

A PREHISTORIC BUREAUCRACY

Homer, the first and greatest of Greek poets, depicts a society which may be loosely described as feudal. Power is in the hands of kings, who are bound to each other by ties of marriage and traditional friendship. Their nobles are men of equally good blood and high repute; the common people appear to have no function but to serve their lords and masters. The operation of the government is but sketchily indicated. The kings and princes meet in council, decisions are taken and are reported verbally by messengers. There is not the slightest hint that administration involves paper work, nor is there anything that can be called a "civil service."

It was a passionate belief in the historicity of the Homeric poems which led the German, Heinrich Schliemann, to seek the material remains of the cities in which the Homeric heroes are described as having lived. His success in uncovering the prehistoric cities of Troy and

A Prehistoric Bureaucracy

Mycenae did not, however, merely prove the existence of some kernel of truth in the Homeric legends; it also opened the way to the scientific investigation of Greek prehistory. Three-quarters of a century of work by archeologists of many nationalities has given us the basis for a much more detailed reconstruction of the world in which the Homeric heroes are supposed to have lived; and it has gradually become clear that Homer knew relatively little about what he purports to describe.

One of the most exciting discoveries regarding this prehistoric society was that it was literate. With one minor exception, Homer's characters knew nothing of writing. Schliemann, too, died in ignorance of this cardinal fact. It was not until 1900 that the Englishman, Arthur Evans, later knighted, showed that writing existed in at least one palace of Bronze-Age Greece. A trail of inscribed seal-stones led Evans to Crete, and he discovered there a new civilization which he called Minoan, flourishing between about 2000 and 1400 B.C. This civilization was fully literate, their records on tablets and bars of clay and their dedicatory inscriptions on sacred objects showing that reading and writing were widely known. There were, however, significant differences between the culture of Crete and that of the adjacent mainland. Development on the mainland began later (about 1650 B.C.) and lasted down to at least 1200 B.C. It was soon apparent that Crete was in some degree responsible for the growth of civilization on the mainland, though experts differed in the extent or nature of the contacts this supposed.

The exploration of the Palace of Knossos in Crete, destroyed around 1400 B.C., allowed some conclusions to be drawn about the type of society which had constructed and lived in it. It was a vast complex of buildings, on several floors, one part built on to another and all connected by passages and staircases. The principal apartments, and many of the corridors and porticoes, too, were decorated by fresco painting in vivid colors, applied with extraordinary taste and skill. The outer limits of the palace in several directions were formed by series of magazines for the storage of produce. There were workshops too in the same building. One was apparently the atelier of a master potter; another was occupied by a lapidary. These facts we know because of the imperishable nature of their materials; we can only infer the existence of workshops concerned in the manufacture of perishable goods, textiles, leather goods, woodwork, etc. The main block of the palace measures about 100 yards (or meters) square. It was clearly not the home of an illiterate Homeric warrior but of an intelligent and cultivated monarch, who

had organized in his own hands and within his own walls the economy of his kingdom. The total number of people living or employed in the Palace of Knossos cannot have been much less than five hundred. Outside the main palace stretched a considerable town, only partially tested and delimited by excavation but, so far as we know, arguing again a high standard of civilization. A number of tombs of the same period in the neighborhood show that the wealthier inhabitants were often buried with full armor and warlike equipment; this may suggest a military aristocracy but one certainly not unappreciative of works of art.

The management of such a household as the palace was obviously not a small task, and it is difficult to see how it could have been efficiently carried out without some measure of bookkeeping. Accounts are necessary to insure that precious materials are not embezzled by workmen, that extra rations are not drawn, and that the household is run with suitable economy. It is not then surprising that many such documents were found, though they remained unintelligible for fifty years after discovery. We now know that these tablets of clay, inscribed with a complicated script, are in fact the day-to-day records of the working of a vast administrative machine.

I have told elsewhere the story of their decipherment by the late Michael Ventris.¹ Here I want to discuss only the society which they reveal to us. But first we must turn from Crete, the great island which had been the cradle of Aegean civilization, where writing and book-keeping had long been known, to the more recent culture of mainland Greece.

The written documents from Knossos belong to the last phase in the occupation of this site, at least on the grand scale; its later history is obscure, but it never again achieved such eminence. The destruction of this huge palace is dated by archeologists to about 1400 B.C., and the tablets must belong to this period, since they are clearly not a permanent archive but rather day-to-day notes. The principal site on the mainland of Greece which has yielded its archives is that of Pylos, a Mycenaean palace situated in undulating country not far from the sea, in the south-west corner of the Peloponnese. The site is a few miles north of the bay of Navarino and is not to be confused with the modern town of Pylos on the southern shore of that bay. Here Professor C. W. Blegen of Cincinnati discovered in 1939 a large archive of some six hundred

1. *The Decipherment of Linear B* (Cambridge: At the University Press, 1958).

