Excavations in the Chapel of St. Vartan in the Holy Sepulchre*

M. BROSHI and G. BARKAY
Israel Museum, Jerusalem Tel Aviv University

I. REMAINS FROM THE IRON AGE

The Church of the Holy Sepulchre is a large complex of structures located in the heart of the Christian Quarter of the Old City of Jerusalem. This complex originated in the days of Constantine the Great in the fourth century C.E.; since that time, it has undergone various phases of destruction, reconstruction and entirely new construction. Most of the extant building is of the Crusader period.

Beginning in 1960, extensive restoration work was carried out in the complex, within the framework of which archaeological excavations were conducted. The first general review, including data stemming from these excavations, was published by Coüasnon, and a well-illustrated final report in three volumes was recently published by Corbo. Naturally, the main point of interest in the excavations was the revealing of the church building of the Byzantine and medieval periods. However, in the course of the excavations remains were found from earlier periods, including some from the end of the Iron Age, though in the report they are rather summarily treated. The Iron Age finds dealt with in the final report are from all parts of the building complex.

Excavations and Finds

On the eastern edge of the church complex lies the Chapel of St. Helena, named after Constantine's mother (Figs. 1:1, 2:1). This chapel is reached by descending from the main level of the church by a stairway. St. Helena's chapel is in the custody of the Armenians, who call it the Chapel of St. Krikor (Gregory). From this chapel, an additional stairway leads down eastwards to a rock-hewn cave known as the Chapel of the Invention of the Cross (Figs. 1:2, 2:2).

In 1970, the Armenian Patriarchate sought to clarify whether beyond the apses of the Chapel of St. Helena, to the east, there was a sealed space or, as was generally

* Published in Hebrew in El 18 (1985), pp. 8–20. Section I of this article was written by G. Barkay and Section II by M. Broshi. The authors wish to thank S. Gibson, who contributed to this paper in more than one way.


Fig. 1. Plan of the Holy Sepulchre complex. 1 – Chapel of St. Helena (Chapel of St. Krikor); 2 – Chapel of the Invention of the Cross; 3 – Chapel of St. Vartan; 4 – the northern space.
Fig. 2. Plan of the excavated area and its surroundings. 1—Chapel of St. Helena (Chapel of St. Krikor); 2—Chapel of the Invention of the Cross; 3—Chapel of St. Vartan; 4—the northern space; 5–6—ancient cisterns.

suspected, merely bedrock.4 A brief excavation showed that there was indeed a space, blocked up already in antiquity (Figs. 1:3, 2:3). This space, the continuation of the cave of the Chapel of the Invention of the Cross, was excavated by the Armenian Patriarchate, which subsequently fitted it out as a chapel, today called the Chapel of St. Vartan and the Armenian Martyrs.5

In the period between November 1975 and February 1976, M. Broshi supervised the excavations conducted on behalf of the Armenians in this area.6 The space cleared in these excavations measured 9.8 × 10.3 m. and a depth of 13 m. was reached below the initial level of work. The space cleared is a hollow created during the quarrying of the melke rock, with the higher 'crust' of mizzi hilu rock forming a kind of ceiling (Pl.

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4 E.g. H. Vincent and F.M. Abel: Jérusalem nouvelle, II, Paris, 1914, Fig. 84 on p. 131: 'ligne probable du rocher'.

5 The spaces east of the Chapel of St. Helena were also discussed by Corbo (where they are denoted Loci 307–309), pp. 110–113, Plates 57–58, Photos 103–109.

6 The clearance was conducted by several labourers, We wish to express our gratitude to Bishop Guregh Kapikian, who invited M. Broshi to supervise this work. Part of the clearance was completed prior to his
(14:A). In the ceiling of the cave thus formed, in the south-eastern corner, a karst flue can be seen, indicating that there were natural hollows here even prior to the quarrying.

Above the quarried floor there was a floor of beaten earth mixed with ashes.\(^7\) The floor overlaid a fill of *terra rossa* and white stone chips. Beneath the floor and the fill was the surface of the quarry, showing signs of the quarrying; between the traces of the blocks removed from the quarry were channels hewn while separating the blocks. The floor of the quarry was found covered by grey to blackish earth. The thickness of the fill below the beaten earth floor varied between a few centimetres and 1.3 m. All the potsherds found within this fill and on the floor are of the Iron Age II.\(^8\) Below the floor, two loci were discerned in which the pottery was entirely homogeneous, all the sherds belonging to the Iron Age. The maximal length of the preserved floor fragment was 6.5 m., but it was difficult to determine the limits of the floor since it was cut through by foundation trenches of later walls, W2 and W3 from the Late Roman period and W4 from the early Byzantine period (see the plan and sections in Fig. 5).\(^9\) Thus, it is not clear whether the floor represents a roofed or an open occupational level, as no associated walls were found abutting it. The floor has been dated approximately to the seventh century B.C.E. on the basis of the potsherds found in the fill beneath it. The overall dating to the Iron Age II has been strengthened by the results of Carbon-14 tests of the ash found admixed in the floor. The age of the sample tested was determined as 1053 (± 210) B.C.E.\(^10\)

The pottery uncovered in the excavations was found in seven loci:

**Locus 1:** Beneath the floor. The sherds here included an ostracon fragment (see below).

**Locus 2:** Beneath the floor. Under a large, split stone, all the sherds are of the Iron Age II.

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8. Isolated sherds of later date intruded into the pottery baskets, apparently originating in higher levels; this probably occurred during the time when there was no proper archaeological supervision.
9. See also below, Section II.
10. The examination was made at the laboratory of the Isotopes Department of the Weizmann Institute, Rehovot (Test No. 478). The results are quoted from a letter of 1 February 1977 by Dr. Y. Karmi, whom we thank for his assistance in this matter.
Locus 3: Between W3 and W4, actually from the foundation trench of W4 (Constantinian). This locus has the nature of a fill, and the sherds are mixed.

