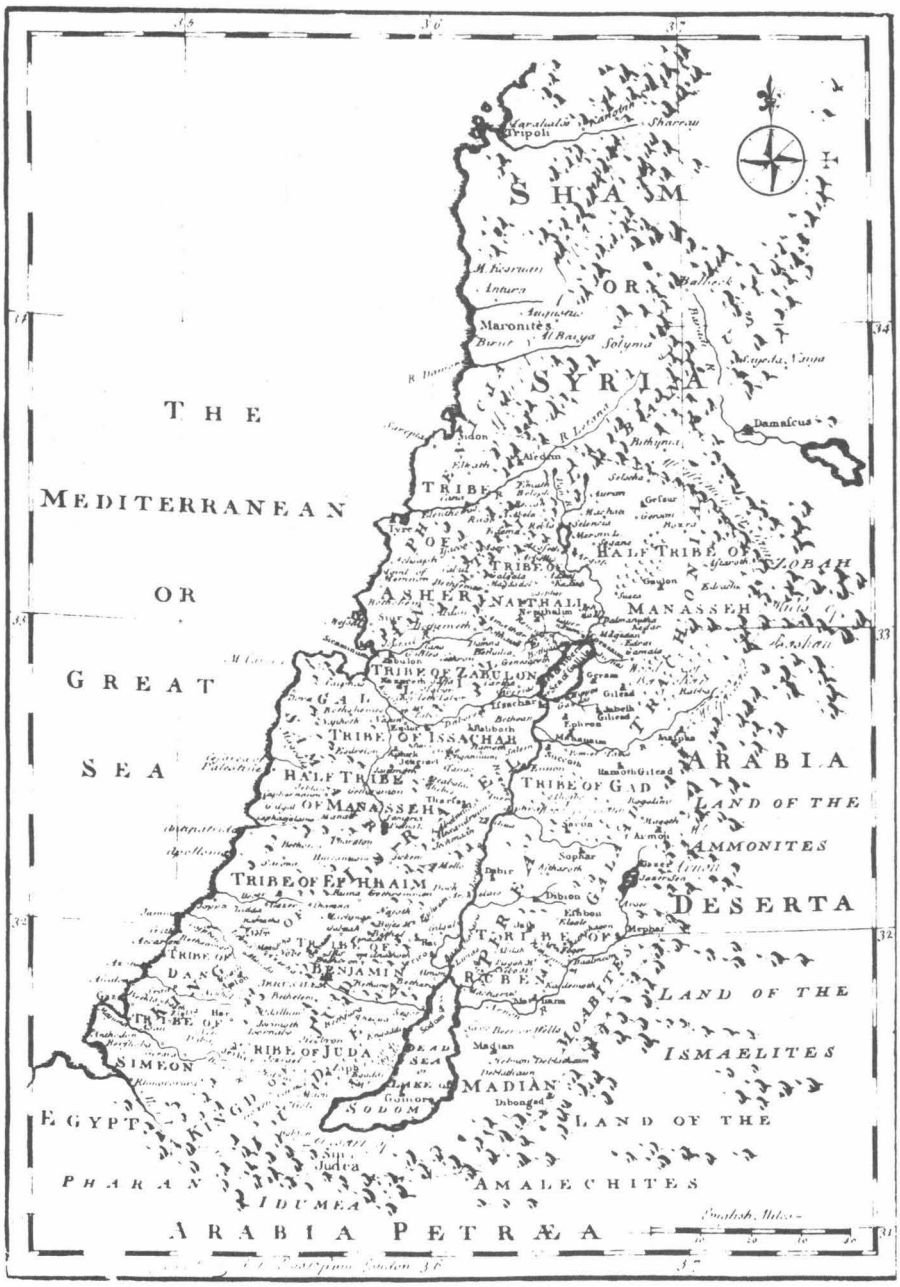
Bulletin of the Anglo-Israel Archaeological Society



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On the cover: an 18th-century map of
the Holy Land, by Eman. Bowen.

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Editorial

The opening article is about the lost Byzantine city of Dor/Dora. The site known as Khirbet el-Burj is a massive ancient tell located on the northern coast of Israel, between Caesarea and Haifa. The wonderful sandy beaches at Dor are a magnet for tourists, some of whom stay in the nearby guest house of Kibbutz Nahsholim. Perhaps the earliest tourist of renown to visit Dor was Lady Hester Stanhope who encamped near the site in 1812. Seventy years ago, excavations were first undertaken at the site by the British archaeologist Professor John Garstang, confirming that this was indeed the site of Dor which is mentioned in the Bible. Over the past decade or so the site has been excavated by a team of archaeologists from the Hebrew University led by Professor Ephraim Stern, revealing substantial and well preserved archaeological remains belonging to the Iron Age, Hellenistic and Roman cities. But where was the Byzantine settlement located, and was it a village or a city? These and other questions puzzled scholars. Between 1979 and 1983, and more recently in 1994, my colleague Professor Claudine Dauphin has been uncovering the remains of a very large episcopal church dating from the Byzantine period, near the south-eastern foot of the tell. It seemed unlikely to Dauphin that such an outstandingly impressive building such as this would have belonged to a minor fishing village as some scholars were claiming. In 1994, I began a project of landscape archaeology around Dor discovering large numbers of farms and small villages from the Byzantine period scattered in the surrounding landscape. The immediate conclusion was that Dor had to have been an important regional centre for the agricultural hinterland and could not have been just another village. The present article sums up our views regarding the location and appearance of the Byzantine city of Dor.

The second article in this issue is also linked in some ways with Byzantine Dor. The author, Sean Kingsley, spent a number of years scanning the remains of ancient shipwrecks beneath the sea off the coast of Dor, together with Kurt Raveh of Kibbutz Nahsholim. Kingsley and Raveh are the authors of *The Ancient Harbour and Anchorage at Dor* which has just been published by Tempvs Reperatvm in Oxford. Kingsley's article deals with the bag-shaped amphora which is a ubiquitous storage vessel in pottery assemblages of the Roman and Byzantine periods. Kingsley is able to show that the bag-shaped amphora was the most popular transport jar from shipwrecks dating from the 6th and 7th centuries.

The legacy of the nineteenth-century Swiss scholar Titus Tobler (1806–1877) is the subject of the third article by Dr Haim Goren. Goren studied historical geography under Professor Yehoshua Ben-Arieh in the Hebrew University, and is the

author of a number of important articles dealing with German scholarship and Palestine in the nineteenth century.

This issue ends with five reviews of recent books and short lecture summaries by Professor Avraham Biran on the Tell Dan excavations and the Aramaic stele which he uncovered there, by Dr Denys Pringle on Crusader Churches and by Irving Finkel on Board Games in the Near East.

Shimon Gibson

Bulletin of the Anglo-Israel Archaeological Society 1994–95 Volume 14

The Byzantine City of Dor/Dora Discovered

CLAUDINE DAUPHIN and SHIMON GIBSON

Since John Garstang's excavations at Tell Dor (el-Burj) in the early 1920s, the general view prevailing among scholars has been that by the end of the third century AD settlement at the site had either become very much reduced in area or had been almost totally abandoned (Garstang 1924a: 40). The discovery and excavation of a large basilical church of the Byzantine period near the foot of the tell by Joseph Leibovitch in 1952 and later by Claudine Dauphin in four seasons from 1979, appeared, however, to upset the theory that the site was deserted or had dwindled at that time. Ephraim Stern's renewed excavations at the tell since 1980 resulted in the question concerning the extent of the Byzantine settlement being raised once again. According to his published reports, no archaeological remains later than the mid-third century have been found on the summit of the tell itself (Stern and Sharon 1993: 128). However, some scattered remains and coins are known. Moreover, Stern has recently uncovered remains of Byzantine structures along the eastern slope of the tell in his area B1 (Stern and Sharon 1993: 128). This has led to the suggestion that the church was not built to serve an urban community but was the nucleus of an extremely limited settlement with a small number of structures clustering around the south-eastern foot of the tell. Stern has described this settlement as a small village (Stern and Sharon 1994: 54).

It is our contention that this view is incorrect and that, conversely, the archaeological evidence actually points to Dor having been a prosperous urban settlement during the Byzantine period with a range of public buildings, a network of streets and fortifications, and with a flourishing economy based on a combination of maritime and agricultural pursuits. It can also be demonstrated that the historical accounts relevant to this period, with references to Dor having had its own bishop, help to sustain further the notion that the site was an important settlement for the region and not just an obscure coastal village. The succinct description of the site in the fourth-century *Onomastikon* as having been 'deserted' (see below) was not intended by Jerome as a reference to the bustling Byzantine lower city of Dor but to the ruins of the old biblical tell which was largely uninhabited during this period. It is felt that archaeological interpretations based solely on this historical reference have been largely overstated leading to misleading inferences. Dor was clearly much more than just a hamlet and we believe it should now be considered as one of the more prominent small cities of the Byzantine period along the northern Mediterranean coast of Israel.

It is the intention of this article to present the reader with a clear picture of the available archaeological and historical data pertaining to the Byzantine city of Dor/Dora, with the hope that future excavations of a more substantial nature in the area of the lower city, along the lines of Dauphin's work on the church, might add some flesh and bones to the picture of the Byzantine city and bring it back to life.

Map of the Byzantine city

Our map of the Byzantine city (Fig. 1) was prepared on the basis of data gathered from different sources, notably nineteenth-century written accounts, site reports from the early part of the twentieth century, and sheet-maps and aerial photographs made at different times. Added to this are Dauphin's personal observations at the time of her excavations of the Byzantine church at Dor between 1979 and 1983. Unfortunately, the area of the lower city was excluded at Stern's insistence from the survey licence granted to Shimon Gibson by the Israel Antiquities Authority for his autumn 1994 project of landscape archaeology conducted in the region of Dor. It could therefore not be properly re-examined.

The reports published by early explorers and travellers, particularly from the nineteenth century, provide useful data regarding some of the ruins of the lower city. The value of this source of information is enhanced when one considers the subsequent damage to this area caused by stone robbing by the local population in order to provide building stone for the houses of the nearby village of Tanturah (Rogers 1862: 75; Guérin 1874: II, 306, 308; Oliphant 1887: 16; Schumacher 1887: 84; Wachsmann and Raveh 1984: 241). Large quantities of additional building stone were frequently dug out of the site and taken by boat to be sold in the markets of Jaffa further down the coast (Wilson 1866: 39). The pillaging of the site for its stone continued until well into the Mandate period and was one of the reasons why Garstang, as Director of the newly-created Department of Antiquities of Palestine, decided to initiate excavations at Dor in 1923. To these published nineteenth-century accounts should be added further details culled from the letters, sketches and photographs of C. R. Conder, C. F. T. Drake, G. Schumacher and others in the archives of the Palestine Exploration Fund (PEF) in London.

The site file for Dor prepared by Garstang and his successors at the Department of Antiquities during the period of the British Mandate constitutes another useful source of information. This file is now included in the archives of the Israel Antiquities Authority at the Rockefeller Museum in Jerusalem. It contains an array of documents, correspondence, maps and photographs, some of it connected with Garstang's excavations at Dor and the rest with visits made by the Government Inspectors to the site, J. Ory, N. Makhouly, P. L. O. Guy and D. C. Baramki, particularly during the 1930s and 1940s. Garstang's original maps and plans of the site which were used for his publications and a very large collection of mostly unpublished photographs are kept in the archives of the PEF. His field diary and other excavation records are missing and are thus presumed lost.

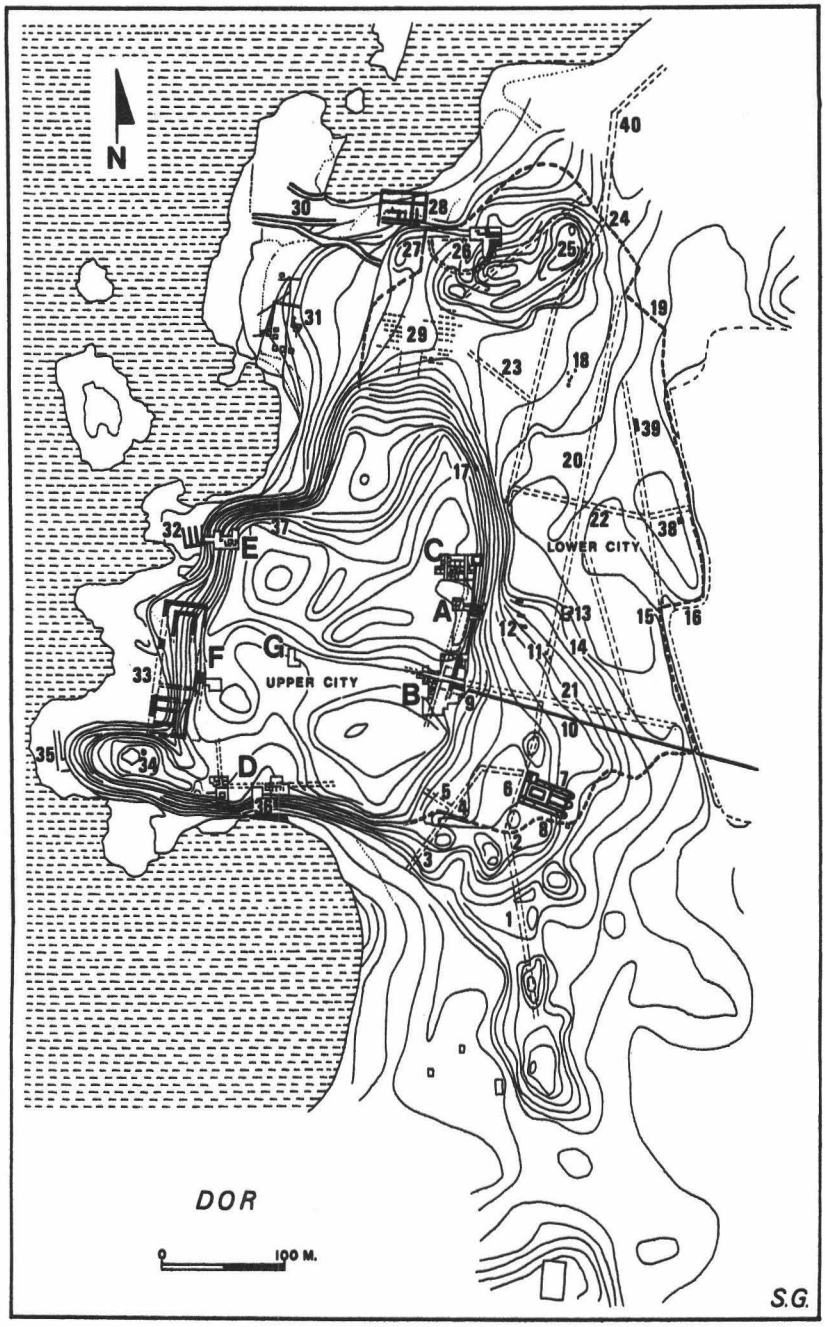

Figure 1. Map of Dora depicting the lower city in relation to the tell, incorporating features of Byzantine date and earlier (drawing S. Gibson).

Of paramount importance for determining the extent of the Byzantine city are the detailed maps and aerial photographs of the area obtained from archival sources. The topographical maps provide crucial information regarding changes to the ground level and help establish the conjectured line of the fortification wall running along the edges of the lower city.[1] However, by far the most important source of information for mapping the city are vertical black-and-white aerial photographs, some of which date back to the First World War and others are more recent.[2] An excellent colour aerial photograph taken in August 1994 (No. 8197/94A, scale 1:10,000) is also useful. The aerial photographs were all carefully scanned, some of them stereoscopically, and 'shadow' features representing buried archaeological remains, such as blocks of structures and lines of streets, were then added to the map of the Byzantine city. This was done only if the same features observed could be identified on more than one aerial photograph and on photographs taken at different times. That such 'shadow' features do actually represent buried structural remains is confirmed by comparing those visible on the tell in the 1970s with the archaeological remains subsequently uncovered there by Stern since 1980. During our analysis, the assumption was made that features which could be identified as ancient in the area of the lower city must be of Byzantine date or earlier. This coincided with a number of observations in the field which showed that the latest pottery scattered on the surface of the lower city was of Byzantine date.

Our understanding of the layout of the lower city is based on the scanning and analysis of aerial photographs. This has enabled us to delineate the street network, the different quarters of the city and the line of its fortifications. However, our map of the city remains schematic and a more detailed ground survey could still be undertaken, although it should be taken into account that some parts of the original ground surface are now being obscured by modern dumps.[3] The use of remote sensing equipment would not be of much use in tracing further details of the city since present technology does not allow for readings to differentiate between stone walls and large or dense masses of rubble below ground surface. Thus, our map of the lower city could only be adequately tested by excavation.

