

# A Neolithic Fortress and Funeral Center

*Excavations at Hambleton Hill in southwestern England reveal that in about 3600 B.C. elaborate funeral rites began to be carried out there. As the funeral center decayed, a huge fortress was built*

by R. J. Mercer

**H**ambleton Hill is a landmark of striking proportions that sits astride the valley carved by the Stour River through the chalklands of southwestern England. A Neolithic herdsman who looked up to the hilltop in about 3400 B.C. would have seen an impressive sight. Crowning Hambleton Hill was a huge defensive enclosure with three concentric ramparts. The inner rampart, the most formidable of the three, was supported by 10,000 oak beams as thick as telephone poles. In the ditch around the ramparts human skulls placed at intervals added an eerie note to the appearance of the fortifications.

The Neolithic complex at Hambleton Hill had not always been intended for defense. The impressive fort was the final step in a process of modification and expansion at the site that began in about 3600 B.C. and may have lasted for several hundred years. From an archaeological point of view what is even more arresting than the fortifications is the possibility that in its early phases Hambleton Hill served as a center for elaborate funeral rituals. It appears that when a member of one of the communities near the hill died, the body was exposed to the elements in a special area. In some instances the body may have been accompanied by offerings of precious objects. After the flesh had fallen off the bones, some corpses may have been selected for burial in another place with further ceremonies.

The Hambleton Hill site is a great outcrop of chalk that dominates an area of rich pastureland. A large Stone Age necropolis and later a fortress once crowned the hill. Little of the Neolithic monuments can be seen in the photograph. (The striking earthworks on the northern spur of the hill [bottom] are from a later Iron Age fort built over part of the Neolithic fortifications.) Most of the remains relating to Neolithic funeral rites were found at the center of the hill and on the Stepleton spur (top left). The Neolithic fortifications protected the entire hilltop; they were particularly strong on the southern and western slopes (upper right).

ble enough economic base to build permanent settlements; few traces of the earliest agricultural communities have been found. Within a few hundred years, however, the economic stability provided by agriculture enabled some members of the community to turn to activities other than farming or tending their herds. The fortifications and funeral rituals at Hambleton Hill were products of the energies liberated from subsistence activities by the development of agriculture. Hambleton Hill is one of the largest Neolithic sites excavated in Europe so far and it is one of the few known Neolithic sites where funeral rituals were highly developed. As such the site is helping to provide a novel picture of life during the New Stone Age in Britain.

**H**ow has the picture of life and ritual at Hambleton Hill been assembled? The Hambleton Hill Excavation and Field Survey Project, which lasted from 1974 to 1982, was an emergency effort to rescue Stone Age artifacts from the encroachment of modern agriculture. It had long been known that there were Neolithic artifacts on Hambleton Hill. As early as 1913 Heywood Sumner, a British architect and antiquarian, had detected the remains and drawn up one of the first site plans of a Neolithic enclosure to be published in Britain.

A brief exploratory survey in 1959 by Desmond Bonney of the Royal Commission for Historical Monuments showed that other Neolithic earthworks existed on the hill and suggested the complex might repay full-scale excavation. In the early 1960's plowing of the sheep pasture on the site was begun and continued plowing would have destroyed the evidence needed to understand the huge monument. Therefore in 1974 an excavation was undertaken that ultimately covered 60,000 square meters.

The field project revealed the remains of several related Neolithic structures on the hill [see illustration on page 97]. Most of the artifacts connected with funeral rites were found in a large enclosure (the main causewayed enclosure) at the center of the hill. Two long barrows, low mounds that may have had a ceremonial function, faced each other across the main enclosure, one to the south and one to the north. A smaller enclosure (the Stepleton enclosure) occupied the tip of the southeastern spur of the hill. The Stepleton enclosure was probably a domestic area for at least part of the time it was used in the Neolithic period.

The defensive fortifications that circled the hilltop were strongest on the southern and western slopes of the hill, between the Stepleton enclosure and the main enclosure. It is possible that there was a third enclosure in a strate-

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gic position for defense on the northern spur of the hill, but it lies under a much later hill fort from the Iron Age and has not yet been excavated. Although the defensive structures and the funeral monuments lie close together, they were probably not strictly contemporaneous; unraveling the chronology of the phases of construction at the site was one of the greatest challenges of the field project.

In addition to Hambledon Hill's strategic location, several economic factors undoubtedly influenced the choice of the imposing hilltop as a site for building. The hill dominates an area well supplied with two resources that were critical in the early Neolithic period: grazing land and flint. The rich pastureland at the foot of the hill includes the Vale of Blackmore to the west and the skirts of the chalk uplands of Cranborne Chase to the east. The

chalklands are rich in flint and the hunting weapons and axes of prehistoric hunters abound there.

As a fertile region where prehistoric hunters were already concentrated, the area around Hambledon Hill was a natural site for the early development of agriculture. The process of development may have been spurred by the arrival of immigrants from the European continent with new techniques and materials, but this part of the Neolithic period in Britain is not well understood. In any event, by about 4000 B.C. the transition to an agricultural economy was under way.

