MYCENAEAN TOMB BENEATH THE MIDDLE STOA

(Plates 19-24)

THE forty-fifth Mycenaean burial place in the bedrock under the Athenian Agora was cleared during the summer of 1965. This small chamber tomb under the terrace of the Middle Stoa is officially designated N 12: 4 but may be more widely known as the Tomb with Coffins. Two of its four skeletons were encased in boxes of white wood. A fine series of ten vases, a long bronze spearhead, amber, carnelian, and steatite ornaments in a closed context suggest that the tomb was used for only one generation shortly after 1400 B.C.¹

Since the Agora Excavations began in 1931, they have brought prehistoric deposits to light wherever bedrock has been exposed. The low land north of the Acropolis was an important cemetery for at least one of the quarters of the Bronze Age town.² One cannot hope ever to get a precise picture of the plan and growth of this cemetery, both because much of the bedrock in which the graves were cut was removed in classical building programs, and because the major monuments and open spaces of the historical Agora cannot be disturbed to probe the prehistoric levels below. It is characteristic of the excavations, however, that Middle and Late Helladic remains turn up in deep explorations of every section, with a light scattering of Neolithic and Early Helladic finds as well, and that the finds document a local culture of strongly marked character in early Athens.

During the 1965 excavation season three north-south trenches were opened from the Middle Stoa to the southern boundary of the Agora to permit the study of the stratigraphy under the South Square. These two-meter wide trenches exposed several interesting early pockets. The middle one revealed an Early Helladic well, a Middle Helladic road, and a Geometric well with the skulls of five dogs in it. The

¹ The Field Director of the Agora Excavations, H. A. Thompson, discovered the tomb and excavated its early stages during the course of extensive stratigraphic investigation in the South Square. He kindly gave permission for our close observation and publication of it. E. L. Smithson and C. Edmonson acted as advisers, L. Angel examined the skeletons, J. Heyle took photographs under difficult circumstances, H. Plenderleith and H. Robinson suggested ways of conserving the wood, and S. Spyropoulos removed and conserved the delicate finds.

² Recent excavations in other sections of Athens have revealed important Mycenaean remains, both domestic as in the wells by the Stoa of Eumenes on the south flank of the Acropolis, and funerary as in the intact thirteenth century tomb on Demetrakopoulou Street in the Ilissos quarter. N. Platon and P. Stavropoullos kindly gave permission to view these finds. The prehistory of the Agora will be fully published by Mrs. Sara Immerwahr in her forthcoming volume. In the meantime, see convenient summaries with maps in J. Travlos, Ἡ Πολεοδομικὴ Ἑξέλιξις τῶν ᾿Αθηνῶν, Athens, 1960 and H. A. Thompson, The Athenian Agora, A Guide to the Excavation and the Museum, 1962.

eastern trench, which cut across the Middle Stoa twenty-six meters from its east end between the fourth and fifth piers, brought to light at its extreme southern limit a single Mycenaean body buried with a crooked kylix in the mouth of a well. At its extreme northern limit it came upon the intact doorway of a chamber tomb under the terrace of the Stoa (Pl. 19, a, b). Among these discoveries the chamber tomb attracted most attention from passing observers and volunteer excavators, and on several grounds merits a separate discussion.³

The Mycenaean tombs and graves of the Agora seem to lie in four principal groups: along the north slope of the Areopagus, along the east slope of the Kolonos Agoraios, in a scattering through the center under the Temple of Ares and the Odeion, and in a northeast cluster especially under the north end of the Stoa of Attalos. The new tomb may be part of still another group cut into the east bank of a slight gully which ran south-north in Late Helladic times. The dromos entered from the west or gully side, an unusual orientation in the Agora, and the chamber at the east lay under the rising ground which was later dressed down in a major improvement program of about 600 B.C. The long axis of the tomb runs 22° north of a true east-west line (Fig. 1) but the canonical points of the compass will be used in describing it. The tomb extends on both sides of the stratigraphic trench, which uncovered only the inner corner of the dromos and the characteristic rough stone packing of the doorway at an oblique angle exactly in front of the euthynteria of the north side of the Stoa.

THE ARCHITECTURE OF THE TOMB

The tomb was almost completely undisturbed, except that the outer end of the dromos had been cut off by the foundations of the Middle Stoa, and the roof proved to have collapsed at an early date. This fallen bedrock sealed the tomb from later intrusions and helped preserve the wooden coffins inside it.

The chameleon nature of the fallen rock made the tomb deceptive to excavate from the start. The soft green clay-bedrock of the Agora with its veins of black, dark green, yellow and white and its inconsistent texture looks nearly the same whether intact or tumbled, even to the most experienced eye. Patience and experiments were necessary to distinguish the fallen rock of the roof and walls from the stable rock of the lower walls and floor. Rotten patches in the surrounding rock and hard strata in the fallen rock lured the excavators into adding one or two anomalies of their own to the original anomalies of the Mycenaean design, but in the end the forms of the door and chamber emerged almost exactly as they had first been made.

Since the bedrock over the tomb seemed undisturbed under levels of the late seventh and early sixth centuries B.C., entrance was attempted through the only

⁸ The other prehistoric finds will be included in Mrs. Immerwahr's study, where the pottery from this tomb will also be set in relation to previous discoveries in the Agora and discussed more extensively as a group.

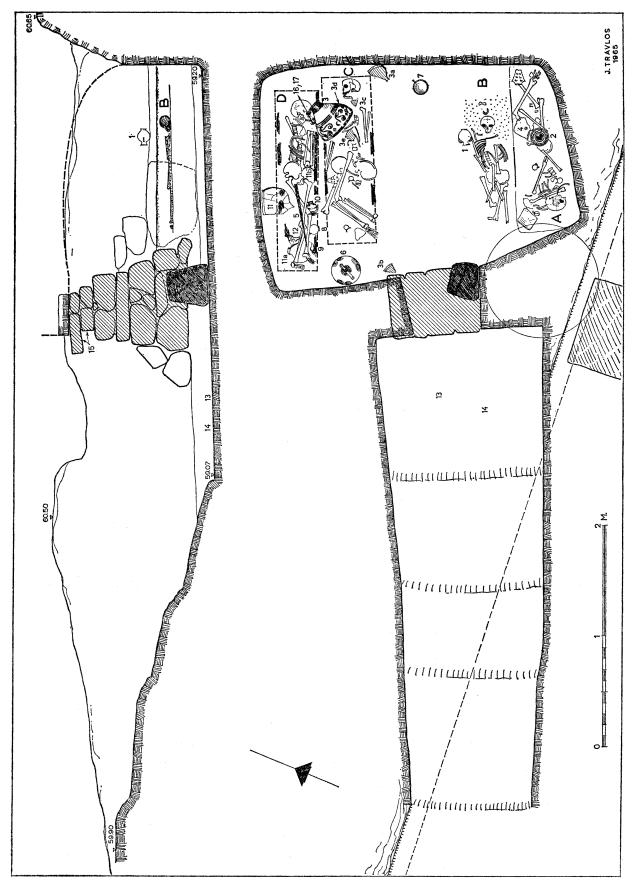


Fig. 1. East-West Section and Plan.

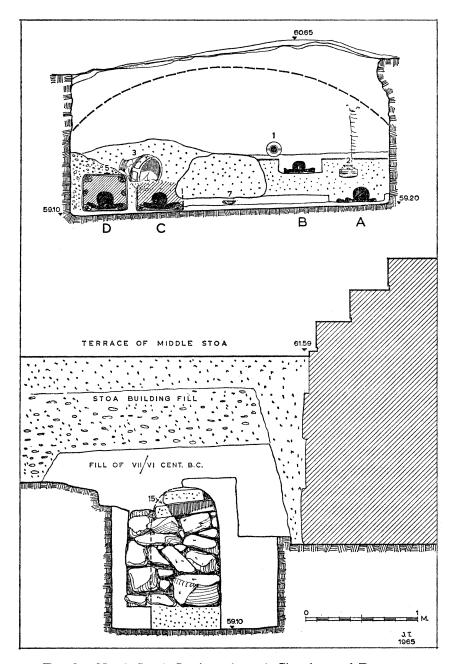


Fig. 2. North-South Sections through Chamber and Dromos.

detectable weak spot in the walls, where a round pit of Turkish times had grazed the southern edge of the doorway (Fig. 1). Barriers of bedrock here showed that the roof had fallen in, however, and the chamber was ultimately excavated from the top, 2.53 m. of tumbled rock from the euthynteria of the Stoa to the burial floor (Fig. 2). The

door was opened last, to check its phases against the number of burials in the chamber, and to resurrect an interesting conglomerate grave marker or stelle which had been used in the upper part of the door packing (Pl. 24, d).

The tomb as finally cleared was a small one by Peloponnesian standards, but average for the Agora where the rotten rock does not permit large underground chambers. The dromos was greater than most Athenian ones, the only one known in the Agora with clear descending steps. It was 4.20 m. long (perhaps originally 5.50 m. before being destroyed by the Stoa foundations). The width was 1.10 m. at the preserved outer end, 1.50 m. at the door. It descended 0.83 m. over four wide rough steps to a line 1.30 m. in front of the door. From this line a hard floor had been cut in a single rising plane to the rear wall of the chamber to allow the escape of groundwater from the chamber out the doorway (Fig. 1). The walls of the dromos were smoothly cut, rising nearly vertically to a height of 1.10 m. on the north side with only a slight suggestion of batter. The fill in the dromos was clean bedrock without observable stratification. Only a handful of prehistoric sherds was found, low down in the dromos before the doorway. These included most of the bowl of an unpainted kylix (No. 13), two rim-sherds of a red mottled cup of which part still lay in the chamber (No. 9), and a conical gray steatite button (No. 14, Pl. 24).

