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## FINAL REPORTS

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# THE LEON LEVY EXPEDITION TO ASHKELON 

## ASHKELON 8

## The Islamic and Crusader Periods

by<br>Tracy Hoffman

With contributions by
Denys Pringle, Hannah Buckingham, Frances Healy, Tasha Vorderstrasse, Christopher Bronk Ramsey, Robert Kool, Robyn Le Blanc, Kathleen M. Forste, John M. Marston, Paula Hesse, and Deirdre N. Fulton

Ashkelon 8:
The Islamic and Crusader Periods
by Tracy Hoffman
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# 17. The Fortifications: Grid 20 Fortification Tower 

by Hannah Buckingham and Denys Pringle

In the 2014 summer season, excavation was undertaken in the northeastern sector of the walls of Ashkelon in Grid 20, on a tower known to members of the Expedition as the "Snake Tower," ${ }^{33}$ lying 140 m north of the Jerusalem Gate. ${ }^{34}$ During the survey of the town walls, this site had been identified as an area with high potential for excavation, since it appeared to be one of the few remaining places where it might be possible to expose a complete stratigraphic sequence of construction and occupation.

The tower occupied a position at a corner of the town wall, where after running north from the Jerusalem Gate it made a $90^{\circ}$ turn to the west for some 25 m before continuing again in a northerly direction. Before excavation began, all that was visible were the remains of part of a solid rounded tower and the wall running south from it, standing at the top of the scarp on the eastern side of the site (figure 17.1). Some 7.4 m west of the wall and parallel to it stand the remains of another wall, ca. 10 m long, 1.44 m thick, and ca. 5 m high, leaning at an angle of $10^{\circ}$ to the west (figures 17.2-3). Other large pieces of fallen masonry from the medieval walls lie down the slope to the north, where the rampart had evidently been undermined. In the 1950s-60s, the site had been leveled for the erection of wooden holiday chalets, but since the abandonment of the holiday camp in the 1980s it had become overgrown with thorny vegetation.

The key objective for the 2014 season was to understand the complete stratigraphic sequence of the walls' construction and use. Preliminary analysis of the standing masonry suggested that the tower was essentially Fatimid (tenth-twelfth century), although likely to have been built on Byzantine foundations and reused after the Crusader conquest of 1153. This initial hypothesis was largely borne out by the excavations,

[^0]

Figure 17.1. View of the site under excavation from the south, with remains of the Phase 3 Fatimid town Wall and Tower 3-4 to the right and the leaning wall of the Phase 4 Fatimid Building 8 to the left (photo DP 2014)


Figure 17.2. Leaning Wall 8 from the northwest (photo DP 2008)


Figure 17.3. Leaning Wall 8 from the southwest (photo DP 2009)

| Phase | Description | Period | Date |
| :---: | :---: | :---: | :---: |
| 7 | Tower? | Hellenistic | Fourth-First century в.c. |
| 6 | Town wall foundations | Byzantine- <br> Early Fatimid | Fifth-Eleventh Century a.d. |
| 5 | Building remains, lenses, and (assumed) repair of town wall | Early Islamic | Late Seventh-Tentth Century A.D. |
| 4 | Construction of a building inside the town walls | Fatimid | Tenth-Twelfth Century A.D. |
| 3 | Construction of a new city wall, including rounded tower | Late Fatimid | Early Twelfth Century a.D. |
| 2 | Repair and modification of tower with a rectangular base | Crusader <br> (Richard I)? | A.D. 1192? |
| 1 | Excavation and backfilling of stone-robbing and/or archaeological trenches | Modern | Nineteenth-Early <br> Twentieth Century A.D. |



Figure 17.4. Grid 20 plan showing layout of trenches and section lines
although no occupation levels were found associated with the use of the tower, as it turned out that these would have been at a level higher than the current ground level.

The excavation strategy was shaped by the limited time and manpower available, which meant that the exposure of a large area was impractical. Excavation therefore focused on a few key areas (figure 17.4). A long Trench A was opened between the rounded Wall 4 and the leaning Wall 8, in order to determine the relationship between the two structures. Another Trench BD was also opened south of this against the
inside face of the town Wall 3, and another (Trench C) on the outside, to expose its foundations and investigate the constructional sequence. A fourth Trench E, subsequently extended north and south, was also opened to examine the south Wall 63 of the building of which Wall 8 represented the west wall; but another Trench F, intended to examine the same building's north wall, was abandoned when it became clear that no trace of that wall remained.

The period of excavation ran from June 8 until July 8, 2014, when hostilities in the nearby Gaza Strip caused a cessation of work. Denys Pringle and Hannah Buckingham returned to the site between September 10 and 17 to complete the recording and drawing of sections; however, deterioration of the site in the intervening period meant that it was not possible to take the customary formal final photographs before the trenches were backfilled. ${ }^{35}$

## Structural Sequence

The structural remains proved to be complex, with a large number of phases appearing within a relatively small area. The stratigraphic sequence of the area has been divided into seven phases, dating from the Hellenistic period through to the early twentieth century a.D. (figures 17.5, 8-9). The phases are detailed below.