Locus 4: Between W2 and W3 (Late Roman). The sherds are not from a clear level and are mixed.

Locus 5: Around the large stone resting on the floor; the sherds are from above the floor and from the fill of the floor itself, mainly from the latter.

Locus 6: Fills between W2 and W3. Six baskets of potsherds labelled SH 6/1–6

were found here, the lowest of them gathered on the floor and including only homogeneous material from the Iron Age.

Locus 7: Beneath the foundations of W2, to the east.

Among the sherds found beneath the floor was a fragment of an ostraca in paleo-Hebrew. The ostraca was registered as SH 1/1 and was examined by Lemaire. The sherd measures 5.5 × 6 cm.; traces of the ends of three lines of script can be discerned, apparently numerals. The first line contains four clear signs and the two other lines, three signs each. The sherd may be an account or a receipt, like some of the Arad ostraca or the ostraca discovered in Kenyon’s excavations in the City of David. On the other hand, in Lemaire’s opinion, the ostraca could have been a pupil’s exercise in writing numerals, as found in the ostraca from Kadesh-Barnea. The fragmentary nature of the inscription does not allow for a decision between these two interpretations.

Twenty sherds of the Iron Age II, found on the floor and beneath it, are presented here (Fig. 3). All the vessel types are typical of the pottery of the end of the Kingdom of Judah, throughout Judah and in Jerusalem. The date of these sherds is from the end of the eighth to the early sixth centuries B.C.E.

Corbo has expressed doubts as to Broshi’s conclusions as published in the preliminary report. In his opinion, the floor did not belong to the Iron Age and was merely a levelling of the surface carried out at the time of the building of the later walls, apparently in the Late Roman period. The pottery found above and below the floor does not, in his opinion, indicate the date of the floor, for Iron Age pottery is known also from other spots within the complex of the Holy Sepulchre, even close to the site of the excavations in the Chapel of St. Helena. In Corbo’s view, the early pottery is indicative only of the beginning of quarrying activity on the site. He does not believe that the Iron Age finds here indicate the extent of the city in that period. Further, he doubts the value of the Carbon-14 test on material from the floor. He holds that his

11 The designation ‘SH’ on the sherds denotes ‘St. Helena’.
12 Details about the ostraca are from a letter from Dr. A. Lemaire to M. Broshi of 26 June 1980. We are grateful to him for his assistance.
16 Corbo, pp. 112–113.
views are strengthened and confirmed by the results of Kenyon’s excavations in her Area C, in the Muristan.  

Both Corbo and Lux, who excavated beneath the Church of the Redeemer, seem to have accepted the archaeological conclusions and topographical-historical concepts of Kenyon, following her excavations in the Muristan, and they sought to draw an analogy between their excavations and Kenyon’s results. In our opinion, Corbo’s criticism is unacceptable in the light of analysis of the excavation results in the area of the Muristan. Re-examination of the results of Kenyon’s and Lux’s soundings indicates the existence of quarries overlaid by fills with settlement remains and a large quantity of Iron Age II pottery. Corbo dated the quarry in the Holy Sepulchre to the Iron Age II, which we accept. However, the question is whether, at the time of the construction on the site in the Late Roman period, the floor of the quarry was re-exposed; i.e. was this area levelled by a fill and the laying of a floor? 

Methodically, too, the dating of the floor should be based on the latest sherds found within the fill sealed by it; we cannot assume that a fill containing sherds beneath a floor is of no significance for dating that floor. The very fact that the floor-level is lower than the bases of W2 and W3, which were dated to the Late Roman period, does not permit their dating to the same period. It seems to us, therefore, that Corbo’s objections are to be rejected.

The Armenian Patriarchate continued excavating, extending northwards the space which had previously been uncovered. In excavations which they conducted in 1977–1980, a further space was uncovered (Figs. 1:4, 2:4; Pl. 14:B), entered through a modern breach and through a massive Byzantine wall (W4) abutting Broshi’s excavations on the north. Clearance in this area was conducted without archaeological supervision, and no report concerning it has been published. In March 1981, we conducted a series of measurements and photographs, following earlier visits, and all the elements observed were examined, as were the sherds which had been gathered and kept on the site.