In the transition from hunting-and-gathering groups to stable agricultural communities a new type of architectural structure—the walled enclosure—had a significant role. Walled enclosures served as means of control-

ling resources, delimiting areas where specialized activities (such as toolmaking) were carried out and defending a community from attack. About 60 Neolithic enclosures are known in southern England, ranging in size from one hectare to 70 hectares. (A hectare is about 2.5 acres.) A ditch generally ran around the outer circumference of the wall of the enclosure. The overall design varied from a simple enclosure with one ditch to sites with up to five concentric rings of ditches.

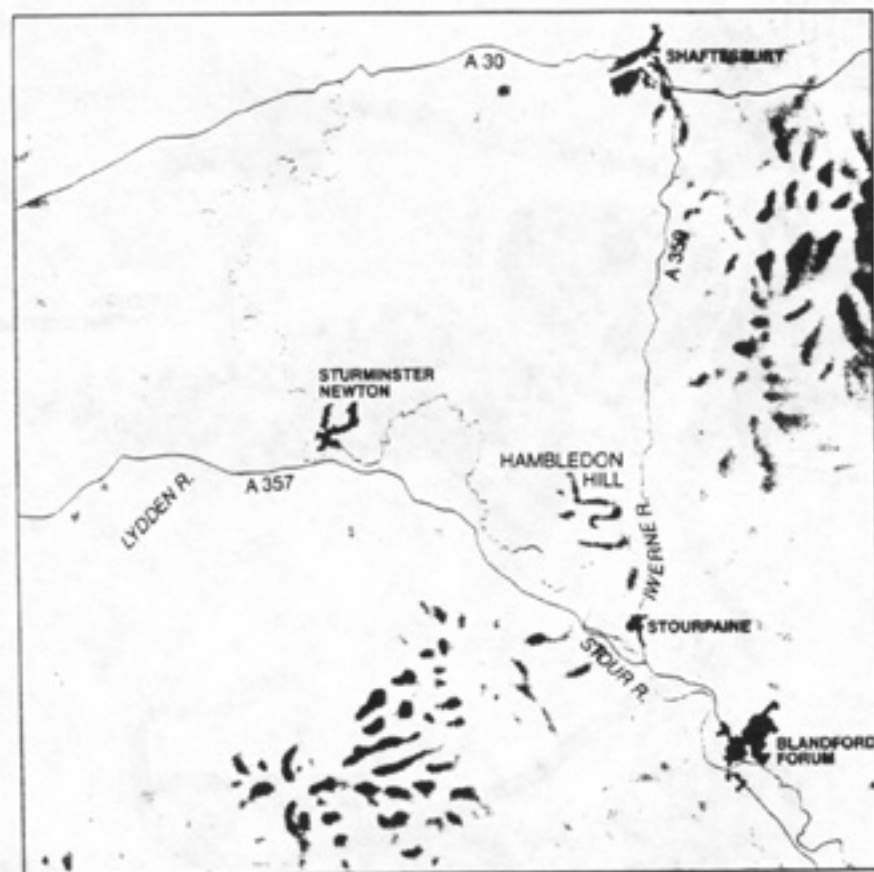
Regardless of the complexity of their design, almost all Neolithic enclosures shared one construction feature: the ditches around the enclosure were not continuous. Instead the ditches were interrupted at irregular intervals by causeways perpendicular to the long axis of the circular depression. The presence of the causeway suggests that the ditches were not conceived as defensive barriers in their own right but as quarries for the construction of the internal bank or rampart. In some instances the bank survives, although it is generally much reduced by erosion. The construction material and style of the bank probably depended on the available resources and the function of the enclosure.

At Hambledon Hill the main causeway enclosure, set in the center of the hill, formed one of the primary focuses of the field work. Since so little was known about Hambledon Hill in 1974 when the Excavation and Field Survey Project began, the preliminary digging strategy was a simple one. About 20 percent of the interior of the main enclosure was excavated to determine what the enclosure had been used for in Neolithic times.

Roughly the same proportion of the enclosing ditch was also excavated. The work in the ditch provided additional information about the function of the site. The excavation of the ditch enabled the field-work team to set up a chronology of the phases of use of this part of the Hambledon Hill complex. The chronology was based on radiocarbon dating and a careful reconstruction of the strata that accumulated in the ditch after it was first dug.

The initial digging revealed that the subsoil of Hambledon Hill had been extensively damaged by erosion and agriculture. It soon became apparent that the hill had been plowed during the late Stone Age, the Bronze Age and the Iron Age as well as in Roman and medieval times. The millenniums of plowing had removed between 70 centimeters and one meter of the topsoil.