The doorway was set toward the left of the tomb façade, an asymmetry accentuated by the fact that it had been widened toward the left, or north, for a later burial. It was at first a small door by Agora standards, only 0.60 m. wide at the base; after recutting it became 0.80 m. Its original height was 1.26 m. The rock façade, preserved over the southern half of the door packing, arched in a light curve. The stomion was half a meter deep and broadened out inside the chamber to 0.70 m. (Fig. 1).

When the doorpacking was dismantled the stomion was seen to have been blocked on at least three occasions, which accorded well with the reconstructed history of the four burials in the tomb chamber. The first narrow door had been filled solidly with boulders set on the outward-sloping stomion floor. When the door was later widened 0.20 m. to the left, a recutting which may have been necessitated by a slide of bedrock down the west wall in the northern half of the chamber partly barricading the entrance, the boulders were set back in the doorframe on a sill 0.20 m. high which accumulated when the rockfall was cleared out. Two coarse sherds from some neighboring stray prehistoric deposit were buried under the largest boulder on the new sill. The third time, only the upper part of the stone packing from 0.80 m. above the floor was removed. Perhaps the floor inside the chamber was already so high with fallen rock that complete opening was impracticable. The last burial was inserted through the upper doorway and laid just inside (Fig. 2); the stomion was rewalled with small field stones in a mud binding on top of the original boulders. A broken conglomerate grave marker was then thrust in at the top, in two pieces stacked flat one above the other (No. 15, Fig. 2, Pl. 24, d).

THE CHAMBER.

The chamber was a small irregular trapezoid whose walls were uneven from the beginning and had been rendered more so by continual cascades of rock to the floor. The depth from the door to the rear wall was only 1.75 m. The west or entrance wall was the longest, 2.72 m., the north wall 2.05 m., the east wall 2.50 m., and the south much the shortest, 1.37 m. Perhaps the tomb-diggers had been stopped by a dangerous instability in the rock from squaring off the chamber here. The walls were preserved to an average height of 1.35 m., a maximum of 1.46 m. When the ceiling was intact the clearance from the floor was probably not more than about 1.30 m. (Fig. 2).

The upper part of the chamber was excavated in horizontal layers, from the level of ca. 600 B.C. where the collapsed bedrock had been dressed down, to the level where the first Mycenaean vase appeared 0.60 m. above the floor (No. 1; Fig. 2). Particularly large or hard chunks of fallen rock were left in place to help determine the history of the tomb's collapse. The southern half of the chamber was then dug to the floor, to find a floor-edge from which the irregular line of the wall could be followed upward in the complex of fallen rock. This led to clearing in vertical slots Burial A against the south wall and Burial B on a line with the door. From them, the floor was followed straight across to the north wall where Burials C and D lay in their coffins (Fig. 2). The excavation strategy, determined by the difficulty of the rock, proved fortunate in the long run, for it meant that the coffins could be cleared as separate problems without remaining too long exposed to the atmosphere.

THE BURIALS

All four burials were undisturbed, laid out parallel to one another with east-west orientation. The ten vases shared among them show very slight chronological differences. Current criteria for assigning absolute dates to Mycenaean pottery would lead one to suppose that the four burials were nearly contemporary, in the early part of the fourteenth century B.C., the ceramic phase Late Helladic III A:1. Since the vases do not indicate clearly the sequence of burials, the skeletons are described in the order in which they were found, A to D. The historical sequence has been tentatively reconstructed according to the physical arrangements in the tomb and the way the bedrock fell (*infra*); if it is correct, Burials C and D were the first, A the next, and B the last.

⁴ The tomb on Demetrakopoulou Street No. 50, excavated by J. Travlos in May, 1965, is the only intact chamber in Athens; its dimensions may serve as a rough guide to restoring heights in collapsed tombs. A dromos about 4.50 m. long entered from the south a rectangular chamber 3.0 m. E-W by 2.30 m. N-S. The stomion was 1.0 m. deep, 1.54 m. high and the roof stood intact 1.60 m. above the floor; 0.75 m. of bedrock remained above that. This slightly arched ceiling is thus only a trifle higher than the top of the doorway, which may be a canon in the thirteenth century at least. It is a labor-saving feature common everywhere; the only notable exceptions are the high vaulted chambers with low doors at Volimidia in Triphylia.

Burial A was identified by Dr. J. L. Angel as the skeleton of an adult woman with four to seven births to her credit (Fig. 1; Pl. 20, a). The body had been placed on its back along the south wall of the chamber. Apparently rock had already fallen from the ceiling before the interment, and a pit had to be excavated in the fall to reach the original floor 0.25 m. below. The skeleton had its head toward the west end of this pit; a square flat stone behind the skull seemed too far away to have served as a pillow (Fig. 1). The woman's arms were doubled up to clasp her head, and eventually the left arm fell through the open jaw after the flesh had gone, giving her a piratical appearance (Pl. 20, c). The legs were drawn up and crossed at the knee to fit in the pit; the length of the bones as found was only 1.25 m. They were in good condition with some minor disturbances such as the position of the coccyx near the lower legs and a slight scattering of ribs and vertebrae. Perhaps the bones floated a little in groundwater when rockfall near the door blocked the drainage carefully supplied by the sloping floor. A long discontinuous streak of hard burned red earth along the north edge of the pit by the ankles, thigh and left shoulder of the skeleton indicated that a fire had been lit at the time of burial. This was presumably to purify the air in the chamber, a characteristic Mycenaean action on re-opening family tombs which may have been especially needed here because of the quick succession of deaths.

The only vase with Burial A was a straight-sided pyxis-alabastron painted with a wavy line and bands (No. 2, Pl. 23, c). This lay quite high over her right hip near the south wall, either floated up on water or set on a particularly steatopygous corpse. A fine small conical bead of purple steatite was found beside the pyxis a little lower than its base (No. 4, Pl. 24, f).

The burial pit dug through fallen rock and the signs of fire indicate that A was not the first interment in the tomb.

Burial B lay at a higher level just inside the doorway, parallel to A but with the head at the east (Fig. 1). Fallen rock had accumulated to a depth of 0.30 m. since Burial A; again, a shallow pit was dug for the body, through a layer of water-borne sand, to clear a compact level space (Fig. 2). This burial seemed from its height and position to have been the latest in the tomb, the one for which only the upper part of the doorpacking had been dismantled.

Dr. Angel identified the skeleton as belonging to a boy thirteen to fifteen years old. The bones were light and delicate, and so had deteriorated more than in the other burials, but were generally in their burial position. The boy had been placed on his back facing the door; the skull was slightly raised, and in the process of decay the back of the skull had shifted around in front of the lower jaw. When the bones were lifted a rectangular patch of black earth was seen to extend under the boy's head and shoulders, 0.53 m. long and 0.48 m. broad. The black may have represented decomposition from a pillow or thick folded cloth which once propped the head up and accounted for the later dislocation of the skull. The right arm was doubled up on the chest, the

left arm straight along the side, and the knees probably were raised, for the right thighbone was found upside down where it must have fallen from a sloping position. The length of the bones in place was 1.15 m.

The single vase with Burial B was a small two-handled jar coated all over in a streaky red-black wash (No. 1, Pl. 24, a). This was found on its side at a high level above the boy's right shoulder, 0.60 m. above the floor and 0.15 m. above the general level of the bones (Fig. 2). It may have floated up, being light and small. This inexpensive tomb-gift might by itself have been classified as late, but it cannot be far distant in time from the jar No. 8, one of the oldest in the tomb.

The center of the chamber floor was empty except for a small orange stippled cup near the east wall (No. 7, Figs. 1, 2). It stood upright on a hard floor which extended across the chamber about 0.10 m. higher than the rock on which Burials C and D lay. This may represent a work floor made when men recut the door, cleared out the debris, buried A, replaced the unbroken cup and swept broken things into the dromos. The cup may be tentatively associated with the nearest burial, C.

Burials C and D occupied the northern third of the chamber. They were two adult men, laid parallel to each other and to the north wall in close alignment. Their heads were to the east; their skulls had turned so they seemed to face each other (Fig. 1; Pl. 20, b). Judging by the physical arrangement, the similarity of their vases, and the identical complexes of rotted white wood which surrounded them, one would suppose them to have been buried on the same day. Since the door was closed only three times, it was deduced that the chamber tomb first was made for C and D who were placed in it together.

The skeleton of Burial C was identified by Dr. Angel as that of a man fifty-three years old, slightly above average height for a Mycenaean. The length of the bones in place was 1.45 m., but the skeleton was in a cramped contracted position. The upper body was on its back, slightly tilted over to the right. The skull rested on the right cheek but had rolled downward so that the palate was exposed teeth upward (Pl. 20, b). The left arm was bent up against the chest. The right arm was extended full length along the body on a thick plank of wood. The legs were sharply bent at the knee with the right leg underneath and the feet drawn back behind the body. The toes of the left foot were cramped against a trace of wood. The position of the bones suggested that the man had been brought into the tomb in a coffin slightly too small for him, and had been tilted and contracted to fit it. The skull was found cracked, perhaps by the same fall of rock from the ceiling which knocked a large krater off the coffin of Burial D to rest above C's right head and shoulder (Figs. 1, 2).