[^1]

Figure 17.5. Grid 20 site plan with phasing

Phase 7: Hellenistic (Fourth-First Centuries B.c.)
The earliest phase consisted of a wall (Wall 44, 49), running east-west (figures 17.5, 8-9). The upper part (Wall 44) was characterized by large, well-cut blocks of kurkar separated by beds of fine white lime mortar, $1-3 \mathrm{~cm}$ thick, but with very fine jointing on the wall faces. This mortar was still relatively soft and appeared to be pure lime putty, with little or no added aggregate. The blocks were on average 34 cm high, 42 cm long, and 15 cm thick and arranged as headers and stretchers in emplekton style. For the most part the wall was built entirely of blocks, though in some places the core consisted of fist-sized lumps of kurk$a r$ set in the same white mortar. The wall was 0.86 m thick and was traced for a length of ca. 3.50 m . It was visible on both the east and west sides of the Phase 3 (Fatimid) town Wall 3-4 and had clearly been enveloped by it, while to the east its partially demolished remains ran under and through the Phase 6 (Byzantine/ Early Fatimid) town Wall 26-27. At the time when the Fatimid tower and wall were built, the upper part of the Phase 7 Wall 44 must have been standing some 3.20 m high, as is indicated by the gap in the surviving Fatimid wall, where the upper part of the Phase 7 wall had subsequently been eroded away.

Below 33.90 m Above Site Datum (ASD), the wall narrowed by ca. 10 cm on the south side, though not apparently on the north, and was associated with a return running at right angles to it to the south below the line of the later Phase 6 wall, but this could only be observed on its west side. The construction of the lower part of the wall (Wall 49) appears to have been otherwise similar to that of the upper part (Wall 44).

Both levels of the Phase 7 wall are tentatively dated to the Hellenistic period on the basis of their style of construction and comparison with another similar fragment of early walling surviving in the town wall south of the Jerusalem Gate. ${ }^{36}$ Unfortunately, owing to constraints of time and the increasing narrowness of the bottoms of Trenches $\mathbf{B}$ and $\mathbf{C}$, it was not possible to reach any intact layers associated with the wall's construction.

## Phase 6: Byzantine to Early Fatimid (Fifth-Eleventh Centuries A.D.)

In the second phase a massive wall of concrete construction was built on a north-south axis partly over the top of the Phase 7 structures (Walls 44, 49) (figures $17.5-6,7-10$ ). Only the foundation of the wall survived. Since it had evidently been subject to

[^2]subsidence eastward down the slope as well as to deliberate robbing, it appeared when first excavated as several distinct pieces (Walls 26-28, 90), which were only later revealed to be part of the same feature, albeit very likely relating to different phases of it. At the northern end of Trench C, Foundation 90 stood 1.3 m above a base point of 33.20 m ASD and was at least 2.8 m thick, while at the southern end (Foundation 26) it stood only 0.85 m above a base point of 34 m ASD and was at least 1.6 m thick; but in both areas the outer face was missing. The masonry consisted of rubble concrete, laid in courses some 15 cm high. The mortar binding the rubble was light gray and included large amounts of shell as well as some small stones and charcoal. The west (inner) side of Foundation 26 was faced with roughly rectangular blocks of kurkar covered in mortar, giving the impression that the foundation had been built completely filling the trench into which it was set. This also seems to be confirmed by traces of orange sandy soil that were found in the interstices between the courses; these contrasted with the evidently later fill that excavation revealed running up against the wall face.

Because of later excavations, including that for the much deeper foundations of the Phase 3 (Fatimid) wall, which appears to have removed everything from the west side of the Phase 6 wall and to have been responsible for a partial void below Foundation 26 (figure 17.7), few layers could be directly associated with this wall. At the north end of Trench C (figure 17.6), what remained of the bottom of Foundation 90 directly overlay a sandy Layer 103, into which had been cut an Feature 104 filled with loose gray ashy material including charcoal and bone fragments. In the middle of the trench another fragment of Foundation 28 overlay a layer of soft dark orange silt (Layer 50), containing pottery of Byzantine and early Umayyad date. A layer of dark brown soil (Layer 29) running against the east side of Foundation 26 and Wall 28 at a higher level, however, most likely postdates the robbing of the wall, though the latest pottery from it is datable to the Byzantine period.

Inside the wall to the west, a layer of burnt material containing large amounts of vitrified wasters of Byzantine coarse ware (Layer 70) that had been redeposited against the inside face of the later Phase 3 Wall 3 (see Figure 17.7 and below) suggests that there may have been a kiln in this area in the Byzantine period.

The dating of the wall from Phase 6 remains problematical. The ceramic evidence suggests an early Umayyad terminus post quem for Section 28 and a Byzantine one for the rest. The type of shelly mortar with which the wall is constructed would also be consistent with a date in the Byzantine or early

Figure 17.6. Above: Trenches A and C, section a-b (looking north). Below: Trench A, section c-d (looking south)


Grid 20, Trench E, view to east
Section d-d ${ }^{1}$

Figure 17.7. Above: Trenches B and C, section e-f-g (looking south and west). Below: Trench E, section d, looking west

Umayyad periods, ${ }^{37}$ but evidence for post-Byzantine construction is also suggested by a photograph taken by Garstang (see figure 19.20, this volume), which appears to show two antique column drums built through the wall a little further north. One of these columns still exists, though now displaced several meters north of the position in which Garstang photographed it. In order to attempt a more direct approach at dating the wall, samples of charcoal were collected from the mortar of Sections 26, 28, and 90; but of 22 samples taken only three identifiable short-lived samples from Section 90 proved to be suitable for radiocarbon analysis. These yielded results which, when combined, produced a calendar date somewhat later than expected of a.D. 990-1020 at 65 percent probability or $965-1035$ at 95 percent, pointing to a construction date in the early decades of Fatimid rule from 969 onward. ${ }^{38}$ Although the dating of Section 90 of the wall thus seems reasonably secure, it does not necessarily follow that all the other remaining parts of the wall date to the same period, since elsewhere in Ashkelon, wherever sections of the Fatimid town wall have been identified, they usually overlie walls of the earlier Islamic or Byzantine periods. It seems reasonable to assume therefore, despite the lack of unambiguous dating evidence for it, that the Byzantine and Early Islamic wall would have followed the same alignment.

