

higher up, and has now been completely washed away by the rain-water which came down the channel from the plateau west of the Second Pyramid. While the causeway and the corridor still stood, this water must have passed down the northern side of the corridor and the temple to the cultivated land in the valley. Any obstruction north of the temple would dam the water up in this angle between the temple and the causeway corridor.

It is further to be noted that the exterior corridor had been closed by a thin wall of crude brick, one brick thick, where it entered the causeway corridor. The purpose of this wall is difficult to perceive. The corridor on one side of the block must have been abandoned, while on the other, it was still in use. The block belongs therefore to a time when the complete decay of the valley temple was approaching.

(7) *The Decay of the First Crude-Brick Temple*

The permanency of a crude-brick building is affected by:

- (a) The soundness of its wooden parts.
- (b) The rainfall.
- (c) The rapidity of the accumulation of sand or débris.
- (d) The local topography which affects the course of the drainage water and of the drift sand.

The most decisive factor for the preservation of a building in the Giza pyramid field is its local topography, including, it must be noted, the situation of surrounding buildings. For example, the preservation of the mastaba tombs in the great cemetery west of the First Pyramid and north of the Second Pyramid was due, firstly, to the massive stone wall on the southern edge of that area and to the enclosing wall of the First Pyramid on the east, which together held up all the drift sand brought in by the north, northwest, and west winds, which are the prevailing winds, and, secondly, to the slope of the limestone substratum which allowed the rain-water to drain off to the north. The Mycerinus valley temple was in a fatal situation, standing free on a low gravel bank on the edge of the desert, at the northern side of the mouth of a wide *wady* and deflecting with its causeway the branch channel which drains the limestone plateau west of the Second Pyramid. As long as the causeway and its corridor stood, all the rain water discharged by the branch channel flowed down the northern side of the causeway to the back of the valley temple. There its only outlet, aside from an inadequate drain under the causeway corridor, was around the northern face of the temple. Any deposit of sand or débris north of the temple was bound to increase the accumulation of water in the angle between the causeway and the temple, while the flow of water around the temple hastened the decay of the exterior wall and the deposit of mud débris. Other factors, now undiscoverable, may have affected the deposit of sand, for example, a mere eddy of wind in the angle in question may have led to the formation of a bank of drift sand, the snake-form drift so common in the desert, at the northwestern corner of the temple. The effect of the water discharged by the branch channel is well shown by the device adopted in the second crude-brick temple to protect the building; for a rubble embankment over a meter high was built along the bottom of the western and northern walls of that temple, to protect them against erosion by water. Furthermore, the surface of decay of the whole temple showed the channels and lines made by water washing down over the middle of the western wall.

It will be remembered that in paragraph 2 A, above, the statement was made that a gap had been left in the massive western wall of the original stone temple, apparently to permit the passage of the limestone blocks coming down the causeway from above. When the western wall of the first crude-brick temple was built, the stone blocks already in place were enclosed in the brickwork and formed a support to it; but the gap in the stone wall was filled with unsupported crude brick. This gap extended from a point south of the causeway to the southern wall of magazine (III-6). As the brickwork in the gap south of room (III-2) was protected by the causeway, the western end of (III-2) was the only part actually exposed to the action of the water which collected in the angle between the causeway and the northern part of the temple. The examination of the first crude-brick structure showed that the western end of room (III-2) had been washed away and with it the inside faces of the northern and southern walls of that room. The doorway into the portico and the doorway in the screen-wall had also been washed away at this time. It was clear that the brickwork in the west end of (III-2) had become water-

soaked and soft, and being unsupported by the old stone masonry, had given way suddenly under the pressure of the accumulated rain-water. The northern and southern magazines and storerooms were unaffected by the rush of water. In the middle of the open court, the water must have spread in a pool, soaking the brickwork of the rooms standing there at that time, and bringing them down, but not affecting the walls near the southern and northern sides of the court. Probably the water finally drained away through the gravel foundations of the court, or evaporated.

The level of the surface of decay of the first temple over the western and the northern walls proves that a meter or so of sand and water-borne débris had accumulated against these walls at the time when the sanctuary was destroyed by the inrush of water. When the break occurred, the western end of room (2) was scoured out considerably below the previous accumulation of débris on the outside, but the foundations were left intact.

The gully through the sanctuary carried off the accumulation of water behind the temple, thus relieving the pressure on the western wall and preventing the utter destruction of the magazines and storerooms. At this time, or at any rate before the restoration of the temple, the accumulation of sand and débris on the western, northern, and southern sides of the temple had reached such a height that the causeway corridor and the exterior corridor were buried to just above their roofs. But the walls of the temple could still be traced in the sand, higher on the northern side, especially in the northwestern quarter, and lower on the southern side, especially in the southeastern quarter.