The maximal dimensions of this additional space which was uncovered are 7.4 x 18 m.; it is entirely covered over by rock. The height of the rock ceiling at the centre is about 6.5 m. The shape of the chamber as revealed by the clearance is long and narrow,
Fig. 3. Pottery of the Iron Age from the Chapel of St. Vartan.
EXCAVATIONS IN THE CHAPEL OF ST. VARTAN

Description of the Pottery in Fig. 3

<table>
<thead>
<tr>
<th>No.</th>
<th>Reg. No.</th>
<th>Vessel Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SH 1/2</td>
<td>Bowl</td>
<td>Reddish, reddish core, red slip</td>
</tr>
<tr>
<td>2.</td>
<td>SH 1/3</td>
<td>Bowl</td>
<td>Reddish, white grits and gravel, grey core, wheel-burnishing on interior</td>
</tr>
<tr>
<td>3.</td>
<td>SH 1/4</td>
<td>Bowl</td>
<td>Reddish, numerous white grits, grey core</td>
</tr>
<tr>
<td>4.</td>
<td>SH 1/5</td>
<td>Storage-jar</td>
<td>Reddish, numerous white grits, greyish-brown core</td>
</tr>
<tr>
<td>5.</td>
<td>SH 2/1</td>
<td>Krater</td>
<td>Light brown, numerous white grits and gravel, continuous wheel-burnishing on interior</td>
</tr>
<tr>
<td>6.</td>
<td>SH 2/2</td>
<td>Bowl</td>
<td>Reddish, some white grits, greyish-brown core, red slip</td>
</tr>
<tr>
<td>7.</td>
<td>SH 2/3</td>
<td>Bowl</td>
<td>Yellowish light-brown, white grits and gravel, brown core, continuous wheel-burnishing on interior</td>
</tr>
<tr>
<td>8.</td>
<td>SH 2/4</td>
<td>Bowl</td>
<td>Reddish, white and red gravel and grits, reddish-brown core, red slip</td>
</tr>
<tr>
<td>9.</td>
<td>SH 4/1</td>
<td>Bowl</td>
<td>Reddish, numerous white and some grey gravel and grits, red slip on interior, traces of soot from conflagration</td>
</tr>
<tr>
<td>10.</td>
<td>SH 4/2</td>
<td>Krater</td>
<td>Grey, grey core, continuous wheel-burnishing on interior</td>
</tr>
<tr>
<td>11.</td>
<td>SH 4/3</td>
<td>Jug</td>
<td>Reddish-pink, numerous white grits, greyish-brown core</td>
</tr>
<tr>
<td>12.</td>
<td>SH 4/4</td>
<td>Krater</td>
<td>Reddish, numerous white and some grey grits and gravel, grey core, wheel-burnishing on interior</td>
</tr>
<tr>
<td>13.</td>
<td>SH 4/5</td>
<td>Bowl</td>
<td>Red, white grits and gravel, grey core, wheel-burnishing on interior</td>
</tr>
<tr>
<td>14.</td>
<td>SH 4/6</td>
<td>Storage-jar</td>
<td>Reddish-brown, numerous white and some grey grits and gravel, grey core, well fired</td>
</tr>
<tr>
<td>15.</td>
<td>SH 5/1</td>
<td>Krater</td>
<td>Red, numerous white grits and gravel, grey core, continuous wheel-burnishing on interior</td>
</tr>
<tr>
<td>16.</td>
<td>SH 5/2</td>
<td>Hole-mouth jar</td>
<td>Reddish-white, white gravel and grits, reddish-brown core</td>
</tr>
<tr>
<td>17.</td>
<td>SH 5/3</td>
<td>Storage-jar</td>
<td>Greyish-brown, well fired</td>
</tr>
<tr>
<td>18.</td>
<td>SH 6/1-4</td>
<td>Storage-jar or pithos</td>
<td>Yellowish-brown, numerous white grits, greyish-brown core, deeply incised after firing</td>
</tr>
<tr>
<td>19.</td>
<td>SH 7/1</td>
<td>Body fragment</td>
<td>Reddish, white grits, brown core, lug-handle</td>
</tr>
<tr>
<td>20.</td>
<td>SH 7/2</td>
<td>Krater</td>
<td>Reddish, reddish-brown core, wheel-burnishing on interior</td>
</tr>
</tbody>
</table>

oriented east—west. On the north, east and west it is bounded by the rock-cut walls of the ancient quarry. The southern boundary of the chamber is W4, the southern face of which was uncovered in Broshi’s excavations (see below, p. 119). In the northern rock wall can be seen an opening blocked by field-stone construction with mud and clay mortar. At the centre of the rock ceiling, a small karst flue can be discerned, around which are reddish stains of oxidation, contrasting with the white background of the surrounding meleke stone. Most of the ceiling is covered with traces of quarrying with a
sharp implement (chisel or quarrying adze). The height of the ceiling is not uniform, and all over its surface are scars and negative impressions of stones removed during quarrying. Traces of the quarrying — separation channels between blocks and stumps of removed blocks — can also be seen on the walls and floor of the cave (Pl. 15:A). On the walls and ceiling, the stones were separated vertically, while close to the floor there were indications of horizontal removal. The sizes of the blocks quarried here can be estimated from the traces remaining on the floor and walls. The stones were large, good-quality ashlars. Several sizes are represented, e.g. 0.51 × 1.2 m, 0.5 × 1.2 m, 0.7 × 1.84 m and 0.76 × 1.96 m. There are also negative traces of ashlars more than 2 m long. The traces of quarrying give the impression that the stones here were intended for a high-quality public project.