## Phase 5: Early Islamic (Late Seventh-Eleventh Centuries)

Evidence for Early Islamic building activity within the line of the Phase 6 walls was found in Trenches A, E, and $\mathbf{F}$ (figure 17.4). In the southern part of Trench $\mathbf{E}$ this phase was characterized by an indistinct series of disturbed lenses and areas of masonry, uncovered to the south of and directly below the later Phase 4 (Fatimid) Wall 63 (figure 17.7). Although the investigation of these layers was constrained by the small size of the excavated area ( 1.5 meters square), they seem likely to have represented the remains of foundations of structures whose upper parts no longer survived. The rough pieces of lime-mortared walling that were uncovered (Walls 53, 73) were aligned northwest to southeast, a quite different orientation from that of the later Phase IV (Fatimid) building. Another area of roughly constructed masonry (Area 92), albeit un-mortared, lay south of Wall 73. No surfaces were

[^3]

Figure 17.8. Trench C, Hellenistic Wall 44 running (left-right) through the Phase 3 (Fatimid) (3-4) and Phase 6 (Byzantine-Fatimid) $(26,28)$ town walls (photo DP 2014)
found associated with these areas of masonry, and the fills between them included lenses of material that were either compacted (Lenses 67, 97) or soft (Lenses $78,82,93$ ), the latest pottery from them being of the mid-eighth to mid-tenth centuries.

In the northern part of Trench E, north of Wall 63, a series of fills and horizontal surfaces predating the construction of the Phase 4 building was excavated, though except at the lowest levels excavated they survived only as a narrow strip on the west side of the trench, the remainder having been dug away in Phase 1 (figure 17.7). Immediately below Wall 63 lay remains of another un-mortared Foundation 108, similar to Foundation 92. This was set in a fill (Fill 98, 91) of fairly compact brown-gray soil containing some shell and small stones as well as small fragments of mortar similar to that found in the Phase 7 (Hellenistic) wall (Walls 44, 49). The pottery from these layers was predominantly Late Roman and Byzantine, but also included sherds from the mid-eighth to mid-tenth century. Overlying Layer 91 (at 36.6 m ASD) was a discontinuous spread of mortar (Layer 109), ca. 6 cm thick, mixed with shell and beach gravel, apparently representing an area where mortar had been mixed. This was overlain by another brown Layer 87, 2530 cm thick, similar to those below but containing predominantly pottery of the Islamic period, including fil-ter-necked jug fragments of the mid-eleventh to early twelfth century. This was covered by a spread of looser brown soil, large stones, and lumps of shelly mortar, sealed by a compact yellow-brown clayey surface containing flecks of mortar (Layer 84), which also extended over the top of Foundation 108. The surface of Layer 84 was subsequently overlain by an orange ashy tip (Layer 66) containing thin lenses colored


Figure 17.9. Trench C, Hellenistic Wall 44 running (obliquely left-right) through the Phase 3 (Fatimid) $(3-4)$ and Phase 6 (Byzantine-Fatimid) $(26,28)$ town walls, with the top of the Fatimid pisé wall visible below the masonry wall to the left (photo DP 2014)
orange and white (mortar) respectively and with a hard surface sloping down slightly to the south. Above this was a gray ashy Layer 110. These two ashy layers appear to correspond to two lenses of similar material (Layer 112) on the south side of Wall 63, which were also cut through by the wall's foundations. Layer 110 was covered by gray-brown soil, becoming looser to the north (Layer 111). This in turn was covered by a level plaster surface laid on a bedding of stones and mortar (Layer 71). This had every appearance of being the floor of the building constructed in Phase 4, except that in section it could be seen to have been cut though by Foundation 102 of Wall 63. It therefore seems more likely to have been in origin a construction floor associated with the building work. The floor of Building 61 ran directly over it (see below).

In Trench $\mathbf{A}$ (figure 17.6), a complex sequence of deposits and surfaces was uncovered, cut through on the east by a later Trench 106 associated with the robbing of the Phase 3 (Fatimid) town wall and on the west by the Foundation 88 of the leaning Wall 8 of the Phase 4 building and by a later Trench 17 dug against it. The earliest of the layers excavated (Layer 105) was hard, compact, and light yellow-brown in color, containing pieces of mortar similar to those encountered in the Phase 7 Wall 44. This layer appears to be the equivalent of Layer 98 in Trench E. It was overlain by a lens of loose orange-brown pebbly fill sloping down to the north, which was only visible in the side of the cut for Trench 106. Above this was a deposit (Layer 37), up to 70 cm thick, of light graybrown soil with ash, mortar, and charcoal inclusions. The latest pottery from this layer was datable to the mid-ninth to mid-tenth century. Set into it were two


Figure 17.10. Trench C, section e-f looking south, showing Phase 6 (Byzantine-Fatimid) Wall 26, 28 (center, left) and Phase 3 (Fatimid) Wall 3 (right) (photo DP 2014)
blocks of worked kurkar (Feature 101), suggesting that the buildings whose foundations were encountered in Trench E may also have extended this far north. This was covered by a series of scoops and compact fills, including a darker compact Layer 39 above Layer 101, two layers consisting mainly of crushed mortar (Layers 13, 38), and an orange sandy layer containing a large amount of pottery (Layer 33), including types datable to the Fatimid period (mid-tenth to early twelfth century). The composition and compaction of Layers 37 and 39 were similar to Layer 66 in Trench E.