Before the second temple was built, the roofing beams in the doorways of the first temple had decayed, and the superimposed brickwork had sunk down into these doorways. The roof of the exterior corridor, and probably that of the causeway corridor, at least in the lower half of its course, had collapsed, and the corridors had become filled with drift sand. The roofs of the magazines and storerooms had also fallen, and these rooms had become partly filled with débris. The temple appears to have lain in complete ruin. A surface of decay was formed, and it may well be doubted whether even a pretence was made of maintaining the temple service.

Thousands of fragments of statues, stone vessels, pottery, and other objects were found scattered over the temple site in all deposits, but especially in the floor débris of the court. A few of the pottery vessels may perhaps be ascribed to the second temple or the later houses, but the majority were of Dynasty IV. The masses of utensils found in the northern magazines, and the statues found in the southern magazines and in the portico, by their inscriptions and by comparison with the objects found at the pyramid temple, were proved to be of the time of Mycerinus or Shepseskaf. The condition of these rooms showed that practically all the objects in the magazines and storerooms were in the rooms in which they had been originally placed by Shepseskaf. The statues in the portico appeared merely to have been raised about 20 cm., and placed on the later floor. They all bore the name of Mycerinus and were undoubtedly the work of his reign.

Nevertheless, hardly a single object was entirely undisturbed. The pottery in room (10) lay utterly smashed on the floor. The stone vessels in rooms (7), (8), (9), (12), (13), and (16) were also broken, but many of these vessels were complete and all had been broken in the rooms where originally deposited. But some pieces were found on the floor of the magazine corridor (20), and fragments fitting on several of the stone vessels were found in the lower deposit of débris in the court. Thus it is clear that a considerable plundering of the magazines had taken place previous to the construction of the second temple and indeed before the building of the second series of house walls in the court. Fragments of statues, a fine copper jar, and other objects were found in the water-borne débris in the middle of the court. It was also evident that the destruction of the statues had already begun in the period of the first plundering of the magazines. On the surface of decay of the first temple, and in particular on the southern wall of the temple, house walls had been built, and under these were numerous deposits of alabaster and slate chips made by the breaking up of the statues and statuettes. Among these deposits were a few unfinished model vessels of the forms so common in the mastabas of Dynasties V and VI, and made of the same stones as the fragments of statuary, occasionally even presenting parts of the polished surfaces of statues. This proves that model vessels were actually manufactured in the temple. As will be shown later, the plundering of the temple for hard stone did not cease when the second temple was built. But

it may be assumed that whatever else of value there was in the magazines and storerooms had been removed very early in the plundering of the temple, perhaps during the early years of maintenance of the services.

(C) DESCRIPTION OF THE SECOND CRUDE-BRICK TEMPLE, PLS. VIII AND X

On the surface of decay of the first crude-brick temple, before it became covered with sand, a second temple of crude brick was built, the parts of which coincided approximately with corresponding parts of the older temple. A new portal or vestibule was built over the middle part of the old; a new sanctuary, including closed portico and offering room, was built over the old sanctuary; at least two rooms were added, one on each side of the offering room; and, finally, an outer wall was built enclosing the whole. The older open court continued to serve the same purpose in the new temple, but the floor was now nearly a meter higher and was merely the surface of decay produced by the inrush of water through room (2).

(1) *The Outer Wall of the Second Temple*

The outer wall of the second temple was 220 cm. wide, considerably less than the outer walls of the old temple. On the north and west, this wall rested on the middle of the older wall and had been protected at the foot by a sloping rubble embankment, about 100–200 cm. high. The southern end of the west wall and its embankment crossed over the top of the doorway from the southern to the western exterior corridor; and the southern wall of this second temple was built over the southern wall of the southern exterior corridor. No trace was found of an eastern wall closing the front of the structure; so that this great wall on three sides of the second temple was probably, in fact, the enclosing wall of the pyramid city and followed the older walls of the city in front of the first temple to its eastern limits, where this later enclosure was then bounded by an eastern wall, running north and south. The eastern end of the northern wall was washed away near the northeastern corner of the temple; and the eastern end of the southern wall, continuing beyond the eastern face of the vestibule, gradually disappeared, having been weathered away. The walls of the offering room (2) were bonded with the western wall, so that clearly this great enclosing wall had been built at the same time as the second temple and was structurally a part of it. It is to be noted that the southern wall bounding the exterior corridor must have been visible when the second temple was built, and was perhaps mistaken by the builders for the southern wall of the first temple.

(2) *The Sanctuary*

The sanctuary consisted of two rooms, as in the first temple — a narrow, long (east-west) offering room and a wide (north-south) portico or anteroom — and these were approximately over the old rooms. But they did not exactly coincide with them in size or plan, and the floors were 20–30 cm. higher. It will be kept in mind that these two rooms had suffered most from the inrush of rain water, and were most in need of restoration.