The excavations of the Armenian Patriarchate on this site were, as noted, conducted without scientific supervision. Among the large quantities of pottery here, mainly from the fills, the number of Iron Age II sherds was noticeable. On our visit during the course of the clearance, we discerned that most of the Iron Age pottery came from the lower parts, adjacent to the rock floor, and we had the impression that at several spots homogeneous pottery of Iron Age date was coming to light. On the basis of this impression (but without an actual quantitative check), it would seem that more than 10% of the sherds collected here were of the Iron Age. During our visits to the site, we also collected several sherds, which had been removed and dumped along with earth from the excavation. Among these sherds, we recorded 18 items (Pl. 16:A–B):

1. Hind fragment of an animal figurine, preserving part of the body and two legs (Fig. 4).
2. A damaged head of a 'pillar' figurine of the 'bird's head' type.
3. The body and hind part of an animal figurine with traces of white slip (Fig. 4).
4. A leg fragment of an animal figurine.21
5. A cooking pot handle with a potter's mark (X) made before firing.
6–7. Two rims of cooking pots with 'gutter' channels on the rim.22
8. A bowl fragment with continuous concentric wheel-burnishing.23
9–11. Two fragments of deep burnished kraters with handles and a rim sherd of a krater without a handle.24
12. The thickened base of an oil lamp.25
13. The neck of a black-burnished perfume juglet.26

21 Broken 'pillar' and animal figurines are known in large quantities from every excavation in Jerusalem — in the City of David, the Jewish Quarter, the Citadel, along the western city-wall and even in the Muristan area. For the typology and chronology of these figurines, see T.A. Holland: A Study of Palestinian Iron Age Baked Clay Figurines with Special Reference to Jerusalem: Cave I, Levant 9 (1977), pp. 121–155.
23 Ibid., p. 206, Photo 219.
24 Ibid., p. 205, Pl. 65:19.
25 Ibid., p. 293, Pl. 100:18.
26 Ibid., pp. 263, 265, Pl. 89:22.
14–17. Three ‘folded’ rims of bowls bearing traces of wheel-burnishing and a ring base of another bowl.

18. A storage-jar handle with two ridges of the lamelekh jar-handle type.

Further, the excavations uncovered sherds of hole-mouth jar rims, storage-jars and deep burnished kraters — all types characteristic of the late Iron Age II. commonly found on Judean sites and in the various excavations in Jerusalem.

It would thus appear that the cave of the Chapel of the Invention of the Cross was part of a much larger cave, separated today by later walls into several units. Besides the chapel, the ancient cave quarry included the space with the Iron Age floor uncovered by Broshi, as well as the space north of it cleared by the Armenians. This was a large, artificial cave originating in a quarry of the Iron Age II. The cave may continue further northwards, into the area beneath the building of the Coptic monastery. It should be noted here that beneath the Coptic monastery a burial cave was discovered in 1885: on the basis of its plan and the burial customs reflected in the plan, it should be ascribed to the Iron Age II. The overall length of the large, artificial cave on the east of the Holy Sepulchre complex is about 25 m. and its height is between 6.5 and 13 m.

Fig. 4. Fragments of two Iron Age figurines from the northern space: above, No. 1; below, No. 3.

The Significance of the Iron Age Finds

Ancient quarries are known throughout the area of the Holy Sepulchre complex, as they are in other excavations in the immediate vicinity. The quarries are earlier than all the other activities for which evidence was found here and predate the Iron Age pottery

27 Ibid., pp. 242, 247, Pl. 82:1.
30 Corbo, Pl. 67 and Photos 12, 18–19, 21, 27, 32, 37, 45, 48, 50, 53–55, 62, 75, 97, 103–105, 109–110. In Corbo’s plan, no absolute heights are given for the bedrock. These would have facilitated reconstruction
assemblages discovered here. Quarrying activity alone would not justify the large quantities of pottery discovered. Moreover, the quarry cannot belong to the same archaeological phase as the earth and pottery covering it. The quarrying activities in the vicinity of the Holy Sepulchre took place in the ninth–eighth centuries B.C.E., a time when this area was outside the city and at some distance from it. It is possible, of course, that quarrying on this site continued in later periods when this area was not built over. This would apply to the Hellenistic and Early Roman periods, until the time when this region was once more included within the city by the 'Third Wall'. However, there can be no doubt that the beginnings of this large quarry beneath the Holy Sepulchre and its main period of use were in the days of the Judean Monarchy.

The quarry was subterranean; a similar quarry is that known today as 'Zedekiah's Cave' or 'Solomon's Quarries', east of the Damascus Gate. There, too, the initial quarrying phase was in the Iron Age II, judging from the sphinx carved in Phoenician style on the wall of the cave31 and the pottery found within it.32 This type of closed quarry, in the form of a cave with a rock ceiling above the quarried area, is unknown at any other site. The rock quarried in these artificial caves, fine meleke, is not that obtained in the other known quarries of the Iron Age. At Ramat Rahel, Samaria and Megiddo, quarries of the same period have come to light, all of them open, in which the quarrying was horizontal and the stone quarried was the lower-quality nari limestone.33 There is no doubt that the stone quarried in the Holy Sepulchre and its vicinity was utilized for fine ashlars, serving for the construction of fortifications or major public buildings of the Judean capital.

After the quarry had been abandoned and with the growth and development of Jerusalem, sporadic settlement took place above the quarries. Evidence for this phase can be seen in the large quantities of pottery, which could not conceivably have been brought here from afar. The cave was substantially cleared during the Late Roman period down to the level of the earthen floor, in order to insert W2 and W3. The buildings of these northern extramural quarters were dismantled and reused as building material in subsequent periods, from Second Temple times up to the construction of the church early in the Byzantine period. All that is left of this occupation phase is the floor fragment uncovered in our excavations. It can be assumed that careful excavations in other parts of the complex of the Holy Sepulchre would reveal further segments of floors or even building remains of this phase. Poor but significant remains of the

of the ancient topography of the area. Corbo's base height was at the present floor-level of the church. In earlier plans absolute heights are given for the points of rock known prior to the recent excavations; see Vincent and Abel (above, n. 4), Planches, Paris, 1926, Pls. XII–XIII.