The form of the wood associated with Burial C was not perfectly clear, for it was much less well preserved than in the case of Burial D. The wood seemed of exactly the same nature in both burials. It was white, soft, moist, uncarbonized, and quickly dried to powder which blew away. Only scant traces of this wood were found in

the fallen rock over the bones of C, and these traces were scattered, evidently by the subsiding roof. Small fragments were found out on the central chamber floor near cup No. 7, others at 0.15 to 0.20 m. above the floor against the east wall. It was not at first realized that C was encased in wood at all, the traces being attributed to scatter from the much sturdier remains around Burial D. When the skeleton was prepared for lifting, however, strips of planking and small lumps of wood appeared at the following points: against the toes of the left foot, in three tiny patches under the ankles, under the whole left half of the pelvis, scattered in traces among the ribs, a long piece under the right forearm and wrist, a long piece on the left side from rib cage to shoulder, and a fragment at the crown of the skull. The bedrock which had penetrated all parts of the skeleton and left chunks and pebbles embedded in the wood did not apparently seal in the remains tightly enough to preserve them so completely as in the case of Burial D. Consequently the best evidence for the shape of the wood came from under the body where it was more protected. It is not in itself sufficient to show whether the body was in a complete coffin or merely laid on a flat plank bier. There are, however, certain indications that it was a coffin: the piece of wood part way up the skull, the pieces at a high level against the east wall, the traces among the ribs which must have dropped from above. Furthermore, something high and flat in this area checked the fall of the great krater from the neighboring coffin, so that it rested quite high above C's skeleton (Fig. 2).

The only vase definitely associated with Burial C was a spouted ewer handsomely painted with brown spiral-argonauts and flowers (No. 6, Pl. 22, a, c). It had been placed upright at his feet, outside the wooden construction, against the west wall near the door. Pellets of black carbonized matter were found in the earth around it. The ewer had been badly smashed, apparently by a vertical slide of rock down the face of the west wall on top of it; it was mended from over one hundred pieces. Perhaps it was this displaced sheet of rock which covered up part of the doorway and caused the stomion to be recut for Burial A. The disturbance must have happened before the fall in the northeast corner knocked krater No. 3 off D's coffin, for a sherd of that vase was found lying on fallen rock at the edge of the door 0.20 m. higher than the top of the ewer; it had flown through the air with the force of the blow and come to rest on earlier debris.

A small rectangular scrap of ivory was found on the floor by Burial C (No. 18); it had no context nor any relation to other objects in the tomb. It might have dropped from a weapon or belt of one of the funeral party.

Burial D stretched along the whole north wall of the chamber. This interesting burial was complicated to clean and preserve. The first sign of its presence was the remains of the large krater No. 3 painted with red argonauts and marine motifs (Figs. 1, 2; Pl. 22, a, b). The upper side of this toppled vase was 0.52 m. above the tomb floor, the underside 0.37 m. It had clearly been resting on something horizontal which supported it at this level. The large open bowl had gradually filled up with

small pieces of rock dislodged from the roof by water, and then a greater rockfall had knocked the whole vase over so that the main part tilted forward and came to rest above Burial C while small fragments of the rim scattered all over this part of the chamber. One sherd dropped straight down from the edge of the support to floor level, but the rest could not fall farther than its position as found. The position of the krater therefore suggested the presence of two high flat structures side by side with free space between them, and this is part of the evidence for reconstructing a coffin for C as well as D. One sherd among C's ribs near traces of wood might have rested on the top planks of his coffin at first and then subsided to bone level as they gave way.

Clearing toward the west wall on a level with the krater the workmen suddenly uncovered what looked like a complex of rotted bronze and ivory in very poor condition. This proved to be a long bronze spearhead resting on black decomposed material and white wood. The spearhead rested horizontally 0.37 m. above the floor,

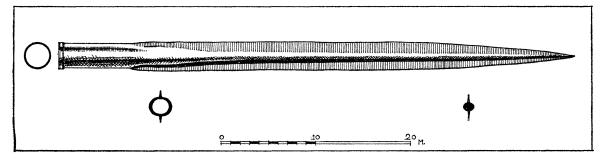


Fig. 3. Spearhead (No. 5).

level with the underside of the krater, over the legs of the skeleton with its point toward his feet (Figs. 1, 3; Pl. 20, d). The spearhead is one of the longest ever found, measuring 0.54 m. in place. It seemed almost too diseased for removal but was eventually taken out in paraffin. The blade was surrounded by a black discoloration in the earth which extended 0.05 m. beyond its tip, perhaps the traces of disintegrated cloth, or a leather scabbard. Between the spearhead and the north wall was another long, thin discontinuous streak of black earth in a line parallel to the point on the long axis of the coffin. This measured between 0.02 and 0.04 m. or two fingers wide, traceable for nearly 0.80 m. Flanking the spearhead and black streak, still in parallel lines, there emerged the first long rodlike remains of white wood. It was at first thought that the dark streak represented an inlay in a white wooden table top with the spear and vase resting on it. Once the wood was understood to be the upper surface of an undecorated coffin, the dark streak was interpreted tentatively as the remains of the wooden spear-shaft taken from the bronze blade and laid beside it. There was room on the coffin for a shaft about 1.0 m. long.

A word should be said about the condition of the wood and the field methods used to preserve it until the entire bank of fallen rock against the north wall could be cleared. The white material in the rock did not give the impression of being wood at all. It was a series of moist laminated slices on top, the color of ivory and the consistency of wet cotton. Below, where more solid fragments had been preserved, long bunched dense fibers could be seen through a glass, and, on a few pieces, cross-fibers giving the effect of basket-weave. This ruled out its identification as ivory. Experts thought it might be pale wood with the impression of woven cloth on the under side, but final microscopic examination showed that the "weaving" was the very regular remains of cellular structure in the wood.

Samples sent to Dr. Papamichael at the Institute for Forestry Research in Athens were identified as either cypress or pine and were forwarded to Paris for further investigation. For some reason the wood had not carbonized; its ivory color was the original tone under the bark. At several places in the rock around it, particularly by the well-preserved stretches on the right side of skeleton D, a satiny reddish brown stain was observed which might have been left by decomposing reddish bark. It was paler than the dark stain left by flesh. If the bark had in fact been left on the planks, the coffin must have been a hastily-constructed unsmoothed box, but the stain may have resulted from other causes.

This wood had evidently been sealed in bedrock (Pl. 21, a) with a high moisture content before it could disintegrate. The sealing kept it from carbonizing, under special conditions. Examples of wood have been found in Mycenaean tombs at two or three other mainland sites, but in every case carbonized and scarcely recoverable, or as mere dark brown traces in the soil. Only the wood in the Shaft Graves at Mycenae was enough protected from atmosphere to preserve it well. The Agora tomb seems to be the first to produce evidence for the full height and shape of the wooden coffin, both through its surviving remains and through the disposition of the objects on top of it.⁵

The wood was extremely delicate and moist on first exposure. The problems of cleaning and preserving it were perplexing; brushing removed the surface, air blown through a syringe carried particles away, dry picking with dental tools removed the surrounding rock so that dimensions could be recorded, but tended to skin the wood at the facet of contact. The work proceeded slowly; the coffins were exposed eleven days to the summer atmosphere before removal. Principal stretches were sprayed with Krylon to protect the surface, shaded by straw mats during the day to prevent rapid drying, wrapped in nylon at night to conserve moisture. After removal to the laboratory in talc and paraffin, the wood was soaked in a Carbowax solution to replace the evaporated moisture content, the bones and sealstones removed from their embedded position, and dry storage trays set up for wood and skeletons as nearly as possible in their original relation. Contrary to the canons of technical books, this cypress or pine seemed antipathetic to moisture, and became progressively more durable as it dried out if properly protected. The same was noted by Schliemann with the carbonized and uncarbonized fragments of wood he found in the Fifth Shaft Grave at Mycenae (infra and note 7).

In the drawings Figs. 1 and 2 only the most certain traces of wood are recorded. There was some indication of central longitudinal members top and bottom in the coffin of Burial D. In at least some cases the wooden elements of the coffin showed more sign of squaring than is shown in the drawings.

The highest wood was observed at 0.43 m. above the tomb floor (Pl. 21 b, c). The undersides of the krater and spearhead lay at 0.37 m. At this upper level the wood was picked up in long streaks at the edges and center of an area 0.45 m. broad and 1.65 m. long. It did not seem to be a solid sheet but had the form of three poles or planks, which had perhaps once been covered over by heavy cloth or hide. These rod-like streaks had an average thickness of 0.05 m., varying from 0.04 to 0.07 m. Underneath the skeleton of Burial D the wood was preserved in solid chunks and long rectangular stretches, at so many points that it seems quite clear that the coffin had a solid bottom; here the dimensions were 0.50 m. broad by 1.75 m. long. The sides were probably solid too. As rock penetrated the coffin from above, it forced the sides out and down so that wood lay inside the vases surrounding Burial D and adhered to many upper surfaces of the bones, especially on the thighs and toes. The objects on top of the lid were not displaced by this gradual infiltration but probably subsided a little. The restored dimensions of the coffin, based on consistent remains of well-preserved wood without taking scattered traces into calculation, are ca. 1.75 m. long, 0.45 m. to 0.50 m. broad, and 0.45 m. high. This compares fairly closely with the preserved dimension of the wood under Burial C, 1.50 m. long and 0.42 m. broad. In neither case was there any trace of nails or pegs to fasten the parts together, no imprints of rope binding, no right-angle joints between any two pieces of wood, no evidence for Mycenaean methods of carpentry.