The removal of so much soil posed a major archaeological difficulty because with the soil were torn away



**STRATEGIC SETTING** of Hambledon Hill made it a natural place for an early Neolithic community to build. The hill commands the corridor cut by the Stour River through the chalklands of southwestern England. It dominates the rich grazing lands in the Vale of Blackmore to the west. In about 4000 B.C., at the beginning of the Neolithic period, population may have been concentrated in the area, drawn by the availability of two key resources: pastureland and flint for making stone tools. The Neolithic fortress on the hilltop would have been visible for miles around to the members of the communities living in the lowlands at the foot of the hill.

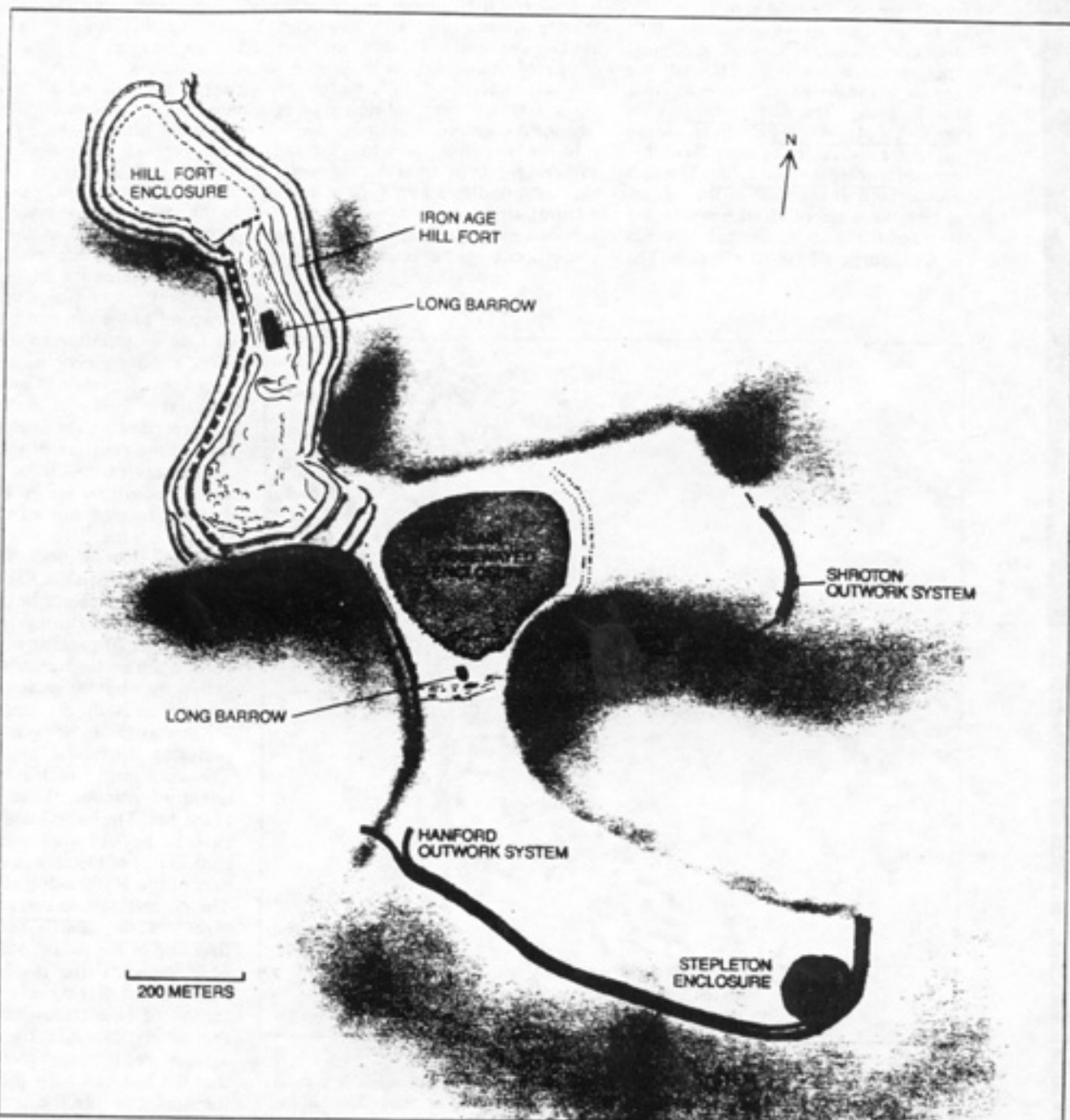


most of the postholes from the foundations of buildings and other wood structures. Hence little can be said about the dwellings and other structures that might have stood on Hambledon Hill. That is a considerable loss. Many of the pits in the main enclosure, however, were deep enough

for their bottom parts to have survived the plowing, and these pits yielded much fascinating detail about ritual practices in Neolithic times.

It was clear that in many instances the pits had been dug and left open to allow a sediment of naturally eroded chalk to be deposited in the bottom.

Only when this had happened were carefully chosen objects deposited in the hole. The assemblages of objects, which include pottery, stone axes and red-deer antler, appear to have been ritual offerings that may have accompanied corpses laid out in the enclosure.