In the first temple, the axis of the offering room had practically coincided with that of the temple; but in the second temple, in which the widening had caused the axis of the temple to shift about 140 cm. to the south, the manifest desire to bring the new offering room over the old resulted in setting the axis of the new room about 90 cm. north of the axis of the new temple. Yet it was still about 25 cm. south of the old axis. The new room was about 60 cm. less than the old in width. The southern wall rested on the older southern wall with its interior face about 10–15 cm. south of the old face. The interior face of the new northern wall, however, was about 70 cm. south of the old face, and the northern wall on the inside was founded in a trench cut in the old floor, while outside, on the north, it rested on the old wall, which had been partly cut down to take it. On the west, the new wall was built on the older denuded wall, and its interior face was about 25 cm. west of the face of the older foundation wall. On the east, the interior face coincided with the old face, but the doorway was of different form and shifted slightly southward. On each side of the eastern end of the room, a doorway opened into the adjoining magazine, as in the old room, but was adjusted to the positions of the new walls.

In this second temple, the portico was replaced by an anteroom, a simple rectangular room, not of the compound recess form, with a doorway in the east and the west sides and with a single north-

to-south row of four columns to support the roof. The east wall was built over the eastern boundary wall of the old portico, inside the screen-wall of the older temple, and its doorway was thus entirely west of the older doorway. The interior west face of the portico was set 50 cm. west of the older face. On the north and the south, the walls of the portico were built partly over the remains of the old walls and partly over the débris in the old portico, but the axis of the room remained unchanged, although the axis of the new offering room was shifted to the south. The four columns had been wooden logs, and had rested on circular limestone bases in a north-to-south line down the middle of the room.

The doorways of these new rooms had only mud floors, not stone thresholds. In the eastern doorway of the anteroom, we found a stone door-socket set in mud, and it is probable that all these doorways had been closed with wooden doors, whose posts rested in similar detached stone sockets.

The floor of the anteroom was on a level with the hard trodden surface of the mud débris in the court, which at this time covered the old stone ramp and hid it from view. On this trodden surface, just outside the doorway, were two more circular bases of stone. These imply a porch in front of the doorway.

In the offering room, on the second mud floor, at the western end, stood an altar consisting of an alabaster slab set on two upright stones, with a libation basin of limestone beside it. Beside this altar, on the south, four unfinished statuettes lay in confusion on the floor. The alabaster slab was water-worn and had fallen or been knocked over to the north. It appeared as if an altar-bench had stood originally in this place, and had been accidentally disturbed only after the abandonment of the temple. But the statuettes had perhaps been cast down from room (5) by treasure-seekers.

Near the western wall of the anteroom were four seated alabaster statues, inscribed with the name of Mycerinus. These stood just in front of the line of the west wall of the old portico and opposite the space between the first and second columns on the south, the third and fourth on the north. These positions did not correspond to the openings between the columns and the antae of the old portico, and it is probable that the statues, having stood in the old portico, had been shifted slightly to one side and raised to rest on the new mud floor.

(3) *The Magazines*

North and south of the offering room, the walls of the first temple were preserved to a good height. On the south, in line with the exterior southern face of the anteroom, an east-to-west wall 80 cm. thick had been built between the southwestern corner of the anteroom and the back wall of the second temple, enclosing a long room shaped like a magazine. But this wall was unplastered on either face. No corresponding wall was found on the north. Nevertheless a doorway gave access from the offering room to this space on the south, and another northward to the ruined northern magazines. The question naturally arises as to the purpose of these two doorways. Both had been walled up at an apparently early date, for the sides of the doorways were hardly worn, and thereafter there was no exit from the offering room. It is also to be noted that we found no opening through the western wall by which one might have passed upward toward the pyramid temple. The statues in the anteroom prove that the temple was still devoted to the funerary services of Mycerinus; and, if the same priests and servants were attached to both the valley temple and the pyramid temple, the procession from the valley temple to the pyramid temple must have gone back from the offering room to the front of the temple and around by some path not discovered by us. The exterior corridor and the causeway corridor were certainly not in a condition to be used. Alternatively, it is possible that the pyramid service was abandoned at this time, or was conducted by a different set of men from those attached to the valley temple.

The possibility suggests itself that the unexplained wall south of the offering room was intended for the side wall of a stairway leading to the roof, or even over the west wall toward the pyramid temple. But we found nothing to support this suggestion.

(4) *The Open Court*

The old floor of the open court, as stated, was buried in about one meter of mud débris. Neither pathway nor basin was any longer visible. And those who crossed from the portal must have walked upon the surface of decay formed by the débris deposited in the court. North and south, the court was filled with little mud huts and granaries.