Inside and upon these remains of wood lay a skeleton identified by Dr. Angel as of a young man eighteen to twenty-four years old, probably about twenty. Burial D lay on its back with the legs slightly raised, the toes turned in pigeon-fashion, and the whole body tilted to the left. The bones measured 1.53 m. in place. When the leg bones, which had fallen flat, were raised and fitted back at their original angle, the knee cap was 0.24 m. above the bottom of the coffin, which allowed the body ample vertical space inside the box, but the cramped position of the feet suggested it had been too short for him, as Mycenaean coffins always are. The left arm was doubled up under the body with the hand in front of the chin, while the right arm was bent up against the chest along the front or south side of the coffin. The young man had worn a cord around his left wrist on which two amygdaloid beads were strung, one amber, and one carnelian carved with a soaring eagle (Nos. 16, 17, Pl. 24, f).

There were no other tomb-gifts inside the coffin. Five vases were found underneath and beside the coffin along the legs. Two of these were complete and in position: a small two-handled jar coated in a streaky red-black wash like No. 1 (No. 8, Pl. 24, b), and a small three-handled jar decorated with stemmed spirals (No. 10, Pl. 23, d). Both had traces of wood across their mouths and inside them. The other three vases were both broken and incomplete. A second red mottled cup was found in three pieces under the left shin (No. 9, Pl. 23, a); two joining fragments of the rim had already been excavated in the dromos. A broken kylix lay under the right lower leg with a

large piece of wood across the inside of the bowl (No. 12, Pl. 23, f); the rest of this kylix was never found, either in chamber or dromos. A deep krater with vertical strap handles, of the same type as the krater on top of the coffin but of coarser quality and painted with a faded scale pattern (No. 11, Pl. 23, e), had been broken into three big sections which did not join. The bowl was split in almost equal halves, one part lying obliquely under the lower right leg beside the kylix and one part lying outside the edge of the coffin at a level with skeleton D's right hip (Fig. 1). The base lay just above the left hip under an arm bone and rib bones.

These three broken vases are not entirely easy to explain in a reconstructed history of the burials in the tomb. Since they were underneath D's bones and coffin, they must have been already on the floor when the coffin was set down; then they were pinned in place and not subjected to further disturbance. Since parts of the cup No. 9 were swept out into the dromos, and parts of the kylix and krater never recovered, it is clear that the tomb floor had been tidied between the times the vases were broken and the last burial made. It is unlikely, however, that the vases belonged to an earlier burial. While it is true that older burials were regularly swept aside in Mycenaean tombs, the skulls were usually left in a corner and the other bones tidied up but seldom totally removed. Here there was not even a splinter of toe or vertebra to indicate such an event. The vases in question are also contemporary with the others, like the krater No. 3 or the ewer No. 6, which were definitely associated with Burials C and D. They were not made in a previous generation.

The most reasonable explanation is that these three vases were broken in the course of the funeral ceremonies for C and D. They were partly tidied up now or later during Burial A (No. 9 being swept into the dromos, Nos. 11 and 12 dispersed), partly left where they lay on the floor in the dark. Perhaps they slid off the coffins as these were brought in through the narrow door. Perhaps they were deliberately smashed as part of the rite of dispatch. They are all vases for drinking: a cup, a goblet, and a mixing-bowl. Just as the broken kylix in front of the doorway documents the well-attested Mycenaean funeral custom of drinking a final toast to the dead and smashing the cup against the stones, so these drinking vessels inside the chamber may reflect a similar practice. There is no cogent need to dissociate them from the coffin burials, and another explanation would be difficult to visualize.

It should be noted that nearly all the vases associated with the coffin burials have some defect in quality although they are impressive and well-painted pieces. The great krater No. 3 and the mottled cup No. 9 are made of poorly cleaned clay full of pebbles and grit. The cup No. 7 was dented at the rim while it was still soft, before or during firing. The krater No. 11 and the kylix No. 12 were knocked about so roughly in the leather-hard stage that they went into the kiln crooked and came out ridiculous. One has the impression that these were "seconds," defective products of a first-class workshop, which a family in haste bought for the dead knowing that they would look fine at the funeral and would not be seen again by any critical eye. The broken seal-

stone on the wrist of Burial D, which must have splintered while being engraved, seems another instance of the same practical outlook.

THE SEQUENCE OF BURIALS

The ten vases with the four skeletons in the chamber belong to a very short period of time, the ceramic phrase called Late Helladic III A:1. This period falls in the early fourteenth century although its absolute dates are not yet settled satisfactorily. Some scholars limit it to the twenty-five years of the last phase of the palace at Knossos in Crete in the late fifteenth century, ca. 1425 to 1400 B.C. Others, regarding the ambiguous and largely unpublished evidence at Knossos as a frail support, initiate Late Helladic III about 1400 B.C. and close its first phase shortly before the Amarna Age in Egypt, perhaps about 1365 B.C. There is relatively little pottery of this period in comparison to what follows, and its experimental creativity with high standards may not last much more than one generation. This group is a welcome addition to the Agora finds, since it provides further evidence for the new wealth and artistic energy in Athens at the time of the fall of Knossos, spread through more modest social strata than the princely tombs on the north slope of the Areopagus.6 Even if this phase of pottery-making is only twenty-five or thirty years long, four deaths in one family are not surprising during that span. The very tightly closed context makes the sequence easier to sort out, and endows the tomb with an extra archaeological value.

The man of fifty-three (C) and the tall youth of twenty (D) seem to have been buried first, in their coffins, on the same day. Probably they are father and son. Perhaps they died in battle or hunting and were brought home from the field in hastily constructed boxes, although no signs of wounds were seen in the bones. Perhaps they died of some disease which made it desirable that they should be kept in coffins until a tomb could be excavated for them. It is just in this period that the first known wooden coffins appear in Crete (*infra*, pp. 70-71), and that the Argolid seems to adopt the custom for a few important burials of the late fifteenth and early fourteenth centuries. It is likely that many more wooden coffins were used in Mycenaean funerals than conditions of the soil have permitted excavators to realize.

The woman who had had several children (A) must be the next burial. Before she died, the face of the west chamber wall north of the door had slipped down to

⁶ The Areopagus tombs represent a richer class of burial than any tomb in the Agora below: Hesperia, IX, 1940, p. 274; XVII, 1948, p. 154. Cf. Hesperia, XXIV, 1955, p. 188 notes 3 and 4. Remains of another rich chamber were found below Philopappos Hill (Arch. Ans., 1931, col. 213); although looted it still held fine gold ornaments and a gem of this same period, LH II-III. The sudden wealth of Athens at the time of the fall of Knossos ought not to be totally unrelated to the legend of Theseus. The new Agora tomb seems to have belonged to a family of substantial yet not notable means, which purchased fine although defective vases as tomb-gifts but could not bury expensive gold and ivory with the dead. The coffins, the marine motives on the two greatest vases, and the eagle on the gem all suggest some interest in Cretan fashion of the period.

smash the ewer No. 6 and partially block the doorway, which was then recut and widened. The workers seem to have cleared the room of rockfall, forming a work floor, sweeping out broken vases and replacing a whole cup in a convenient space (No. 7). They dug a shallow pit in the debris on the relatively empty southern floor, lit a fire to clear the air, buried the woman and blocked up the new doorway again.

The adolescent boy (B) in front of the door must have been the last burial. More debris had accumulated and groundwater had deposited a layer of sand which the workmen scooped away to make a level space for the body. Only the top part of the door was opened; the boy must have been light enough to lift in over the boulders. He may have had his head propped up on a pillow or cloth facing the door. When the doorway was blocked up again, a conglomerate grave marker (No. 15) was used in the upper packing. Perhaps this stele had already broken, here or on a neighboring tomb. Perhaps the instability of the tomb chamber made it dangerous for further burials, or there were no family survivors to need it, so that the marker was removed deliberately and put to practical use. Then the roof caved in for good, sealing the tomb and its contents. The collapsed fill masqueraded as stable bedrock and was later dressed down in the great archaic improvement program for the Agora about 600 B.C. After more than four centuries the end of the dromos was sheared off by the foundations for the massive Middle Stoa built in the second century B.C. In late Turkish times a pit was dug by the door but did not penetrate the tomb. The remains of one generation of Mycenaean Athenians living in the fourteenth century B.C. were thus preserved intact.