**SITE PLAN** shows how Hambledon Hill was developed. In its early phase (*orange*) the site was a center for funeral rituals. The main causewayed enclosure at the center of the hill was where the bodies were first laid out. After the flesh had fallen off the bones some bodies may have been buried in a pair of long barrows positioned north and south of the main enclosure. The Stepleton enclosure may have been a dwelling place for a small, privileged group of people

who conducted the funeral rituals. As the funeral center fell into disuse the Neolithic community transformed the site into a fortress. A rampart was built on the southern and western slopes and the Shroton spur (*green*). A third enclosure, on the northern spur under the Iron Age fort, may have been the command center of the fortress. Later two additional ramparts (*purple*) reinforced the main one along the southern slope, which is gentle and hence vulnerable.

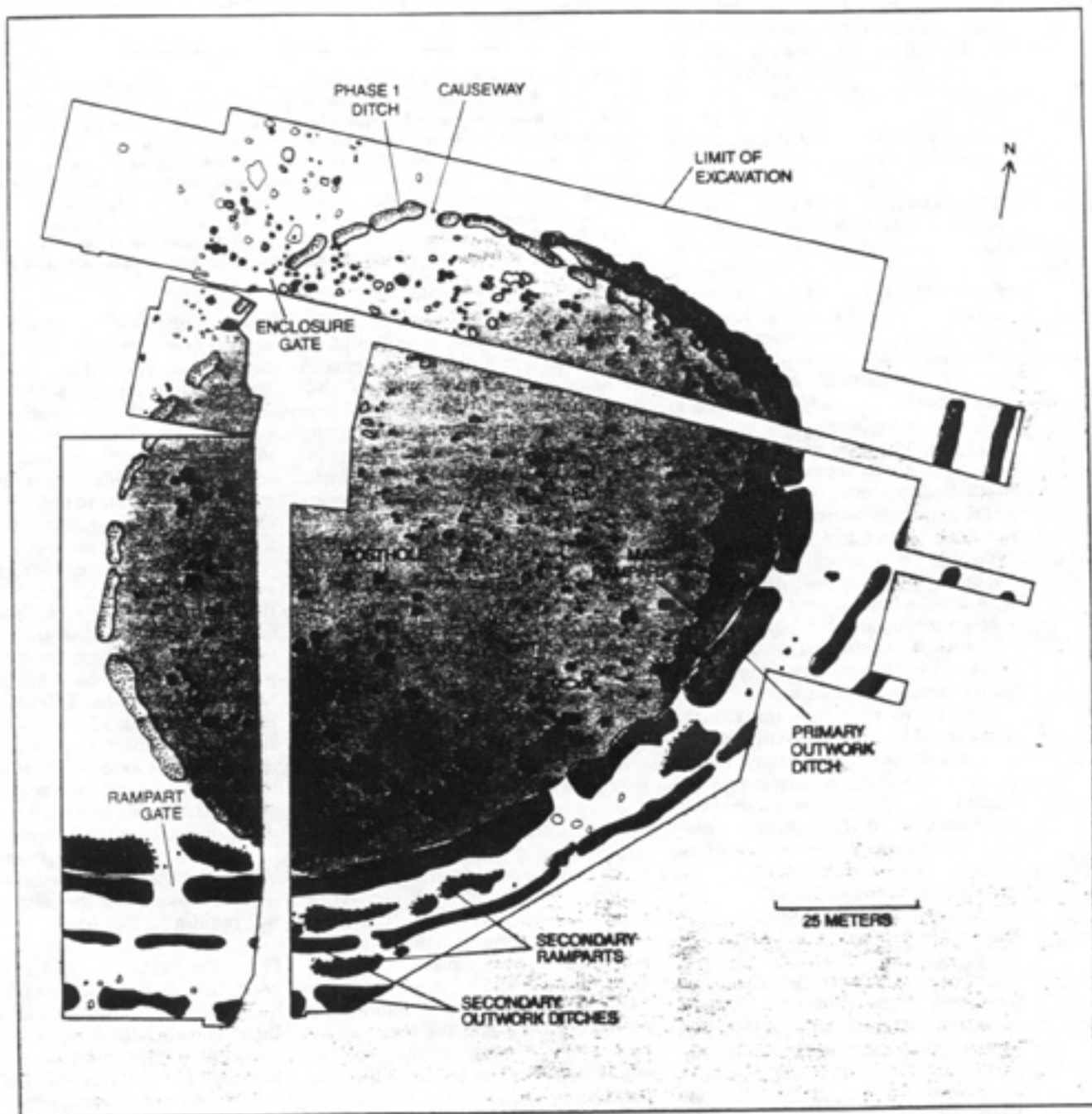
The objects in these assemblages undoubtedly had a high prestige value for the members of the Neolithic community. Fragments of pottery recovered from the pits are apparently the remnants of complete vessels. Compared with shards from other parts of the site, the pottery includes a high proportion of wares imported from distant regions such as Cornwall and Devon. Some of the vessels are quite large and were made with a skill that

prompted imitations (only partially successful) in local materials.