32 This pottery was discovered in Captain Monckton's excavation in the cave in 1924. The evidence concerning this material has never been published, but is included among the reports in the archives of the Department of Antiquities and Museums at the Rockefeller Museum in Jerusalem (File No. 101, Region A2).

Architectural walls, which byzantine discussion plan. The intensity of building activity here in Byzantine times and the principal interest of the excavators in the church structures certainly contributed to the fact that further remains of this phase have not come to light.

One might postulate that the floor does not represent an occupational level or a living floor, but was a technical level used for dragging the large stones out of the quarry in a later phase of its use. However, the large quantities of Iron Age pottery and the nature of the floor do not justify such an interpretation.

The floor which was uncovered thus represents, in our opinion, a phase of extramural quarters which spread north of the city wall exposed by Avigad. We date the settlement phase from the late eighth century B.C.E. to the Babylonian destruction of the city in 587/86 B.C.E.

II. REMAINS FROM THE ROMAN AND BYZANTINE PERIODS

Architectural Remains
In describing the architectural remains from the excavations, we will begin with the later walls, since they serve as an important point of departure for dating purposes.

Apart from one medieval wall (W5 — see below, p. 124), the latest walls found may be attributed to the Constantinian basilica known as the ‘martyrium’, i.e. W4 and W6 (Figs. 5–6). W4 appears to be the foundation wall of the northern stylobate of the nave. W6 was probably built in order to support the ceiling of the quarry that formed a rock ledge on which the façade of the basilica was erected. Sufficient wall segments of the Constantinian church have survived to enable a fairly accurate reconstruction of its plan. The southern face of W4 is known for a length of 39 m. (in the space under discussion and to the west in the Chapel of St. Helena), and its northern face for a length of 21.75 m. (Pl. 15:B). This wall, 2.82 m. thick, is preserved to a height of 12 m. and consists of two parts: a lower part of 14 courses of stones and an upper part, slightly set back about 0.2 m., of six courses. The whole wall was built of ashlars, many in secondary use, on a foundation of small field stones above bedrock. Among the stones in secondary use are Second Temple period ashlars with dressed margins, three smooth column drums and a number of smooth-faced ashlars similar to the stone in W1 on which a ship was drawn (see below, pp. 125–127). The interstices between the stones

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34 Above, nn. 17–18.
35 N. Avigad: Discovering Jerusalem, Jerusalem, 1983, pp. 46–60. The northern suburbs outside the walls, as well as the finds from the Church of the Holy Sepulchre as part of this phenomenon, were treated extensively in G. Barkay’s doctoral dissertation (unpublished, 1985), prepared under the supervision of Prof. D. Ussishkin at Tel Aviv University.
36 Co?asnon, pp. 37–46; Corbo, pp. 103–113.
37 The dimensions presented here are based on our measurements, which differ slightly from those given by Corbo.
Fig. 5. Plan of the excavated area. The numbers are those of walls.
were filled in with a hard grey plaster. Although the craftmanship of this wall is fine, it seems unlikely that it was visible at the time when the basilica was in use. This wall is the best-preserved part of the martyrium and of the entire Constantinian complex.38

The western face of W6 is known for a length of 6.8 m. and stands to a height of 6.4 m. (Pl. 15:B). Judging by the eastern extent of the northern face of W4, we may

38 For various reasons, it can be assumed that during the period of the existence of the Constantinian martyrium, the subterranean spaces on the east (the space under discussion, the Chapel of the Invention of the Cross to the south and the Chapel of St. Helena on the west) were blocked. As for the Chapel of the Invention of the Cross, the wall parallel to W4 (Carbo’s Wall 304) cut off the cave and prevented access to it.
assume that W6 is approximately 6 m. thick. This wall was built of 11 courses of stones with grey plaster in the interstices, and it also included many ashlars in secondary use.

W6 was built to support the ceiling of this space, which had originally been undercut by the Iron Age quarrying. Since the façade of the Constantinian church was built over this area, it became imperative to construct a massive means of support within the 13 m. gap below it.

The irregular bond between W6 and W4 indicates that W6 belongs to an earlier building stage. Several stones were most probably removed from the northern extension of W6 in order to allow W4 to bond into it. Such an irregular bond is probably to be interpreted as an afterthought on the part of the builders rather than as an indication of two separate periods of construction. Moreover, the structural similarities between the two walls clearly indicate that they were built in one period. We believe that these walls were wholly constructed during the Constantinian period. There is no evidence that they utilized earlier Hadrianic remains, as has been suggested (albeit with caution) by Coüasnon. There is also a considerable similarity between the style of construction of these walls and that of other wall segments of the Constantinian basilica. The orientation of these walls is also compatible with the position of the central Constantinian apse.39

Schick’s plan of the Church of the Holy Sepulchre from 1885 indicates the presence of two cisterns: one north and the other south of the Chapel of St. Helena (Fig. 2.5, 6). The southern line of the northern cistern corresponds well with the known thickness of W4 (2.82 m.). The northern line of the southern cistern probably indicates that the southern wall of the Chapel of St. Helena had a similar thickness. Hence it seems reasonable to assume that the southern wall of the present chapel was originally the foundation wall of the southern stylobate of the nave of the Constantinian basilica. Coüasnon reached the same conclusion, though for different reasons. The two cisterns may also date from Constantinian times, located below the northern and the southern aisles.