THE COFFINS

Coffin burial on the mainland is rare, but evidence has accumulated recently to show that it is not so rare as general surveys of Mycenaean burial customs state. Heinrich Schliemann was the first to discover carbonized wood in significant quantity in Mycenaean burials, in the Shaft Graves at Mycenae in 1876. He says of his First Sepulcher (Grave V): "Especially characteristic of this tomb was the large quantity of wood it contained. Besides a number of half-burned pieces of wood from the funeral fires, I found there a piece of cypress-wood, 9 in. long and 4½ in. broad, which had not been touched by the fire . . . When first taken out of the grave all this wood was moist and soft, but it is now dry, and I hope with proper care it can be preserved." Schliemann did not entertain the idea of coffin burial, feeling, as most excavators have since, that Mycenaean dead were buried in their funeral garments directly on an earth or pebble floor. However, as Cretan clay coffins became better known through two able publications, and their indebtedness to wooden prototypes was recognized, in such features as framed panels and imitation nails, V. Stais suggested that some of the wood in the Shaft Graves might have come from coffins with masks or gold ornaments nailed or glued to the outer surfaces. An influence from wooden Egyptian coffins was theoretically attractive. In the absence of persuasive evidence, G. Karo left the question open for the Shaft Graves, but experts like D. Fimmen and A. Evans continued to regard contracted burial in a wooden box as a likely custom on the mainland.⁷

Remains of wooden biers were uncovered by C. W. Blegen in his campaigns of 1926-1928 at the Argive Heraion. Very carbonized and damaged traces of wood were observed in three chamber tombs, flat on the floor without indication of height. In Tomb 29 the wood was "pretty thoroughly carbonized, brown in color, light in weight, thin and very fragile"; it had the form of a frame rectangle ca. 1.20 m. long and 0.70 m. wide with projections, perhaps legs or carrying-handles, at all four corners. Since there was no wood inside the frame, Professor Blegen suggested it might have been covered in heavy cloth or canvas. In Tomb 42 there seemed to be four long planks bound by two shorter cross-pieces; the longest was 1.25 m., about 0.10 m. wide, and crumbled when touched. In Tomb 10 the traces were even more deteriorated; perhaps from a bier, perhaps from spearshafts or a shield-frame. Professor Blegen concluded, "There was no trace in any sepulchre of the use of a wooden coffin . . . It was clearly not a Mycenaean custom to bury in coffins of any kind." He added, however, one very substantial example of a clay burial coffin to the short list known at that time in Greece."

In 1939 A. Persson discovered a wooden structure in chamber tomb No. 8 at Dendra, interpreted it as a coffin, and reviewed the whole subject in his report. The left side had been spoiled in excavation, and no evidence for height was obtained, but "the wood could be clearly distinguished as a brownish, decomposed, porous mass..." with probable dimensions of 1.90 m. long and 0.55-0.60 m. wide, made of boards 0.03-0.04 m. thick. A bronze helmet (now often regarded as a shoulder-guard) lay beside the stains. The excavator associated Palace Style vases with the coffin; their relation to it was not disclosed.

After the Second World War excavators in Crete began to find traces of wooden prototypes for clay chest-larnakes. The best-preserved remains were excavated by St. Alexiou in an important chamber tomb at Katsaba, belonging to a wealthy man with Egyptian contacts who died during the latter years of the palace era at Knossos.¹⁰ The dimensions of the coffin were *ca.* 1.30 m. long and 0.45 m. wide, and it had been

⁷ H. Schliemann, Mycenae and Tiryns, p. 332, the only recorded analysis of funeral wood for 90 years; P. Orsi, "Urne Funebri Cretesi," Mon. Ant., I, 1890, p. 202; St. Xanthoudides, 'Εφ. 'Αρχ., 1904, p. 1; V. Stais, 'Εφ. 'Αρχ., 1907, p. 33; M. Meurer, Jahrb., XXVII, 1912, p. 208; G. Karo, Ath Mitt., XL, 1915, p. 135 and Die Schachtgräber von Mykenai, pp. 38 ff.; D. Fimmen, Die kretisch-mykenische Kultur, p. 64; A. Evans, Shaft Graves and Bee Hive Tombs, 1929, p. 15.

⁸ C. W. Blegen, *Prosymna*, 1927: Tomb 29, p. 76, fig. 149; Tomb 42, p. 150, fig. 370, plan 30; Tomb 10, p. 199; terracotta larnax from Tomb 17, pp. 54, 456; resumé p. 249.

⁹ A. Persson, New Tombs at Dendra near Midea, 1942, pp. 41, 111 ff., 162, with a survey of past theories and evidence and stress on Egyptian connections.

¹⁰ St. Alexiou, Κρητ. Χρον., VI, 1952, pp. 11 ff.

painted bright blue. Shortly after, S. Hood began to find traces in a number of chamber tombs near Knossos, the Warrior Graves and others of the same LM II-III period, which could be interpreted as disintegrated remains of coffins. None of the six possible examples were in condition to illuminate construction: "brown smudges a few millimetres thick," "a thin brown layer," "a dusky patch." In a few cases these patches could be measured. Dimensions at Hospital Site Tomb I (where there may have been a pair) were roughly 1.50 m. long, 0.25-0.50 m. wide; at Ayios Ioannis at least one meter long; in Tomb XV on the Gypsades hill, 1.50 m. long by perhaps 0.45 m. wide. Hood also recalled that at Phaistos, Tomb 9 of the Tombe dei Nobili had contained carbonized wood, interpreted at that time as a table although the stain was below the bones."

Most tombs which have produced traces of coffins belong to the same period, the late fifteenth and early fourteenth centuries. This is true in the Agora, Dendra, Prosymna 29 and probably 42, Katsaba, Knossos, and Phaistos. Most clay coffins are later, both in Crete and in Greece, and tend to belong to poorer tombs. From the recorded dimensions, wooden coffins seem to have been longer than clay ones, although contracted burial is the rule in both forms. No statistics have been kept of the height of persons buried in either kind of coffin, so that it would be romantic to suppose the wooden coffins were used for tall fighting men.

It may be worth noting a tenuous relationship between coffins and the color blue. The Katsaba coffin was painted blue; a more recently excavated tomb there had a blue floor, to match the blue ceiling in the Temple Tomb at Knossos. The coffin-tombs Phaistos 9, Ayios Ioannis, Dendra 8, and Prosymna 42 also produced either flecks of blue paint or lumps of blue substance (kyanos), finds which are altogether very rare. Although the Agora coffins were unpainted and perhaps even unsmoothed, an important tomb on the Areopagus had decayed wood painted blue. In that case it was beside the skeleton, a table rather than a coffin, supporting two bronze swords, a cleaver, and a bowl.¹² A symbolic association between the color of funeral furniture and the color of sea or sky is not impossible, but difficult to check. Perhaps only three of the hundreds of known painted clay coffins use the color; it is not natural in the vase-painter's repertory.¹⁸ Yet the evidence for blue-painted wood in some cases at least helps round out a vision of richly finished Mycenaean carpentry, supplementing the known use of gold foil overlays and glass or ivory inlays on tomb objects like boxes, tables, footstools, if not coffins. In other cases, coffins may have been covered with a cloth.

¹¹ M. S. F. Hood: Hospital Site Tomb I, B.S.A., XLVII, 1952, p. 248 note 18; Tombs II and V?; Ayios Ioannis, B.S.A., LI, 1956, pp. 84 ff.; Gypsades hill, B.S.A., LIII, 1958-59, pp. 198, 218, Tombs I and XV. Phaistos: R. Paribeni, Mon. Ant., XIV, 1904, p. 522 note 1.

¹² Hesperia, XVII, 1948, p. 156. For blue in other tombs, see notes 8-11 above.

¹⁸ A polychrome larnax from Tanagra, recently cleaned at Thebes; a polychrome larnax from Ta Dramia, in Chania; the Haghia Triadha sarcophagus.

The coffin of Burial D clearly had the best tomb-gifts laid out in state on top of it, the argonaut krater over the head and the great spear along the thighs. A comparable arrangement was suggested by Hood at Ayios Ioannis near Knossos where fragments of copper wire lay near the head end of wood traces; he supposed them to come from a disintegrated helmet laid on top of the coffin.¹⁴ Perhaps the bronze armor by the Dendra coffin had been in a similar position. The concept is common to many cultures, from the helmets on Villanovan cremation urns to the steel helmets on soldiers' crosses in World War I. The Agora coffins suggest that a height of *ca.* 0.45 m. may be average in Mycenaean times; the tops would be at about the same level as tables which were sometimes used to display funeral gifts in the same fashion.

The two coffins in the new Agora tomb are only the fourth and fifth in the short list of fairly certain wooden larnakes in prehistoric Greece. One may suppose that coffins and catafalques were used in many more burials than those recorded. Clay coffins seem on the whole later, in Greece as in Crete. Mycenaean clay larnakes are not common, but were used in widely scattered areas for both infant and adult burial. The recently discovered larnax cemetery at Tanagra in Boiotia has added at least fifteen examples to those already known. Unfortunately they come from illicitlyexcavated tombs, but seem to have been in use in the later thirteenth century B.C.¹⁵ These are of the chest type, like two stone coffins in Kephallenia of the same period. Bathtub larnakes have been found at Thebes, Mycenae, Tiryns, Prosymna, Aghios Kosmas, Ktouri in Thessaly, Naxos and Ialysos among the islands, a distribution which speaks for the acceptance of this burial practice in many provincial communities. 16 It is impossible to be certain whether influence from Crete is at work; the actual manufacture of the coffins seems in all cases to be local. Coffins are practical in hot countries, especially in periods of widespread war and a high death-rate. Their use for Athenian dead in an age of expanding activity and overseas connections is interesting.