In Trench F, a loose Layer 86 containing pottery of the Abbasid period (mid-eighth to ninth century) was overlain by two very compact Layers $\mathbf{7 9}$ and $\mathbf{8 3}$ containing similar pottery and types of the mid-ninth to mid-tenth century. Layer 83 was similar in composition and compaction to Layers 37 and 39 in Trench A (with which it was level) and Layer 66 in Trench E.

## Phase 4: Fatimid (Tenth-Eleventh Centuries): Construction of a Building Inside the Town Walls

Before the excavation started, one medieval feature that was already visible on site was a Wall 8 standing some 10 m west of and parallel to the visible remains of the town wall (figures 17.1-3, 11). In published plans of the walls of Ashkelon, including those of E. G. Rey (1871:208, fig. 52, pl. XIX), the Survey of Western Palestine (Conder and Kitchener 1881:3.236 (facing)), and John Garstang (1921:pl. I), this wall is interpreted as the west side of a tower forming part of the town walls. The 2014 excavation demonstrated, however, that the two walls were unrelated and that the Phase


Figure 17.11. West Wall 8 of Phase 4 Fatimid building, from the east (photo DP 2014)

4 wall was instead part of an earlier Fatimid building, standing inside the line of the Phase 6 (Byzantine/Early Islamic) town walls, and that it was partially demolished when the town walls were rebuilt in Phase 3.

The wall is 10.40 m long, 1.44 m wide, and survives to a height of 4.40 m above a $7-\mathrm{cm}$-wide foundation plinth (figure 17.5-6). At present it is leaning at an angle of $10^{\circ}$ toward the west. It appears to have been built on a raft of granite column drums, laid mostly longitudinally rather than transversely to the line of the wall. Their purpose was evidently to provide a solid base on what was probably recognized to be unstable ground. A similar, though less consistent, reuse of Herodian and Byzantine columns has been noted in the foundations of the Umayyad palatial buildings lying south of the Haram al-Sharif in Jerusalem (Prag 2008:130-31, figs. 115-16, 118.). In the case of Wall 8, however, the laying of the columns longitudinally and so close together may actually have made the wall less stable than would otherwise have been the case and have contributed to its lean. In addition, the central part has sunk somewhat, leaving diagonal cracks in the wall and the columns at the ends sticking up at an angle.

Despite its unstable foundation, the wall was well built with two facings of kurkar ashlars enclosing a rubble concrete core, laid pari passu with the facing in courses $13-19 \mathrm{~cm}$ high (mostly $14-15 \mathrm{~cm}$, averaging 14.65 cm ). The mortar used varies from creamy buff to creamy pink in those places where it contains a lot
of crushed tile or ceramics; it is sandy and somewhat gritty, but with almost no charcoal content. The rubble core also contains occasional lumps of shelly-mortared masonry derived from an earlier construction. The wall's west face, which was evidently the external face, is reasonably well preserved, with its face set back some three centimeters at horizontal intervals of three, eight, and 13 courses. The east face has lost its facing stones above a height of 1.70 m , and, where excavated in Trench A, the lower one meter of the facing had also been robbed out along with one of the columns from the foundation. Traces of a possible foundation Trench 88, containing some small stones, which may represent packing, were also discerned in this trench.

The standing Wall 8 appears to be the west wall of a building that once extended eastward toward the Phase 6 town wall. The position of the building's north wall is indicated by traces of its stub end, at least 0.90 m thick, surviving in the standing masonry at the north end of Wall 8, though no trace of its foundations was found by excavation in Trench F. At the south end of Wall 8, however, not only was the stub end of the south wall more clearly expressed in the standing masonry, but it was also possible to excavate its Foundation 63 in Trench E (figures 17.7, 12-13).

The south wall was 1.25 m wide and ran 3.60 m to the east, after which all trace of it had been removed by the construction of the foundation (Foundations


Figure 17.12. South Wall 63 of Phase 4 Fatimid building, from the southeast, with Wall 8 behind (photo DP 2014)


Figure 17.13. South Wall 63 of Phase 4 Fatimid building, from the northeast (photo DP 2014)
$\mathbf{2 3}, \mathbf{4 8}$ ) for a structure associated with the Phase 3 town wall. The wall's foundation included three antique granite column drums set in two parallel rows longitudinally to the line of the wall. The columns extended some 15 cm beyond the wall face. Another shorter column piece was also set transversely through the wall at the point where it met the west Wall 8. Subsidence of the western part of the wall had resulted in the longer of the longitudinally set columns fracturing in the middle. Above the columns were remains of what appears to have been the threshold of an entrance into the building, represented by a paved and mortared Surface 57-58 with the edges of the missing walls still visible in the mortar. The door appears to have been ca. 1.35 m wide between jambs 0.4 m thick, widening to two meters on the inside.