A Prehistoric Bureaucracy

clay tablets, a number which has been doubled by finds made during more recent work on the site. It was immediately apparent that these tablets were in the same script and the same language as the Linear B of Knossos; not only the forms of the signs but also many groups of signs, or words, were identical at both places. This was a severe blow to the archeologists who had regarded the latest phase at Knossos as alien to the Greek mainland; but perhaps more striking was the chronological difference. Professor Blegen dates the palace of Pylos to about 1200 B.C., and there has naturally been a temptation to narrow this gap of 200 years in order to account for the similarity of script and language. Although it may be possible to lower one date a little and raise the other, there seems to be no chance of reducing the gap much below 150 years. Thus we have to do with a script and dialect which could maintain itself virtually unchanged over a period of perhaps five generations.² It is not sufficiently appreciated that this in turn implies the existence of a stable and well-organized society in which the tradition of writing could be passed down from father to son or from teacher to pupil. It bespeaks a rigidity in the system which is familiar to us today, where every language has its correct orthography, but contrasts strongly with the freedom of the Greek inscriptions of the sixth and fifth centuries B.C., where each man wrote as he spoke, with little regard for uniformity or convention. Only in the Hellenistic period does a standard orthography for the Greek language emerge; only in an age of schoolmasters and pedants, if not of literary scholarship, do we find standard spellings—often, alas, fossilized and no longer in step with the phonetic developments of the language.

Further discoveries at Mycenae confirm the uniformity of script and language in Mycenaean Greece. The palace at Mycenae yielded no written documents to Schliemann and his successors; the site was badly denuded and its plan can be traced only in part. It may be significant, however, that its destruction took place at a date later than that of Pylos. It was, unlike the palaces of Knossos or Pylos, protected by massive walls. Sheltered by these defenses, life seems to have continued there long after the lower town beneath the citadel had been sacked

2. Professor Blegen in a recent article ("Minoica," in *Sundwall-Festschrift* [Berlin, 1958]) has questioned Evans' dating of the Knossos tablets to 1400. He suggests that they belong to a reoccupation of the palace at a later period, roughly contemporary with the mainland palaces. If this theory proves correct, it will simplify the historical reconstruction; but it remains true that the uniformity of spelling implies a stable tradition.

and burned. It is from buildings in this lower area that Linear B tablets have been recovered, in relatively small numbers so far but again showing great uniformity in script and in language with Pylos and Knossos. The exact dating is disputed, but these tablets may be contemporary with, and are certainly not later than, those from Pylos. It is particularly remarkable that differences of dialect seem more apparent between Mycenae and Pylos than between Pylos and Knossos. Further evidence that this script was known and used widely throughout Greece about the thirteenth century comes from a series of inscribed jars found at sites as far north as Thebes in Boeotia.

In material culture the whole of southern Greece enjoyed a surprising uniformity throughout the Mycenaean period (roughly 1650–1200 B.C.), and it is clear that, although the transition cannot be dated exactly, by the end of the fifteenth century it had become firmly established in Crete too. How far north this area extended is not yet clear; a recent discovery of an important site of this period at Iolkos in Thessaly promises part of the answer. But even if the archeologists are uncertain, Homer claims to know: the Catalogue of the Ships in the second book of the *Iliad* is a lesson in Mycenaean geography, and so far as the statements have been tested by archeology it seems to be reasonably accurate. We are probably therefore justified in thinking of the Mycenaean area as comprising Thessaly, central and southern Greece, Crete, and Rhodes. Whether Cyprus can be included, at any rate before the very end of the Mycenaean period, is still in dispute.

At all the principal sites in this Mycenaean world we find the same pattern repeated in essentials. The capital, if we may use the word, is a large palace—not all, it is true, on the scale of Knossos, but nonetheless large, bearing in mind the relatively light population. These palaces were much more than mere residences of kings. They housed the large and complex staff needed to run the whole kingdom, not only the royal family and its attendants but also palace officials of every degree and a variety of craftsmen.