(5) *The Portal Structure or Vestibule*

Over the middle part of the old vestibule we found the remains of a portal structure nearly square in form, of which the southern part alone could be fully traced. On both the east and the west, the southern side of a doorway was preserved, which was just outside and in line with the corresponding doorway of the old vestibule. The west wall descended nearly to the floor of the old court and was not plastered on the outside. The south wall crossed the northernmost of the southern magazines over denuded walls and débris. The east wall was founded on a low level like the western wall, and, like it, also showed the southern face of a doorway. Along the southern side of the anteroom, an east-to-west wall, unplastered like all the others, was founded on the floor of the anteroom and built against the older wall. These walls were all of the same size and quite clearly distinguishable. Although founded deep, they were built over the older walls, even over house walls, and were undoubtedly not earlier than the other walls which I ascribe to the second temple. Over the northern wall of the anteroom there were traces of another wall, and on the west, north of the doorway into the court, remains of the northern half of the west wall of the second portal. There can be no doubt that this portal building offered a passage through to the court, in the axis of the old passage, but with a higher floor-level.

(6) *General Decay of the Second Temple*

The second crude-brick temple was built on the ruins of the first temple (Pl. X, sections), and as, owing to the erosion on the one hand and the deposition of sand and débris on the other, the surface of decay presented by the old ruins was very uneven, the second temple was not founded on a level plane. The exterior walls built on the older walls were founded on a level with the sand and débris accumulated on the outside of the ruins at the time. The walls of the offering room and the wide room (portico) were fitted into the gully made by the water rushing through the old west wall, and here the surface of decay had been partially cut away to obtain a level floor inside the rooms. The portal was built over the ruins of the old vestibule. The court, having been left a hollow by the decay of the first temple, remained lower than the rest of the old temple, was re-used as it stood, and was encumbered with houses.

Thus the second temple, observed from the west, rose above the surface of its day and formed a sort of hollow filled with houses. The water, still deflected by the middle stretch of the causeway, continued to flow down the northern side of the main *wady* and to run off along the western and the northern sides of the temple, so that these two sides had to be protected by a rubble embankment against erosion. The surface of sand and débris on the west sloped evenly to the south, so that no pool collected against the western face, nor was there any trace of water breaking through the western wall. On the contrary, the temple seems to have fallen gradually to decay. The collection of sand and débris continued on the north, west, and south, and the decay of the crude-brick walls above went on until the surface rain-water ran over the west wall. This drainage water running over the ruins produced a surface of decay (Pl. 25 *a*) sloping toward the east-southeast, with little channels worn by the water. And the water filling the court appears to have run over the southern part of the vestibule. This was the surface of decay which we saw section by section in 1908 and 1910, carefully noting its slope and its water channels. The sand over the west wall, the highest preserved part of the second temple, was only about 20–50 cm. deep, but over the lower southeastern part several meters deep. This accumulation was due without doubt to some artificial obstruction in the mouth of the valley. In the northern wall of the vestibule anteroom (377), a square burial shaft, not much later than the Old Kingdom, descends to the subsoil, and the surface of that time was less than a meter lower than the present surface. In the Moslem period, probably about the twelfth century A.D., treasure-seekers dug the great rubble-lined hole in rooms (18) and (4), in which we found the slate pair. Smaller holes in the vestibule, and in the north wall of the court, were apparently of about the same date. In much more recent times the local inhabitants, extracting the decayed mud brick of the walls for use as fertilizing material (*sebakh*), had dug a number of holes in the western and northern walls which were easily accessible from the modern surface. But all these holes had become covered with drift sand before we began work, so that the valley presented a level surface of sand sloping very gently to the east-southeast (Pl. 24 *a*).

(7) *Plundering of the Second Crude-Brick Temple*

The chief objects of the second crude-brick temple had been merely taken over from the first temple. The statues which we found in the southern storerooms and the objects in the northern magazines were approximately in their original places. The large statues in the wide room (1) were only slightly shifted from the positions they had occupied in the old portico. The altar and basin in the offering room may also have been in the old offering room, but they had been reset and may have been entirely new. The statuettes beside them were certainly from the old temple and may have been only accidentally deposited in this room. If new pottery was provided, analogy with the Giza cemetery shows that it would have been of the traditional types, IV and XXV, and the model types, XLIII and XLIV, with perhaps a bowl-stand and a few bowls.

Thus apparently the second temple contained nothing to attract plunderers except the hard stone statues and vessels which had been in the first temple. But it is clear that the destruction of these objects in order to procure hard stone for model vessels, was resumed, if it was interrupted, as soon, at any rate, as the second temple fell into disuse. The position in which the shattered triad was found in the court showed that it was being broken up after the abandonment of the second temple. It had probably been taken out of corridor (4), where the other triads were found. The four statues in room (1) were also broken up in this period, before the formation of the surface of decay of the second temple. But the distribution of the fragments of statues through the various deposits of débris proved that the greater part of the damage had already been done before the building of the second temple.