CATALOGUE

A. FINDS FROM THE CHAMBER 17

1 (P 27448). Pls. 22, a; 24, a. Amphoriskos above right shoulder of Burial B.

H. 0.14 m., d. 0.125 m. Complete, but chipped and cracked. Red-buff clay full of grit and pockmarks.

Globular body, flat ring foot, concave collared neck, thin offset rim, strap handles arching from top of shoulder to greatest diameter of body. Whole body, and inside of neck, coated in streaky red-black wash.

Furumark *MP* Type 74, LH II B to LH III A:2, with the color pointing toward an early

¹⁴ S. Hood, B.S.A., LI, 1956, p. 86. The analogy to the turban on Turkish tombstones is Karo's (Ath. Mitt., XL, 1915, p. 184 note 2).

¹⁵ Vermeule, *J.H.S.*, LXXXV, 1965, p. 123.

¹⁶ *Ibid.*, note 3.

¹⁷ The following abbreviations are used in the catalogue:

date: Myc. I to III A:1 examples vary between red and black, III A:2 examples are generally red, III C ones generally black (428). Although this is apparently the latest vase in the tomb it is almost identical in fabric with No. 8, one of the earliest.

Plain buff, gray, and streaky black examples of the same general type were already known in the Agora (P 23734, P 23691, P 20690). Stubbings quotes several specimens in his survey of Mycenaean pottery from Attica, B.S.A., LII, 1947, p. 46, both plain and coated from Vourvatsi, Pikermi, and Trakhones (pl. 13, nos. 3, 5, 6). Cf. also C. Waldstein, The Argive Heraeum, II, fig. 25.

2 (P 27449). Pls. 22, a; 23, c. Straight-sided alabastron above right hip of Burial A.

H. 0.10 m., d. at base 0.15 m. Intact. Fine buff clay with a little grit; buff slip; brownblack crackled glaze paint somewhat worn.

Broad bottom lifting at edges, vertical sides battering inward toward shoulder, sloping shoulder with three small angled rolled handles, low splaying neck, flat rim.

Concentric circles on base (one, three, and three); groups of stripes on sides (two, three, and two); wavy lines above degenerated ivyleaf pattern in each handle zone on shoulder, framed by stripes; neck and handles painted solid; stripe on reserved rim.

Furumark MP Type 93, LH III A:1 (to 2); Motive 53 nos. 4-5, LH III A:1 to 2. An Attic example from Pikermi has a cross-hatched shoulder (Stubbings pl. 11, no. 4); another in the collection of the University of Missouri which may come from Attica has a similar wavy line (Missouri Alumnus, Spring 1964). There are III A:1 sherds of this shape from the Atreus bothros at Mycenae (E. French, B.S.A.,

LIX, 1964, p. 247, fig. 1). Most straight-sided alabastra are later.

The vase was filled with fine pale crumbly earth quite unlike the surrounding fill. It may have contained unguent.

3 (P 27450). Pl. 22, a, b. Deep krater with vertical strap handles, on top of coffin over head of Burial D.

H. 0.33 m., d. at rim 0.34 m., with handles 0.43 m. Found in six major sections; fragment missing below one handle, chips from rim and wall. Pale, poorly cleaned buff clay with grit and pebbles; buff slip; clear orange-red glaze-paint.

Broad pear-shaped conical body, lower body in almost straight line with foot (only slightly concave profile), torus disc base, well-defined thin offset rim, broad vertical strap handles from rim to greatest diameter of body. Handles each pierced by two fine vertical holes at attachment to rim.

Rim glazed solid inside and outside. Handles edged by vertical bands, crossed by diagonal bars. Three bands below decorated zone, band above solid glazed foot. Decorated zone is framed by a fine stripe at the sides and top, within which three curtailed argonauts face left on each side, crossing the frame; filling ornaments of formulaic seaweed, trefoil rockwork and rosettes.

Furumark *MP* Type 6, LH III A:1; Motives 22 no. 16, LH III A:1, 17 no. 18, LH II B- LH III A:1, 29 no. 20, LH III A:1.

Kraters of this early shape and decoration are extremely rare on the mainland. This and its fellow No. 11 may be among the first in Greece, along with the sherds from the Atreus bothros at Mycenae (French, B.S.A., LIX, 1964, p. 248). In LH III A:2 kraters become slightly

CMS I = A. Sakellariou, Corpus of Minoan and Mycenaean Seals I, 1965, The National Museum, Athens.

CT = A. J. B. Wace, Chamber Tombs at Mycenae (Archaeologia, LXXXI, 1932).

MP = A. Furumark, The Mycenaean Pottery, 1941.

MV = A. Furtwängler and G. Loeschke, Mykenische Vasen, 1886.

Stubbings = F. Stubbings, "The Mycenaean Pottery of Attica," B.S.A., XLII, 1947, pp. 1-75.

better known, with handsome examples painted with birds at Delphi, Mycenae, and Koukounara near Pylos (B.C.H., 1935, pl. 23; Πρακτικά, 1950, p. 220 fig. 23; Ἔργον, 1963, fig. 88), possibly the Markopoulo krater with dancing figures if that is not already LH III B (Ἦχ., 1895, pl. 10, 9 and 9a). Most mainland kraters are III B, with a marked inward curve below the bowl and a tall narrow foot.

The design and quality of No. 3 are very like those of the ewer No. 6 and seem local. The shape is probably not inspired from Cyprus, where kraters are plentiful in this period but are almost all of the tall-necked amphoroid type; the closest parallel in shape is the Window Krater in London and Nicosia (British Museum C 391) and an unpublished fragment from Enkomi. Early tomb groups at Ialysos in Rhodes produce no kraters. Everywhere they are better known from sherds than from complete examples. Attic sherds are recorded from the Agora, the Acropolis, Eleusis, the Marathon and Menidi tholos tombs, Spata, and Velanideza; only Markopoulo and Vourvatsi have whole vases, later than these ('E ϕ . 'A $\rho\chi$., 1895, pl. 10, 9; Stubbings, pl. 10 no. 1). Only one other mainland krater, from Mycenae, seems to be painted with an argonaut design (N.M. 157).

The argonaut design was popular on other shapes in Athens in the late fifteenth and early fourteenth centuries; the ewer No. 6 is a good specimen of a class on which it was commonly employed; there are impressive designs on three-handled jars in the Agora (Hesperia, IX, 1940, p. 281, fig. 18), at Spata (MV, pl. 17, no. 110), Berbati (I.L.N., Feb. 15, 1936, pp. 276-279, fig. 16), Asine (Asine, fig. 248, 3). Simplified survival of the Minoan Marine Style is clear. Here the argonaut is curtailed, bodiless; the marine filling motifs restrained; the design well-balanced on an uncluttered ground. The seaweed design seems unique; the other fillers are matched on a contemporary ewer from Markopoulo (N.M. 3765).

Krater No. 3 is extraordinarily impressive and well-painted, a "text-book piece," but has

technical defects like most other vases in the tomb. In this case it is poor preparation of the clay which left enough grit and pebbles to split the surface during firing.

4 (ST 737). Pl. 24, f. Conical purple steatite bead or button close to the pyxis No. 2, above right hip of Burial A.

H. 0.007 m., d. at base 0.014 m. Vertical string hole with wear at top. Minor chips from bottom edge.

5 (B 1287). Pls. 20, d; 24, c; Fig. 3. Bronze spearhead on top of coffin over legs of Burial D.

Preserved length 0.54 m., d. of socket at shaft 0.028 m., d. at midpoint of blade 0.03 m. Length of socket 0.135 m. Plain circular socket terminating in slight ring grooved at each edge, 0.006 m. across. No sign of a split or nail holes for securing the shaft in the present corroded state of the blade. Blade round in center section, with thin flat cutting edges. Continuous profile, the broadest part of the blade only slightly wider than the socket, gradual contraction to sharp pointed nose.

The spearhead was surrounded by black discoloration extending 0.05 m. beyond the tip, possibly traces of a cloth wrapping or a wood or leather scabbard. A line of black discoloration parallel to the blade might have been left by the disintegration of the wooden shaft which had been dismounted from the socket for placement on the coffin. This discoloration was traced for 0.80 m. in discontinuous streaks 0.02 to 0.04 m. wide. There was calculated to be space on the coffin for a one-meter shaft which, with a bronze blade over half-a-meter long, would make a short but sturdy thrusting weapon.

This seems to be the second longest Aegean spearhead published. Even in its corroded state it is surpassed only by the great blade 0.57 m. long from the tholos tomb at Dendra in the Argolid (A. Persson, *Royal Tombs at Dendra*, p. 36, pl. XX no. 6). Third in size is a handsome example from one of the Warrior Graves

near Knossos, 0.50 m. long. This was also from a coffin burial (M. S. F. Hood, B.S.A., LI, 1956, p. 96, no. 8). These three spearheads are practically contemporary, no later than Late Helladic III A:1 and scarcely earlier. The type is probably Cretan; other examples are known from the Zafer Papoura cemetery at Knossos, particularly from The Chieftain's Grave of this same period (A. Evans, Prehistoric Tombs at Knossos, fig. 56, pl. XCI, 36 e, f; cf. 75 e). All belong to the category "one-piece" spearheads with a fairly continuous profile from socket to tip (H. Catling, Cypriot Bronze-Work in the Mycenaean World, pp. 122 ff.). The form appears slightly later on Rhodes (A. Maiuri, Annuario, VI-VII, 1926, p. 230, fig. 147, Tomb 59) and is eventually brought to Cyprus by Aegean settlers in the late thirteenth or early twelfth century (Catling, loc. cit.).