As we have said, the management of such a household is in itself demanding, but there is an added complication which we are prone to overlook. In historical ages there has always been a currency of some kind, so that the organization of the economy can be controlled simply by calculations in one, or at most two, metals. If for any reason it is necessary to abandon the control of commodity movements by monetary means, as has happened frequently in modern states, then a com-

A Prehistoric Bureaucracy

plicated system of controls must be established, so that the available supplies are distributed to the users whose production needs to be encouraged. But in the absence of anything to serve as a currency, this system is inevitable if any attempt to control the economy is to be made, and a control system must be established for every important commodity. It is essential to see that the smiths are kept supplied with metal for their work; it is equally essential to see that they do not use this metal for unauthorized purposes. Thus a record of metal issued is necessary. This is a typical sample of a class of documents at Pylos: the bronzesmiths of each community are listed together with the amount of bronze issued to each, and the officials, with true zeal, recorded also the names of the smiths who had received no allotment of raw material and were therefore presumably temporarily unemployed, or at least not engaged on work for the state economy. We may presume further that when a smith sent in the product of his labors it was weighed and he had to account for any discrepancy. The system insured efficiency, but it also demanded elaborate bookkeeping.

But these same smiths must have received in return for their labor the necessities of life. Their lodging may have been assured by their being given quarters in royal palaces or other state-owned buildings. But food and clothing could not be purchased; it must have been provided by the central authority. Many of our records seem to be concerned with precisely this operation. True, we cannot follow it in detail, since many of the relevant files seem to be missing. But we can see goods and commodities being demanded of the various communities of the realm so as to provide the stores from which the artisans were supported. Again, a mountain of paper—or rather wet clay—was needed to keep a check on all these complex operations.

It is at Pylos that our records are most complete. But, even allowing for a certain amount of accidental loss due to failure to survive or to be recovered, it is evident that we have not here the whole record of the economic processes which kept a Mycenaean state alive. One very obvious deficiency is the absence of any documents relating to a time other than the “present.”

It is not easy to prove this negative, but a number of clear indications point in this direction. The tablets are conspicuously undated; the only dates which we find are month names, and these infrequently, apparently always on documents recording religious offerings. The only temporal indications on the vast majority of tablets are such expressions

as “this year,” “last year,” or “next year,” expressions which involve the reader’s knowledge of the date of writing. It is by such means that we can show that the clay tablets are the temporary day-to-day records of the administration. At the end of a year or less these tablets must have been scrapped. Since they were not deliberately fired, it was possible to pulverize them and reuse the clay.

Was there then no more permanent record, so that the operations of one year could be compared with another? We cannot now imagine a civil service which did not glory in masses of statistics revealing the progress or decline of various sectors of the economy. I find it hard to conceive even a Mycenaean clerk failing to keep at least a summary of the year’s work for guidance during the next year or more. But we should beware of a too facile transposition of our bureaucratic methods to a prehistoric society. The clerks may well have known the basic pattern of organization so well that it was unnecessary to keep old records, once the accounts for the year had been closed and any outstanding deficit transferred to current accounts—an item we frequently find in our surviving documents. Despite a certain amount of skepticism on this score, I still think it highly probable that accounts were also kept upon a perishable material; it is ironic that the temporary records were rendered durable by the very fire that would have destroyed any permanent archives.

A comparison of the extant Mycenaean tablets with those of a Near-Eastern site like Ugarit (Ras Shamra on the coast of Syria) reveals vividly the incompleteness of the Mycenaean record. In Greece, unlike the East, clay never became the normal writing material. This is shown most clearly by the shapes of the signs: any script which is ordinarily used on clay develops into a simplified form consisting of rectangular outlines or even mere dots and bars. Not only cuneiform but also the script of Bronze-Age Cyprus, which is of Minoan origin, shows this unmistakably. The maintenance of the curvilinear and complex Linear B forms over a considerable span of time argues strongly for its use at the same time in pen and ink. I believe, too, that some of the carelessly written clay tablets which we possess are rough drafts for a permanent record in ink. For instance, there is a famous text from Pylos of a unique type; it has been described as a “calendar of offerings,”³ and no one doubts that it is concerned with religious offerings. But there are

3. L. R. Palmer, “A Mycenaean Calendar of Offerings,” *Eranos* 53 (1955), pp. 1–13.

remarkable features about it which call for comment. The scribe appears first to have used the tablet for some other purpose; then, having not completely erased the traces of the first inscription, he turned it over and began his text on what was really the back. However, after writing five lines, although he had ruled much more of the tablet, he abandoned this side and completed his text on the original obverse. His writing was careless; he left out signs in repeated formulas, which can only be accidental; and on occasion he wrote, deleted, and wrote over the top in such a way that it is now impossible to be sure what he intended the reader to see. Yet the subject matter is clearly of the highest importance: the gift of gold vessels by men and women to a variety of deities. The only reasonable explanation of this wayward behavior is that this is a rough copy intended for no one but the scribe himself, who, in making a fair copy, would have corrected the errors. Perhaps the fair copy was never made and the rough draft survived in the archive room; or was it still in course of transcription when the alarm sounded and the sword of the enemy put an end to accountancy?