W2, W3 and W7 clearly predate the Constantinian constructions, since they were all cut by the foundation trench of W4. It seems likely that these walls are Hadrianic in date; they are probably to be identified as the foundation walls of a vaulting system which supported the floor of the complex of the Temple of Aphrodite, a complex which Corbo described as the ‘Capitolium’. Information concerning this Hadrianic complex derives from historical sources (mainly Eusebius, Vita Constantini, III, 25–26)40 and from sporadic archaeological remains.41

W2 is preserved for a stretch of 5 m.; it is 2.4 m. thick in its lower and 1.6 m. thick in

39 Coüasnon, p. 41; cf., e.g., Corbo, Pl. 3, Photos 100–102.
40 Corbo, pp. 33–34, 41.
41 Ibid., pp. 34–37, and the reconstruction on Pl. 68. This reconstruction, based on sparse remains, is cautiously denoted ‘hypothetical’ by Corbo. If Corbo’s reconstruction is correct, then the floor supported by these walls was that of the forecourt of the ‘Capitolium’. In any event, we are certainly at the lower level of the Hadrianic temenos here.
its upper portion (Pl. 15:B). The wall has a total height of 2.92 m.: the lower portion is 2.24 m. high and the upper portion 0.68 m. high. The foundations of the western face of W2 were built into a fill of soil about 0.2 m. above the level of the Iron Age floor. On the other hand, the foundations of the eastern face of this wall were inserted into soil fills about 0.4–1 m. above bedrock, thus destroying the eastern extension of the Iron Age floor. These stratigraphical distinctions clearly contradict Corbo's view that this floor was contemporary with W2 and W3.42

W3 is preserved for a stretch of 5.58 m., with an assumed thickness of 2.78 m. and a height of 3.08 m. The foundations of this wall were placed on bedrock, thus destroying the western extension of the Iron Age floor. W2 and W3 were built of mixed field stones and included ashlars dressed with margins and protruding bosses which are clearly in secondary use. The source of these ashlars was probably the buildings of Jerusalem razed in 70 C.E. However, it is possible that some of these ashlars may have come from the 'Second Wall' defensive line, which is believed to have traversed this area further east.

W7, located in the northern space, also belongs to the same series of walls. This wall is preserved for a stretch of 3.2 m., with a thickness of 1 m. and an assumed height of 1.5 m. The construction technique resembles that of W2 and W3. The northern end of this wall was built up against the southern face of the northern quarry wall. The southern end of this wall was cut by the foundation trench of W4. Corbo noted that the homogeneous fills unearthed alongside W7 contained Late Roman pottery and tiles stamped with the mark of the Roman Tenth Legion 'Fretensis' (Pl. 16:C–D).43 Two of these impressions (Type IIg6 according to Barag's classification) belong to the third century C.E.44

According to our relative stratigraphy, it appears that W2, W3 and W7 must predate the Constantinian walls in this area. The fact that these walls include Second Temple period ashlars in secondary use clearly indicates that they must have been built after the destruction of Jerusalem in 70 C.E. In the light of the facts at our disposal, together with the date of the fills unearthed alongside W7, we believe that these walls should be dated to the reign of Hadrian.

W1 is known for a length of 7.57 m., with a preserved thickness of 2.4 m. and a height of 1.74 m. Helms reports that the westward extension of this wall was traced in 1971–1972 as far as the stairway leading down to the 'Chapel of the Invention of the Cross'.45 Although most of this wall was built onto a bedrock shelf, the foundations of the northern face of the wall were built above the southern extension of W2 and W3.

42 Corbo, pp. 112–113.
43 Ibid., p. 112.
44 D. Barag: Brick Stamp-Impressions of the Legio X Fretensis, Bonner Jahrbücher 167 (1967), pp. 244–267; idem, EI 8 (1967), pp. 168–182 (Hebrew). We wish to thank Prof. Barag for his assistance in defining this impression. The tiles measure 47 × 53 cm.; the impression measures 4.5 × 6.5 cm.
The wall was built of field stones and included many Second Temple period ashlars and column drums in secondary use. Built into the second course of the eastern end of this wall is a smooth-faced ashlar, in secondary use, with a drawing of a ship and an inscription (see below, pp. 126–128). It is noteworthy that while this kind of stone was not included in the stones used in W2, W3 and W7, it does exist in secondary use within the Constantinian W4 and W6. In our opinion, these smooth-faced stones originally came from buildings razed in 70 C.E. Because of the high quality of these stones, they were used during Hadrianic times only for important substructural walls such as W1 and not for minor foundation walls. During Constantinian times, these smooth-faced stones were reused once again for the construction of W4 and W6. It seems likely that W2, W3 and W7 are the remains of a grid of foundation walls which were built to support a system of vaulted substructures. W1 was probably part of this latter vaulting system. The closest parallel is the vaults of the huge cistern located beneath the Monastery of St. Abraham, to the south of our area, which is generally believed to be of Hadrianic date. The drawing of the ship and the inscription were probably done at the time of the erection of the Constantinian basilica. Corbo has made a suggestion, which we find doubtful, that W1 was built during the eleventh–twelfth centuries C.E. in order to set apart the ‘Chapel of the Invention of the Cross’, and that at that time the stone with the ship drawing was added into the wall.