Among other imported items found in the pits are stone axes. Analysis of the stone shows that the axes came from Cornwall, southern Wales and Borrowdale in Cumberland. The value of these funeral deposits to the Neolithic inhabitants is suggested by the fact the axes were desirable enough to justify importation over what were then vast distances: 400 kilometers in

the case of Borrowdale. Even more striking was the retrieval of two axes, one of nephrite and one of jadeite, that do not come from Britain at all but probably come from Brittany or perhaps even farther afield.

The items found in the main enclosure thus carry the suggestion of ritual practices. The excavation of the ditch around the main enclosure has helped to confirm that rituals were carried out and has also provided information



STEPLETON ENCLOSURE was probably a domestic area (orange), as indicated by the refuse found there. The digging of the Phase 1 ditch furnished material for a bank of which little remains. The gate at the upper left was the entrance to the enclosure. Postholes within the enclosure may have been foundations for dwellings;

pits contained the remains of feasting and flintworking. After the original bank collapsed, fortifications were built over part of the enclosure. The primary outwork ditch yielded material for the main rampart (green), which was entered by the gate at lower left. Secondary ditches yielded material for two smaller ramparts (purple).

about what kind of rituals they were. The ditch was originally dug to furnish material for the rampart around the enclosure. The remains of the rampart are flimsy, to say the least. What evidence there is suggests that the rampart was a timber-framed case into which a mass of chalk from the ditch was packed to produce an impressive but ultimately unstable barrier.

After the rampart was erected a pastelike silt accumulated at the bottom of the ditch as material washed down the sides of the depression. At many points on the circumference of the ditch the accumulated silt appears to have been carefully cut out of the bottom of the ditch. The paste that had been gathered in this way was probably employed to maintain and repair the rampart.

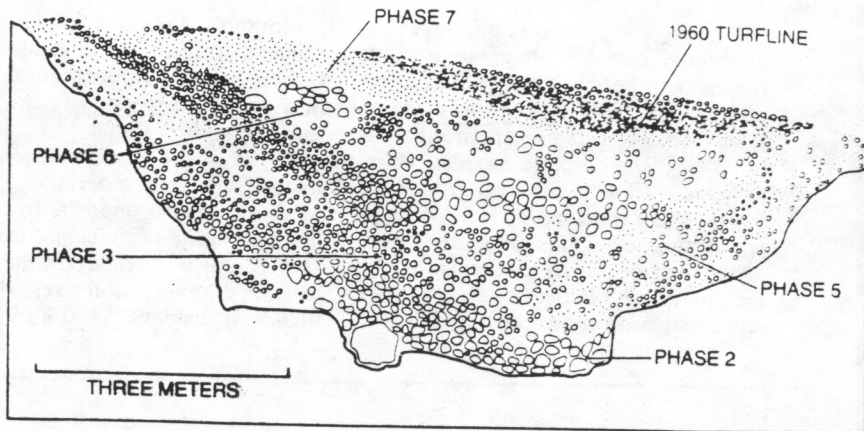
The extraction of the primary silt by the builders deprived us of archaeological information about the initial use of the enclosure. After the removal of the silt, however, an assemblage of objects that appear to have a ritual character were placed on the ditch floor. The deposits, which were probably offerings of some kind and which might originally have been in leather bags, include human bone, animal bone, flint tools and pottery.

In addition to these items, objects more clearly connected with the disposal of human bodies were placed in the ditch. A series of skulls were laid right side up at irregular intervals on the ditch floor. A considerable quantity of broken human bone is also interspersed throughout the bottom layers of the ditch. Among the mass of bone two child burials survive intact under neatly constructed flint cairns.

Perhaps more significant are the trunk and thighs of a youth of about 15 whose body had clearly been lying exposed in the ditch in a relatively advanced state of decay. When the body had begun to fall apart, parts of it may have been dragged to the bottom of the ditch by dogs or other predators that gnawed the bones extensively.

The suggestion that bodies were intentionally exposed in or around the main enclosure at Hambledon Hill could help to answer two significant questions about Neolithic funeral practices. The excavation of long barrows at other sites has shown the barrows were the final resting place for skeletons or parts of skeletons that had been allowed to weather elsewhere. Where had the bones in the long barrows been exposed to the elements?

Furthermore, there is a puzzling imbalance in the bones retrieved from the barrows. In general the skeletons or



**CROSS SECTION** through the ditch around the main enclosure shows strata that helped to establish the chronology of Neolithic events at the site. Phase 1 was the cutting of the ditch itself, hence no Phase 1 remains appear in the ditch. The chalk removed from the ditch was used to build the wall of the enclosure. Phase 2 deposits included human bone and what appear to be ritual offerings of red-deer antler, stone implements and pottery. The Phase 3 layer consists of the wall of the enclosure, which collapsed into the ditch as the main enclosure ceased to be used. The Phase 5 layer reflects the ritual recutting of the ditch and the deposit of additional offerings. In Phase 6 a flint cairn was built over the original ditch. Phase 7 is a post-Neolithic accumulation of cultivation soil. (Phase 4 deposits, which resemble those of Phase 5, were not present at the point where this cross section was made.)

partial skeletons include the remains of relatively few women and children; preference was given to the remains of adult males. The absence of children's bones is particularly striking in view of the very high mortality rate that undoubtedly prevailed among infants and children in prehistoric times. What happened to the bones of women and children?