(D) DESCRIPTION OF THE INTRUSIVE STRUCTURES IN THE MYCERINUS VALLEY TEMPLE

(1) *The Pyramid City of Mycerinus*

With the exception of the two rooms of the sanctuary and the very middle of the court, the whole of the Mycerinus valley temple within the walls of the later crude-brick temple was filled with small structures, rooms, and granaries of crude brick (Pl. VIII). The general appearance was that of a poor modern village (Pl. 31). This village extended also eastward beyond the face of the temple into the area delimited on the south by the continuation of the exterior corridor and probably by a similar wall on the north. The decree of Pepy II found in the vestibule room (377), badly preserved as it is, is similar in content to the stela of Pepy I found at Dashûr in the pyramid city of Sneferuw,¹ and the conclusion seems unavoidable that this village is the pyramid city of Mycerinus, or, at least, a part of it.

The Sneferuw pyramid city was a rectangle about 65 × 100 m. in size, with the long axis running east and west; but it is yet unknown whether the valley temple of Sneferuw stood in this rectangle or adjoined it on the west. Assuming an approximate analogy between the Sneferuw pyramid city and the Mycerinus pyramid city, the latter, being 51 m. wide, would have measured about 78 or 79 m. in length. The first Mycerinus valley temple appears to be a unit bounding the western side of the city, but the second seems to be included in the city rectangle. We followed the southern wall of the temple and the rectangle for a distance of about 70 m. before being forced to stop by the Moslem cemetery. If the rectangle included the temple, then the point where we stopped was only about 10 m. from the eastern end of the rectangle; but if the rectangle really adjoined the temple, then this point was about 70 m. from the eastern side. It seems more probable, from the relations between the earlier temple and the city, that the city was added to the temple and should be reckoned as extending about 78 or 79 m. eastward from the face of the temple. In either case the houses built in the court and later over the ruins of the older temple were an encroachment of the town on the temple. The reason for this encroachment is easily understood. The area of these pyramid cities was fixed by definite massive walls, so that they resembled fortified villages. By decree, the inhabitants, who were the priests of the pyramid temples and the trustees of the pyramid endowments, were granted certain privileges, exemption from taxes and from the exactions of administrative officials, probably as an additional inducement to maintain the offerings and services in the temple. These privileges made the pyramid cities very desirable for residence,

¹ Borchardt, *Ä. Z.*, Vol. XLIII, p. 1.

and certainly everyone living in the neighborhood of such a city who could scrape up any pretext to an inherited right sought to gain a house in the city. Thus there would be always a tendency to overcrowding. One can well imagine the manner in which the chief officials would use such a situation, and the comfortable perquisites which they derived from the sale of sites, accompanied perhaps by appointment to some nominal post in the priesthood of the pyramid temple. The Pepy decree may have been merely a renewal of some older decree; but it is certain that as long as the authority of that dynasty lasted, the pyramid city of Mycerinus was fully populated.

It is equally clear that it was to the interest of the inhabitants of this pyramid city to maintain at least some semblance of the funerary service as a justification for the continuance of their privileges. In this fact I see the reason for the limited character of the restoration of the temple; for the second temple consisted merely of the sanctuary and the enclosing walls, which were really the walls of the city. From these circumstances it is also evident that the pyramid city of Mycerinus could not have enjoyed its privileged position very long after the end of Dynasty VI. Once the privileges ceased to exist, all incentive to live in the city or to maintain the temples was destroyed, so that the site was abandoned and fell rapidly into decay. Situated as it was, the ruined temple and city were soon covered with sand and their existence forgotten.

(2) *The Different Periods of the Houses*

In a village of mud houses which have repeatedly fallen into decay and been rebuilt during a period of several centuries, the tracing of any one period horizontally through the site is practically impossible. The nature of the difficulties is well shown by the state of almost any of the older modern Egyptian villages or of the Bulaq quarter of Cairo. The houses of one generation are not simultaneously destroyed and replaced by a new series built on their ruins; but one by one, at irregular intervals of time, the houses fall or are discarded, to be rebuilt sometimes after a lapse of many years. When a new house is built, it is founded on the surface of decay, or on the foundations of an older house, or in a deep excavation. The mound formed by the decay of the village grows upward by the deposit of dirt in the streets and by the accumulation of débris of decay from the ruined walls. When such a village is excavated, only the foundations of walls are found buried in the mound, except when the town has been overwhelmed by some catastrophe or covered by some great levelling operation preparatory to the construction of an important building. When a village is abandoned, the last series of mud buildings melts away slowly or rapidly, according to the situation and the weather, until only the bases of the walls lie beneath a weather-worn surface of decay. In the pyramid city of Mycerinus, the mud walls were protected by the high outer walls of the two temples, but exposed like the temple walls to the rain-water of the branch channel and to the action of the sand and débris borne by wind and water.