Examination of the foundations on the north side of Wall 63 was restricted by the presence of a large piece of fallen masonry (Feature 9) lying on the
ground surface and by later disturbance (Feature 60), which had effectively removed all trace of any foundation trench to within a few centimeters of the west side of the excavation trench, as well as undercutting the wall itself. From what it was possible to see in the surviving section (figure 17.7), however, it appeared that there was virtually no built foundation below the column drums, and beside the wall only a shallowly scooped Foundation 102, some 20-30 cm wide, filled with mortared rubble and with a level mortar surface. On the south side of the wall, however, the foundation trench was better preserved. As on the north, its surface was represented by a hard level spread of white mortar, in this case ca. 50 cm wide, covering a fill of mortared rubble (Fill 62). This lay below a thinner spread of loose degraded mortar (Fill 55) and in places covered a looser earth Fill 95. The scooped profile of the trench had cut through the ashy Fills 66, 110, and 112 of Phase 5 and some of the masonry Foundations $(\mathbf{7 3}, \mathbf{1 0 8})$ of the same phase, parts of which remained in situ set in the mortared fill. As indicated above (Phase 5), it also appears to have cut through the level made-up plaster Surface 71, which probably eventually came to form the bedding for the floor of the building itself. Part of such a floor (Floor 61), some 20 cm thick, survived above the threshold in the south wall of the building, extending over the top of the mortared foundation Trench 102 and plaster Surface 71 inside. It consisted of a mortar bedding covered by a trampled reddish-brown clay surface containing some coarse pottery.

The building of which Wall 8 represented the west wall and Wall 63 part of the south wall would have measured 9.52 m internally from north to south. Some indication of how it was roofed is provided by two shallow, though much abraded, vertical projections on the east face of Wall 8. These are $58-59 \mathrm{~cm}$ wide and placed at intervals (from the north wall to the south wall) of $2.76,2.64$, and 2.95 m . Although it is possible that these represent the stub ends of walls set at right angles to Wall 8, it seems more likely that they are the remains of pilasters which divided the interior of the building into three bays of roughly equal size. Because of the destruction caused by the construction of the Period 3 town wall, it is uncertain how far the building would have extended to the east, though there would have been room for three bays of similar width within the line of the Period 6 town wall. The bays could perhaps have been covered by groin vaults, possibly but not necessarily with a central dome, separated from one another by transverse arches springing from the pilasters and from four free-standing columns or piers within the room; but for this there is no definitive evidence.

The building's function is also obscure, though its orientation and plan suggest the possibility that it may have been a small mosque. It could be objected that the location of a door in what would have been the qibla wall might militate against such an interpretation; however, if the building were to have been a mosque then the main entrance would doubtless have been in the center of the north wall, facing the mihrab. A small mosque with a similar plan and a decorated but unlit central dome, dated by an inscription to A.H. 736 (A.D. 1335-36), survives in the village of Bayt Lid, between Tulkarm and Nablus.

## Phase 3: Fatimid (Early Twelfth Century): Rebuilding of the Town Walls

The next structural event to be recorded in this area was the complete rebuilding of the town wall (figures $17.5-7$ ). This entailed the demolition of the earlier Phase 6 (Byzantine/Early Fatimid) wall and the partial destruction of the building erected in Phase 4. At this point the medieval town wall, after following the edge of the scarp from the Jerusalem Gate on a course of roughly $N 20^{\circ} \mathrm{E}$, made a dogleg turn of some $15-20 \mathrm{~m}$ to the west before continuing on a course of around $\mathrm{N} 10^{\circ} \mathrm{W}$. Although it is likely that already in the Hellenistic and Byzantine periods a tower or bastion would have marked the point at which the wall made its initial turn, we have little evidence to indicate what form such a structure would have taken. In the rebuilt wall of Phase 3, however, the exposed right-angled turn was marked by a massive quarter-round tower or bastion, built of a piece with the curtain wall to the south of it (figures 17.5, 14-17). Only the southern part of this tower still survives in situ (Tower 3-4), the northern part and the wall that would have run west from it having been undermined and destroyed, though several large Fragments 5-7 still lie on the downhill slope. The masonry that survives extends some 11.5 m north-south and is some 2.5 m thick. An irregular Foundation 23, 48, 1.4 m thick and 3.5 m long, which runs west at right angles to the southern end of Wall 3, albeit separated from it by a gap of some 60 cm to the depth excavated, also appears to belong to the same construction, though it was not fully excavated and its purpose remains unclear.

Although it is likely that the wall and tower would have stood at or near the edge of the east-facing scarp, it is clear that most of what is now visible of them represents a foundation and would originally have been hidden below ground level. It is therefore difficult to gain an appreciation of the topography existing at the time when the walls were rebuilt and in use. There has also clearly been considerable undermining and
subsidence to the north. Before excavation the difference between the ground levels to the east and west of the wall was 1.55 m at the southern end and 2.56 m in the center; but it is likely that both ground levels would have been some two meters higher when the wall was first built and that there was a level berm in front of the outer face.

Whatever the difference in ground levels inside and outside the walls may have been when they were first built, the builders evidently understood the need to provide them with deep foundations. The curtailment of the 2014 excavation unfortunately meant that it was not possible to excavate to the very bottom of the foundations; however, the lowest level recorded in Trench C, on the outside of the wall, was 32.42 m ASD, or 3.16 m below the present external ground surface and 4.8 m below the level inside (figure 17.7). Such foundations would have required the digging of a massive construction trench. On the inside (west side), however, the cut had been largely removed by the digging of a much larger trench some six meters wide against the wall in Phase VII (figures 17.6-7).