Miss Sandars noted the preponderance of spears over swords in the Knossos tombs of the period, "effective and lethal" basic weapons not often decorated like the more prestige-giving swords (A.J.A., LXVII, 1963, p. 128). Yet the greater Warrior Grave spearhead has a decoratively faceted socket, and examples both from Knossos and from Dendra have finely chased blades with ornamental designs. The Agora spearhead is less princely, though as effective a weapon. Such a massive bronze blade, mounted on a possibly short stave, was surely designed for thrusting rather than throwing. The thrusting spear was a staple in Aegean battlefield techniques involving duels, as well as in certain forms of chase such as boar-hunting where it would be gripped with both hands and held level for the boar's forward charge to impale him on it. The blade at Knossos identified as a boar spear is shorter, broader, leaf-shaped (Hood, B.S.A., XLVII, 1952, p. 261, Ayios Ioannis 2). The Agora spearhead is long, thin, relatively fragile by contrast, yet is sturdier than the pig-stickers illustrated in Mycenaean art (the Vapheio boar-hunt gem, Chr. Tsountas, 'Εφ. 'Aρχ., 1889, pl. 10 no. 15 or A. Sakellariou, CMS, I, no. 227; the Tiryns fresco, G. Rodenwaldt, Tiryns, II, pl. XIII; cf. Sp. Marinatos, B.S.A., XXXVII, 1936-37, p. 190).

6 (P 27451). Pl. 22, a, c. Ewer at foot of Burial C.

H. to top of spout 0.315 m., to top of handle 0.29 m.; d. 0.27 m. Nearly complete but warped and cracked, mended from over one hundred fragments. Fine pale green-yellow clay with grit and pockmarks; smooth pale buff slip; dark brown-red glaze paint turned black on neck and handle.

Bulging ovoid body, low foot slightly concave in profile, flat base, curved strap handle with pronounced vertical midrib from rear of spout to upper shoulder, short spout curving up at 50° to vertical axis; plastic knob (unpierced) at lower handle attachment, plastic ridge at junction of shoulder and neck and halfway up neck.

Bands edging rim of spout and crossing its undersurface; two bands below spout, three at upper plastic ridge, one over shoulder ridge; handle and knob painted solid; band above solid-painted foot. Continuous fine wavy line around top of shoulder. On body, three curtailed spiral-argonaut designs, slightly to left of center in front and drawn back toward handle on sides; simple flowers spring from zwickels at crevices between tentacle-coils.

Furumark MP Type 144, LH III A:1; Motive 22 no. 16, LH III A:1.

There were previously three ewers with similar decoration from the Agora (P 4647, P 23587, P 23578); it is the kind of vase Athens does well. Markopoulo-Kopreza, Vourvatsi and Salamis have yielded one argonaut ewer each, the first with the trefoil filling ornament of krater No. 3 from this tomb, and perhaps from the same workshop as this ewer ('E ϕ . 'A $\rho\chi$., 1895, pl. 10 no. 8, NM 3765; Stubbings, pl. 14 no. 3, fig. 20 B; D. M. Robinson, A.J.A., LIV, 1950, pl. I, V, now in the Fogg Museum, Harvard). In Rhodes the spiral coils tend to be heavier, the composition more crowded, but one has similar flowers added to the argonaut (Pilona T. 20, G. Jacopi, Annuario, XIII-XIV, 1933-1940, fig. 94). Those at Thebes tend to be coarser except the earliest which has a foliate band and fine drawing (Thebes No. 534; A.

Keramopoullos, $\Delta \epsilon \lambda \tau$., III, 1917, p. 83, fig. 59). The new Agora ewer is well-painted, with crackled glaze, and with a fine thin wall which was, however, too thin toward the base, and the pot was too poorly fired to be strong.

7 (P 27452). Pls. 22, a; 23, b. Low one-handled cup, from floor south of Burial C.

H. 0.045 m., d. with handle 0.135 m. Complete, mended from twenty pieces. Warped before firing, dented in at rim. Good red-buff clay, dark buff slip, red-brown matt paint.

Shallow hemispherical cup, small raised foot, narrow out-turned rim, flattened loop handle from rim to midpoint of bowl.

Rim painted solid inside and out, handle solid with reserved triangle at top (two overlapping bands parting at top), two bands framing a stripe above foot, edge of base painted solid. The outside of the cup is covered with a fine mottled or stippled pattern, applied with a brush not a sponge.

Furumark MP Type 219, LH II B to LH III A:1. Motive 77 no. 2, LH II B to LH III A: 2. Cups with bases decorated by thin lines between broad ones are especially typical of the LH III A:1 period (Furumark 422).

Mottled cups are more common in the Argolid than in Athens; there was only one other already in the Agora collections (P 22143); another from Vourvatsi in Stubbings, pl. 8 no. 1, beginning of LH III. Examples of the same early date are known at Mycenae, Prosymna, the Argive Heraion, Enkomi, and indeed most important sites of the early fourteenth century. Cf. B.S.A., LIX, 1964, p. 249, pl. 72 and fig. 2. The technique is a Minoan inheritance. Cf. No. 9 below.

8 (P 27455). Pls. 22, a; 24, b. Small two-handled jar under coffin and left leg of Burial D.

H. 0.10 m., d. 0.105 m. Complete except for chips from wall, mended from sixteen pieces. Crookedly shaped on potter's wheel. Fine pale buff clay, dilute streaky red-black matt paint coating the whole body and the inside top of

the neck. Splash of paint under center of flat base.

Globular biconical body, low spreading neck, two vertical strap handles from rim to greatest diameter, faint ring foot.

Furumark MP Type 66 in miniature, or variant on Type 74 or 67. The exact shape is hard to parallel; the position of the handles is unusual. Cf. Stubbings, pl. 13, nos. 3, 5, 6 and remarks on No. 1 above; C. Waldstein, Argive Heraeum, II, Tomb 1, no. 7, fig. 25. The position of this vase in the tomb guarantees an early date and associates No. 1 with the same early fourteenth century ceramic phase.

9 (P 27453). Pls. 22, a; 23, a. Low one-handled cup from under the coffin of Burial D and from the dromos.

H. 0.04 m., d. with handle 0.135 m. Two sherds from dromos, three from chamber; missing half of rim, handle, three-fourths of bowl. Red-buff clay with lumps and grit, unsmoothed wheel-marks inside bowl, buff slip, orange-red glaze-paint.

Same type as No. 7 but more coarsely made, bowl lower, foot broader and lower; raised button at bottom interior of bowl.

Edge of rim and foot painted solid; broad band above two fine lines over foot; bowl painted with coarse mottled or stippled pattern.

Furumark MP Type 219, LH I B to LH III A:1; Motive 77 no. 2, LH II B to LH III A:2; base decoration places it in LH III A:1.

10 (P 27454). Pls. 22, a; 23, d. Small three-handled jar under coffin and left leg of Burial D.

H. 0.128 m., d. 0.115 m. Complete except for chips from rim, one handle broken. Buff clay with grit and pockmarks, good pale buff slip, streaky orange-brown glaze-paint.

Pear-shaped body, slender flaring stem, flat base, three rolled angled handles on shoulder, low flaring neck, flat lip spreading downward; slight plastic ridge at junction of shoulder and neck.

Lower body and foot painted solid with stripe

above; broad band between stripes below handles; band and two stripes below solid-painted neck; rim striped on outer edge; inside of neck painted solid; handles painted solid, with a single long-stemmed spiral between each pair on shoulder.

Furumark *MP* Type 28, LH II B to LH III A:1, Motive 49 no. 4, LH III A:1.

This relatively common form of vase usually has two stemmed spirals in each handle zone and is larger.

11 (P 27456). Pls. 22, a; 23, e. Deep krater with vertical strap handles, under coffin, legs and pelvis of Burial D.

Restored h. 0.26 m., d. at rim ca. 0.26 m., at base 0.11 m. Found in three major sections, mended from eleven pieces, about one-sixth of body and one handle missing. Extremely coarse pale buff clay, pocked and full of grit, dirty green-buff slip, worn green-black paint, faded and crackled, almost worn away except on rim and handle.

Deep lopsided pear-shaped bowl, raised ring base with flat sides and concave moulding, flat vertical handles from rim to below decorated zone, thin rim turned out at 90°; the bowl and foot in a single curve. The krater seems to have been knocked crooked while still soft, before or during firing.

Rim painted solid; handles edged with vertical bands and crossed by diagonal bars; thin stripes framing top and sides of decorated zone on upper bowl; three bands below zone and two (?) above solid-painted foot. Simple pendant scale pattern in zone between handles.

Furumark *MP* Type 6, LH III A:1; Motive 70, LH II A to LH III B.

See remarks under No. 3 above for the rarity of such early krater forms in Greece. No. 11 is nearly identical with No. 3 in form, but considerably coarser in fabric and duller in design. A finer though fragmentary example of contemporary net pattern on a similar krater, H. Schliemann, *Tiryns*, London, 1886, pp. 123 f., pl. xxvii a.

12 (P 27457). Pls. 22, a; 23, f. Kylix from under coffin and right leg of Burial D.

