked out. "Archaeology with a Capital 'S" is, however, still widely assigned to students in departments of anthropology.

I loved this paper in 1973 when I first read it. The capital S in the title refers to science, but not natural or physical sciences. What concerned Flannery was archaeology itself as a science of process, operating within a Hempelian hypothetico-deductive framework. That approach to research begins with a theory about how things work and derives testable hypotheses from it. Hypotheses are then evaluated by gathering and analyzing data, and a theory is either supported or rejected by the results. Flannery humorously described two contrasting types of analysis in archaeology. The first was a "law and order" approach, which he criticized for confusing statistical correlations with causation. The second was a

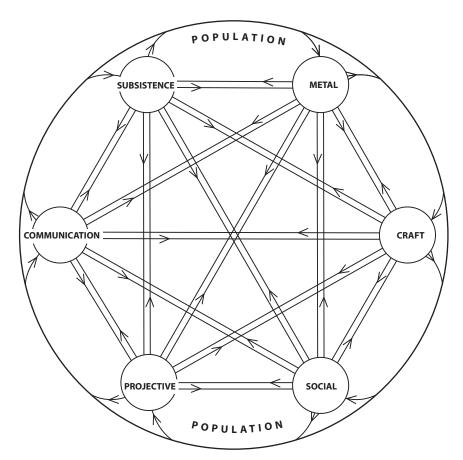


FIGURE 26. Colin Renfrew's systems diagram for the emergence of complex societies in the Aegean area. Redrawn by Rosemary Robertson, from Colin Renfrew, *The Emergence of Civilisation*, fig. 21.1. With permission from Casemate Publishers.

"Serutan" approach (named after a popular American laxative, its slogan "Serutan is Nature's spelled backwards"), essentially the general systems theory of Ludwig von Bertalanffy, an Austrian biologist (1901–1972), popularized in Aegean prehistory by Colin Renfrew in *The Emergence of Civilisation* (see figure 26).¹

Von Bertalanffy's proposition was that virtually all natural phenomena, including human societies, can be described as systems. Any system consists of interdependent components, or subsystems. Change in one component may prompt changes in another, and the consequences may be quantifiable, even predictable. Renfrew had argued that such a "multiplier effect" was responsible for a growth in complexity in past Aegean societies.² Growth in one subsystem encouraged expansion

in others, and that ultimately explained the origins of civilization in the Greek Bronze Age.

Classical archaeologists showed little or no interest in hypothesis testing, systems theory, or more generally in archaeological theory as it was developing in American anthropology and in European departments of archaeology. Anthropology and Classics were, however, both concerned then with another definition of science: analytical studies of archaeological materials, whether animal, vegetable, or mineral.

Bill McDonald, Blegen's colleague at Pylos, was, in fact, a pioneer in expanding the contributions of the natural and physical sciences in archaeological research, in the Mediterranean's version of the New Archaeology, one that was neither processual nor anthropological. Bill was inspired by large multidisciplinary expeditions mounted in the Near East by Robert McCormick Adams and Robert Braidwood, and in Mesoamerica by Richard "Scotty" McNeish and William Sanders. These were anthropologists of a generation older than Lewis Binford and Kent Flannery.

McDonald, in his introduction to *The University of Minnesota Messenia Expedition*, describes the philosophy of his project.

There is no argument—at least among scholars like Adams and Braidwood—about the importance of obtaining all relevant information about the natural environment as well as the cultural features of the target region. The real nub is how to collect the information, digest it, and present it in integrated form.³

For McDonald the answer was to coordinate a large team of "specialists" in the field in the hope that resulting products could be integrated in publication and made interdisciplinary, not merely multidisciplinary. His colleagues were often drafted from university departments of natural and physical sciences and many learned about archaeology and prehistory on the fly.

Our own approach to science at Pylos is one that attempts to integrate research by natural and physical scientists within a research program focused on archaeological and anthropological problems—and thus to produce results that are truly interdisciplinary. We draw on the expertise of professionals in the field of archaeological science for nearly every aspect of our work. How were the soils that we excavate formed? Where were the objects we excavate made? What were they made from? When were they buried? For help in answering these and many other questions, we turn to chemists, geologists, physicists, and botanists, as well as osteologists, malacologists, and physical anthropologists.