A reasonable hypothesis suggested by our findings is that the bodies of the community members were laid out in exposure centers such as the main enclosure at Hambledon Hill. After the flesh had fallen off the bones, a few skeletons may have been selected for burial in long barrows. If the hypothesis is correct, then exposure centers such as the Hambledon Hill main enclosure formed part of a ritual process that included the long barrows.

Some support for this hypothesis comes from the fact that 60 percent of the great quantity of bone found at the Hambledon Hill main enclosure is from young children. Moreover, it would appear that bone from male corpses and from female corpses is present in roughly equal proportions. Thus all members of the community or of a subgroup of the community are represented. To link the main enclosure more directly to the barrows would require evidence from the long barrows on the site.

Such direct evidence is not yet available from Hambledon Hill. The southern barrow, 20 meters long, was bulldozed during pasture improvement in the 1960's. The bulldozer obliterated the mound of the barrow, destroying

much of the evidence that would be needed to test the hypothesis. Similarities between the artifacts found in the barrow ditch and the artifacts found in the ditch of the main enclosure suggest the two monuments were linked in the minds of the builders. The loss of the barrow's mound, however, makes it impossible to link the corpses exposed in the main enclosure with those buried in the barrow.

The mound of the northern barrow, which is 66 meters long, is intact, but the barrow has not yet been excavated. The reason is that the northern barrow lies in a protected position within the later Iron Age hill fort. Since the Hambledon Hill project was in a sense a rescue effort, work was focused on the most vulnerable monuments and the excavation of the protected northern barrow was not undertaken. Although the material found in the main enclosure at Hambledon Hill is suggestive, a final answer to the question of the connection between the main enclosure and the long barrows will require further work.

The final major component of the hilltop funeral complex was the Stepleton enclosure. Much smaller than the main enclosure, the Stepleton enclosure was recognized as a Neolithic structure by means of field walking, ground survey and aerial photography. It is probable that in the early phases of building at Hambledon Hill the Stepleton enclosure was a small, simple structure with an entrance facing uphill toward the main enclosure.

Postholes found in the Stepleton

enclosure show that buildings stood there. The evidence is too sketchy to reconstruct the buildings but material found near the enclosure suggests the structures were dwellings. For example, the oldest deposits in the ditch around the enclosure contain little human bone (and no skulls). The deposits do, however, include large quantities of debris from the working of flint and red-deer antler, which were typical Neolithic domestic pursuits.

The enclosure was more than just a place of work: animal bones found in and around the Stepleton enclosure indicate that a good deal of feasting went on there. The state of the bones shows that much meat was wasted and there is little evidence that bones were smashed to yield humble soups or stews. Whoever lived at Stepleton liked the choicest kind of Neolithic food—roast meat on the bone—and did not hesitate to throw away the less desirable cuts. The pattern of consumption detected in and around the

enclosure suggests that a small and relatively privileged group may have lived at Stepleton. It is tempting to speculate that this group presided over the elaborate funeral rituals that may have linked the main enclosure with the twin long barrows.