Tell Dor

The main tell is located on the edge of a *kurkar* sandstone ridge which protrudes into the sea, north of Kibbutz Nahsholim. Natural bays exist to the south and north of the tell and harbour installations have been found connected with both. The *kurkar* sandstone is visible running along the lower edges of the tell to the north-west and west, with rock-cut de-silting channels, stone quarries and installations of one kind or another (Fig. 1: 30–32, and 35). Many of these remains have been investigated by Avner Raban and others (Raban 1981). The tell itself is largely artificial with archaeological deposits over 14 metres high covering an area of about 60 dunams (about 15 acres). Remains have been found during the excava-

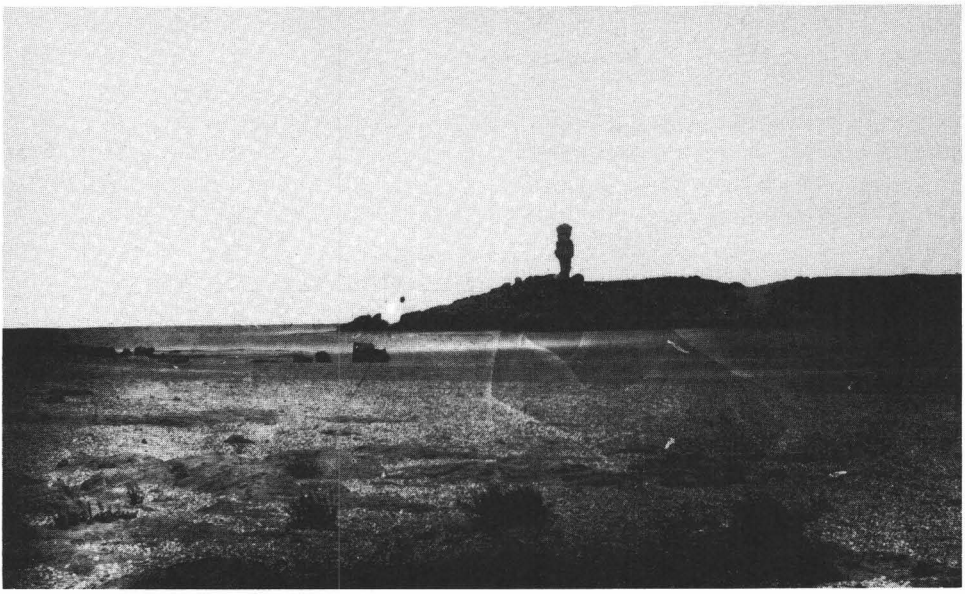

Figure 2. General view of Tell Dor from the south in a photograph by Corporal Henry Phillips taken in 1866 (Photograph P494, courtesy of the Palestine Exploration Fund).

tions dating chiefly from the Middle Bronze Age IIA, Late Bronze Age, Iron Age, Hellenistic and Roman periods. At the south-western corner of the tell a small promontory (Fig. 1:34) juts out into the sea. It has medieval fortifications (probably those of Crusader Merle: Pringle, forthcoming) and the remains of an Ottoman tower, 9 metres high, which was a conspicuous monument until it collapsed on 15 January 1895 (Conder 1873: 83; Conder and Kitchener 1882: 8; Schumacher 1895: 113–114) (Fig. 2).[4]

Excavations were first undertaken at the tell in 1923 and 1924 by Garstang on behalf of the British School of Archaeology in Jerusalem. Two test trenches were sunk on the northern and southern slopes (Fig. 1:36, 37) and a substantial area along the western slope in the area of the monumental temples with their impressive *podia* was cleared (Fig. 1:33). Recent work has shown that these temples are undeniably Roman and apparently do not date back to the Hellenistic period as was once believed (Stewart 1995: 306; Stern and Sharon 1995: 33–35). Garstang reported that in the 1923 season Byzantine pottery was well represented in the surface deposits but that structural remains from that period had not been detected (Garstang 1924: 45). During the 1924 season, a hoard of bronze coins dating from the mid-third century AD was found within the fills which postdated the gate at W2 leading to the area of the northern temple (Garstang 1924: 73). FitzGerald's notes on the pottery from Garstang's excavations make it clear that distinctions between Roman and Byzantine wares were not always possible within the upper stratum of the tell (FitzGerald 1925: 80, 96). Garstang knew how to differentiate between

Roman and Byzantine pottery, but because he found the materials from these two periods stratigraphically mixed, an exact classification of types became practically impossible.

Renewed excavations on the tell have been conducted by Stern since 1980. Seven areas are being excavated and substantial structural remains have already been uncovered dating from the Iron Age, Hellenistic and Roman periods (Fig. 1: A to G). According to Stern (1994: 300), the flourishing Roman city began to decline substantially during the latter part of the early third century. The numismatic evidence from these excavations indicates that the latest coins from the site date mainly from the period extending up to the beginning of the third century AD, with far fewer coin finds for the rest of that century and especially for its second half. Meshorer (1986–87: 62) has proven that the last coin series was minted at Dor during the reign of Julia Domnia (AD 211/212). However, a few coins of even later date are known at the site, notably a coin of Valentinian II (AD 375–392) and one of Justinian I of AD 538–550 (Stern 1994, Fig. 227). In addition, according to Stern (1994: 319), some of the Roman structures in Areas A and E continued to be used during the Byzantine period (Fig. 1: A, E), whilst installations constructed in the Byzantine period itself are also known from the tell. While Stern is surely right in his assessment that a substantial urban settlement did not exist on the tell during the Byzantine period, such archaeological remains which have been found in his excavations as well as in those of Garstang, do confirm the existence of a sparse settlement on the tell after all. One should also note that a rock-cut cave was excavated on the western slope of the tell by Kurt Raveh and was found to contain pottery from the Byzantine period, as well as finds from the Roman and medieval periods (Raveh 1989–1990: 118). This cave probably belongs to the group of caves referred to by Conder and Kitchener (1882: 8).

The lower city

The lower city of Dor is located to the north and east of the main tell and covers an area of about 68 dunams (approximately 17 acres). Conder and Kitchener (1882: 9) referred to the central strip of the lower city as 'the causeway'. Very little of it has been excavated and Garstang does not appear to have considered working there. The first to do so was Leibovitch in 1950 and 1952 for the newly-founded Israel Department of Antiquities, uncovering parts of a Roman theatre (Fig. 1:26) and a Byzantine church (Fig. 1:7) at the northern and southern ends of the city respectively (Leibovitch 1951; 1957). The excavation of the Byzantine church was resumed by Dauphin in 1979; the most recent season of work at the site took place in 1994. Recently, Stern's work in Area B1 (Fig. 1:B) has been extended from the main tell eastwards, this resulted in the uncovering of Byzantine structures which belonged to the lower city (Stern and Ilan 1993:128). Limited excavations have also been conducted along the eastern edges of the lower city (Fig. 1:38–39) by Kingsley and Raveh (1994a).

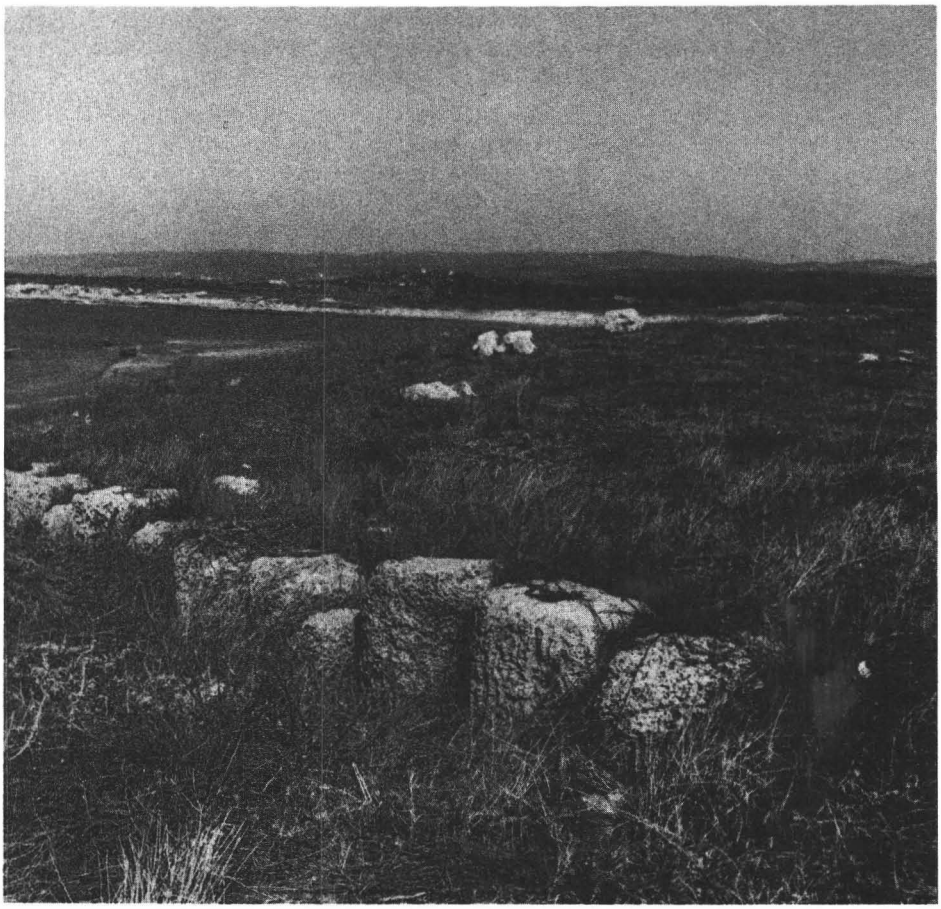

Figure 3. The top of a buried wall north of Tell Dor (cf. Fig. 1:27), towards the north-east (photo C. Dauphin).

The city-walls

The proposed line of the fortifications which protected the lower city to the north, south and east, has been delineated on our map on the basis of tell-tale signs visible in aerial photographs. Topographical considerations were also taken into account. Nothing is known about the methods of construction of the circuit wall and whether or not it had towers; it was possibly built in a similar fashion to the Byzantine city wall at Caesarea (Lehmann 1995).

The southern stretch of the fortification wall appears to have run eastwards from the south-eastern edge of the main tell, passing immediately to the south of the church and continuing eastwards, for another 100 metres or so, before turning

sharply towards the north. A section of a thick wall which may have been part of this fortification was observed by Kurt Raveh (personal communication) during building works conducted next to the houses of Kibbutz Nahsholim located immediately south of the church (Fig. 1:8). A large part of a Gaza amphora (5th–6th centuries) was found there (Kingsley: personal communication).

There were at least two gates in the southern wall. The one on the west (Fig. 1:4) was approached by a path (Fig. 1:3) which led up from the beach of the southern bay. The paved street extending from this gate within the city has been observed beneath the sand dunes to the west of the church (see below). The second of the two gates (Fig. 1:2) was probably the principal one. It was approached by a road running along the *kurkar* ridge from the south which was an extension of the *Via Maris* (Fig. 1:1). A path existed here before this area was levelled during the preparation of the grounds for Kibbutz Nahsholim. This gate, we believe, led to the *cardo* (Fig. 1:20) which crossed the city from south to north.

The south-eastern corner of the city fortifications corresponds to the point of entry of the built aqueduct (Fig. 1:10) which reached the city from the south-east (see below). The eastern fortification wall ran from this corner northwards for about 100 metres where it then turned sharply eastwards for about 50 metres, before eventually resuming a line running towards the north. A gate may have existed at the point where the line is indented (Fig. 1:16), but this is uncertain. The indented line of wall follows natural topographical features and is clearly visible on early maps and on aerial photographs dating from June 1918.[5] The area east of this line was originally a swampy stretch of ground known as El Bassa es Safra and is depicted as such on a topocadastral map from April 1932. Interestingly, this eastern line is still preserved by the western berm of the modern fishpond which is located immediately to the east of the area. Scattered near the line of the berm (Fig. 1:15) are large squared *kurkar* blocks, some of them 80 × 40 cm in size.

The north-eastern corner of the city fortifications has an identation (Fig. 1:19) which may correspond to a gate situated at the northern end of the *cardo*. Scattered squared blocks of *kurkar*, all roughly 1.00 m × 40 cm, are visible within a small fish pond just south of this conjectured line. Another gate was probably located about 50 metres further along the line of the northern wall (Fig. 1:24). This gate was approached by a road which ran parallel to the shore and was an extension of the *Via Maris* running to the north of the city (Fig. 1:40). A well-preserved section of Roman road was uncovered recently close to Kefr Lam (Habonim), not far north of Dor (Roll 1995: 31*). The northern fortification wall clearly encircled a series of mound-like features which incorporate the remains of a theatre (Fig. 1:26), before turning southwards and running as far as the northern edge of the main tell. The fortification probably played a part in retaining the substructures of the theatre to the north and west. An artificial ditch has been cut during modern times in front of the line of the northern fortifications. A section of wall which may have been part of the north-western fortifications is visible not far to the west of the theatre and is buried by sand dunes (Fig. 1:27). Only the upper edge of this

wall can be traced; it was built of squared blocks of *kurkar* and column drums (45 cm in diameter) in secondary use of which at least eight drums were seen (Fig. 3). This may suggest that the fortifications of the lower city were partly built out of building stones and architectural fragments taken from the ruins of earlier Hellenistic or Early Roman structures on the main tell.

Immediately to the north of the suggested fortification line are the remains of a large rectangular structure (Fig. 1:28) dated to the second-third century AD. It is believed to have been a storage building connected to the northern harbour (Raban and Galili 1985: 339, Fig. 20; Raveh 1989; Raveh 1988–89: 50). Mooring stones have been found in its immediate vicinity (Kingsley and Raveh 1994 a). Further west are the remains of three partly rock-cut and partly built de-silting channels (Fig. 1:30) and a structure with a series of rock-cut tanks (Fig. 1:31) which has been identified as an installation for producing purple dye belonging to two phases, the first dating from the second-third century AD and the second to the sixth century AD (Raban 1981: 20–21; Raban and Galili 1985: 343, Figs 23 A–B and 24).

The street network

The principal street which bisected the lower city on a more or less straight line from south to north is very clearly visible in aerial photographs (Fig. 1:20). This was the *cardo maximus*. Approximate measurements based on enlarged aerial photographs suggest that this street had an approximate width of at least 10 metres. There must have been gates in the fortification wall at the corresponding ends of the street (see above). The southern extension of this street ran from the gate northwards past the western facade of the Byzantine church (Figs. 1:6 and 7:6). In the northern part of the city another north-south street ran parallel to the *cardo* and about 50 metres further to the west.

It is interesting to note that a path extending across this entire area from south to north was known until the period of the British Mandate. It more or less corresponds to the line of the ancient street buried beneath, except that the street, judging by aerial photographs, was substantially wider. The modern path which linked the village of Tanturah with Kefr Lam (Habonim) to the north, is clearly depicted on a map of the site published by Garstang (1924, Pl. I). Garstang also mentions the existence of several ancient columns next to this path (1924: 65), but these are not shown on his map of the site. However, the exact position of these upright columns (Fig. 1:11) can be established from a more detailed map, similar to Garstang's published version, which is in the site file in the archives of the Israel Antiquities Authority.[6] It would appear that the columns seen by Garstang are the same as those seen by Conder during his survey of the area on 8 March 1873: 'On one side, just south of el Hannaneh [Fig. 1:13], are nine granite columns: these are placed touching each other; south of these are three more, also touching; the remaining three are fallen and scattered. They are 1 foot 6 inches [46 cm] in diameter, without base or capital, having only a simple fillet at the upper end of the shaft; they are sunk in rubbish to some considerable depth.' (Conder and

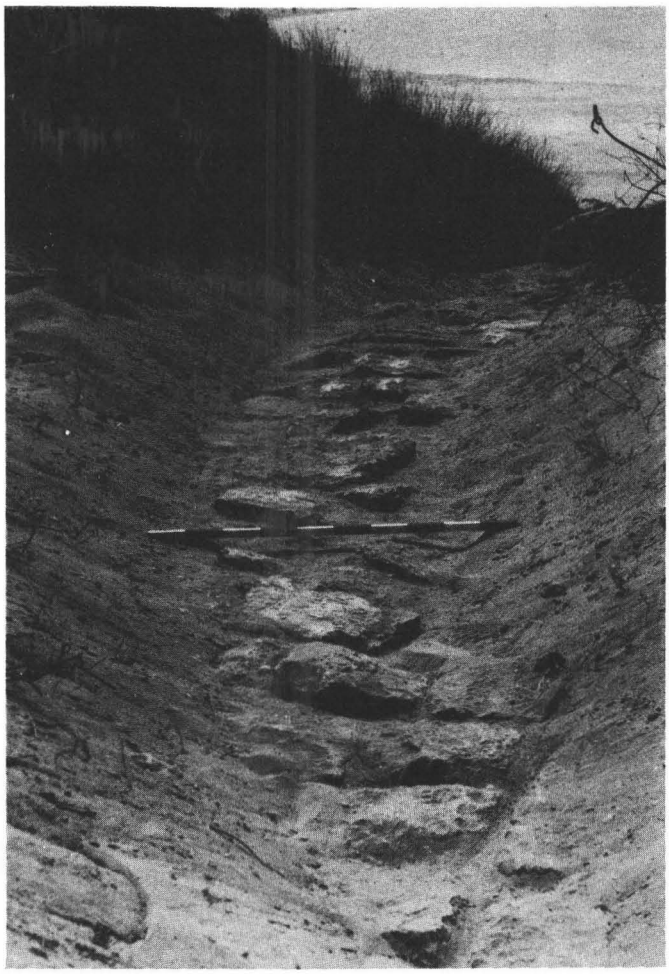

Figure 4. Photograph of paved street west of the church. Scale: 1 metre long (photo C. Dauphin).