In the remainder of this chapter, I discuss the role of archaeological science at Pylos in just one aspect of our research: the analysis of human skeletons. These include remains from graves excavated by Blegen's team and more recently by our own group since 2015.

A LITTLE HISTORY OF EARLY MYCENAEAN BURIAL AT PYLOS

In the course of reorganizing storerooms in our local museum, Sharon Stocker located human bones that Blegen had recovered from Mycenaean graves. J. Lawrence (Larry) Angel of the Smithsonian Institution had examined them, but only cursorily, and some not at all. We had his notes in our archives, but he had never published a report.

Lynne Schepartz, a physical anthropologist and archaeologist based at the University of the Witwatersrand in Johannesburg, has now analyzed all of these skeletal remains—179 individuals in total, dating from the end of the Middle Bronze Age to the end of the Late Helladic period (see figure 27).⁴ Blegen had found them in two tholos tombs, seven chamber tombs, and one large circular enclosure that he called the Grave Circle. The collection is one of the largest preserved assemblages of human remains from Mycenaean Greece.

There is nothing particularly unusual about Mycenaean burial customs at Pylos. Tholos tombs and chamber tombs are found throughout southern Greece. Tholos tombs were round, vaulted monuments with coursed stone walls, often called "beehive tombs." They were first built in Messenia toward the end of the Middle Helladic period, perhaps in imitation of tumuli, the earthen burial mounds that preceded them chronologically. Multiple individuals were buried in a tholos tomb, the bodies of the dead set on its floor (or occasionally put in large jars). Accompanied by adornments and surrounded by gifts of precious materials, the bodies were left to decay. The bones were eventually gathered together and put in pits or simply shoved toward the walls of the tomb. Components of skeletons are thus generally comingled, and most of the time it is difficult or impossible to determine precisely when any particular body was interred.

The same practices hold true for chamber tombs, rectangular or circular graves that were dug like small caves into the soft marl bedrock common in the Peloponnese. In the Grave Circle at Pylos, the earliest dead were buried in large jars, set into pits, while the latest skeleton was still articulated. Its excavator believed the Grave Circle was a poorly preserved tholos tomb. Blegen disagreed, and we agree with him.

Tholos tombs are typically found near important Early Mycenaean centers, and the discovery of several of these tombs had encouraged Blegen and Kourouniotis to look on the Englianos Ridge for the Palace of Nestor.⁶ Already in 1939, Blegen located two tholos tombs there in addition to the Grave Circle: Tholos IV, northeast of the acropolis and oriented to the gateway through the Early Mycenaean fortification wall, and Tholos III, a kilometer toward the sea.

In addition to analyzing human skeletal remains, we have also defined with greater precision how long each tomb served as a place of interment by reexamining pottery deposited with the burials. It is clear that in Early Mycenaean Pylos, the mortuary "arena" was a more important locus for competition among the elite



FIGURE 27. Lynne Schepartz studying human remains from the Palace of Nestor. Courtesy of the Department of Classics, University of Cincinnati. All rights reserved.



FIGURE 28. Tholos Tomb IV near the Palace of Nestor at Pylos. Courtesy of the Department of Classics, University of Cincinnati. All rights reserved by the Hellenic Ministry of Culture and Sports—Hellenic Organization of Cultural Resources Development.



FIGURE 29. Gold-handled sword from the grave of the Griffin Warrior. Courtesy of the Department of Classics, University of Cincinnati. All rights reserved by the Hellenic Ministry of Culture and Sports—Hellenic Organization of Cultural Resources Development.

through display of wealth than in the later palatial period. By then, tholos tombs were no longer being built and were less regularly used for burial.