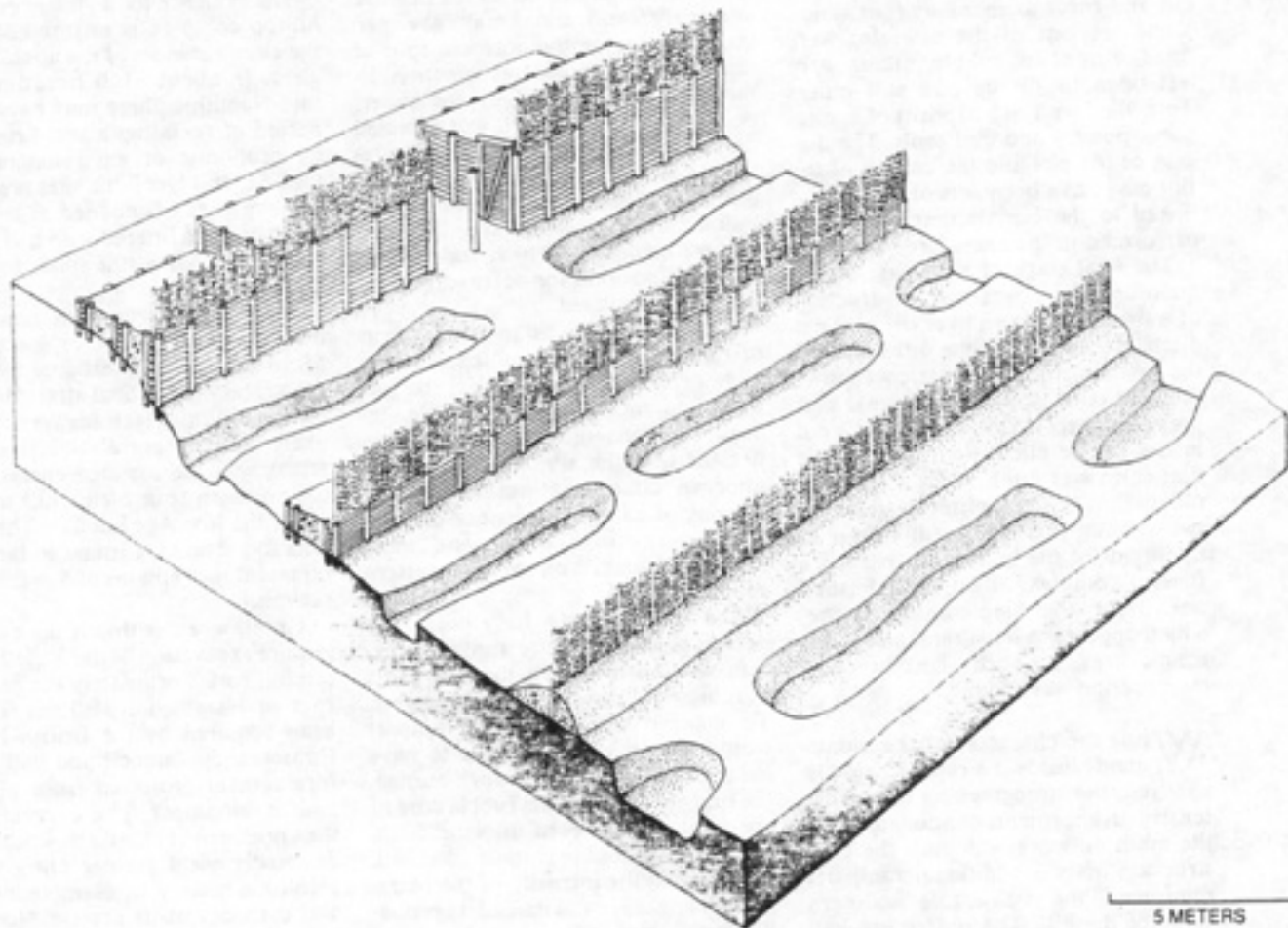
While Hambledon Hill was still at its height as a funeral center a period of modification began that probably lasted for 200 or 300 years. The cumulative effect of the modifications was to turn Hambledon Hill into a great fortress. The transformation was a gradual one, and acts of veneration of the dead were apparently carried out for a long time in the main enclosure.

The first defensive modification was probably undertaken after the main enclosure, the Stepleton enclosure and the barrows had fallen into some disrepair. A major earthwork was constructed along the southern part of the hill. The earthwork, a causewayed ditch backed by a timber-

framed rampart, may have enclosed all the vulnerable points of approach to the entire summit of the hill, an area of about 60 hectares.

Little is known of the first system of earthworks enclosing the site because they were destroyed soon after being built during the reconstruction and strengthening of the defenses. The ditch segments were deepened and an enlarged timbered rampart was built over the remains of its earlier counterpart. The second outwork also protected the entire 60-hectare hilltop.

Like its predecessor, the enlarged rampart had a timber-framed "box" type of construction. Vertical supports in the form of oak beams as thick as telephone poles were placed about a meter apart along the front and back faces of the wall. To provide stability the upright supports were probably braced by horizontal beams passing through the rampart itself. Overall some 10,000 huge oak beams may have been employed in constructing



**THREE RAMPARTS** flanked the southern side of Hambledon Hill when the hilltop was at its height as a fortress. The main, inner rampart was a mass of chalk packed into a "box" frame. The frame was built of 10,000 oak beams with the diameter of telephone poles. At each entry point two gates swung shut onto a huge central oak

post. The screening above the ramparts consisted of interwoven saplings. The second rampart also had an oak frame; the third rampart was simply a chalk mound. The ditches were interrupted by banks, or causeways, suggesting that they were not defensive barriers but merely served to provide construction material for the ramparts.

the timber frame. A project of such magnitude must have made great demands on the capacity of an early agricultural community to deploy its labor resources.

While the hilltop was being transformed into a fortress the funeral center apparently began to be neglected.

At some point the ramparts of the main enclosure and the Stepleton enclosure collapsed into their respective ditches and the smaller of the long barrows tumbled into its ditch.

In spite of their dilapidation the main enclosure and the barrows apparently retained some of the original ritual function. Examination of the strata in the ditch of the main enclosure showed that after the rampart around the enclosure collapsed, pits were dug in the chalk rubble that filled the ditch. The pits, filled with ash, pottery, human bone and animal bone, were in some instances deep enough to penetrate to the bottom of the original ditch.