In Trench A, excavation did not reach the bottom of this later cut and it was therefore not possible to establish the dimensions or depth of the original construction trench (figure 17.6). The western face of Wall 4 also had an irregular profile with no proper facing stones, suggesting either that it had been built directly against the side of the foundation trench or that the facing, if there ever was one, had been robbed when the later cut was made. In Trench BD, however, more obvious evidence of stone-robbing was found (figure 17.7). Here Wall 3 was found to have a regular vertical facing below 35.52 m ASD ; above that, however, the facing had been robbed and the wall core scoured out, most likely by the prevailing northwesterly wind, suggesting that the robber trench had been left open for some considerable time. The robber trench, which narrowed to only 50 cm in width at the very bottom, had been cut through a black gritty deposit (Layer 70) sloping down toward the north; this contained quantities of ash and coarse Byzantine pottery, including many vitrified wasters most likely from a kiln. It was overlain by another gritty Fill 69, orange-brown in color and also running down toward the north. But whereas the pottery from Layer 70 was no later than Byzantine, that from Fill 69, though mixed, included types dating from the Fatimid period (mid-tenth to twelfth century). Both of these fills appear to have been deposited, or more likely redeposited, against the inner face of the wall after its construction. It appears therefore that here, at any rate, the wall was built within a construction trench of uncertain width, which was subsequently backfilled with redeposited material.


Figure 17.14. Exterior of the Phase 3 Fatimid town wall and tower (3-4) from the southeast, showing the large blocks and ghost of the Phase 7 Hellenistic Wall 44 running through it and, in the foreground, the foundation of the Phase 6 Byzantine-Fatimid wall $(26,28,90)$ against which it was built; also visible are the Phase 2 (Crusader?) triangular spurs added to the Phase 3 tower (photo DP 2014)


Figure 17.15. Phase 3 Fatimid rounded Tower 4 from the northeast, showing the Phase 2 triangular spurs added to square off the foundation. The original Fatimid-period ground level is indicated by the polygonal courses and plinth just above the top of the spurs (photo DP 2014)

On the outside (east side) (figure 17.7), the outer edge of the foundation trench was represented by the west (inside) face of the foundation of the Phase 6 (Byzantine/Early Fatimid) wall (part of which [Wall 26] was even undermined in the process, though remaining suspended in situ) and possibly the Phase 7 Wall 49 beneath it (though this was not fully investigated for fear of collapse). In the southern part of Trench C, Wall 3 was investigated to a depth of 32.42 m ASD. If we assume that its inside face continued down vertically to the same depth, the wall's


Figure 17.16. The surviving top of the Phase 3 Fatimid rounded Tower 4, showing granite through-columns (photo A14-26213)


Figure 17.17. Phase 3 Fatimid rounded Tower 4 from the north, showing the Phase 2 squaring off of the truncated wall in line with the added spur. Inside the tower (right) the Fatimid floor level would have been higher than the present surviving height of the tower (photo DP 2014)
thickness at this level would have been 4.6 m . On the outside, however, the lower 2.2 m of the excavated wall face was built with a slight batter, which turned into a more pronounced chamfered plinth projecting 70 cm , some 50 cm from the bottom. This lower portion of the wall was built of rammed earth (pisé or tapial construction), consisting of earth, clay, and some stones, including pottery and mortar fragments. At least two horizontal divisions could be discerned in it, one ca. 20 cm below the top (at 34.52 m ASD ) and another 39 cm below it, each characterized by a spread of pebbles and some potsherds.

Above the rammed earth construction, the wall continued more or less vertically in lime-mortared
masonry for five courses, before thickening and overhanging its base for its remaining height. The facing stones above ground level, however, had been completely robbed, as had most of those immediately above the rammed earth wall. The construction consists of irregular courses of rubble set in a hard graybuff sandy mortar containing granules of white lime. The rubble includes at least one lump of gray shelly mortar containing charcoal, most likely derived from the Phase 6 wall. For its upper 1.80 m , the wall continues to project forward and its construction changes slightly, with relatively more stone to mortar. The core consists of horizontal courses of varying height ( $13-38 \mathrm{~cm}$, some of them probably double courses) containing pieces of kurkar set in a hard buff-cream sandy mortar containing no charcoal. Traces of two courses ( $14-15 \mathrm{~cm}$ high) of what may have been an eroded outer face also exist, but they do not relate very convincingly to the coursing of the core material.

The Fill 43 of the construction trench between Walls $\mathbf{3}$ and 26 consisted of a very loose mass of stones and other loose material; what little pottery it contained included some sherds from the mid-ninth to mid-tenth century.

As mentioned above, the foundations of the Phase 3 town wall and tower enveloped a portion of the Phase 7 (Hellenistic) Wall 44 running east-west through it to a height of over three meters (figure 17.5). In Trench C, the splayed base of the northern part of the foundation also ran against Wall 44 on the south and the foundation of the Phase 6 Wall 90 on the east (figure 17.8-9, 14). Above this the outer (east) face of the rounded Tower 4 stands 4.5 m proud of the present ground surface, though when built most of its "facing" would have been below ground level. Its mortar is very hard, cream-buff in color, sandy with small grits ( $<5 \mathrm{~mm}$ ) including some shell fragments but very little charcoal. The lower 2.20 m is rounded or sub-polygonal in plan and is faced with irregular ashlars ( $14-24 \mathrm{~cm}$ high), besides two marble columns set transversely into the wall and some other column fragments (figures 17.14-15). During surveying in 2012, a bronze coin, identified as an Abbasid cast fals of the period A.D. 800-30, was recovered from the mortar bed below the topmost course of this rounded lower section. ${ }^{39}$ Above this section are two further courses, each 35 cm high, arranged to a slightly more regular polygonal plan. All the masonry up to this point appears to represent a foundation, rather than an intended wall face; it would therefore most likely originally have been covered by soil which has since been eroded away. Indeed, a photograph taken