Kitchener 1882: 9; cf. Drake 1873: 100). Elsewhere, Conder (1874: 12) described these grey granite columns as 'shafts planted perpendicularly in a line beside one another'. These upright columns may indicate that the *cardo* was a colonnaded street. In 1987, a grey column capital was transferred from this location to the Museum of Kibbutz Nahsholim (Kingsley: personal communication).

Another street in the southern part of the city extended from the western of the two conjectured gates in the southern wall. Part of this paved street was observed beneath the sand dunes to the west of the church (Figs 1:5 and 4). It had a visible width of at least three metres at one point but the kerb stones were not visible, so that its total width could not be ascertained. The paving stones consist of roughly squared *kurkar* blocks, all approximately 40 × 30 cm in size, laid in no specific

order. One part of this street extended towards the main tell, the other ran directly from the conjectured gate towards the north-east where we believe it turned eastwards and joined the main street of the city, the *cardo*.

A street which crossed the lower city from east to west from the south-eastern corner of the fortifications to the area of the Roman gate 'piazza' at the edge of the main tell in Stern's Area B, has been identified by us as the principal east-west *decumanus* (Fig.1:21). The built aqueduct (Fig. 1:10) ran almost parallel to this street to the south. Another east-west street runs across the city about 150 metres further to the north (Fig. 1:22).

Additional streets are visible on aerial photographs and these have also been depicted on our map.

Houses and other buildings

'Shadow' features visible on aerial photographs suggest the existence of houses and buildings throughout the area of the lower city. This is confirmed by the few excavations which have been undertaken as well as by field observations.

Excavations by Stern at the edge of the main tell in his Area B1 have revealed a sequence of structures of Roman and Byzantine date (Fig. 1:9). The remains of structures and fills with Byzantine pottery were observed by Raveh (personal communication) during construction works which preceded the construction of the tennis courts for the kibbutz (Fig. 1:14). Nearby, the lines of ancient walls are evident in the ground surface in the area of a modern track (Fig. 1:12). Excavations just inside the line of the eastern fortification wall revealed a wine press complex (Fig. 1:38) which apparently went out of use in the third century AD (Kingsley and Raveh 1994b). About a hundred metres further north additional excavations brought to light the remains of a large structure of dressed ashlars (Fig. 1:39) dated to the Roman period. It is oriented generally in the direction of one of the streets visible in aerial photographs. The remains were much disturbed by the earth-moving activities connected with the building of fishponds in this area.

A group of five upright columns in the northern part of the city (Fig. 1:18) were drawn on a map at the time of Garstang's work at the site, now in the site file for Dor in the archives of the Israel Antiquities Authority.[7] On this map they are referred to as 'visible tops of burried (*sic*) stone columns'. A sondage made by Leibovitch in 1950 on the western slope of a mound at the northern end of the city, to the east of the theatre, revealed two superimposed strata, the upper (80 cm thick) containing pottery dating from the Roman and Byzantine periods and the lower with pottery from the Persian and Hellenistic periods (Leibovitch 1951: 38) (Fig. 1:25).

An area immediately north of the main tell may have included public buildings (Fig. 1:29). A series of parallel lines are discernible in aerial photographs, these representing robbers' trenches cut by the inhabitants of the nearby village of Tantura along the lines of walls in order to pillage their stones. In a letter to the Director of Antiquities of July 1939, the Inspector of Antiquities N. Makhouly,

wrote: 'It seems that stone quarrying from ancient remains at el-Burj was carried out, on a very huge scale, by skilful (*sic*) stone cutters during the last three months, causing a serious damage to the remains . . . On the northern slope and base of the mound: an extensive area measuring about 150 m. × 60 m. is heavily furrowed by deep trenches which undoubtedly followed the direction of ancient walls from which stone was extracted. In many places the depth of the trenches excavated (was) 3 metres and the walls in them were totally destroyed. Most of the stone quarried from this area were removed, but still (a) few hundreds of them remain scattered on the spot. Column shafts and drums, marble fragments and jar pieces were turned over during the illicit operation of excavations, (Letter ATQ/754, quoted here courtesy of the IAA.). These robbers' trenches are clearly evident in photographs in the site file of Dor in the archives of the Israel Antiquities Authority.[8]

The theatre

The theatre stands at the northern end of the city and is still largely unexcavated (Fig. 1:26). A small portion of it was cleared by Leibovitch in August 1950. The trench which he dug is still visible (Leibovitch 1951: 38–39, Fig. 5).

Leibovitch published only a very short report in Hebrew which we have translated as follows: 'Not long after the examination began, an area with large ashlar paving was discovered, partly rounded on its western side; it would appear that this was the *diazoma* of a Roman theatre, the passage which separated the upper and lower range of seats (I on the plan [our Fig. 5]). One face of the *diazoma* (II) was also found and it served also as one of the site walls (the southern) of the *vomitorium*, the entrance passageway to the threatre; its width was 3.20 m (III). In the fills of sand above the ruins were fragments of a sculptured cornice which apparently belonged to the vaulted ceiling of the *vomitorium*. The façade of the theatre was positioned towards the north; clearly the theatre was built so that it could overlook the sea to the north. The second wall (the northern) of the *vomitorium* was connected to the eastern edge of the stage (*scena*) (IV). The upper courses of the stage and of the *vomitorium* are preserved roughly to the same height, but nothing is preserved of the ceiling which connected them. On the stage were found two columns made of grey granite, as well as a few smaller columns; their bases which were made out of concrete are marked on the plan. A sculpted entablature was apparently placed above these columns as one can learn from the sculpted fragments found in the sandy layer above the ruins. The stage was paved with pieces of grey and white marble, as well as with coloured pieces. A capital and a base of a column were found in the area of the theatre, both of marble. The central part of the stage (V) was lower than the parts on each side; the fills in this part of the stage contained decorated architectural fragments. Having established that the diameter of the theatre was approximately 60 metres, a trench was excavated outside the stage in the direction of the central seating. It was here that the *orchestra* was uncovered, paved with limestone flagstones; above this paving was

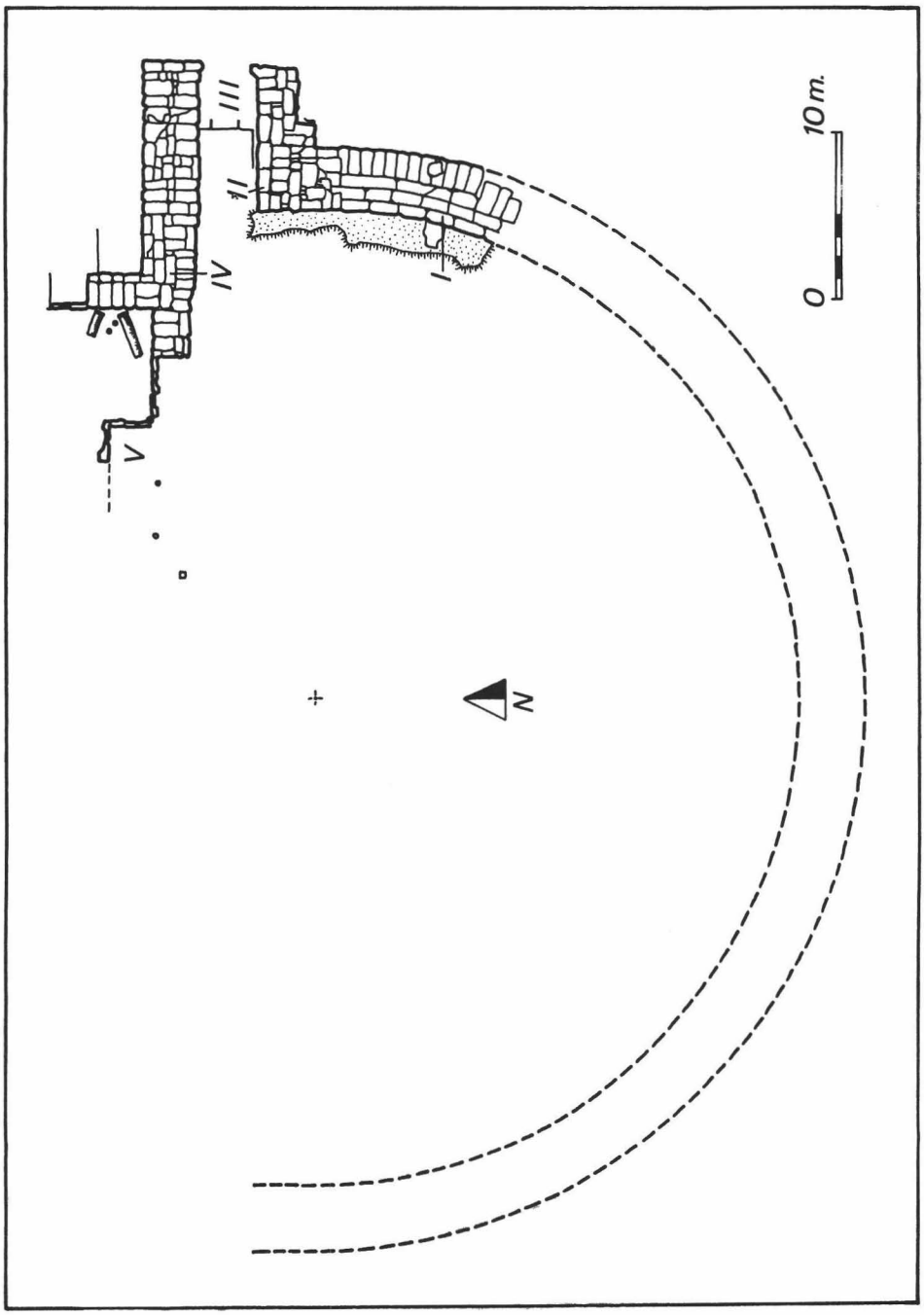

Figure 5. Plan of the theatre (after Leibovitch 1951, Fig. 5).

found an additional floor of unknown function made of concrete. In this trench two stone seats were found, fallen on their sides, and a part of a stone column. Among the finds one should mention, apart from the pottery and glass objects, a fragment of a Greek inscripton which was found in the *diazoma*. Only a few coins were found in the excavations dating from the late Roman period, and three Arabic ones of the Ayyubid rulers . . ., (Leibovitch 1951: 38–39).[9]

The theatre was built out of limestone and not out of the local *kurkar* sandstone. It was probably built up from level ground with massive substructures which have yet to be excavated. It appears that the passage excavated by Leibovitch represents part of the eastern *aditus maximum* and was barrel-vaulted (Segal 1995: 51). The columns formed part of the decoration of the stage wall (*scaenae frons*); a section of the *praecinctio* was also uncovered. Further excavations are necessary in order to clarify the details regarding the construction and dating of this theatre, as well as to investigate the relationship between the theatre and the adjacent city wall.[10] Stern (1994: 295) has suggested that the theatre was initially built in the Hellenistic period. Judging by its construction, this seems unlikely. It was probably built like many other theatres in the Near East during the second century AD. Segal (1995: 51) has suggested a more general second-to-third century AD date. It is quite possible that this theatre served not only a cultural but also an administrative function within the city (Bowsher 1992: 275). Hence, it may have continued in use with the latter purpose during the Byzantine period. Similarly, the theatre at Caesarea continued to function for a while during the Byzantine period (Levine 1986: 182).

The church

The episcopal basilica of Byzantine Dora rose at the southern end of the city (Fig. 1:7). Partial rescue excavations were undertaken at the site by Leibovitch in February 1952 on behalf of the Israel Department of Antiquities and Museums. The semi-circular eastward-oriented apse of the central nave of a large basilica was cleared, as was part of the mosaic pavement of a northern aisle (Leibovitch 1953; 1957). Besides the impressive size of the building, one discovery in particular supported Leibovitch's assertions that this was the episcopal basilica of Byzantine Dora, namely an episcopal ivory sceptre lacking its handle. It was shaped like a hand, the three middle fingers extended in a characteristic episcopal blessing symbolizing the Holy Trinity. One of the fingers bore an ivory ring (Leibovitch 1957: 35). The excavations were discontinued after the illness and death of Leibovitch, and the site was abandoned. The site was sufficiently important for the Israel Department of Antiquities and Museums to request Dauphin to resume excavations at the Church of Dor in June 1979. Three further seasons followed, in June–July 1980, October 1983 and October–November 1994.

The Byzantine church complex is huge (Fig. 6), covering at least 1,000 m^2. It is thus one of the largest ecclesiastical complexes outside of Jerusalem. The core of the structure consists of a three-aisled basilica, 18.50 metres long and 14 metres wide (Fig. 7: Nos. 10–13). The central nave, which terminates in the east in a

Figure 6. The church of Dor: general view from the north-west (photo Z. Radovan).

semi-circular apse, is flanked by side-aisles. The walls are built of ashlars occasionally laid as headers and stretchers and internally plastered. Both the nave and the side-aisles were paved with mosaics of which only small patches have so far been found.

Beyond each side-aisle, there is an 'external aisle' extending along the entire length of the building. The external northern aisle is laterally partitioned into a number of spaces. At its western end is a room (No. 3 on Fig. 7) paved with crude white mosaics. In its south-eastern corner the base of a staircase (No. 4) was uncovered. This staircase, supported also by two additional walls in the northern half of the room, probably enabled access to an upper storey, a terrace or a gallery. This room may have been the ground floor of a small tower from which the sexton called the faithful to prayer by banging on the *simandron* which is a wooden board still in use in Greek Orthodox monasteries. From the west, the other partitioned spaces of the external northern aisle include: an atrium (No. 5) paved with stone slabs which led into an antechamber (No. 6) whose plaster floor was originally paved with marble slabs. This gave access to a shallow, plaster-lined, rectangular basin or baptismal *piscina* (No. 7). Steps exist along the eastern and western edges, each 12 cm high. These areas are followed by two mosaic-paved rooms. The mosaic of Room 8 was decorated with 60 red-ochre buds—each enclosed in a dark grey