W5 is known for a length of 6.33 m. and consists of at least three courses of field stones visible to a height of 1.57 m. The foundations of this wall were built above the rubble core of W3. Its southern end was built up against the north face of W1. Although the date of this wall is uncertain, it may represent the foundation courses of the eastern wall of the Chapel of St. Helena, even though its alignment is slightly irregular. Hence it is possible that this wall dates from Crusader times.

The area to the north of W4 (Area 307 according to Corbo’s designation) was probably blocked up during the Constantinian period. In the northern part of this area a blocked rock-cut entrance can be seen, which formerly linked this area with another space used today as a cistern. A drainpipe was also found, visible for a height of 9.5 m., abutting the northern face of W4 and descending to the rock floor (Pl. 17:B). This drainpipe consists of 18 stone segments bonded with grey mortar. The diameter of these segments is 0.46 m. and they are each 0.53 m. high.

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46 This wall includes, *inter alia*, the drum of a fluted column with flat ridges (Doric) and a stone plaque with chip-carved ornament apparently originating from a ceiling of the Second Temple period (Pl. 17:A).

47 For this cistern, see C. Schick: Large Cistern under the New Greek Building South East of the Church of the Holy Sepulchre, *PEFQSt* (1889), pp. 110–112; Vincent and Abel (above, n. 4), Pl. XII (‘Citerne XI, dite de Sainte Hélène’).

48 Corbo, p. 113.

49 For a drainpipe similar in form and identical in dimensions in the Church of the Holy Sepulchre, contemporary with the Constantinian complex, see C. Katsimbinis: The Uncovering of the Eastern Side of the Hill of Calvary and its Base, *Liber Annus* 27 (1977), p. 204, Figs. 11, 12, Pls. 28, 29.
In conclusion, we may list the architectural remains found during the excavations in the following chronological order:

1. Quarry, Iron Age II.
2. Beaten-earth floor, Iron Age II.
3. W2, W3, W7 and possibly also W1, Hadrianic period.
4. W4 and W6, cisterns and drainpipe, Constantinian period.
5. W5, Crusader (?) period.

The Inscription and Drawing: Their Date and Significance

The Inscription. At the eastern end of W1, a finely smoothed stone plaque (31 x 65 cm.) is affixed, bearing an ink drawing of a ship and, below, a Latin inscription in ink reading: DOMINE IVIMVS, 'Lord, we shall go' (Fig. 7; Pl. 17:C). This inscription is somewhat enigmatic, especially as regards the second word. We may possibly regard it as an allusion to the Latin version (whether the Old Latin or the Vulgate) of Psalm 121:1 (MT 122:1), which reads: In domum Domini ibimus, 'Let us go to the house of the Lord'.50 Our inscription displays a slight variation from the biblical verse, for the noun appears in the vocative rather than the genitive, while v is substituted for b in the second word. This exchange is known in Christian inscriptions and in vulgar Latin inscriptions in general (though the reverse exchange is more common).51 These two words are also associated in the New Testament, in John 6:68: Domine, ad quem ibimus?, 'Lord, to whom shall we go?' The use of a verse from the Psalter, from the well-known pilgrims' psalm, indicates that the inscription was probably made by Christian pilgrims, among the earliest who were able to make their way to Jerusalem openly and express their Christian feelings explicitly. The use of Latin indicates that these pilgrims were from the Western Empire — Italy, Gaul, Spain or North Africa.

The Ship. The ship is depicted with its bows to the left and stern to the right and with its mast unstepped, lying on its side. This is a small merchant sailing vessel typical of the Roman period, for which there are numerous parallels.52 A foresail (No. 2 in Fig. 7) or artemon is shown above the bows (1).53 The upper line is apparently the raked foremast. The artist depicted two rudders, the left one of which is visible only in its lower part (4), while the right-hand one is seen in full (5), with its tiller (6).54 We do not know how to interpret the detail drawn around the left-hand rudder (4a). On the stern in a cheniscus,

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50 Père P. Benoit orally suggested this allusion to M. Broshi, for which we are most grateful.
51 According to Prof. V. Väänänen, of the Historical-Philological Institute of the University of Helsinki, in a letter to M. Broshi dated 8 January 1977.
52 L. Casson: Ships and Seamanship in the Ancient World, Princeton, 1971, Fig. 191 (henceforth Casson); for the shape of the hull, see ibid., Figs. 149, 151, 156 etc.
53 Ibid., Fig. 147 and, in more detail, Figs. 179 etc. and pp. 240–243.
54 Ibid., pp. 224–228.
the common, goose-headed stern ornament of this period, with the sternpost behind and supporting it (8). The lowered mast (9) is of the composite type, as is indicated by its tapering form and especially by the wooldings or lashings binding the several parts of the mast together. The parallels can be supplemented by the ship depicted at Beth She'arim, of the third or first half of the fourth century C.E. Above the mast, the mainsail is apparently furled (10, 12), with the shrouding and the sheets around the yardarm (11). The side wales run back to the stern, providing a housing for the oars (13). There may also have been triangular topsails above the square mainsail.