Our own recent research is fleshing out the picture we had from Blegen's bones. We have the grave of the Griffin Warrior, found in 2015, and two new tholos tombs, unearthed in 2018. Discovery of the former grave was the result of happenstance, inasmuch as it was never our intent to dig where we discovered it. Our intended target in 2015, then also in 2016 and 2017, was instead a nearby field where we hoped to find houses in the town that had surrounded the Palace of Nestor in its heyday in the thirteenth century B.C. Several years before, the Greek Ministry of Culture had, on our behalf, begun legal procedures to expropriate this field, which was still in private hands. Blegen himself in the 1950s had requested permission to explore it, but its owner would not give him access. He did, however, manage to excavate Tholos IV, which was cut into the edge of the field (see figure 28). Today that tholos tomb is a popular attraction for visitors to the site.

In the event, we were not successful in completing the expropriation by 2015 and, as a Plan B, needed to excavate in an olive grove nearer the acropolis. Blegen had already looked there and found next to nothing, so we were not optimistic. On the first day of excavation, however, we found a small shaft with stone walls, which we subsequently have called the grave of the Griffin Warrior. A single male in his thirties had been buried in it, accompanied by extraordinary riches—gold, silver, bronze, ivory, precious gems—the likes of which had never before been discovered at Pylos (see figure 29).⁷

Three years after the discovery of this amazing grave, excavation in the adjacent field, expropriated at last, could finally begin in 2018. We first cleared weeds from it so that we could see the surface of the earth and could map its contours. In so

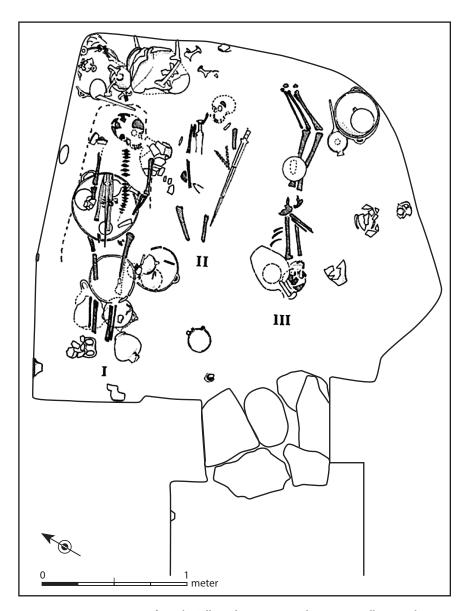


FIGURE 30. A warrior grave from the Sellopoulo cemetery in the Kairetos valley near the Palace of Minos at Knossos. Redrawn by Rosemary Robertson, after Popham, Catling, and Catling, *Sellopoulo*, fig. 3. Courtesy of the Department of Classics, University of Cincinnati. Reproduced with permission of the British School at Athens.

doing, we immediately noticed a concentration of stones in the northeastern part of the field and, nearer to Tholos IV, several large stone blocks with a hollow under them. With these observations in mind, we opened trenches, and it was soon clear to us that lightning had struck a second time: just as with the Griffin War-

rior, again on the first day of excavation we made important discoveries: the two new tholos tombs (see figure 30). The entrance passages (*dromoi*) leading to these tholos tombs, VI and VII, were parallel to each other and to that of Tholos IV.

It now seems that the most important cemetery of Early Mycenaean Pylos was centered on the newly expropriated field, along a road that led northeast from the acropolis of the Palace of Nestor toward the Aigaleon range.

In the case of Tholos VI, the space within the chamber of the tomb, the *thalamos*, is enormous, about 12 meters in diameter, and its walls are preserved to a height of about 4.5 meters above the floor. According to our rough estimates, we removed about a thousand cubic meters of earth and rocks from the interior of Tholos VI in order to reach its floor. Tholos VII is considerably smaller, about 8.5 meters in diameter, and its walls are preserved to a height of only about 2 meters. The walls of both, like Tholos IV, are built of unworked stones, and the *dromoi* are earthen. A peculiar feature of Tholos VI, however, remains unexplained. In two parts of the *thalamos*, ashlar blocks rested on its floor, so close to the walls that they cannot have fallen from above. We imagine that the blocks were brought here from the acropolis of the Palace of Nestor, salvaged from destroyed buildings of Early Mycenaean date.