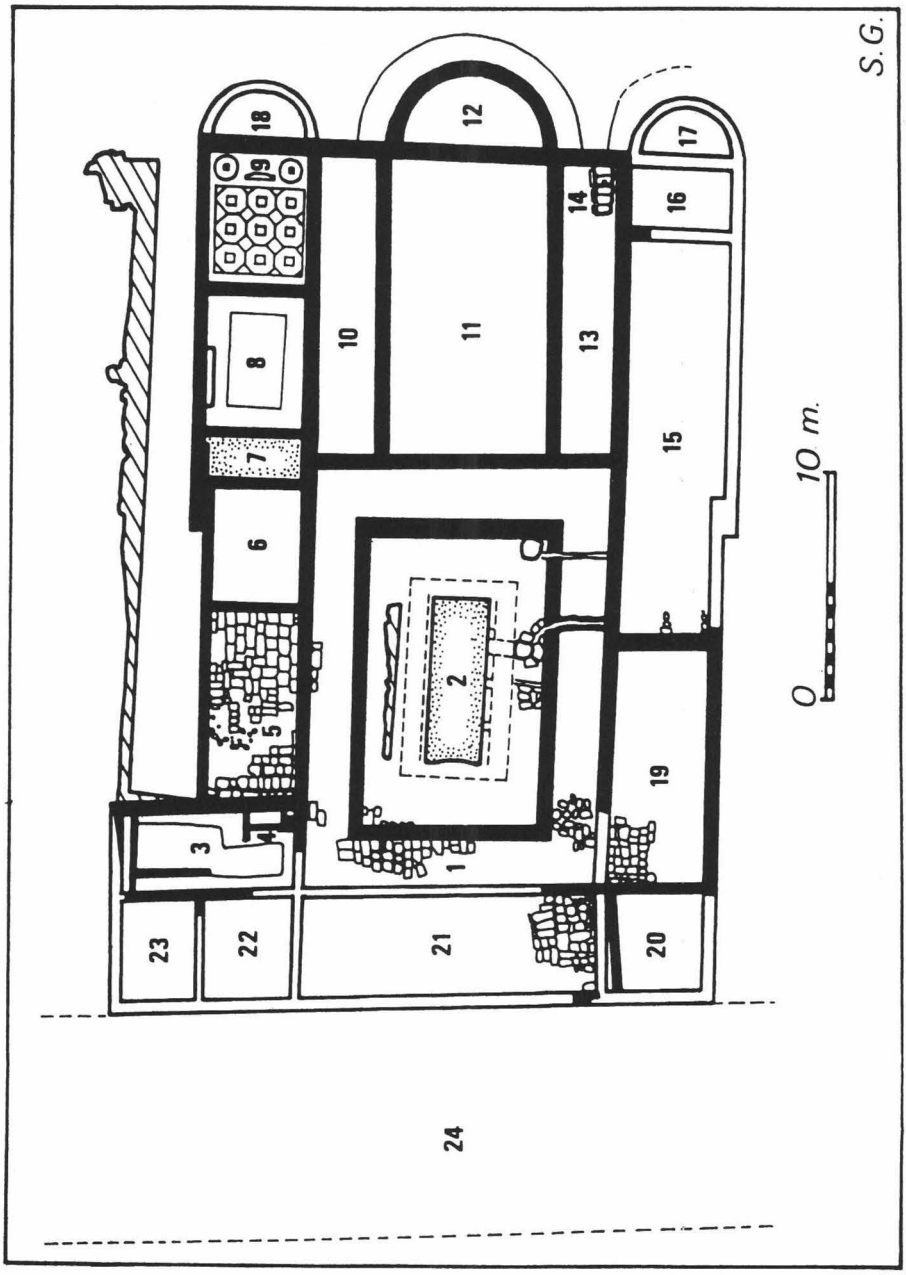

Figure 7. Plan of Dor Church: 1: Peristyle Court; 2: Cistern; 3: Tower; 4: Staircase; 5: Northern Vestibule; 6: Antechamber; 7: baptismal *Piscina*; 8: Anointing Room; 9: Room for celebration of the Eucharist; 10: Northern Aisle; 11: Nave; 12: Central Apse; 13: Southern Aisle; 14: Saints' Tomb; 15: External Southern Aisle; 16: Room where Reliquary Column may have stood; 17: Southern Apse; 18: Northern Apse; 19: Southern Vestibule; 20–23: portico; 24: Street. The remains of the podium of the Hellenistic-Roman temple and of a wall belonging to it are hatched (drawing S. Gibson).

calyx—spread out in six north-south rows of ten buds each, on a white ground. At the eastern end of the floor a fragmentary *tabula ansata* marked the central axis of the field. The pavement of Room 9 combined octagons, squares and stepped lozenges. To the east of this, a stone step probably gave access to a raised area—chancel or altar—now destroyed. Marble screens encased it on its northern and southern edges. The mosaic floor of Room 9 extends eastwards on either side of the stone step. Its decorative motif repeated itself symetrically on either side of the step.

The external southern aisle was almost entirely destroyed by the construction of kibbutz houses. Part of the foundations of its eastern apse were uncovered in October 1994, as well as a rectangular room (No. 19) at its western end, paved with stone slabs and corresponding to the atrium in the external northern aisle. The mosaic pavement of the external southern aisle has survived only as small patches south of the wall of the southern aisle.

To the west, the church was preceded by a stone-paved portico (No. 20–23) fronting the *cardo* (No. 24), the main north-south street of Byzantine Dora (Fig. 1:6). This is strikingly reminiscent of the propylea of the Holy Sepulchre basilica opening onto the Jerusalem *cardo maximus* (Gibson and Taylor 1994: 74–75 and Fig. 45). The portico of the Dor basilica gave access to a rectangular peristyle court paved with stone slabs (No. 1). Along the east-west axis of the apse and occupying most of the width of the atrium, the paving stones covered the vault of a large cistern, now collapsed (Fig. 6). Its plaster lining covers a pavement of crude white tesserae. Three pairs of corbels or projections protrude from the internal northern and southern walls of the cistern. Water entered through three plaster-lined channels which extend from the wall south of the cistern; water must have been directed down vertical gutters from the roof. A shaft was cut in the solid rock beside the cistern, plaster-lined and with seven footholds cut in its eastern and western sides. It is linked to the cistern by a doorway cut into the southern wall of the cistern.

At the end of the first season of excavation, it was suggested that the church had been erected in the fourth century, on the basis of third-and-fourth-century coins found in the sandy fills supporting the church. This hypothesis was verified in the 1980 season by the discovery, when the eastern half of the pavement of Room 8 was lifted, of a mosaic pavement with a geometric design, 38 cm below the upper pavement. A bronze *tremessis* coin of emperor Constantius II (337–61) minted at Cyzicus in Asia Minor was found on the pavement. The construction of the first stage of the church must therefore be assigned at the earliest to the first half of the fourth century.

To the Christian fourth-century basilica of Dor belong the lower mosaic pavements of Rooms 8 and 9, the lower floor of slabs and pebbles of antechamber 5, the lower plaster floors of the *piscina*, of the peristyle court, of the aisles, of the nave, of the apse and of the external southern aisle. The lower pavement of Room 8 was burnt at its northern end. Similarly, a fire destroyed the slab-and-pebble

floor of the antechamber. The church was rebuilt on the same plan in the fifth century.

In date and plan, the original basilica of Dor is comparable to the Constantinian foundations of Jerusalem and Bethlehem: the Holy Sepulchre and the Church of the Nativity. One aspect of the Dor basilica, however, appears to be unique. The location of the *piscina* is next to the atrium but inside, not outside the ecclesiastical complex. This illustrates the recommendation by the *Testamentum Domini Nostri Jesus Christi*, a canonical law text of the second half of the fifth century which lay down the rules concerning the plans of churches, that the baptistery should be connected with the atrium (Cooper and Maclean 1902: 63). The rhetor Choricius of Gaza describes in the *Laudatio Marciani* how, at the western end of the sixth-century Church of St Sergius at Gaza, now destroyed, there was a long portico in the north which included the baptistery (Abel 1931:16). The tripartite division of the external northern aisle of the basilica at Dor corresponds to the first three stages of the baptismal liturgy as described in the mid-fourth century *Mystagogical Cathecheses* of St Cyril, Bishop of Jerusalem (Piédagnel and Paris 1966). Candidates for baptism stood in the vestibule (Fig. 7: Room 5) called 'the external room' at the western end of the church complex—the region of Darkness—and renounced Satan. They then proceeded eastward, towards the divine Light, into 'the internal room' (Room 6). There they undressed, were anointed by the bishop, and stepped one by one into the *piscina*. They recited the Act of Faith and were either immersed three times or holy water was poured onto their foreheads. Immediately after the baptism they were again anointed by the bishop and put on white robes. The third *Cathechesis* does not mention a room specially connected with the anointing ceremony, but it is probable that this took place in Room 8 at the eastern end of the northern portico where the newly-baptised attended for the first time the celebration of the Eucharist and took communion. The steps leading up to an elevated apse or chancel in Room 9 indicate that this room was used for the enactment of the Holy Mysteries (Fig. 8).

The external southern aisle of the basilica would have served a different purpose: there, as well as in the peristyle court, sheltered the sick who came to be healed by undergoing a period of *incubatio*—a time of prayer, fasting and often deprivation of sleep. The practice of incubation held a prominent place in the rites of divine healing in ancient Greece as in the Temple of Asclepius, the God of Medicine, in his sanctuaries at Epidaurus and Pergamon (Simon 1972: 335–6). It was adopted by Christianity and is well attested by Saints' *Lives*. The saint appeared to the sick as they slept in the porticoes of his church and either healed them on the spot or prescribed them a treatment. At Dor, the sick gathered round the remains of two saints, whose names are not known, but whose tomb was found in the eastern end of the southern aisle. The tomb was closed by five slabs placed crosswise in a row oriented east-west. A small hole, 16-18 cm in diameter, had been cut in the centre of the western edge of the easternmost slab. The hole was lined with an earthenware pipe. We suspected that oil would have been poured into the tomb through this pipe in order to be sanctified by contact with the remains

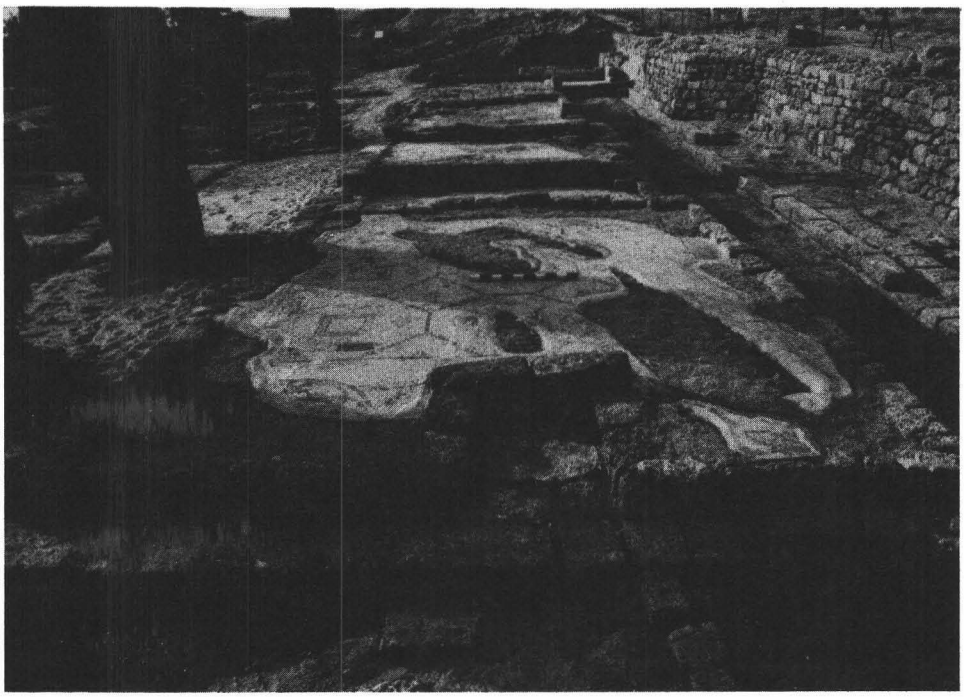

Figure 8. The external northern aisle of the church at Dor viewed from the east. Room 9 is in the foreground. To the right, part of the *temenos* of the Hellenistic-Roman temple used to support the northern retaining wall erected in November 1994 (photo S. Mendea).

of the saint. The oil would then have drained into a plaster-lined basin 2 metres long and 1.40 metres wide, between the tomb and the northern wall of the southern aisle, then to be used for healing the sick. This interpretation was confirmed by the discovery of oily organic deposits around the lower portions of the eastern wall of the southern aisle. The reliquary-tomb of Dor is the first of its kind to have been found in Palestine.[11]

Besides possessing the tomb of two healing saints, Dor could pride itself on owning a memorial of Christ's death. In the 1952 excavations, about 100 metres east of the basilica, a grey marble column was found lying on the surface. A three-line Greek inscription ('A stone of the Holy Golgotha') had been carved 92 cm above its base. Beneath the inscription there was a hollow cross. A small cross had been carved at each of the four ends of the central cross. The hollow probably contained a fragment of the Golgotha, the rock of Calvary, enclosed in a cross-shaped metal reliquary, rivetted into the column—for there were holes at the end of each branch of the central cross (Leibovitch 1953). Such a prized relic must have exercised tremendous magnetism over pilgrims travelling from the north along the *Via Maris*, or disembarking at the port of Dora, whence they could ascend directly to the church. Dor's role as a major port and road junction on the trade and

pilgrim routes linking Egypt and North Africa to the Syro-Cilician hinterland, is underlined by the quantity and variety of imported pottery found in the course of the excavation of the basilica. There were Egyptian white storage jars, 'Late Roman C' and 'North African Red Slip' bowls and plates, as well as storage jars from Asia Minor.

The water supply

An aqueduct which conveyed water to Dor from a distant spring at Khirbet Tata in the mountains above Nahal Dalia, located some 3.5 kilometres to the south-east of the city, has been investigated by Yehuda Peleg (1994). Sections of this aqueduct (Fig. 9) were also recently examined during a survey conducted by Gibson in 1994 to the east of the city (Features Nos. 289–291, 296–298, 299). The exact line of this aqueduct near the city can clearly be traced in an aerial photograph taken in 1918.[12] It was incorrectly labelled as an 'old road' on the map of the *Survey of Western Palestine* (Sheet VII, 1879). The aqueduct entered the lower city of its south-eastern corner (Fig. 1:10) and extended westwards on a series of arches towards the 'piazza' area at the east gate of the main tell (Fig. 1:9). Stern's excavations there (Area B2) revealed the remains of four masonry piers and the edge of a large water reservoir (Stern 1994: 297–299, Figs. 185, 205). The date of this aqueduct is still uncertain but since it originally conveyed water to the main tell it may be assumed to date from at least the Roman period. Water cisterns are known from the tell and one plastered tank on the north-eastern slope (Fig. 1:17) may even be of Byzantine date. Stern noted the discovery of a double ceramic pipe encased in cement which appears to have conveyed water during the Byzantine period from the extreme end of the aqueduct to the buildings of the lower city (Stern 1994: 299).

In the lower city, Inspector of Antiquity N. Makhouly, noted in 1946 'built and rock-cut wells with tanks'.[13] A large structure with solid walls built of well dressed blocks of *kurkar* reinforced with concrete and internally plastered, exists to the north of the line of the aqueduct within the lower city (Fig. 1:13). This structure is a reservoir for water storage and was probably originally constructed in the Byzantine period, although it may have been restored by the inhabitants of Tantura during the Ottoman period or perhaps earlier during medieval times. This reservoir was named El Hannaneh and is shown on the *Survey of Western Palestine* map (Sheet VII, 1879; cf. Dahl 1915: 12, n. 5). Guérin (1874, II: 309) briefly mentioned this structure during his visit to Dor in 1870. According to him it was nine paces square with walls built of ashlars. He noted that within the structure he saw fallen column shafts of marble and granite. It was later examined by Conder in March 1873 who described it as follows: 'El Hannaneh is a ruined cistern just east of the causeway; it is about 10 paces square, and built of stones 2 feet to 3 feet 6 inches [60 cm to 1 metre] in length. The interior is lined with rubble coated with hard white cement, containing fragments of pottery pounded small, and dark red in colour, together with ashes. The mortar behind the cement is thickly bedded,