Remembering the conditions, the difficulties encountered in unravelling the series of houses in the Mycerinus valley temple become comprehensible. The complete reconstruction of any one period was simply unattainable. The town as it stood when abandoned, which would naturally have presented the only opportunity of complete recovery, had been greatly damaged by the rain-water, and the southern part, more exposed than the northern, had apparently entirely disappeared. The following facts, however, serve to outline the growth of the city within the temple:

1. As long as the first temple stood, the city would encroach only on the open court, and the earliest structures are to be sought there.
2. The houses on the walls of the first temple must have been built after the greater part of the temple had fallen into decay, probably after the construction of the second temple. None of these houses encroached on the sanctuary proper (the portico and the offering room).
3. There are no buildings on the surface of decay of the second temple; that is, the last houses and the second temple fell into decay simultaneously.
4. In the northwestern quarter of the court, there are three distinct series of walls visible:
 - (a) On the floor of the court, embedded in the floor débris of the court, which was a deposit of decayed mud and sand about 20 to 70 cm. deep.
 - (b) On the floor débris of the court.
 - (c) Partly over the walls of the first temple and partly over the court, about one meter above the floors of the series (b).

(a) *The Walls on the Floor of the Court.* — The floor of the court was covered with a layer of débris of decay, mostly mud, with some sand and other material, which varied in depth from about 20 cm. over the stone pavement to about 40 to 70 cm. along the northern and southern sides. In this floor débris, especially in the upper part, a considerable number of fragments of stone vessels and of shattered statues (Pl. 34 c) were found, some of which fitted on fragments of stone vessels found in the magazines of the first temple, and had clearly been scattered by the plunderers of the magazines. Thus all walls founded on this débris (Pls. 32 b, d, e; 34 f) had been built after the very serious first plundering of the older temple; but the walls in the débris belong to the time when the funerary service was maintained in the first temple.

The walls embedded in the floor débris of the court were badly preserved, owing probably to the dampness and to the pressure of the superimposed débris. The bricks were crushed and the walls difficult to follow. Walls apparently founded on the floor of the court were exposed under rooms (301)–(304), (318), (332), (333), and in the northwestern quarter parallel to the western side of the court. Of these, the only well-built walls were under room (303). The later wall between (303) and (302) had, in fact, been founded on one of the older walls; and the older walls appear to have been denuded to the level of the floor débris of the court previous to the construction of the later walls. Within these older walls under the floor of (302), and in the floor débris of the court, a group of 35 pottery vessels was found, mostly unbroken (Pl. 34 a). Although this layer of débris contained many objects from the magazines of the first temple, the preservation of the vessels under room (302) indicates that they were originally deposited where found and not brought here from the temple magazines by plunderers. Either room (302 *sub*) was an extra magazine constructed in the court at the time of the funeral because of the lack of room in the over-filled magazines, or it was built for a similar purpose at some slightly later date, perhaps for the storage of utensils used in the service. For example, the offerings made in the early years succeeding the funeral were probably specially full, being real and not sham offerings, and may have been brought in vessels which, after being emptied, were set aside in this room.

A comparison with the vessels found in the Giza cemetery shows that the group from (302 *sub*) (Pl. 72 b) lacks a number of characteristic types found in the royal mastabas of Dynasty IV, that it contains some of the types found in the mastabas of Dynasty V, and that, finally, the group, as a whole, corresponds rather to Dynasty V than to any other (see Chap. IX, POTTERY).

(b) *The Walls Founded on the Floor Débris of the Court.* — The series of walls founded on the floor débris of the court, and denuded to the level of the walls of the first temple, was the best preserved of all. In particular, a bonded complex of rooms lines the southern side of the court (Pl. 33) and consists of five separate apartments each opening on the court (Pl. VIII):

- (1) Rooms (301), (317), (337), (338), (339).
- (2) Rooms (316), (315), and (302).
- (3) Rooms (314) and (303).
- (4) Rooms (308), (304), and (305).
- (5) Rooms (306), (307), and (324).

Some of the doorways had stone thresholds, and one door-socket of stone was found in (315). The doorway between (306) and (307) and that between (307) and (324) were very low, each spanned by a limestone lintel. The roofs over the rooms were presumably of wooden logs covered with mud, but might have consisted of crude-brick vaults such as were used in the chapels of the mastabas of Dynasty IV. The walls were generally one brick thick, alternating header and stretcher courses, and their surfaces were mud plastered.

On the floor of room (307) were found four pottery vessels, a limestone jar, and a rough limestone basin. The pottery vessels were: a tall red-polished bowl-stand (type XXII-2), a large red-polished basin (type XXXIV-1), and two large jars (type III). These types occur from Dynasty IV to Dynasty VI and do not greatly assist in dating the rooms.

North of room (324), the same series of walls continued under the portal structure of the second temple, and was certainly earlier than that structure. The northern wall of room (338) was built against the screen-wall of the portico and was later than that wall (Dynasty V).

Abutting on this bonded complex were the well-built walls of

(6) Rooms (310), (323), (325), and (331).