The chronology of the three tholos tombs is relatively clear. Blegen's Tholos Tomb IV was built first. Tholos IV may, in fact, be one of the earliest tholos tombs built anywhere in mainland Greece. The evidence for its date consists of three ceramic vessels of the later Middle Bronze Age—one a small pithos that probably had served as a burial urn, as in the Grave Circle. This jar was made in central Crete, in the Knossos area, and its "kin" there were used as burial containers. Fragments of the pithos were dragged into the *dromos* of Tholos IV when new burials were added to the tomb. Dating the final use of Tholos IV is more problematic, but it was certainly in use in the fifteenth century B.C.

Did Tholos IV serve as a magnet for the other graves that we have discovered since 2015? Our two new tholos tombs and the grave of the Griffin Warrior were built later than Tholos IV, in the fifteenth century B.C., in the phase just prior to the destruction of the Minoan New Palaces (Late Helladic IIA). Anyone passing through the gateway in the fortification wall that surrounded the acropolis would have confronted them straight ahead.

The Grave Circle, on the other hand, lay along a road leading down the Englianos ridge toward the sea in what must also have been a prestigious location. Like Tholos IV, the Grave Circle was first used in the later Middle Helladic period. Tholos III is much farther from the acropolis, along the modern road to the sea, and, like the others, was used in the fifteenth century B.C.

Its excavator, Lord William Taylour, imagined, naturally enough, that Tholos IV had been the royal mausoleum for the family that ruled Pylos and was the dominant force in western Messenia. The picture now becomes more complicated. We have speculated that the Griffin Warrior, in light of so many expressions of both military and religious symbolism in the iconography of objects buried with him,

was an early Mycenaean king, a *wanax*.8 Was it that special rank that explains his isolated burial? All three tholos tombs adjacent to the acropolis and the Grave Circle were used at more or less the same time for lavish displays of wealth in burial. Did these monuments hold the mortal remains of competing lineages or factions, lesser princes of Pylos, their families, and supporters? These Early Mycenaean elite, in any case, were filling their tombs with Cretan imports of the highest quality, in addition to imports from farther afield, including objects made of amber, amethyst, carnelian, glass, and lapis lazuli.

Our scientific examination of human remains recovered by Blegen has shown just how special the elite were, but the studies have been time-consuming. Many skulls from Blegen's day had remained encased in a matrix of soil since being excavated. Once we cleaned the bones, standard techniques were employed to determine the sex of the individuals and their age at death. The proportional representation of different age groups is the same both for chamber tombs and tholoi, the largest cohort being young adults, nineteen to thirty years of age. Nor do proportions of males and females differ by tomb type. The equal distribution of males and females supports the hypothesis that Blegen's Early Mycenaean graves were family tombs—but does not rule out their being a place for interment of members of a faction, which may have had, in any case, a basis in kinship.9

We have also determined what people buried in the tholos and chamber tombs ate. The fact that we have had a large number of individuals to work with allows us to say meaningful things about the composition of their diet and to determine if they had differential access to protein. Of Samples from teeth or bones were collected from sixty-seven individuals, and then stable isotopes of carbon and nitrogen preserved in them were examined. Carbon isotopes can be used to distinguish between three major dietary categories: marine resources, most leafy plants, and grasses. Nitrogen isotopes can be used to differentiate between terrestrial and marine protein.

The results of analyses point to minimal consumption of marine resources by all groups, independent of tomb type. This is unsurprising since fish has never been a major component in the Greek diet, despite proximity to the sea. But analyses did document considerable variability in meat consumption correlated with tomb type. Higher amounts of animal protein were consumed by individuals buried in the tholos tombs, irrespective of gender, and their dental health was superior to others.

Women, on the other hand, had poorer dental health than men. This is true of women from both tholos and chamber tombs, while men from tholos tombs had the least tooth decay and less tooth loss before death. Why did men have more access to protein than women? Perhaps because they attended meat-based feasts more often. We know from later Linear B texts and wall-paintings in the Throne Room of the Palace of Nestor that feasts were a tactic employed by the *wanax* to promote solidarity among the elite in the thirteenth century B.C.

In the previous chapter, I mentioned evidence for feasting already in Early Mycenaean Pylos. Special access could also explain why linear enamel hypoplasia (a failure of the tooth enamel to develop correctly during growth, leaving bands of reduced enamel on a tooth surface) is not correlated with tooth decay and loss. Hypoplasia is indicative of relatively acute childhood stress that would be experienced by an entire population. In contrast, tooth decay and antemortem loss reflect experiences as an adult.