H. 0.135 m., d. ca. 0.10 m. with handle, 0.165 m. restored with two handles. Red-buff clay with grit and pockmarks, medium buff slip, undecorated.

Conical-rounded bowl, finely profiled outturned rim, thin flat handle(s) curving from rim to base of bowl, slender stem slightly concave in profile, flat foot with straight edges and high conical hollow underneath.

Furumark *MP* Type 260, LH II to LH III A:1, or Type 264, LH III A:1 to LH III A:2.

The kylix must have been knocked over before firing, and is extremely crooked.

B. FINDS FROM THE DROMOS

13 (P 27458). Pls. 22, a; 24, e. Fragmentary kylix from in front of door.

Preserved h. 0.09 m., d. at rim 0.11, with handle 0.135 m. Mended from many pieces, foot, stem, and parts of bowl missing. Red-buff clay, no slip, undecorated.

Conical bowl, concave lip, slightly out-turned rim, single flat handle rising in loop slightly above rim.

Probably Furumark MP Type 267, LH III A:1 to LH III B.

14 (ST 734). Pl. 24, e, f. Conical gray steatite bead or button from in front of door.

H. 0.013 m., d. at base 0.02 m. Gray-black steatite with white stains, speckled with brown. Burned? Vertical string hole. Split and cracked, chips at bottom edge, coarse vertical striations; not a true cone.

15 (A 3521). Pl. 24, d. Conglomerate grave marker from upper packing of doorway.

Max. h. after mending 0.55 m., max. w. 0.55 m., thickness 0.08 to 0.15 m. In two joining pieces stacked one above the other in the packing, one piece splitting in situ. A rough trapezoid of river conglomerate, not a common stone in the Agora, containing deposits of glass, sand,

pebbles. Edges and face worked; rough, worn and chipped, perhaps incomplete.

Grave markers of many materials may have been used in large Mycenaean cemeteries to identify the family vault, close set in a row of others, for successive openings. Perhaps wooden poles or cairns or other perishable markers were employed; comparatively few stone markers have been found on or in mainland chamber tombs later than the period of the Shaft Graves at Mycenae. The Painted Stele at Mycenae was re-used as building material like this one (Chr. Tsountas, 'E ϕ . 'A $\rho\chi$., 1896, pl. 1; cf. 1888, p. 127, fig. 4; Chr. Tsountas and J. Manatt, The Mycenaean Age, p. 152), that from Dramesi (C. W. Blegen, Hesperia, Suppl. VIII, 1949, pp. 39 ff.) also broken and one part carved with ships now smashed up for building stone in a modern house as in Mycenaean times; the cippi tombali of Ialysos in Rhodes were not visible outside the dromos (A. Maiuri, Annuario, VI-VII, 1926, p. 208). The example here is clearly a worked stone of stele-character, the first recorded grave marker in the Agora.

16 (ST 740). Pl. 24, f. Amygdaloid amber bead from left wrist of skeleton D.

L. 0.025 m., d. 0.017 m. Pierced longitudinally, broken at one end, condition fair.

17 (J 141). Pl. 24, f; Fig. 4. Amygdaloid engraved carnelian sealstone from left wrist of skeleton D.



Fig. 4. No. 17.

L. 0.025 m., d. 0.018 m. Pierced longitudinally, front broken through at center to stringhole, back bevelled in broad facets, chips on front top edge.

The carving represents a bird with double tail, probably an eagle, rising vertically in rear view with head turned left (right). No enclosing outline, sketchy style with bunched parallel incisions.

The stone is interesting in its closed context for showing that this sketchy linear style was already prevalent in the early fourteenth century. It is also common in the Warrior Graves at Knossos. The LH III A:1 pottery with Burial D must be almost precisely contemporary with the gem, nothing in use long before the burial; the breakage of the stone probably happened when it was carved. It thus matches the vases as irregular, damaged goods suitable for the dead.

Two mainland and three Cretan seals have similar designs: 1) a glass amygdaloid, Mycenae Tomb 516 (N. M. 6536, Wace, CT, p. 66 fig. 28, Sakellariou, CMS, I, no. 146), found in a pit with LH I pottery; the feather-lines rounded instead of simply slashed; 2) an ivory lentoid from Thebes Tomb 10 (N.M. 5645, A. Keramopoullos, 'A $\rho\chi$. 'E ϕ ., 1910, p. 219 fig. 14, A. Sakellariou, CMS, I, no. 406), with horizontal squared-off wings in more tubular style: 3) Knossos, amygdaloid limestone (St. Xanthousides, 'E ϕ . 'A $\rho\chi$., 1907, pl. 8 no. 156); 4) unknown provenance, Berlin (Bossert, Alt Kreta, p. 241 g); 5) steatite lentoid, unknown provenance, Athens (Sakellariou, CMS, I, no. 468).

18 (BI 792). Rectangular scrap of ivory from floor south of Burial C. No context.

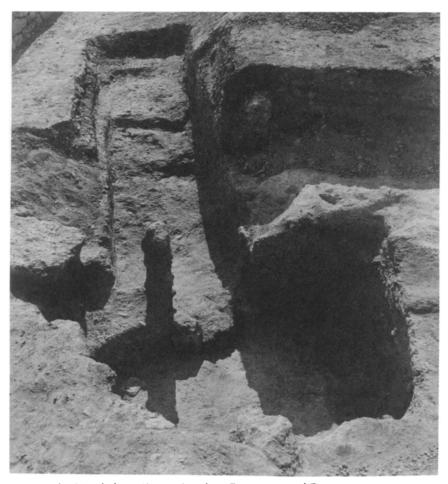
L. 0.018 m., w. 0.003 m. Burned? Stained and blackened. Perhaps from a belt or weapon of one of the funeral party.

EMILY VERMEULE JOHN TRAVLOS

Wellesley College Agora Excavations, Athens

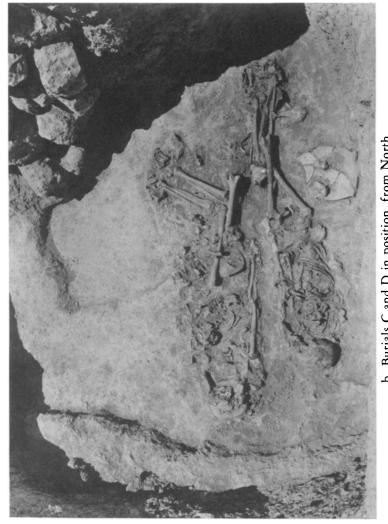


a. Mycenaean Chamber Tomb from Southwest: Dromos and Doorway.



b. Tomb from East: Chamber, Doorway, and Dromos Steps.

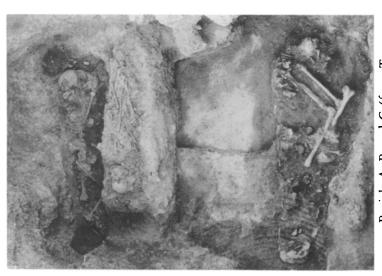
Emily T. Vermeule and John Travlos: Mycenaean Tomb Beneath the Middle Stoa



b. Burials C and D in position, from North.

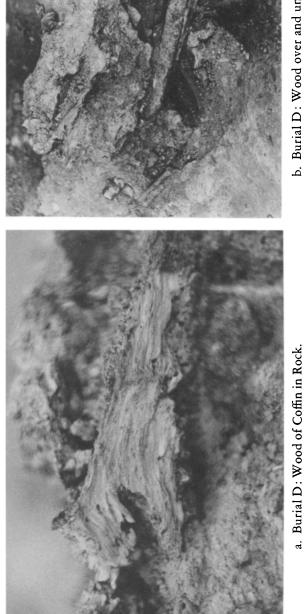


d. Spearhead No. 5 in place on Top of Coffin, Burial D.



a. Burials A, B, and C (from Top to Bottom), from North

EMILY T. VERMEULE AND JOHN TRAVLOS: MYCENAEAN TOMB BENEATH THE MIDDLE STOA c. Skull of Burial A.



b. Burial D: Wood over and under Legs, above Vases 8-12.

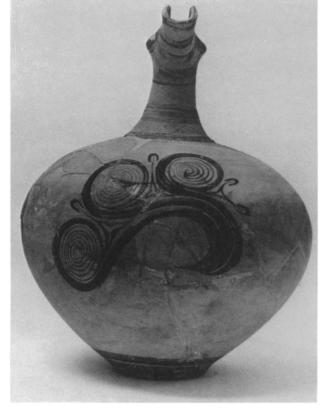


EMILY T. VERMEULE AND JOHN TRAVLOS: MYCENAEAN TOMB BENEATH THE MIDDLE STOA c. Skeleton D and Right Side of Skeleton C in Position with Wooden Planks, from South.



a. Group of Vases.





b. No. 3 c. No. 6

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b. No. 7



c. No. 2



d. No. 10



e. No. 11



f. No. 12

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PLATE 24



a. No. 1

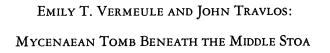




c. Spearhead No. 5



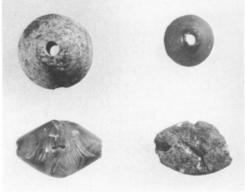
d. Stele No. 15





b. No. 8

e. Nos. 14 and 13



f. Nos. 14, 4 17, 16