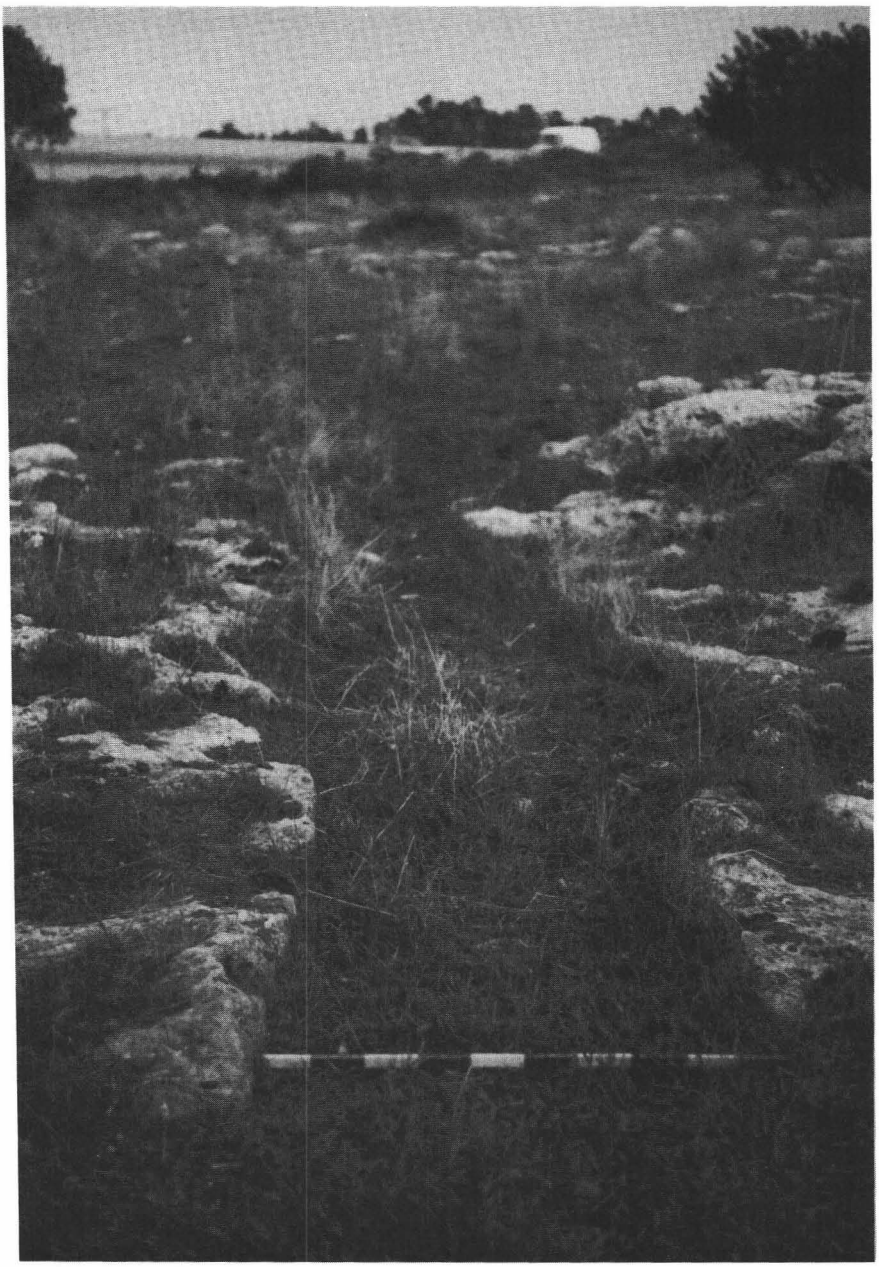

Figure 9. A section of the rock-hewn aqueduct which brought water to the city of Dor (photo S. Kingsley).

and contains large bits of pottery. Close to the north wall of the cistern is a shallow round well of small ashlar. The work resembles that of the walls of Caesarea, and may be attributed to the twelfth or thirteenth century, (Conder and Kitchener 1882: 9–10). The medieval date attributed to the structure by Conder was not accepted by Drake who also visited the site in March 1873. Drake wrote in a letter to the PEF: 'To the east of the mound is a Roman tank for irrigation, differing from those I formerly described near Jaffa, as being built of rather large blocks of stone.' (Drake 1873: 100). It is interesting to note that Conder at the time of his survey also dated this structure to the Roman period (see his notebook in PEF Archives, WS/266). A plan of this structure, labelled 'ancient ruined building (cistern under)', appears on a map of Dor from 1924.[14] The partial remains of this structure are still visible next to the tennis courts of the kibbutz.

Conclusions

The area of the lower city of Dor was first settled in the Persian period, probably during the fifth to the fourth centuries BC. This need not have been a particularly large settlement and was perhaps only a northern suburb of the main tell. Additional suburbs were built around the tell in the Hellenistic period. Persian and Hellenistic pottery was found by Leibovitch in a sondage at the northern end of the lower city (Leibovitch 1951: 38). About two metres to the north of the church, Dauphin uncovered the remains of a monumental edifice of late Hellenistic or Early Roman date, judging from its masonry, pottery, coins and the leg fragments of a white marble statue. Further traces of this building were located immediately north of the cistern in the peristyle court. The exciting find made in November 1994 that the church rested directly on that building (Fig. 10) confirmed the excavator's hypothesis that the basilica of Dor had been erected over a pagan temple whose *stoa* had been ultimately replaced by the external aisles and by the atrium to the west of the cistern, whose *cella* had become the nave and side-aisles of the church and whose *adyton*—the subterranean 'holy of holies'—had been remodelled into a cistern. The plan of the Dor Temple would have resembled that of the Temple of Nemesis at Rhamnous dating to the sixth century BC, of the fifth-century BC Heraion at Argos in mainland Greece, as well as that of the Temple of Rhoikos in the sixth-century BC Heraion on the island of Samos (Melas 1973: 39–47, 125–31, 179–89; Schoder 1974; 180–81, 190–91). Characteristically for Greek cult centres, the temple had been erected on the edge of the lower city and at the foot of the acropolis (Schoder 1974: 404–5). The temple was burnt, as evidenced by the great quantity of ash overlying the remains of its podium, and its paving stones removed and reused to build the northern wall of the basilica, this vividly illustrating archaeologically the burning and looting by Christians of the pagan temples of Byzantine Palestine.[15]

It is interesting to note that the earliest pottery found during Gibson's 1994 survey scattered in the agricultural fields within a radius of about two kilometres around the city also dates from the Persian and Hellenistic periods. It would appear

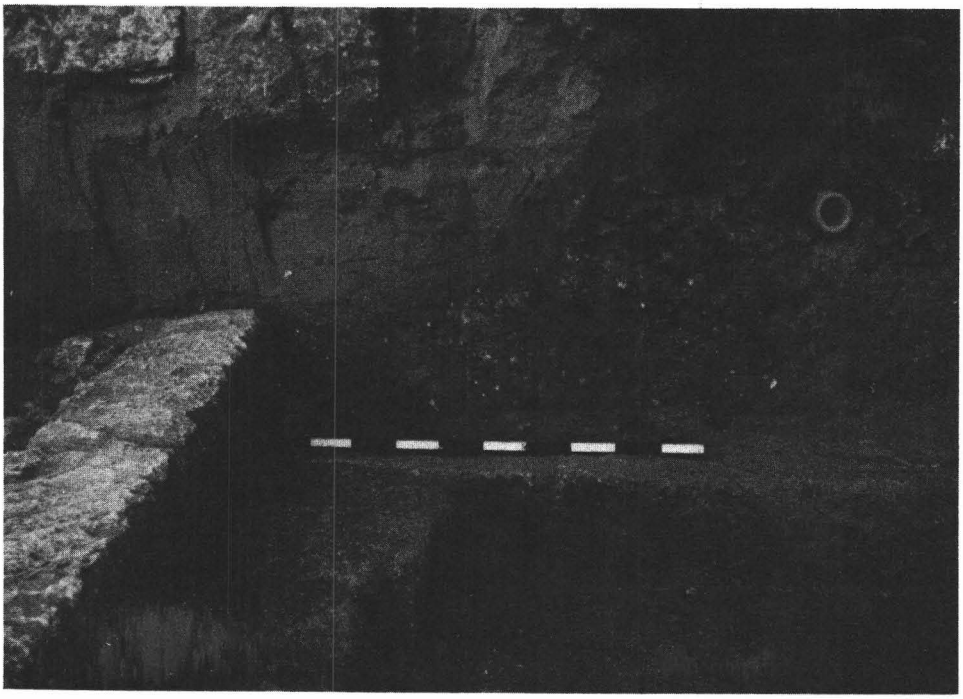

Figure 10. The church of Dor: the eastern wall of the Byzantine tower (left) rests directly upon the remains of the *temenos* of the Hellenistic-Roman temple. The storage jar protruding from the section marks the destruction level of the church in the late eighth or ninth century (photo C. Dauphin).

that the lower city was properly established as a large planned settlement in its own right during the Early Roman period as a major extension of the settlement on the main tell. Thus, during this period there existed an upper and lower city. During the Byzantine period, the main tell largely ceased to be inhabited and the area covered by the lower city expanded considerably to 6.8 hectares (cf. the figure of 8 hectares proposed by M. Prausnitz in Broshi 1979: Table 2). Eventually, it covered an area slightly larger than the area of the original city on the main tell. On the basis of a coefficient of 400 persons per hectare put forward by Broshi (1979:5) the population of the lower city probably consisted of no more than 2,500 individuals.[16] The date at which the fortification wall was established around the lower city is uncertain. We believe this took place no earlier than the Roman or Byzantine periods. The occasional discovery of structural remains of Roman and Byzantine date in areas beyond the area of the lower city and especially to the east and south-east in the grounds of Kibbutz Nahsholim (Kurt Raveh: personal communication), are a clear indication that extra-mural suburbs existed at Dor during these periods. Gibson's survey of the environs of Dor has shown that the number of farms and villages dating to the Roman and Byzantine periods in the surrounding countryside was considerable. Clearly, Dor was a thriving regional

centre for the agricultural hinterland during these periods. Judging by underwater finds, Dor also continued to function as a port throughout the Byzantine period and the remains of a number of Byzantine shipwrecks have been detected in the southern harbour of Dor (Wachsmann and Raveh 1984: 229; Raveh and Kingsley 1991; Kingsley and Raveh 1994; Wachsmann 1995).

Stern (1994: 319) has stated that in the light of his excavations, settlement at Tel Dor ceased to exist or was largely diminished by the beginning of the second quarter of the third century AD, with only a small cluster of buildings surviving during the Byzantine period around the church.[17] This view can no longer be sustained by the archaeological evidence which we have presented above. Furthermore, the historical evidence does not negate the existence of a settlement at Dor in the Byzantine period, as Stern would like to believe. Although not mentioned by the Bordeaux Pilgrim in his fragmentary list of port stations (Geyer and Cuntz 1965), Dor was depicted nevertheless on the Peutinger Table which shows the main lines of communication in the Roman road system of the fourth century AD (Roll 1995: 30*). Moreover, Jerome's description of fourth-century Dora as 'a city now deserted' (*Onom* 250:56) is clarified by his account in *Epistle* 108 of the pilgrim Paula's amazement at 'the ruins of Dor, a city once very powerful' (Wilkinson 1977: 47) in the course of her first journey around the biblical sites of Palestine in 385. Judged in the light of Jerome's interest in sites as fossilized embodiments of biblical events, both comments appear as direct references to the ancient ruins on the biblical tell which by then had been largely abandoned. They thus have no bearing on the state of the Byzantine settlement in the lower city.

Even more important for understanding the history of the site during this period are the historical sources which name the bishops of Dora. The first bishop of Dora to be mentioned—late in 483 or early in 484—was Fidus who, according to Cyril of Scythopolis in his *Life of St Euthymius* (66: 15–17; Festugière 1962: 120), had formerly been a deacon at the laura of Euthymius (modern Khan al-Akhmar) in the Judaean Desert. This does not mean that Dora lacked a bishop prior to the late fifth century. The archaeological evidence for the foundation of the episcopal basilica in the first half of the fourth century is undeniable. Moreover, Abel (1967: 197–98) rightly points out that the list of bishops who attended the Council of Nicaea in 325 never claimed to have been exhaustive: it is certain that all the bishops of the Later Roman Empire did not take part in that council. Besides the nineteen episcopal sees cited in the *Actae* of the Council of Nicaea, 'il est possible qu'il en existât alors d'autres comme Joppé, Apollonia, Antipatris, Dora. Les signatures des conciles ultérieurs nous les feront connaître en même temps que les nouveaux sièges créés au IVe et au Ve siècle au fur et à mesure de l'expansion de la religion chrétienne'.

By the sixth century Dora was well-established as first suffragant of adjacent Caesarea, metropolis of the archiepiscopal see of *Palaestina Prima*. It is mentioned both in the *Synekdemos* (Honigmann 1939: 718:2)—a treatise originally composed under Emperor Theodosius II (408–50) and re-edited by Hierocles between August 527 and the Autumn of 528 as an official manual for the use of civil servants in

their local administrative duties—and in Georgius Cyprius' *Geographical Treatise* (Honigmann 1939: 1000) dated to the beginning of Justinian's reign. Bishop Barochius attended the First Council of Jerusalem in 518, and Bishop John the Second Council of Jerusalem in 536 (Dahl 1915: 102–08; Abel 1967: 200; Bagatti 1984: 92–93). Further proof of the preëminence of Dora in the ecclesiastical administration of Byzantine Palestine is provided by the following fact. In 638, Patriarch Sophronius of Jerusalem was prevented by the Arab occupation of the Holy City from travelling to Rome to promote Orthodoxy against the rising tide of Monotheletism.[19] He entrusted this difficult task to Bishop Stephen of Dora (Le Quien 1740, 111: 274). On behalf of the diocese of Jerusalem, 'of nearly all the bishops of the East and of the Christian communities', Stephen of Dora defended the cause of Orthodoxy before Pope Honorius I (625–38). On Sophronius's death in 645, the patriarchal see of Jerusalem fell vacant and Pope Theodorus (641–49) appointed Stephen of Dora both as 'first of the church council of Jerusalem' and as Papal Legate. The all-encompassing role of 'Vicar of Jerusalem' which included the instituting of bishops, presbyters and deacons in *Palaestina Prima, Secunda* and *Tertia*, should have been allotted to the bishop of Caesarea, metropolis of *Palaestina Prima*. However, since Caesarea had fallen to the Persians in 614, it lacked a *metropolitos*. The bishop of Dora being first suffragant of the archbishop of Caesarea, it was natural that Stephen of Dora should have deputized by default both for Caesarea and Jerusalem. He was instructed by Pope Theodorus to reëstablish Orthodoxy in Palestine by deposing some bishops (presumably those who had adopted Monothelitism) and maintaining others in their sees. Stephen faced violent opposition in Palestine from his fellow bishops who agitated so well at the Papal court that in 649 at the Council of the Lateran Pope Martin (Theodorus' successor) transferred his delegation of authority from Stephen of Dora to John of Philadelphia (Amman in modern Jordan).

Although nothing further is known historically of Byzantine Dora, it appears that Stephen's episcopal church survived the Arab occupation of Palestine until Abbassid times. However, the rest of the city may have gone into decline and it is interesting to note that Gibson's survey has shown that Dora's agricultural hinterland had already become depopulated, with the abandonment of farmhouses and fields, during the second half of the sixth century, at the latest. The final fate of the basilica of Dor is clearly imprinted on the remains. Dor was destroyed by fire as evidenced by an ashy layer and collapsed material: chunks of wall plaster, marble fragments, broken storage jars, glass window panes, glass chandeliers or *polycandela* hanging from bronze chains and hooks, all mixed with iron nails, door-latches and a fragmentary lead *polycandelon* molten by fire. The pottery in this destruction level indicates a late eighth-century or ninth-century date. The episcopal basilica of Dor would thus have been one of the many victims in Palestine of Islamic fanaticism promoted by the Abbassids.

The existence of Byzantine episcopal sees was grounded both in ecclesiastical and in civil administration. Since 381, according to Canon 12 of the Oecumenical Council of Constantinople, ecclesiastical dioceses were compelled to model them-

selves on civil constituencies (Héfélé and Leclercq 1908: 21–24). Episcopal sees were therefore *de facto* associated with cities. Thus the bishops of Dora would on no account have held ecclesiastical jurisdiction over a small and obscure coastal village, but solely over a true Late Roman and Byzantine *polis*, a city protected by fortification walls resembling the *poleis* depicted on the Madaba mosaic map (Avi-Yonah 1954). Such precisely was the Byzantine city of Dora which we have discovered.

Notes

1 These include Sheet VII of the *Survey of Western Palestine*, scale one inch to a mile, 1879, Ordnance Survey, Southampton; *Tantura: Antiquity Site*, scale 1:1,000, dated January 1924, Land Survey Department, Jerusalem; *Ijzim Map Provisional, Topocadastral Sheet 14–22*, scale 1:20,000, April 1932, Survey of Palestine, Jaffa; *Registration Block 10931 (El Burj)*, scale 1:2,500, 1942, Survey of Palestine, Jaffa; *Topographical Map of Nahsholim (Tantura)*, scale 1:2,500, dated July 1949.

2 Aerial photographs Nos AINN 1631 to 1633, taken at 8,000 feet in June 1918, and Nos 9053/1 and 9058/1, taken in November 1967, scale 1:12,500.

3 Ironically, these dumps which represent the spoil-heaps of Stern's excavations of the upper biblical tell, are rapidly obliterating the traces of the lower Hellenistic, Roman and Byzantine city.

4 The tower is depicted in a number of nineteenth-century engravings (Conder and Kitchener 1882: 7; Porter 1889: 234). A rare photograph of the tower—reproduced here as Figure 2—was taken by Corporal Henry Phillips in April or May 1866 during a visit to the site in the company of C. W. Wilson and S. Anderson (P494 in the photographic archives of the Palestine Exploration Fund).

5 Aerial photograph No. AINN 1631: Israel Antiquities Authority Photograph No. 118349.

6 *Tanturah: Antiquity Site*, scale 1:1,000, 1924.

7 See note 6, above.

8 Photographs Nos 20.251–20.253 in the Dor file in the archives of the Israel Antiquity Authority.

9 For additional information based on Leibovitch's excavation file in the archives of the Israel Antiquities Authority, see Segal 1995: 50–51, Figs. 32–33. According to our calculations the estimated diameter of the orchestra should be 58, not 60 metres.