Concerning the unstepped mast, we may ask was this the retractable mast of a small coasting vessel, or was it a fixed mast of a larger ship which had broken? In our opinion, the second possibility is the more likely. If the mast was a retractable type, the ship would be unusual in having both such a mast and a foresail; in depictions of ships

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56 Ibid., pp. 69, 231, n. 31.
59 For a clear parallel to our ship, with a removable mast, see ibid., Fig. 191, p. 329, n. 3; see also L. Casson: Harbor and River Boats of Ancient Rome, Journal of Roman Studies 55 (1965), p. 32, Pl. V above.
with retractable masts, we have found that they all have a single mast.\textsuperscript{60} A further factor in support of regarding this as a large ship with a fixed mast is the fact that the accompanying inscription is in Latin. If the writer of the inscription had indeed come from the Western Mediterranean basin, he would have sailed on a relatively large ship and not on a small coaster. If our assumption is correct, we may also conclude that the pilgrim responsible for the drawing and inscription had been faced by some great peril, such as a storm which broke the mast of his ship and threatened to sink it. The drawing and inscription were intended to express gratitude for his salvation.

**Interpretations and Controversies.** The drawing of the ship and the inscription below it have been discussed so far in four main publications: by Bennett and Humphreys,\textsuperscript{61} Testa,\textsuperscript{62} Broshi\textsuperscript{63} and Helms.\textsuperscript{64} The course of the treatment and publication of the drawing and inscription is important for an understanding of the controversy which has risen around them, and therefore we shall briefly review events. In 1971, a year after the beginning of work on the site, the staff of the British School of Archaeology in Jerusalem was invited to examine the excavation site. A.G. Walls, the architect of the School, and S. Helms, a senior scholar there, examined the archaeological remains, photographing and drawing the ship and the inscription. Unfortunately, they did not clean the stone prior to copying it, and this led Humphreys, to whom the material was entrusted for publication, to rely in no small measure on her imagination. This, in turn, led to serious complications, both in the reading of the inscription and in the description of the ship. In the opinion of Humphreys and Helms, the inscription reads: ISIS MYRIONIMOS, ‘Isis of the Myriad Names’.\textsuperscript{65} In other words, they read 10 letters incorrectly and arrived at a total of 14 letters, though in fact there are only 12. Similar confusion was evident in the interpretation of the elements of the ship.

In 1975, the plaque was cleaned by the Franciscan I. Testa. This cleaning left no room for doubt concerning either the elements in the drawing or the reading of the inscription, which he read as we do. Testa, who did not realize the clear pilgrim nature of the inscription at the time, interpreted both it and the drawing in a religious manner. In his opinion, the ship was sailing on a metaphysical sea. He thus found it significant, for example, that the prow faced towards Golgotha (though in fact the stern faced Golgotha). He also regarded the fact that the ship was unmanned as indicating that ‘our ship was guided by angels and by the hand of the invisible Christ’.\textsuperscript{66} However, most

\textsuperscript{60} Casson, p. 329, n. 3. We wish to thank Lionel Casson and Avner Raban, who assisted us in defining the various parts of the ship.


\textsuperscript{63} Broshi (above, n. 6), *Qadmoniot* and *IJNAUE*.

\textsuperscript{64} Helms (above, n. 45), pp. 105–120.

\textsuperscript{65} We can only guess at the reason for this decipherment. Isis was the name of one of the most famous ships in antiquity; Casson, pp. 186–189.

\textsuperscript{66} Testa (above, n. 62), p. 221.
depictions of ships in antiquity show them without crew.67 In short, Testa’s allegorical interpretations, in our opinion, seem to miss the mark.

Helm’s article68 defends Humphrey’s original reading of the inscription. He does so by voicing ‘suspicions concerning the ship and its fate after we left it in 1972’.69 In other words, Helms insinuates that Testa not only cleaned the inscription but also ‘improved’ it. This, of course, is a serious accusation, but one which can readily be refuted. If Testa had indeed altered the inscription to give it such strong associations with the Psalter, how is it that he did not understand its significance when republished it? Further, the inscription was examined on 12 January 1977 by a team under Chief Inspector M. Kornblum of the Criminal Identification Bureau of the Israel Police, who, by means of infra-red illumination, clearly established that the inscription and the drawing had not been tampered with in any way.

Like so many sites in Jerusalem, the Chapel of St. Vartan encapsulates much of the city’s history, from the Iron Age II to the Crusader period. However, even among the sites of Jerusalem the excavations reported here have disclosed an unusual wealth of archaeological data. The highlights of these data are the remains of the Iron Age II, the evidence for the architectural history of the Church of the Holy Sepulchre and the earliest known inscription and drawing by a Christian pilgrim to the Holy Land.

67 See, e.g., the plates in Casson, passim.
68 Above, n. 45.
A: Chapel of St. Vartan, Iron Age quarry, looking east.

B: Space to north of Chapel of St. Vartan, looking north.

EXCAVATIONS IN THE CHAPEL OF ST. VARTAN
A: Excavations in northern space, looking west; note signs of quarrying. Above, Wall W7 of Hadrianic period.

B: Chapel of St. Vartan, looking north-west. The labourer stands on Wall W2; to left, W4; in background, W6.

EXCAVATIONS IN THE CHAPEL OF ST. VARTAN
A: Sherds of the Iron Age from the Armenian excavations.

B: Fragments of Iron Age figurines from the Armenian excavations.

C: Stamped pottery tile of the Tenth Legion 'Fretensis'.

D: Stamp impression of the Tenth Legion 'Fretensis'.

EXCAVATIONS IN THE CHAPEL OF ST. VARTAN
PLATE 17


B: Stone drainpipe, Byzantine period.

C: Inscription and drawing of ship.

EXCAVATIONS IN THE CHAPEL OF ST. VARTAN