[^4]by John Garstang in 1920 shows soil extending over it (see figure 19.122, in this volume). On this foundation stood the rounded tower itself: first a footing course in rough ashlar, ca. 14 cm high and set slightly forward; then two plinth courses, also 14 cm high, the upper one with a plain chamfered top. Above this there survive eight courses of ashlar, each ca. 14 cm high, with a splayed array of granite through-columns set through the wall, 1.02 m above the base. Three of these columns survive in situ (figure 17.16), while the mortar impressions of another one may be seen to the north of them and another three or four to the south. The remains of the tower itself stand 1.48 m above the base course. The floor level of the tower would have been above the height of these columns and well above the present ground level on the west, so has now been lost.

The subsequent eroding away of the upper part of the Phase 7 Wall 44 incorporated into the wall of Phase V created a gap between the north part (Wall 4) and the south part (Wall 3) of the Fatimid wall. As the facing of the upper part of Wall 3 has also gone, it is difficult to tell how the rounded face of the "tower" related to the wall face to the south of it. Even in what survives, however, the curving face of the tower extends behind the projected line of the eroded wall face, suggesting that there would have been a vertical indentation at this point, to emphasize the change from straight to rounded wall and, in effect, make the rounded portion appear from the outside more like a tower and less like a rounded continuation of the wall. A similar architectural trick is used on one of the rounded towers built in 1169-71 on the walls of Cairo by Saladin (Salah al-Din), while acting as wazir for the Fatimid sultan al-'Adid (1160-71) see chapter 19, this volume.
As remarked already, the floor levels associated with the tower would have been some two meters or more above the present ground level, and the northern part of the tower has been completely destroyed. Furthermore, no part of the wall face survives on the west side above the foundation level. It is therefore hard to tell whether the back of the tower was open or enclosed, how tall it might have stood, or what provision was made in it for defending it at different levels by embrasures, wall walks, or parapets. The only piece of masonry on the inside of the wall that might relate to an associated structure is an irregular Foundation 23, $\mathbf{4 8}, 1.4 \mathrm{~m}$ wide and 3.5 m in length, which runs east-west from the southern end of Wall 3, separated from it by a gap of 0.60 m (figure 17.5). Its construction is similar to that of Wall $\mathbf{3}$ and the building of it would have entailed the destruction of the eastern part of the south wall of the Phase 4 Building 63.

Phase 2: "Mise En Valeur" of the Tower after Partial Demolition (Crusader?-1192?)

It appears that the rounded tower was undermined and slighted while Ashkelon still retained a military significance, for an attempt was subsequently made to refortify it. The main evidence for the attempted rebuilding consists of two triangular masonry "Spurs" 64-65 that were added to the southeast and northeast sides of its foundation with the evident intention of producing a rectangular base enclosing the rounded tower (figures $17.5,14-15$ ). The north end of Wall 4, already perhaps damaged or fallen, was also squared off in line with the northern "spur" (figure 17.17). In some places an attempt was made to bond the "spurs" into the rough facing of the foundation, but elsewhereincluding on the plinth of the rounded tower itselfrubble was simply applied to the earlier facing. The mortar used for the spurs is medium hard, creamy gray, and sandy, containing grits ( $<3 \mathrm{~mm}$ ) and finely graded crushed shell; in places it also includes potsherds, but they seem to have been used more as pinnings than as part of the mortar mix. Some small kurkar ashlars still adhering to the lower part of the foundation indicate that the whole squared base would have been faced, though apart from these few survivals all the ashlars have now been robbed out. Given that the northern part of the rounded tower no longer existed, it may be doubted whether much of its superstructure remained standing at all. Indeed, the facing up of the foundation suggests that the external ground level was deliberately lowered in order to present something resembling more a low rectangular bastion than a standing tower. It also seems to have been at this point that a section of Blocking 59 was added to bridge the gap in the wall where the remains of the Phase 7 (Hellenistic) Wall 44 had been partly eroded.

## Phase 1: Stone-robbing and Archaeology (Nineteenth-Early Twentiethth Centuries)

The final major phases of activity consisted of excavations and backfilling apparently associated with demolition work, stone-robbing, treasure hunting, and/or archaeology, in varying combinations.

The first is represented by the excavation of a trench some six meters wide and over two meters deep against the inside (west) face of the Phase 3 town wall. This would have resulted in the demolition of whatever still remained of the Phase 4 building, which had already been partly destroyed in Phase 3. In Trench A (figures 17.5-6), although it was not possible to excavate it fully, the cut seems to have begun almost vertically on the west and probably sloped down to the east.