These were of later date, but appeared to have been intended as an enlargement of the group (306), (307), and (324). That is, they belonged to the same period of occupation. In the space between the walls and the stone pathway were a number of poorly built walls, which were slightly later and yet had their floors on the same level.

In the northern half of the court, no such continuous complex of well-built walls was present, but the greater part of the area was occupied by circular granaries and single rooms or pairs of rooms. In the northwestern corner decayed and obscure walls formed

(7) Three rooms (57*a*), (57*b*), and (58) (Pl. 32 *b, d*),

with their western and northern walls (half-brick thick) built against the niched wall of the court, and with their floors about 40 cm. above the floor of the court. On the floor of room (57*b*), in the NW corner, were five stacks of pottery — three stacks, each consisting of two flower-pots upside down against the north wall, and two stacks, each consisting of four coarse trays, leaning with upper sides out against the west wall. These were clearly in their original position in the room which is thus marked as a storeroom. On the same level with these rooms were the

(8) circular granaries (?) (40*b*), (48 + 49 *sub*), (50 *sub*), (53), (54 *sub*), (55), (56), (383 *sub*), (386 *sub*), (391 *sub*), (404), and (407) (Pl. 32 *b; 33 e; 34 f*).

As to

(9) the rooms towards the middle of the court,

we were never able to determine whether they belonged to this series of rooms or to the succeeding series; possibly they belonged to both.

(*c*) *The Walls Founded Partly on the Decayed Walls of the First Temple.* — A very extensive series of walls was founded partly on the denuded walls of the first temple, partly over the débris-filled magazines, and partly over the older structures in the court (Pl. 31 *a* and *b; 28 d; 27 d; 36 a*). Over the exterior corridor, the southern wall of the temple and room (III-19) stood the complex

(10) Rooms (5) to (11),

of which only the foundations below the floor level were preserved. On the foundation level were heaps of alabaster chips from statues, potsherds, etc., from the temple magazines. Probably connected with this complex were the walls of

(11) Room (I-4),

and with these in turn the walls forming

(12) Rooms (I-1) to (I-3),

which were over room (III-17) and corridor (III-4); but the connecting masonry had been destroyed by the two enormous holes dug by Arab treasure-hunters.

Similarly, over the northern magazines, the western wall of the court, and partly over the court, stood the large interbonded complex

(13) Rooms (I-12) to (I-21), (I-23), and (I-24).

South of (21) lay the

(14) Rooms (I-22), (I-27), (I-28), all bonded together.

To the same period appeared to belong

(15) the rectangular rooms along the northern side of the court (I-29), (I-30), (I-39), (I-47), (I-52), (I-54), (I-383), (I-386), inasmuch as they were built over the older circular bins. With these belong the circular bins (I-40*a*), (I-390), (I-393), (I-405), and (I-406). As already stated, the rooms near the middle of the side of the court may be assigned to this period or to the preceding period, or to both.

In addition to the walls just mentioned, the following complexes were also over temple walls:

(16) Rooms (101) to (104) on top of the south wall of the court.

(17) Rooms (388) and (389); over the northern magazine room (410) of the vestibule.

(18) Rooms (355) to (358) and (370) to (372) in the southern magazines of the vestibule.

The rooms (388) and (389) were over the walls and the filling of the northernmost of the vestibule magazines (410), (411), and belonged manifestly to the series of walls over the western magazines.

The intrusive rooms in the southern magazines (cf. 18 above) had floors above the old floors; their doorways corresponded with the old doorways, and the walls were well built and heavier than those in any other part of the city (Pl. 35). The walls of the old magazines were utilized, wherever possible, as the exterior walls of the new rooms. Under the floors a number of pottery vessels were found, which had been in the old magazines. These rooms had undoubtedly been built at a time when the walls of the first temple were still practically intact, although the roofs had already fallen and the magazines become partially filled with débris. But the doors opened into the corridor (354), and this corridor must have been accessible, although not necessarily from both ends.

The rooms (372*a*) and (372*b*) were overbuilt by the walls of the later portal building, just as were the walls north of room (324) in the court. Taking all the facts, it may be concluded that the later rooms in the vestibule magazines are certainly as early as the complex (301) to (307), in the adjoining part of the court, and may be even earlier. But it is impossible to decide whether they formed merely a restoration of the vestibule magazines, or were of the same character as the complex in the court.

(*d*) *The Walls in the City Enclosure in Front of the Temple.* — The rectangular enclosure of the pyramid city of Mycerinus extended eastward for perhaps 70 m. from the eastern face of the temple. The southern side was bounded by a continuation of the exterior southern corridor (III-21) of the first temple; and the walls of this city corridor, although they were built against the southeastern corner of the temple, were practically contemporaneous with the walls of the first temple. At a distance of 415 cm. east of the corner of the temple, a wide doorway (width 155 cm.) opened through the northern wall of the exterior city corridor into the city enclosure. It was unfortunately not possible to follow the city enclosure over any great area, owing to the presence of the modern Moslem cemetery. The village people became very nervous and begged us to desist.