We have also suggested a mechanism that would have contributed to superior health among those buried in tholos tombs: not only availability of more food, but also a more diverse range of food produced on agricultural benefices, if these were operating in the Early Mycenaean period for the advantage of an emergent elite, as I suggested in chapter 3.

We might already have guessed that Early Mycenaean society at Pylos was very hierarchical from our archaeological investigations alone. In the 1990s, our intensive surface survey collected artifacts from 468 grid squares (20 m × 20 m) around the acropolis of Pylos. ¹¹ We collected and dated 35,700 pieces of pottery—permitting us to estimate the size of the settlement at various times in the past. By 1700 B.C. the settlement covered more than five hectares. By the fifteenth century, it had reached nearly seven hectares. The thousand individuals living in a settlement of that size should have yielded thousands of corpses in the course of the Early Mycenaean period—yet relatively small numbers were buried in tholos or chamber tombs.

It thus seems obvious that anyone buried in a tholos or chamber tomb was privileged. Few members of society would have enjoyed a burial of either sort. The evidence on the whole points to the existence of three levels in the Early Mycenaean social hierarchy: the highest-ranked elite buried in tholoi or the Grave Circle, lower elite interred in chamber tombs, and non-elites leaving no traces at all.

In our epilogue, Stocker and I incorporate what we have learned about the mortuary landscape of Pylos into a systems analysis that we think yields a convincing reconstruction of social, political, and economic change in Early Mycenaean Pylos.

WHERE THE FUTURE LIES

Programs in archaeological science have become more common and their projects have become more ambitious. There are exciting new methods applicable to mortuary analysis. Several remain in their infancy as interpretative tools for archaeologists, however, and it is important to evaluate their claims critically. Results may at times be presented in such a way as to make them ripe for misinterpretation by contemporary political causes that would misuse and abuse them.

Two recent studies, both concerned with human skeletal remains, have the potential to impact greatly how we view the Early Mycenaean period. Both address



FIGURE 31. Tholos Tombs IV, VI, and VII near the Palace of Nestor at Pylos. Department of Classics, University of Cincinnati. All rights reserved by the Hellenic Ministry of Culture and Sports—Hellenic Organization of Cultural Resources Development.

the nature of relations between the Greek mainland and Crete at the time of the Griffin Warrior.

The proposition that a mainland invasion was responsible for cultural changes on Crete in the fifteenth century B.C. is an old one and at times has been employed to explain how such a great wealth of Minoan luxury goods reached the Peloponnese. Many prehistorians also believe that Greek Linear B replaced the indigenous Minoan script, Linear A, at Knossos, after that center was captured by mainlanders. An older generation of archaeologists postulated, in fact, that so-called Warrior Graves in the Knossos area, dated to the Cretan Monopalatial period (LM II–IIIA1), hold the remains of mainlanders. Swords, daggers, and other weapons accompanied those burials (see figure 31). 13

This culture-historical hypothesis that an invasion of Crete by mainlanders was responsible for bringing the Minoan New Palace Period to an end has, however, been doubted by some. 14 Scientific techniques employed to test the hypothesis have involved measuring the ratio of two isotopes of strontium that reflect the bedrock geology of the area in which an individual spends the early years of his or her life. The isotopes are transferred into local food chains and from there lodge in

human skeletons through consumed food and water. A signature remains frozen in dental enamel.

One recent study has tried to determine if mainlanders could be recognized in graves from the Knossos area. Human remains were examined from graves older and younger than the destruction of the Minoan New Palaces, several from Warrior Graves dated "to the period immediately following the LM IB destructions." Characterizations of these samples were compared to the geology of the Knossos area and to that of the northeast Peloponnese. It was concluded that there were no significant differences between isotopic signatures for the individuals buried in the Warrior Graves and those buried at Knossos prior to the LM IB destructions. Thus that those interred in the Warrior Graves were not mainland Greeks.