It was subsequently backfilled with layers of stones and building rubble sloping down from the west. Of these fills, Fills 24 and 52 consisted of a large amount of rubble, including a large chunk of mortared masonry, whereas Fill 42 contained little rubble but a great amount of bone and glass. The pottery from these layers was very mixed and predominantly Byzantine to medieval, but also included some Ottoman-period types. These layers were covered by a more compact weathered pebbly Surface 18. In Trench BD (figure 17.7), the cut extended to a depth of 34.96 m ASD and was clearly associated with the robbing of the facing stones from the Phase 3 Wall 3. It was filled with discarded rubble and stones in a light brown-gray gritty Fill 45; although the pottery was again predominantly Byzantine and medieval, it also contained some Ottoman-period types. In the northern part of Trench E this episode is represented by a cut containing a similar loose stony Fill 60, which even extended partly under Wall 63. While it is possible that such clearance might have been the work of Lady Hester Stanhope, who is known to have excavated the interior of one of the towers of Ashkelon in 1812, there is no direct evidence to link her activities to this area. A likelier explanation, supported by the evidence from Trench $\mathbf{B D}$, is therefore that it represents an episode of demolition and robbing of stone, carried out perhaps by Ibrahim Pasha in 1832-40 or by the inhabitants of Jura at any time in the nineteenth century. In view of the wind scouring to which the western side of Walls 3 and 4 was subjected, it seems likely that they would have been left exposed to the prevailing northwesterly gales for some considerable time thereafter before being backfilled.

This backfilling was followed by another episode of backfilling, which in places may have been preceded by further digging activity. These fills mostly consist of very loose fist-sized stones associated with large amounts of Late Roman and Byzantine pottery, some medieval and only very occasionally a piece from the Ottoman period (Pieces 14-16, 19, 21-22, 25, 32, 35-36, 47). In Trench $\mathbf{A}$ (figures 17.6), fills of this kind (Fills 14, 16, 22) overlay the earlier backfill at the eastern end of the trench against Wall 4. To the south of this, in Trench BD (figure 17.7), similar rubbly fills (Fills 15, 19, 21, 25, 32, 35, 36) overlay Layer 45 next to the Fatimid town Wall 3. In the gap between Walls 3 and 4, where the Hellenistic Wall 44 had eroded away, a dark brown silty layer containing little pottery (Layer 10) appears to represent topsoil washed through the gap. These layers lay beneath a surface Layer 11 containing some rubble, partly disturbed by the preexcavation mechanical clearance of the site.

In Trench E, a similar rubble Fill 47 was found overlying the earlier Fill 60 on the north side of Wall 63, covered by a sandy buff topsoil with rubble inclusions (Layer 46). To the south of this the remains of Wall 63 were covered by an identical sandy buff topsoil (Layers 30, 34), overlying a soft brown fill datable to the Ottoman period (Fill 54).

At the western end of Trench $\mathbf{A}$, adjacent to the early Fatimid Wall 8 (figure 17.6), a cut through the building surfaces filled with loose rubble (Trench 17) may be interpreted as a robber trench to remove one of the columns from the base of the wall, the "ghost" of which could be seen in the mortar. However, this robbing might have occurred as early as Phase 3 , since this feature lay directly below the loose surface soil (Layers 1-2).

In Trench $\mathbf{C}$ on the east side of the rounded Tower 4 and town Wall 3, the archaeological stratification was also disturbed by later archaeological activity and
stone robbing. Layers 85, 94, and 96, covering the remains of the Phase II wall, contained Byzantine- to Fatimid-period material, while the upper part of the excavated area was marked by buff-colored sandy layers (Layer $20=\mathbf{8 1}, \mathbf{5 1}$ ) containing pieces of rubble and very mixed pottery (Roman-Fatimid), quite possibly representing fills associated with previous archaeological activity. These layers were below a loose dark brown topsoil (Layers 12, $80=\mathbf{7 2}$ ).

The fills consisting of loose rubble comprising fist-sized stones associated with Late Roman and Byzantine pottery seem likely to represent the backfilling following the archaeological activity of John Garstang in the 1920s, as similar fills have been excavated in other areas where Garstang is known to have worked. Other excavations appear more likely to have been associated with the robbing of stone or columns from the abandoned buildings.


[^0]:    ${ }^{33}$ This corresponds to Area 28, Tower FF, in Denys Pringle's report on the town walls in Chapter 19 of this volume. The present report supersedes the interim report that appeared in 2016 (Pringle and Buckingham 2016).
    ${ }^{34}$ Editor's comment: The numbering and sequential ordering of phases for Grid 20 Square 68 have been adjusted to conform with Ashkelon Excavation standards. Thus, the following phases in the current chapter correspond to phases previously published (Pringle and Buckingham 2016): Phase I. Hellenistic $=$ Phase 7; Phase II. Byzantine-Early Fatimid $=$ Phase 6; Phase III. Early Islamic $=$ Phase 5; Phase IV. Fatimid $=$ Phase 4; Phase V. Late Fatimid $=$ Phase 3; Phase VI. Crusader $=$ Phase 2; Phase VII. Modern $=$ Phase 1.

[^1]:    ${ }^{35}$ Students and volunteers who worked on the site included Matt Hewett, Anna Kim, Sarah Ostertag, Stela Martins, Abby VanderHart, Mark Verbruggen, Shane Cavlovic, and Rajaa Elidrissi. Surveying was undertaken by Trent Dutton.

[^2]:    ${ }^{36}$ Tower K, phase 4. See Chapter 19, this volume, p. 157.

[^3]:    ${ }^{37}$ See discussion by Pringle in Chapter 19, this volume.
    ${ }^{38}$ See Chapter 20 by Pringle, Healey, and Bronk Ramsey, this volume. The laboratory numbers are OxA-33101, OxA33102, and OxA-33103.

[^4]:    ${ }^{39}$ See cat. no. 73 in Chapter 24, in this volume.