10 On the location of theatres within Near Eastern Roman cities, see Frézouls 1961.

11 Kloner (1988–89: 125) has recently uncovered a similar kind of arrangement beneath the floor of an early Byzantine church south-west of Tel Maresha. Beneath a square stone with a hole set in the mosaic floor of the church and blackened by burnt organic material, presumably oil, was a long narrow jar without a base used like a pipe extending down to the top of a cist grave containing human remains.

12 Aerial Photograph No. AINN 1631: Israel Antiquities Authority Photograph No. 118349.

13 Report No. N/3794 of 24.5.46; Israel Antiquities Authority Archives.

14 *Tantura: Antiquity Site*, scale 1:1,000.

15 See the description by Mark the Deacon of the destruction in May 402 of the Marneion of Gaza at the instigation of Porphyry, first bishop of Gaza (Grégoire and Kugener 1930: 55–56).

16 See the recent review of methods of estimating population numbers in Zorn 1994: 32.

17 For additional views suggesting that Dor had ceased to exist by the fourth century, see Meshorer 1986–87: 60; Barag 1994: 180; Safrai 1994: 24 (cf. Di Segni 1994).

18 On the Monothelite heresy which was heavily subscribed to by the episcopate of seventh-century Palestine, see Musset 1948, I: 185–87.

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Bag-Shaped Amphorae and Byzantine Trade: Expanding Horizons

SEAN A. KINGSLEY

The bag-shaped amphorae or *havith* is found in virtually every Byzantine deposit sampled in Israel since the initial type identification at the Tyropoeon Valley in Jerusalem during 1927 (Crowfoot and Fitzgerald, 1927, Pl. XIV.31). Its anatomy is exceedingly familiar within regional Roman and Byzantine coarse ware assemblages. However, alongside the analytical treatment to which the cylindrical Gazan amphora has recently been subjected (Mayerson, 1992; Johnson and Stager, 1995), evaluations of the role of the bag-shaped counterpart in the broader economy and long-distance trade are severely limited. Nevertheless, a mounting body of evidence unequivocally confirms that the circulation of these containers, and hence principally the content, was far from simply a restricted, regional affair in Late Antiquity.[1]

Anatomy of the Bag-Shaped Amphora

Juxtaposed alongside the ungainly, long Gazan amphora, the squat bag-shaped vessel emerges as much more user-friendly, both in terms of handling ability and storage facility: a rounded base, broadly ribbed, and a low centre of gravity enabled the jar to stand independently without requisite propping against a wall. The morphological variation of the bag-shaped amphora between the 1st century BC and 8th century AD is relatively clearly defined in Israel, in spite of the fact that amphorae tend to display minimal change over broad stretches of time, because these vessels are oblivious to the forces exerted by the social trends which trigger continuous adaptations to the shape and decoration of fine wares (cf. Callender, 1965, XIX–XX).

Early productions are distinguished by a tall collared rim which is maintained at the summit of the vessel from the 1st century BC (Strange, 1975, 56), through the 1st–2nd centuries AD (Singer, 1993, 102) and the 2nd–3rd centuries (Adan-Bayewitz and Perlman, 1990, 167; Bahat, 1974, 164).[2] Based on quantification of the Caesarea Maritima repertoire Riley proposes the 4th century may be regarded a catalyst for the change to vessels with less crisp fabric and a lower rim, an adaptation cemented in the 5th century (1975, 25–6; Fig. 1).

Simultaneously, the application of painted motifs on the generous stomach wall

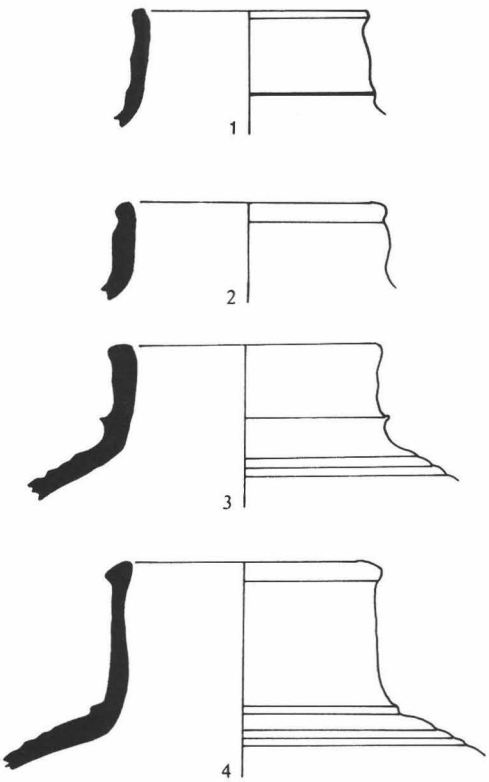

Fig. 1. The rims of early and mid-Byzantine bag-shaped amphorae. Nos. 1–2: Caesarea Maritima, early 6th century (after Wiemken, 1981, Fig. 14). No. 3: Caesarea Hippodrome Type 1A/1B Variant, 4th/5th century. No. 4: Caesarea Hippodrome Type 1A, 2nd–4th centuries (both after Riley, 1975, 26 and 29).

seems to emerge in this century (cf. Ben-Tor, 1986, 2), but only gains prominence about a century later: within the late 5th/mid-6th century assemblage at the Caesarea Hippodrome, painted jar fragments comprised no more than a meagre 3.5% of the total Rim/Base/Handle (RBH) count in a deposit (Riley, 1975, 27 and 61), but proved common in the dump placed against the city wall at the same coastal location between the 6th and first half of the 7th century (Magness, 1995, 143 and 145). The same feature materializes at Tell Keisan between AD 520–640 (Landgraf, 1980, 68) and prevails into Umayyad contexts of *c.* AD 720 at Pella (McNicoll *et al.*, 1982, 160–1).

During the early to mid-6th century the form with a lower rim dominated the Caesarea Hippodrome assemblage, accounting for about 64% of the total amphorae present (Riley, 1975, 25–26; Fig. 2.2). A comparable 6th century assemblage from a well near Tell Fara comprised 65.53% of the total sherd count and portrays the variability common in bag-shaped vessels of this century: Type 3A is characterized by a slightly everted rim and a swelling at the rim centre which

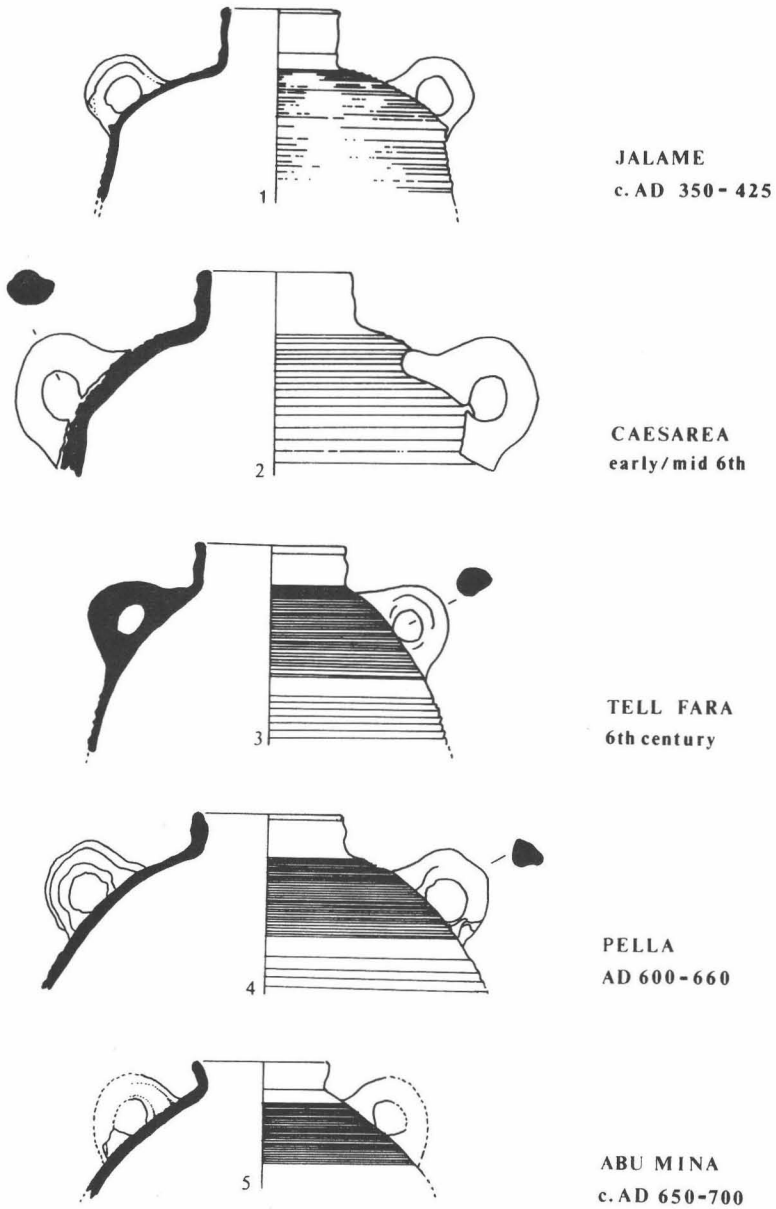

Fig. 2. Rim and shoulder profiles of bag-shaped amphorae. (No. 1 after Johnson, 1988, 217; No. 2 after Riley, 1975, 28; No. 3 after Tubb, 1986, 57; No. 4 after McNicoll *et al.*, 1992, P1. 115; No. 5 after Engemann, 1993, 153).

forms an exterior convexity (Fig. 2.3), Type 3B lacks the swelling and displays a pronounced everted rim, while in cases of Type 3C the shoulder ribbing is replaced by fine grooving and a simple lip formed by the rounded, or slightly pointed termination of the rim, which is furnished with a slight step at its base (Tubb, 1986, 56).

Representing 3.36% of the RBH count at Tell Fara (Tubb, 1986, 60) and only 1.3% at the Caesarea Hippodrome (Type 1C in Riley, 1975, 62), the variant with fine shoulder grooving seems rare in 6th century contexts. In stark contrast, this form blossoms in contexts of AD 630–660 in the Late Byzantine Building at Caesarea, representing 39% of the RBH total (Type 1B in Adan-Bayewitz, 1986, 91). Salient characteristics from this group include a short, vertical neck 2.5–3.0 cm high (those 3.6 cm tall are deemed unusual) with an exterior bulge at about mid-height, plain lips occasionally flattened or rounded, and narrow shoulder grooving achieving 4–6 grooves per centimetre. Similar examples are common as isolated harbour contamination within the waters of Dor and within shipwrecks assigned to the first four decades of the 7th century in the South Bay at the same location (Fig. 3C–3E and Fig. 4), where the extremely fine shoulder grooving of example PW 23 achieves a rate of ten grooves per centimetre (Kingsley and Raveh, 1996, 52–3, 61, 63). An additional, well-sealed example from Pella emanates from Phase V, confined to AD 600–640 (McNicoll *et al.*, 1992, 163 and 168; Fig. 2.4).

Towards the latter half of the 7th century the bag-shaped amphora was subjected to a new stage of development, with an enlargement of the rim and growth in handle size (Fig. 3F). This new model emerges *c.* AD 720 at Pella (cf. McNicoll *et al.*, 1982, 162–3) and is associated with an 8th century winepress at 'Ain el Jedide (Hamilton, 1935, 117). To facilitate the flow of stored liquid, the design of examples dating to this phase occasionally incorporate spouts (cf. Magen and Hizmi, 1985, 81).

Residual Infiltration

Unlike fine wares of the Byzantine period which are relatively precise indices of chronology, published assemblages demonstrate that even if subtly different bag-shaped vessel types manufactured at various kilns throughout the region in any one century co-exist in closed contexts, examples typical of earlier production are also commonly stratified alongside. Hence the sub-type distinguished by a near-vertical rim and one pronounced horizontal ridge toward the rim base, assumed to date no later than the 5th century (Riley, 1975, 26–7 and 29), recur in contexts of the early 6th and 7th centuries at Caesarea (Adan-Bayewitz, 1986, 123; Wiemken, 1981, 44; Fig. 1.1) and within late 6th/early 7th century deposits at Pella (McNicoll *et al.*, 1982, 159).

In comparison to the monumental trade of the Roman Empire, often conducted in state-built 'super-tankers', the scale of circulation reduced in the Byzantine era. Perception of transport jars also altered, with the individual entrepreneur no longer regarding the amphora as mere disposable wrapping, but attempting to

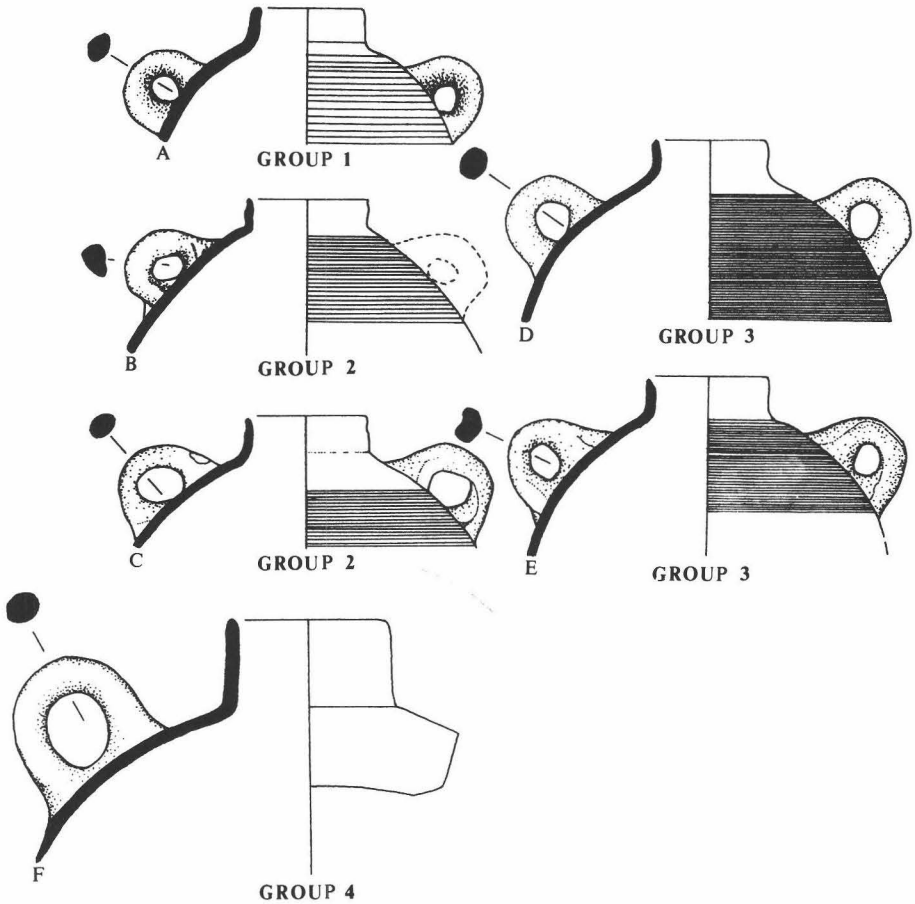

Fig. 3. Sample of bag-shaped amphorae from Dor. Group 1: *c.* 6th century. Group 2 and 3: late 6th/early 7th centuries. Group 4: Late 7th/8th century. Examples A, C, D and F are general harbour contamination. Example B derives from Wreck Dor A, *c.* AD 600–640. Example E was lifted by fishermen from Wreck Dor J, late 6th/early 7th centuries. (Drawings: S. Kingsley and after Kingsley and Raveh, 1996).

minimize transportation costs by recycling vessels. Although this is a disappointing trend for those who attempt to understand morphological changes in a jar in a chronological context, this does explain the manifestation of antiques in some horizons.

The common acceptance of recycling as a necessary evil is well-established amongst the 822 amphorae on the wreck of AD 625/6 at Yassi Ada in Turkey and is explained by van Doorninck as a reaction to the decreasing significance of amphorae as transport containers in preference to skins (1989, 256). Preliminary analysis of bag-shaped amphorae from a 6th/7th century wreck inside Dor harbour showed that the shape and fabric of the containers was also far from uniform,

with several of the fermentation vent holes breached prior to shipment. Another displayed possible evidence of mending: a break in the stomach wall was repatched so that the body ribbing on the refixed sherd was oblique and no longer aligned with the rest of the vessel (Fig. 4). This particular ship may have been transporting empty jars for refilling in one of the many Byzantine wine presses at Dor (Raveh and Kingsley, 1991, 202–3). A third merchant vessel of *c.* AD 600–625 was wrecked at St. Gervais off the South of France with a Gazan amphora amongst the galley stores. It also transported re-used jars, in this case containing pitch (Parker, 1992, 372–3). Talmudic sources even indicate a partiality for the storage of liquids in old jars, since a freshly thrown vessel can absorb as much as one-fifth of the liquid inside it (Zevulun, 1978, 29).