The few structures cleared were sufficient to show that there were at least two periods of houses. Under the floors of the second or upper series, the same classes of objects were found as in the floor débris of the court, including fragments of stone vessels and statues evidently scattered by the plunderers of the magazines of the first temple. This series of houses appears, therefore, to correspond to that built on the floor débris of the court (series *b*, above). Contemporary with this series, a blocking wall had been built across the two ends of the doorway into the exterior city corridor, completely closing that corridor to access. The blocking of the vestibule of the first temple appears to belong to the same period. But these door-blocks may have been built in the latter part of the period of the houses. The walls of the houses, as preserved, were only from 20 to 90 cm. high and were denuded to a very uneven surface of decay, sloping down from a height of about 200 cm. beside the face of the temple, to 140 cm., about four meters eastward of the face. Thus a later series of buildings had almost certainly been washed away. The lowest walls in this quarter may safely be ascribed to the time of the early use of the temple, but their condition was such as to make their recovery impossible.

(*E*) HISTORY OF THE VALLEY TEMPLE AND CITY

The history of the construction and the decay of the Mycerinus valley temple may be set forth as follows:

- I. The unfinished stone temple, abandoned at the death of Mycerinus.
- II. The first crude-brick temple, erected by Shepseskaf.
 1. The rooms formed by the walls resting on the floor of the court (I-302 *sub*), etc., and the series *a* of the city.
 2. The screen-wall closing portico (III-1).
 3. The rooms of series *b* (including granaries).
 4. The alterations in the storerooms (5), (17), (18).
 5. The blocking of the doorway from vestibule (III-377) to corridor (III-380).
 6. Probably the construction of the rooms in the southern magazines of the vestibule.
 7. The plundering of the magazines; the removal of vessels and statues to be broken up for the stone continued through the rest of the time of both the first and second temples.

8. The gradual decay of the temple; the decay and fall of the roofs; the deposition of débris to a depth of 150–200 cm. in the magazines, and from 40–100 cm. in the court; the sanctuary apparently kept clear.
 9. The ruin of the sanctuary by the influx of water through the western wall of the offering room, the formation of a surface of decay; the sanding up of the exterior corridor and the accumulation of débris around the southern, western, and northern sides of the temple to the level of the surface of decay of this temple.
- III. The second crude-brick temple, erected at least as early as the middle of the reign of Pepy II, and perhaps earlier.
10. The series of rooms (*c*), over the rest of the temple and city.
 11. The decay of the second temple; denudation of the upper part of the walls by weather and drainage water; formation of a surface of decay; buried in sand; the burial pit of "the king's tribesman, Yer-r . . ." (Dynasty VII?), holes dug by Arab treasure-seekers of the twelfth to fourteenth centuries A.D. in north wall, and in rooms (III-4) and (18); removal of *sebakh* in recent times.

The point in doubt is the date of the construction of the second temple. The great repairs at the pyramid temple were in limestone and were probably made by Menera. There the necessity arose from the decay of the inner temple of crude brick. But neither of these facts assists us much in the problem of the valley temple. The conditions were different; the thickness of the walls may have been less at the pyramid temple; the decay of the two temples may not have occurred at the same time, and the restoration may have been delayed in the one case or the other. The length of time which it may have taken for the first crude-brick valley temple to fall in ruins is incalculable; the period from Shepseskaf to the end of Dynasty V is not too short, nor that to the end of Dynasty VI too long. The restoration of the temple was not an expensive undertaking, being well within the means of a prosperous landowner of the present day. The people whose interest it was to rebuild the temple were those who belonged to the community of the pyramid city of Mycerinus. Tax-free and relieved from requisitions of all sorts, they could well afford the restoration of the temple. The construction of the second temple is not, therefore, necessarily to be connected with the decree of Pepy II. That decree merely confirmed the old privileges, but the restoration of the temple may have given occasion for its issue. The decree is dated in a year which is later than the thirtieth and earlier than the sixtieth, or somewhere near the middle of the reign of Pepy II. If the decree were issued as a reward for the restoration of the temple, then the second temple was built before the middle of the reign of Pepy II. But, as already remarked, there may have been earlier decrees of which this is merely a formal renewal.

However interesting the question may be, the exact date of the second temple has only an academic value. The few fragments of pottery found were none of them as late as the Middle Kingdom. Even those found inside the walls or on the floor of series *c* of the house walls were clearly of Old Kingdom date, not greatly different from those found under the floors of series *b* and in the magazines of the first temple. All the more important objects were in the magazines of the first temple, or demonstrably removed from those magazines, with the exception of the four large alabaster statues in the portico of the first temple, which had been slightly shifted to the places they occupied in the second temple. Thus there are practically no objects for which the exact date of the second temple would have been of importance.