The detail of the surviving records would be tedious enough if we were able to translate and comprehend it exactly. But what makes its interpretation a fascinating as well as a baffling task is the very fact that relatively little can be understood. There are various reasons for this partial failure.

The first obstacle to understanding is the fragmentary nature of the surviving documents. Most tablets are damaged, and only too often the top edge, containing the explanatory heading, has been wholly or partially lost or defaced. Tablets are usually recovered in several pieces, but careful excavation and study have succeeded in reconstituting a great many. Pylos, which has been dug only in recent years, has been better served here than Knossos. It is painful to record that the Knossos tablets were not so well preserved and that less care was taken to join the fragments. But the task was more difficult because a much higher proportion of the Knossos tablets are small ones bearing only a single line of text, so that there are often hundreds of pieces which must be examined in search of a join. The result is that out of the vast collection—some 3,500 separate pieces—few constitute complete and legible texts.

Second, the nature of the script imposes a severe obstacle. There can be no doubt that, if the Mycenaean Greek dialect had been similarly recorded, but in an alphabetic script, we should still have had much difficulty in understanding a dialect more than four centuries older

than that which is used in any other extant Greek document. The script, in fact, is not alphabetic but syllabic, and each sign represents a syllable. Certain conventions of abbreviation enabled the scribes to avoid unnecessary labor by writing a kind of shorthand—bare outlines of words which they could fill in with ease. But for us, not knowing beforehand either the dialect or its vocabulary, it is extraordinarily difficult to clothe this skeleton with the flesh and blood of real words. That we have succeeded to a substantial degree is due to the patient labor and collaboration of many scholars in many lands. Many have now added their stone to the wall which Michael Ventris founded (it was my privilege to help him with the lower courses), and the structure is now a monument to the happy co-operation of international scholarship.

Third, the nature of the entries themselves prevents us, even when we have read and translated them, from understanding fully the operations which they record. There is no question of departments having drawn up full reports for the use of the ministers of the crown; or, if they did, no trace now remains of such documents. The basic principle of accountancy was to record the barest minimum, the facts which could not be readily remembered or deduced from the mere existence of the record. Many of the tablets are in the driest and most summary form: "At Pylos: sons of the women bath-attendants, twenty-two men, eleven boys." Only the facts that this tablet falls into a series of records in similar form, and that this series can again be related to two other series, allow us even to conjecture its motivation. On the most plausible reconstruction, all three groups of tablets are the records of the palace department responsible for feeding the royal servants; the greater number of servants are women, and the only men recorded here are specifically called "the sons of the such-and-such women." Most are located at Pylos, as might be expected if they are royal servants, and they perform such domestic offices as the grinding of corn and the carrying of bath water. But others are specifically located in other places, probably country houses of the royal family. The titles by which the groups of women are described include the names of several well-known towns on the east of the Aegean, possibly trading posts through which the Mycenaean acquired slaves from the interior of Asia Minor. This, in turn, leaves us wondering what commodities Pylos exported to barter for slaves; they can hardly all have been, like one group specifically so called, captives taken by the sword.

This is the sort of imaginative deduction to which an intensive study

A Prehistoric Bureaucracy

of these records leads; but it must be emphasized that the bare facts presented by our tablets are all of the statistical type quoted. Where tablets cannot be grouped in series, they are far more obscure.

Virtually isolated is a well-preserved tablet from Pylos which reads as follows: "Rowers who are going to Pleuron: from A eight men; from B five men; from C four men; from D six men; from E seven men." The words rendered here by the letters A, B, C, D, and E are five place names. Not one of these can with any confidence be located on a map; only one is a recognizable Greek name, *Rhion*, the promontory. Since they are to send rowers, we may guess that they are seaports. There is nothing by which the "Pleuron" mentioned can be identified; we are driven to guess that it may be the town of that name in Aetolia, north of the Corinthian gulf, which Homer mentions. But this again is far from certain; as in all countries, Greek place names were frequently repeated in different localities; and, although, for instance, we find an almost certain mention of Corinth on the tablets, it is almost equally certain that this is not the famous city on the Isthmus but a humble village of the same name. The total number of rowers amounts to thirty; we may speculate on the significance of this, too. The number is clearly too small for more than one ship; but is it the full complement or not? Or, to proceed a stage further, what was the purpose of this operation order? Why was a ship—or was it merely a crew—being sent to Pleuron?