Fig. 4. Amphorae from Wreck Dor J, late 6th/early 7th centuries. Note the irregular alignment of ribbing on the 'repatched' side of the jar at right (after Raveh and Kingsley, 1991, 203).

Domestic Production and Circulation

Although bag-shaped Byzantine containers have been traditionally assumed to hold only wine in their role as transport jars, just as recent research has rebalanced the over-simplified impression that the Gazan amphora was exclusively a vehicle for wine (Mayerson, 1992), Rabbinic literature clarifies that the *havith* could also contain oil, dried figs and fish-brine (Vitto, 1987, 48). None of the latter, however, is attested archaeologically, and the nineteen bag-shaped storage jars and their contents exposed in a context of AD 310–320 at Meiron in Upper Galilee are exceptional, and should not necessarily be highlighted as typifying products commonly placed in this container form: the wheat, Egyptian beans, king walnuts, barley and perhaps olives were not intended for human consumption but were considered *hekdesh*, a divine tribute (Meyers *et al.*, 1981, 60–72). Until more illuminating evidence appears, the following discussion assumes the principal content of the bag-shaped amphora in contexts of inter-regional and long-distance Byzantine trade was wine.[3]

Following Dar's estimate that during the course of a single year a normal individual would obtain and store five jars of oil and no less than fifteen jars of wine (1986, 161), a massive local market may be envisaged. During the Byzantine period wine production in rural and urban pressing facilities and the manufacture of pottery production were both systematically organized on a regional basis. Bag-shaped amphorae were produced in limited quantities from the second to late 4th century at Kefar Hananya (Adan-Bayewitz, 1993, 136 and 147), at Horvat Usa between the 4th and 6th centuries (Ben-Tor, 1986, 2; Getzov, 1995, 20), at Kh. Aiyadiya and in the vicinity of Beth Shean during the 6th and early 7th centuries (Landgraf, 1980, 78–80), and somewhere in the vicinity of Caesarea (Peacock, 1984, 24). Given the amalgamation of features associated with both bag-shaped and Gazan amphorae found on a jar from the Corinth collection (Johnson, 1986, 592), in certain circumstances the two may have been produced at the same location: fragments of bag-shaped jars, including slags indicative of distortion from over-firing, have been noticed as wasters at Nahal Besor, Be'er Sheva and Horvath Suphah, all inland of Gaza (pers. comm. Yigal Yisrael, Feb. 1995).

According to present perception, since the production of pottery in Byzantine Palestine was predominantly tailored for the local market, vessels were restricted in spatial distribution. Hence most Kefar Hananya ware was diffused in cities and villages no further than 25 km from the manufacturing source in the Galilee (Adan-Bayewitz, 1993, 233) and Jerusalem was similarly self-sufficient, with few examples of northern bag-shaped amphorae painted with white lines attested there (Magness, 1993, 160; Fig. 5).[4]

Local Coastal Geomorphology

When the geographically inopportune coastal profile of Israel—unindented and almost entirely devoid of natural shelter—is juxtaposed with historical perceptions

Fig. 5. Byzantine bag-shaped amphorae from the Tyropoeon Valley, Jerusalem (after Crowfoot and Fitzgerald, 1927, Pl. XIV.31).

of the Holy Land's shore as a "stiff, stormy line, down the length of which as there was nothing to tempt men in, so there was nothing to tempt them out" (Smith, 1966, 101), the necessity for regional self-sufficiency in Byzantine Palestine may be comprehended. Indeed, in relation to the Aegean and the northern Levant the local coast emerges as a veritable no man's land, which explains the present estimate that shipwreck was so endemic throughout antiquity that one ship foundered every 25 m along the near-shore belt (Galili, 1992, 23).

However, the profitability of a land blessed with ample 'milk and honey' is greatly restricted within an expansive commercial market, unless it has effective related modes of transportation to exploit the surplus produce. With the exception of Sebastos, the port of Caesarea Maritima, both large and small artificial harbours are perplexingly anonymous in Israel. Byzantine Palestine was, however, certainly not landlocked. Rather, contemporary socio-economic appraisals of classical trade have stressed the abnormality of monumental ports such as Ostia, Lepcis Magna, and Sebastos by emphasising that most of the trade of the Roman Empire happened in simple ports or coastal cities without any maritime facilities whatsoever (Houston, 1988, 560).

The same holds true for Byzantine Palestine, where the exertion of mind over

matter served as an important philosophy in neutralising the natural inadequacies and hostility of the coastal zone. Along these backwaters of the Mediterranean, Karmon's prediction that virtually any cove or small indentation served at one time or another as a landing-place (1956, 36) has proven prophetic: Byzantine wreckage scattered along the lee side of the elevated *kurkar* ridge at Sdot Yam (Galili *et al.*, 1993, 68) denotes sustained trade centuries after most of the trade of Caesarea's Sebastos slumped and the breakwaters there lost their structural integrity (cf. Raban, 1992). The exposure of extensive Byzantine deposits within the waters of south Dor, including twenty iron anchors, six shipwrecks and thirty-three examples of amphora necks identifiable as isolated harbour contamination (Kingsley and Raveh, 1996, 83) vividly shows how Byzantine mariners utilised the restricted natural phenomena of a string of islets to the maximum.

With a gradiant of less than one degree (Nir, 1965, 4), the shallow continental shelf of Palestine was also endowed with a very limited ship size accommodation capacity, despite the estimate that vessels of at least 240 tons with a 10 m beam and 30 m length would require depths of little more than 3 m (Rickman, 1985, 108). The reduction of state-sponsored trade ventures and the rise of the private entrepreneur in the Byzantine era was accompanied by the decline of the 'super-tanker', such as the 40 m long Madrague de Giens ship capable of transporting at least 4,500 amphorae through the Mediterranean (Tchernia *et al.*, 1978, 103).[5] Comparatively more marginal investment of assets require smaller merchant vessels, a trend associated with Byzantine seafaring and also a trend which minimized the hostility of the local coast where vessels no greater than 16–18 m in length commonly plied the sea-lanes (Kingsley and Raveh, 1996, 80). The analogy of S. Angelo d'Ischia in the Greek archipelago demonstrates how coasters of 80–120 tons were still beached into the present century using moveable capstans (Ericsson, 1984, 100), an operation very probably mirrored within Byzantine Palestine.

Long-distance Trade

If foreign trade indeed accounted for 35% of all the trade in Roman Palestine (Safrai, 1994, 401), evidently in the subsequent centuries, when "never before had the size of the population, the volume of trade, or the intensity of cultivation reached the extent that it did under Byzantine rule" (Wilken, 1988, 236), some of the local markets—particularly those situated adjacent to the coast—must surely have operated with the intention of large-scale export in mind.[6] From the 4th century onward the surplus produce of Palestine seems to have particularly attracted Egyptian merchants who purveyed the wines of Gaza in the 4th century (Safrai, 1994, 394) and seem to have sailed through Dor harbour in the early 7th century: two steelyards employed for weighing produce were discovered in association with bag-shaped amphorae in wreck Dor G and refer to Psates of Rhion, a name of Egyptian origin (de la Presle, 1993, 581), as the owner of the objects. The commercial relationship between the two provinces is further portrayed in the House of Kyrios Leontis Kloubas at Beth Shean where the lower

panel of the mid-5th century mosaic depicts a Nilometer, identifying the location in a Greek inscription as Alexandria (Zori, 1966, 131).

While the Nilotic scene may be judged an allegory of the passage from one world to the next, a desire by Kyrios Leontis to preside at the banquet which signals the arrival of the Messianic Era (Roussin, 1981, 18), or alternatively the prosperity of a Nile cult at Scythopolis (Netzer and Weiss, 1995), the owner's familiarity with Egypt also indicates either trade links or a personal origin in Alexandria. Within the upper mosaic panel a merchant ship is depicted with two pottery containers on the deck (Fig. 6), subject matter which may hint at the actual nature of the owner's Egyptian link: rather than purely random illustrations, both jars are equipped with small ring handles and horizontal lines, schematically representing body ribbing. Further, one of the jars is carefully composed of red tes-

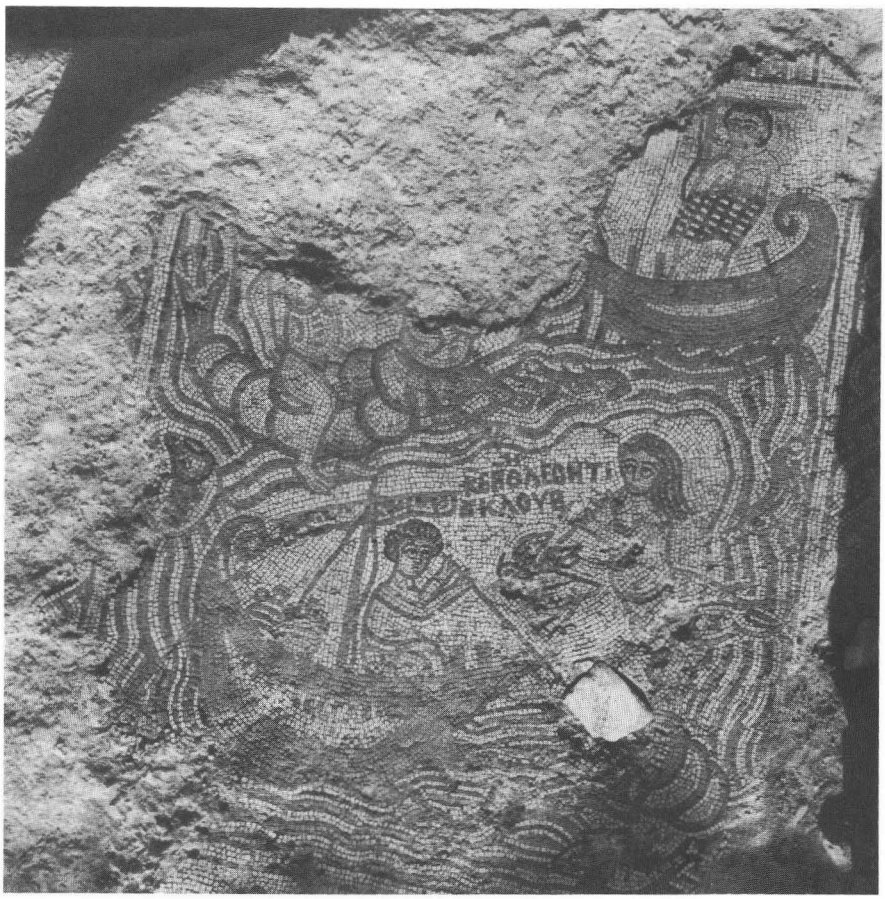

Fig. 6. Mid-5th century mosaic panel from the House of Kyrios Leontis Kloubas, Beth Shean. Note the bag-shaped amphorae on the deck of the ship. (Courtesy of the Israel Antiquities Authority).

serae, the other of black ones, thus exactly corresponding with the two dominant clay types in which the bag-shaped amphora was crafted in Late Antiquity. Without over-stretching the imagination, grounds exist to propose that Kyrios Leontis Kloubis may well have been a merchant who sent his wine to Egypt in bag-shaped amphorae.

Considering the popularity and vibrancy of this network, the recent confirmation that imitation bag-shaped amphorae were manufactured in Egypt at sites like Abu Mina and Marea (Empereur and Picon, 1993, 150; Fig. 2.5) shows that traders had sound competitive commercial sense, particularly as the long-established Western Mediterranean markets began to fragment in the early Byzantine period. Fieldwork at Pella has also recently exposed traces of an active trade with Egypt in the form of imported ceramics (Watson, 1995).

Quantification and analysis of amphorae assemblages at coastal Carthage reflect a subdued local economy in the wake of Belisarius's invasion in AD 533, when jars imported from the Eastern Mediterranean soared from about 10% *c.* AD 400–425 to 25–30% (Fulford, 1980, 71). Even if in geographical terms Palestine straddled a backwater of the Mediterranean, from this date the *terra sancta* emerged as a land of opportunity. The work of the British Mission at Carthage exposed both orange and grey bag-shaped amphorae variants in even earlier horizons of AD 450–530 (Peacock, 1984, 122 and Fig. 35.6–11), while Riley discerned examples within the cisterns at the same location dating from the mid-5th into the late 6th/7th centuries (1981, 121).

According to other published pottery assemblages in the Mediterranean, the exportation of bag-shaped amphorae from Palestine gains momentum no earlier than the late 4th century when these containers arrive at Corinth (Johnson, 1986, 591). During the 5th century the type appeared in Rome and Marseille (De Caprariis *et al.*, 1988, 310; Bonifay, 1986, 280) and elongated examples represented about 10% of the amphorae at Argos in the same century (Abadie-Reynal, 1989, 54–5), and were the second most common amphora at Anemurium (Williams, 1989, 98). Later examples indicative of wine transport during the 6th and 7th centuries have been exposed at Histria on the western shore of the Black Sea (Scorpan, 1977, 273–4), at Chios (Ballance *et al.*, 1989, P1.25), Sarachane (Hayes, 1992, 100 and 168), Sardis (Stephens Crawford, 1990, Fig. 558), and again at Carthage and Marseille (Riley, 1981, 121; Bonifay, 1986, 291).

Alongside additional early 5th and 6th century examples retrieved from anchorages off the south of France and Hala Sultan Tekke in Cyprus (Giacobbi-Lequement, 1987, 172; McCaslin, 1978, Figs. 225 and 226), a fascinating wreck site at Iskandil Burnu, Turkey (Lloyd, 1985; Yildiz, 1984, 29) furnishes the most compelling impression of the nature of the export of bag-shaped amphorae in Late Antiquity (Fig. 7). Transporting a compound cargo of Gazan, bag-shaped and carrot-shaped jars, the ship measured at least 18 × 4 m and commenced its fateful voyage from southern Palestine in the late 6th or early 7th century with a cargo of wine. The bag-shaped amphorae comprised the principal cargo component and included light red variants with very fine shoulder grooving and low rims whose

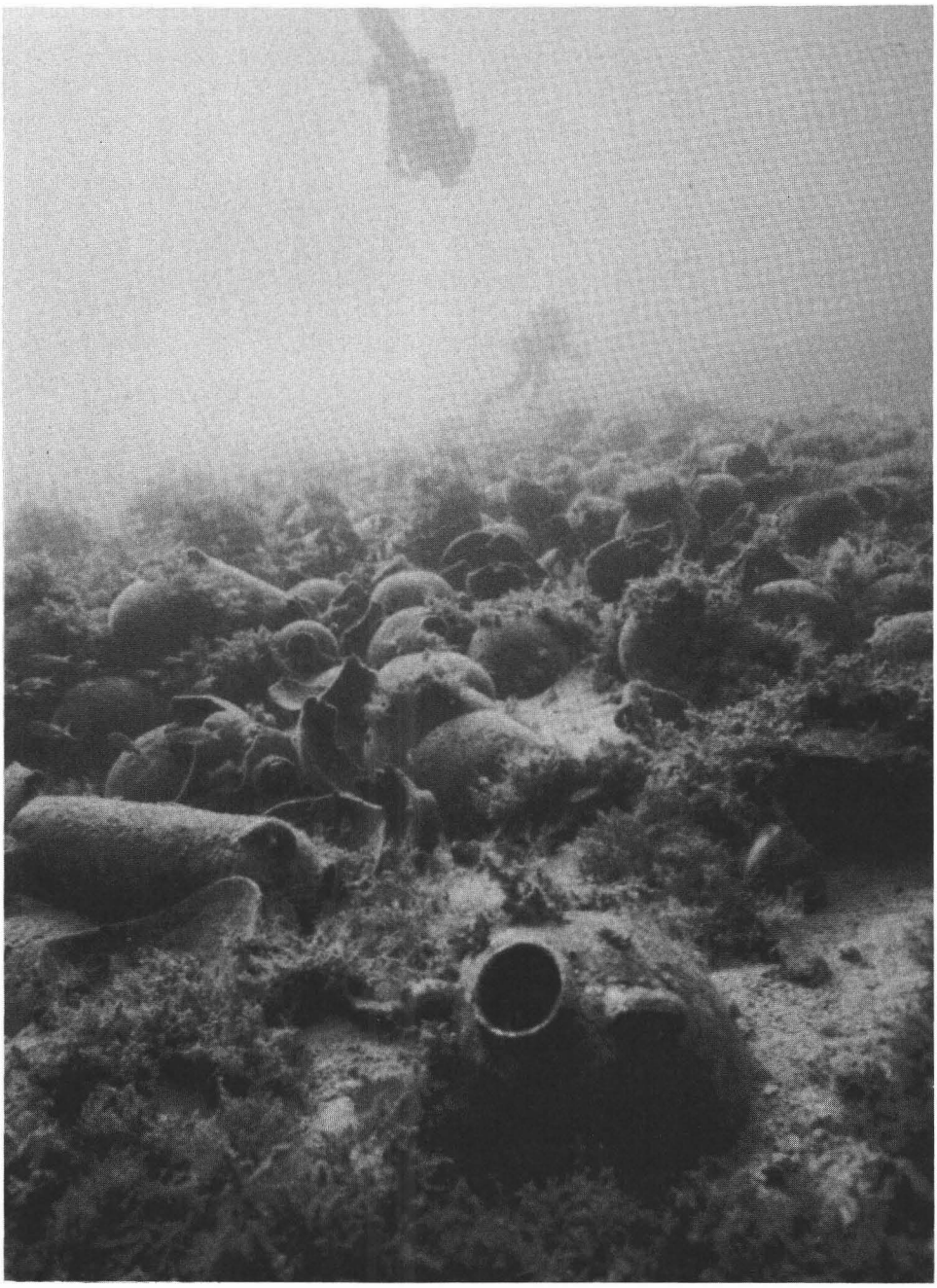

Fig. 7. Archaeologists examining a scatter of amphorae on the seabed at Iskandil Burnu, Turkey. (Photograph by D. Frey and courtesy of the Institute of Nautical Archaeology, Texas A and M University). Note the bag-shaped amphora in the foreground and a Gazan amphora to the left.

wall was thickened on the exterior: some 260 examples were recorded solely on the basis of surface documentation, arranged in at least two staggered layers (Lloyd, 1984).