But what if the people from Warrior Graves were descendants of mainlanders rather than the first wave of invaders themselves? The Warrior Graves at Knossos contained multiple burials, some as late as the middle of the fourteenth century. A precise dating was possible because an imported Egyptian scarab of the pharaoh Amenophis III, manufactured late in his reign, was associated with the final burial in one tomb. It has been suggested that even if those in the Warrior Graves were not first-generation immigrants to Crete, skeletal morphological differences should still exist between them and the Minoan population as a whole, if they were mainlanders—a proposition that remains to be evaluated systematically.

We also may not, I think, assume that invaders from the mainland came from Mycenae. As we have seen, Crete was in contact with Pylos, and that is true also for other Early Mycenaean centers on the mainland that may have had bedrock geology similar to that of Crete, and thus would yield similar isotopic signatures. But even if those interred in the Warrior Graves at Knossos were not mainlanders, that fact alone does not rule out the possibility that Mycenaeans contributed to bringing the Cretan New Palaces to an end. Could they not have ruled the island without extensively colonizing it? A conquest of Crete might have been gradual and have followed a long period of raiding by mainlanders. We need not imagine that a single sudden event was responsible for the havoc represented in the archaeological record. We might even imagine collaborative attacks by mainlanders and Cretans launched against other Cretans.

Another important new research area, potentially relevant to the same hypothesis, but with results likewise inconclusive as yet, pertains to the genetics of the Minoans and the Mycenaeans. Can mainlanders be distinguished from Cretans on the basis of their DNA? The Minoans have long been a problem for the Greek state. The Minoan language was not Greek nor did it belong to the Indo-European family of languages. How then to incorporate a non-Greek civilization into a Greek national project that has emphasized homogeneity and continuity?

Genetic studies seem to be offering a solution to this conundrum. In 2017 a study titled "Genetic Origins of the Minoans and Mycenaeans" appeared in the prestigious *Nature Letter*. The lead author and his colleagues announced: "Here we

show that Minoans and Mycenaeans were genetically similar, having at least threequarters of their ancestry from the first Neolithic farmers of western Anatolia and the Aegean, and most of the remainder from ancient populations related to those of the Caucasus and Iran."¹⁷

Mycenaeans were said to have additional genetic makeup related to that of pre-Neolithic populations of western Europe and the Caucasus and that was lacking in Minoans.

The authors concluded that contemporary Greeks are related to Mycenaeans—a conclusion that would have warmed the heart of Christos Tsountas, but also one immediately celebrated by Greece's neo-Nazi Golden Dawn party. Continuity and racial purity were fundamental to their platform.¹⁸ The ultraconservative Right must also be relieved to find that there is no measurable Levantine or African influence in either the Minoans or the Mycenaeans. Greek nationalists can thus have their cake and eat it too. Minoans and Mycenaeans are basically the same stock, which is good, and Greeks today are more like Mycenaeans, which is even better.

These conclusions sound convincing until one learns that ancient DNA from only nineteen individuals was examined for the study. The sample included just ten "Minoans," chosen from phases of the Cretan Bronze Age earlier than the supposed arrival of mainlanders on Crete, and only four "Mycenaeans," from contexts covering the entirety of the Late Bronze Age on the Greek mainland.

The authors correctly note that "relative ancestral contributions do not determine the relative roles in the rise of civilization of the different ancestral populations." No archaeologist today would imagine otherwise. But is it even possible to speak of Minoans or Mycenaeans as ethnic groups, since the labels refer to cultures, not to genetically homogeneous populations?

Genetic research and strontium isotope analyses have important roles to play in Aegean prehistory, but as yet, the data at our disposal are insufficient to bear the interpretive weight that they have been asked to carry in culture-historical reconstructions. At Pylos we have preferred to concentrate on social and economic questions at a local scale—leaving big-picture questions aside for now and focusing on the creation of the rich little history that I discussed above. Genetics has the potential to tell us more about the Early Mycenaean elite at Pylos, and we are currently collaborating with American and European geneticists. In two of Blegen's chamber tombs, our colleagues at Harvard have identified fathers and sons. We are hoping in the future to be able to determine relationships, if they exist, between the Griffin Warrior and those buried in other Early Mycenaean tombs.