Some scholars have enjoyed themselves at this game of conjecturing a background against which the isolated scraps of information can be made intelligible. Within limits it is an essential exercise if we are to make anything of our scanty and abbreviated material. But it is regrettable that only too often such reconstructions are being presented and treated as established fact. There is hardly a single generalization or deduction from the tablets which cannot be impugned successfully. The temptation to publish exciting deductions has to be kept strictly in check.

It is for this reason that I have chosen to describe Mycenaean society in terms of bureaucratic organization. It would also be possible to present a picture of the social organization: a king, a second-in-command, with various classes of barons, knights, and retainers owing feudal service to the king and rewarded by grants of land. This picture is an imaginative reconstruction based on evidence of differing value. But the evidence for the administrative machinery of the palace exists

in the tablets themselves. Here we are studying not the events recorded but the physical records themselves.

One of the odd features about Mycenaean tablets, from any site, is the absence of any mention of the scribe himself. If we compare the records of Ugarit or any other contemporary site in the Near East, we shall find that the scribes take a delight in signing their names and are proud of their handiwork; at the lowest estimate, the presence of their names is a guarantee of the reliability of the record. Their absence in Greece must be regarded in the light of another fact. Although they did not leave us their names, we do have specimens of their handwriting. Professor E. L. Bennett has made a careful study of Mycenaean hands, and he can assure us that as many as forty hands wrote the archives of Pylos and as many again those of Knossos. The number at Mycenae is eight, which is even higher in proportion to the number of tablets known to date.

Thus it is clear that the making of records was not the full-time task of a few specialist scribes. A competent clerk could have written all the Pylos archives in a couple of weeks or less if he had kept ordinary office hours and had someone to prepare the raw material for him. Rather, we must imagine a large band of officials keeping their own records and only taking stylus in hand when their administrative duties required it of them. Moreover, the distribution of tablets between the identified hands shows that each official had a fairly limited area of the economy to oversee. Even a list of servant-women referred to above is split between two writers, one of whom seems to have dealt with Pylos and the home counties, while the other controlled the outlying districts.⁴ Thus the strongly centralized system—for no records have yet been found in any but capital towns—seems to have been divided into a large number of separate departments.

Thus, to sum up, we may with full justification picture to ourselves the administrative machinery of these prehistoric kingdoms as a band of some forty to fifty officials working in the royal palace or associated offices, each in charge of one small sector of the economy. If we go on to ask how these officials co-ordinated their operations, we enter at once the realm of conjecture. While the king was no doubt the ultimate arbiter and maker of policy, there must have been senior officials in charge of the principal departments. It may be significant that we meet in the

4. See my article "The Mycenaean Filing System," *Bulletin of the London Institute of Classical Studies*, No. 5, pp. 1-5.

A Prehistoric Bureaucracy

Pylos tablets four names which are clearly of special importance. One is that of a man who is recorded as taking part in operations of such diverse kinds as inspecting plowland and issuing spices to perfume-makers; all four seem to have some special function with regard to the levy of sheep and goats which made up an important part of the tribute paid to the palace. But it would not be surprising if four or more senior officials had the general task of supervising the complicated operations involved in this moneyless economy.

It is curious to reflect that centralized administration has so long a history and that there once existed in Greece a society which, so far as we know, used the powerful art of writing for one purpose only—that of recording on countless slips of clay the day-to-day functioning of a bureaucratic state. If accounts could be written, why not literature? Here we can answer only that not a single scrap has survived. Even if the script could be used for such a purpose, there is no evidence to suggest that a written literature existed. On the other hand, research on the Homeric poems does imply a long tradition of oral poetry, transmitted from one reciter to another and performed from memory alone. Highly probable as it is that such poetry existed in the Mycenaean age, nothing in the tablets confirms this.⁵

This military aristocracy was therefore not fully literate in our sense of the term. Appreciative of visual beauty we know them to have been, and we may conjecture their taste for poetic recitation, perhaps even song. But writing seems to have been a middle-class accomplishment, and it is conceivable that the highest as well as the lowest were incapable of writing their names.

Literacy was indissolubly linked with centralized administration, and when, at the end of the thirteenth century B.C., the palaces were destroyed, the art of writing perished. Four centuries of darkness lay ahead before the introduction and adaptation of a Semitic alphabet from Phoenicia gave Greece a far superior notation for her language. Thus began a train of development and borrowing which has supplied the greater part of mankind with the means of recording speech easily and unambiguously. The oblivion into which Linear B fell was no loss to the world; it meant only that its secret had to be rediscovered for us by the work of Michael Ventris.

5. T. B. L. Webster in a recent book, *From Mycenae to Homer* (London, 1958), has pressed the evidence to its limits; but, although his hypothesis is plausible, the tablets cannot be made to substantiate it.