Later a narrow slot was cut around the circumference of the old ditch. In some parts of the ditch the slot was cut and recut as many as four times. Some sections of the new slot were filled with chalk rubble, others were left open to silt up and still others were filled with rich deposits of animal bone, pottery and flint tools. The digging of the pits and the cutting of the slot may have been acts of veneration linked to the burials that were once performed in the enclosure.

The final stage of ritual use of the main enclosure was the construction of a linear flint cairn over the original ditch. Excavation of the ditch around the smaller of the long barrows shows that the same sequence of ritual acts prevailed there: a slot was carefully cut in the rubble-filled ditch and later a flint cairn was built on the site of the old ditch. The parallelism suggests the two monuments were still linked in the minds of the builders as part of a funeral complex, albeit a diminished one. Near the Stepleton enclosure, which appears to have remained a domestic area, no such signs of commemoration were found.

While the character of the monuments inside the rampart slowly changed, the strengthening of the defensive arrangements continued. After the main outwork was built the construction of two additional ramparts reinforced the vulnerable southern slope of the hill. The outermost wall consisted of earth unsupported by timber; the middle rampart had a timber "box" like that of the inner wall.

Community members entered the

hilltop fortress through three great timber-lined gateways. One entrance was next to the Stepleton enclosure; the second was on the Hanford spur of the hill between the Stepleton enclosure and the main enclosure; the third was on the eastern spur of the hill. Each entry point consisted of two gates flanking a large central post. A roadway 2.5 meters wide passed through the entryway, which tapered slightly toward the interior of the rampart and was lined with massive oak posts.

When the outer ramparts were finished, Hambledon Hill must have been an impressive site. It would have been visible for miles from the flat pastureland to the west in the Vale of Blackmore, where the community's herds grazed. The southern and western sides of the hill were rimmed by a timber-framed rampart 2,500 meters long. On the steep western flank a terrace had been excavated to provide a stable base for the rampart. On the southern flank a multiditch outwork system 1,200 meters long provided an imposing defensive obstacle.

The command center of the massive and grisly fortifications may have been the enclosure on the northern spur of the hill. This enclosure, which is almost totally obscured by the superposed Iron Age hill fort, was detected during the excavation by a combination of aerial photography and assiduous field walking on the part of Roger Palmer, the project surveyor. The 4.5-hectare enclosure, which is set in an excellent position for defense, has not yet been excavated.

The completion of the three rings of ramparts made Hambledon Hill a huge defensive structure. Yet the fortress was far from impregnable. Indeed, the archaeological record makes it clear that the site was abandoned after an attack that resulted in the burning of a large segment of the timbered outwork. The segment, some 200 meters long, is on the southeastern spur of the hill.

The fire can hardly have been accidental, since the entire timber structure was on fire, with the oak posts burning right down into their sockets. To achieve this effect the rampart would almost certainly have to have been torched. As the outwork burned, the timbers and then the rubble core of the rampart collapsed into the ditch. Much of the rubble is itself scorched, testifying to the intensity of the blaze.

Both attackers and defenders probably took losses in the struggle around the flaming outwork. The intact skeletons of two young males were found in the rubble and the condition of the skeletons makes it clear that they were

quickly buried. One of the two was probably carrying an infant, which he crushed under him when he fell. The bearer of the infant was apparently killed by a finely worked leaf-shaped arrowhead that penetrated the thoracic cavity from the back.

Another young male, abandoned dead on the lip of the outwork ditch, was not covered by the falling debris. The condition of the bones indicates that his body was soon discovered by predators of all kinds. A fourth skeleton, found in the upper fill of the Stepleton enclosure ditch, may have been dragged there and dismembered by dogs or wolves.

Some of the victims of the attack were interred with more ceremony. On the north side of the Stepleton enclosure are two deliberate burials that can be linked to the conflagration. One body, that of a young male, was carefully laid in a pit that was then filled with heavily scorched chalk; the only known source of such chalk is the rampart destroyed in the attack.

The evidence for a violent end to the hilltop complex is unambiguous, but the circumstances of the attack are not clear. In about 3300 B.C., during the mid-Neolithic, there may have been a period of social upheaval brought on by economic or environmental factors. Several Neolithic sites are known to have been abandoned at this time, some of them littered with leaf-shaped arrowheads like the one found at Hambledon Hill.

Such general questions remain for the moment a matter of speculation. More particular questions, including the strategy of the final attack on Hambledon Hill, also lack answers. It seems likely that the central objective of the attack was the fortified enclosure on the northern spur of the hill that lies under the Iron Age hill fort. The skeletons and scorching found so far might represent the remains of a preliminary skirmish.

To tell whether that is the case will require excavation of the buried northern hill fort. Fortunately the northern spur of Hambledon Hill has recently been acquired by the British Nature Conservancy Council and will therefore remain protected from plowing and development. The excavation of the northern enclosure would undoubtedly yield further clues to the Neolithic history of Hambledon Hill and the story of its demise. Nonetheless, the work that has already been done at Hambledon Hill is giving an intriguing picture of the energy and imagination of the descendants of Britain's first agriculturists.