Conclusions

The cursory account of the role of the bag-shaped amphora in Byzantine trade presented in this paper vehemently contests Zevulun's verdict that the *havith* "was broad-bottomed and therefore ill suited for the export of wine by sea". Such a statement conforms to a generalisation which argues that in order to qualify as a cargo amphora, a jar needs to stand tall and narrow to expedite packing on a ship (Zevulun, 1978, 28).

Recent advances in the field of marine archaeology rectify this fallacy, by tracing a trail of finds extending from underwater coastal contexts like Dor and Atlit (Ronen and Olami, 1978, 36) to deep-water wrecks and a broad diffusion in the Mediterranean basin (Fig. 8). In combination, this framework proves beyond

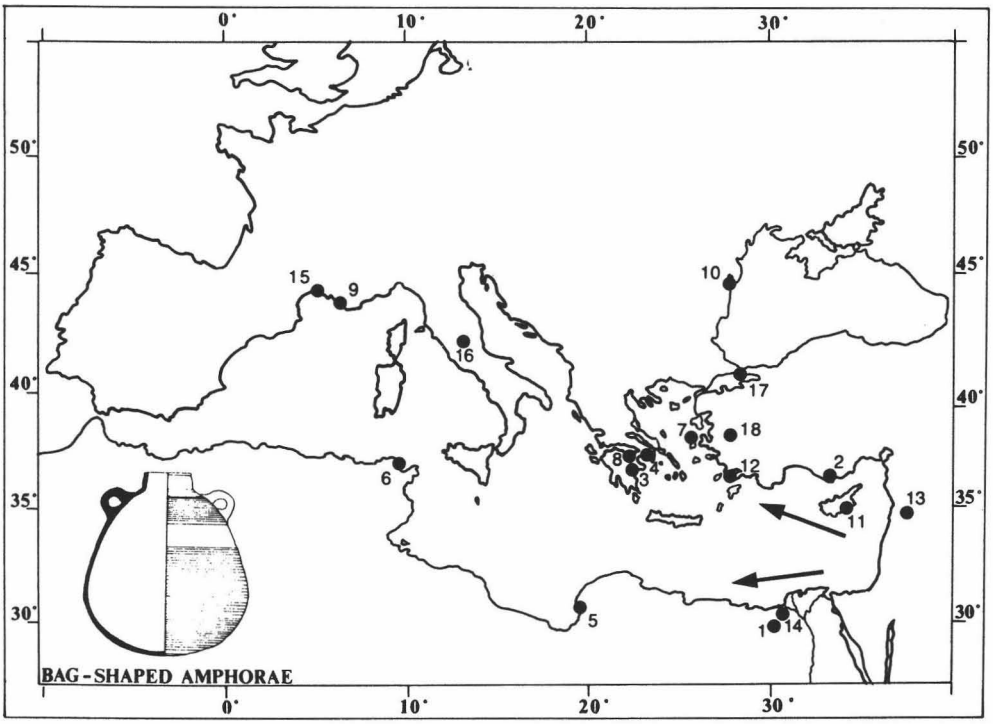

Fig. 8. Distribution map portraying the major locations of bag-shaped amphorae diffusion. See Table 1 for cross-reference of sites. (Drawing: S. Kingsley).

doubt that instances of jars encountered beyond the homeland are not simply explicable as variations of the theme of down-the-line trade.

The six Byzantine wrecks at Dor and another which foundered at a depth of 40 m off Givat Olga *c.* 6th–7th centuries (Edgerton *et al.*, 1980, 13) emphatically depict the bag-shaped amphora as the most popular local transport jar from the 6th century, and from this date all Byzantine ships sampled off the coast of Israel transported bag-shaped jars as cargo or within a domestic assemblage. If the case of Dor Wreck J (Kingsley and Raveh, 1996, 60–1) typifies loading practices, these amphorae could be seated on loops of rope and retained in positions with straw-like padding (Parker, 1992, 164).[7] The broad ribbing and grooving on the vessels further enhanced the grip of ropes which might tightly bond the jars together during a voyage.

Previous evaluations of the bag-shaped amphorae seem to have been partially prejudiced by the diminutive size of the vessel, an aspect which, for the sake of objectivity, requires appraisal within the economic tendencies of Byzantine Palestine: large-scale trade was superseded by a new minimax policy concerned with counterbalancing a moderate investment in a single transaction against a maximum return. In terms of efficiency the bag-shaped amphora fulfilled such entrepreneurial requirements and consequently may be valued as a microcosm of the prevalent attitude to trade in the Eastern Mediterranean.

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Notes

1 Stemming from the Greek *amphi* ('around, on both sides') and *pherein* ('to carry'), in combination translating as 'carried on both sides', the term amphora emerges as a general descriptive word for large pottery vessels bearing easily grasped handles. An amphora neither implicitly connotes non-local or imported containers. Definition is dependent on context, with vessels found in domestic deposits such as store-rooms at Meiron (Meyers *et al.*, 1981, 60–72) identifiable as storage jars and those exposed within shipwrecks or coastal warehouses, recognisable as transport jars or cargo amphorae (following the terminology of van Doorninck, 1989).

2 Contrary to some citations in contemporary literature, in technical terminology the shoulders of bag-shaped amphorae merge directly with the rim, without possessing a neck.

3 Almost every sherd and amphora examined within Dor harbour between 1976 and 1991 by the Dor Maritime Archaeology Project are lined internally with black pitch, confirming a probable content of wine.

4 For an exception, see a bag-shaped amphora with white painted circles and lines from the Tyropoeon Valley (Crowfoot and Fitzgerald, 1927, P1. XIV.31).

5 According to Parker's estimate, the Madrague de Giens had a capacity of 400 tons, or 6,000–7,000 amphorae (1992, 249).

6 Barag's survey of amphorae netted off the coast of Israel by fishing trawlers clearly confirms an escalation in levels of trade during Late Antiquity: the number of Byzantine vessels is twice as numerous as the numbers for any previous period in antiquity (1963, 17).

7 The rope loops encountered in the vicinity of bag-shaped amphorae from wreck Dor J may be more likely interpreted as the remains of a network of loops tied over the rims of the jars in an attempt to prevent excessive movement during a voyage. Although recent analysis of this ship estimates the wood was cut between AD 415–530 (Carmi and Segal, 1995, 12), the diversity of the radiocarbon dates are far from conclusive. Given the trend toward longevity witnessed in the circulation of amphorae of this period, the actual ship Dor J may have been of considerable age when she foundered: this hypothesis is supported by Kingsley and Raveh's evaluation that the act of wreckage occurred in the late 6th or early 7th century (1996, 60–1).

Table 1: List of Bag-Shaped Amphorae Deposits beyond Byzantine Palestine Plotted in Fig. 8

Site	Date	Comment	Source
1 Abu Mina	5th–7th centuries	kiln site	Empereur and Picon, 1933, 150
2 Anemurium	Early Byz.	second most common amphora	Williams, 1989, 98
3 Argos	5th century	*c.* 10% of amphorae in this century	Abadie-Reynal, 1989, 54–5
4 Athens	3rd and 6th centuries	Seven jars, all gritty orange	Johnson, 1986, 593
5 Berenice	Byzantine	rare: one rim, one handle	Riley, 1979, 223
6 Carthage	peaks AD 450–530	orange and grey fabric	Peacock, 1984, 23–4 and 121
Carthage	mid–5th into 7th	short rims, narrow grooving	Riley, 1981, 111 and 121
7 Chios	*c.* 642/3–659/60	fine shoulder grooving and short vertical rim	Ballance *et al.*, 1989, P1.25
8. Corinth	4th–6th	gritty orange and grey examples	Johnson, 1986, 591–2
9 Fos	1st quarter of 5th	six examples	Giacobbi–Lequement, 1987, 172
10 Histria	6th century	Fine shoulder, grooving and low rim with mid-bulge	Scorpan, 1977, 273 and 293
11 Hala Sultan Tekke	5th?/6th century	long, vertical rim	McCaslin, 1978, Fig. 225–6
12 Iskandil Burnu Wreck	late 6th/early 7th century	at least 260 examples in two layers	Lloyd, 1984, 7 and 61
13 Jabal Usays	early 8th century	Umayyad with red palm motifs on rim and all of body	Chidiac, 1990, 38
14 Marea	5th–7th centuries	kiln site	Abadie-Reynal, 1993, 151
15 Marseille	1st half 5th century and late 6th/early 7th	In latter period, 7–14% of RBH: equal most-common jar	Bonifay, 1986, 280 and 291
16 Rome	5th century		de Caprariis *et al.*, 1988, 310
17 Sarachane	mid–5th and *c.* AD 655–70	Fired red and grey	Type 7 and 8 in Hayes, 1992, 65
18 Sardis	AD 612–616	Shop E17 with white paint decoration on grey fabric	Stephens Crawford, 1990, 97

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Titus Tobler's Legacy: Two Sources

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The Swiss physician Titus Tobler (1806–77) was regarded even by his contemporaries as 'the Nestor of the researchers of Palestine' (Furrer, 1878, 49). A study, published in the late 1980s, has evaluated his place among scholars conducting research on Palestine during the nineteenth century (Stern 1988; cf. Heim 1879), and this includes a bibliographical appendix of Tobler's sixty-two publications concerning Palestine (Stern and Goren 1988).

Tobler introduced two scholarly tools into Holy Land studies: the monograph and the bibliography, developing working methods which led to publications of both these kinds of research. He spent most of his time and money visiting European university, monastery and private collections, reading and copying everything concerning Palestine. He took hundreds of documents from his collections with him on his journeys to the Near East (Heim 1879). In 1867, after his fourth and last voyage to Palestine, he decided to make available the knowledge he had accumulated, and published a bibliography of geographical Palestinian literature (Tobler 1867). He divided the items he included into 'works [written] perhaps or most probably by eye-witnesses' and 'works by those who perhaps or most probably did not know Palestine from personal experience'. It is clear from this, and from the critical remarks he provided on almost every item, that he read each book and manuscript he mentions.

While looking for information concerning Tobler and his work, we located two archival items that throw light on the methods Tobler employed in his research. This paper describes the significance of these items.

As early as 1863 Tobler had offered to sell his private library to the Prussian Government, in order that it might be transferred to the German consular library in Jerusalem. Tobler's collection of 'Palestinian literature' included roughly a thousand volumes and many manuscripts, but negotiations were halted when the acting consul in Jerusalem wrote that historical issues were already covered in the consular library and that anyway there was no further room for books . . .[1].

Tobler consequently left his manuscripts to a library in Zurich and allowed his books to be sold to the Russians, provided, as he stated in his will, that the library would be located 'in Jerusalem or somewhere close to it, for the regular use of travellers and scholars'. In the event this clause was ignored, and his books were brought to St Petersburg, where they were catalogued under the heading 'Tobleri Bibliotheca Palaestinensis' (Heim 1879, 115–6; Thalmann 1981, 173).

Not everything, however, was transferred to Russia, since the two items presented here were discovered in libraries in Berlin and Munich respectively. They are Tobler's personal copy of his *Bibliographia Geographica Palaestinae*, and a collection of drawings and plans made during his travels in Palestine.[2]

A key factor in their transfer to Germany was the close friendship between Tobler and George Martin Thomas (1817–87), philologist, historian and the librarian in charge of the manuscripts department in the Royal State and Court Library at Munich (Simonsfeld 1908). From 1848 Thomas was an important member of the (Protestant) Bavarian Academy for Sciences, and became famous for his work on the history of medieval Venice. He also published the collected writings of J. P. Fallmerayer (1790–1861), a historian from Munich, known as 'the fragmentist' because he employed this term in the title of studies about the Orient and the Holy Land (Fallmerayer 1851; Thomas 1861). Another book included a long description of one of Tobler's travels (Fallmerayer 1861).

Relations between Tobler and Thomas were close; Tobler frequently passed through Munich to work in the library, and, after his retirement in 1871, he left his Swiss village of Horn on the Lake of Constance for Munich. At his funeral Thomas representing German scholarship, placed a palm branch, the symbol of pilgrimage to Jerusalem, on Tobler's coffin. He also published a warm obituary in the *Allgemaine Zeitung*, the most important paper, not only in Bavaria, but in the whole of Germany, of which Tobler had been a devoted reader (Thomas 1877; Tobler 1849, 286).

Thomas corresponded with many contemporary scholars. The editors of the *Catalogue of the Written Legacies in German Libraries and Archives* described these letters as 'Correspondence with philologists, historians, byzantinists, orientalists, geographers and politicians . . . enriched with parts of the legacies of Jacob Phillip Fallmerayer . . . and Titus Tobler. Extent: 4.5 meters' (Mommsen 1983, no. 3823).

The first item to be examined here is the personal working copy of the bibliography owned and annotated by Tobler, '*Handexamplar Titus Tobler*'. It is held in the manuscript department of the Prussian State Library in Berlin. Tobler published the book in 1867, but over the next ten years until his death, he continued to collect data and to add items to his bibliography in the form of manuscript additions to his personal copy. These include corrections, new editions of existing works, sources discovered only after the initial publication of his bibliography and new items that appeared after 1867 and prior to about 1875. The latter were copied onto the final leaves and even the cover of the working copy. Some of the notes were written after Tobler's death by Thomas, who presumably helped prepare what was designed to be a further edition of this pioneering bibliography.

This volume, the only item that the State Library in Berlin acquired from Tobler's legacy, was later employed by Reinhold Röhricht, a teacher and scholar of Berlin, who, in 1890, published the second bibliography of Palestine literature. He listed almost three times more items that Tobler (Röhricht, 1963), including everything published until 1878, the year in which the new periodical of the

German Society for the Study of Palestine (*ZDPV*) started issuing regular bibliographies and reviews. It is clear that the volume reached Berlin because Röhricht heard of its existence and asked Tobler or Thomas for permission to use it, either directly or through the library. He reports that the volume was in his possession as he compiled his own work (Röhricht 1963, xv).

One example of Tobler's new material which was included by Röhricht in his bibliography was the model of Jerusalem made by a Hungarian named Stephan Illes and exhibited in the 1873 international world fair in Vienna (Illes n.d.; Zschokke 1874; Littman *et al.* 1986). Tobler saw this zinc model and wrote on the first page of the register of his personal copy:

> A raised map of Js. [Jerusalem] and its surrounding. Made by the Hungarian Stephan Illes in Js. (bookbinder). It encompasses, in addition to the city, the Russian New-Jerusalem [the Russian Compound], the Valley of Hinnom and the largest part of the Valley of Jehoshaphat, the Mount of Olives, the Mount of Offence and the [Mount of] Evil Counsel. . . . Because of its faithfulness to nature, I saw it in Munich in 1874 with the greatest satisfaction; and it would also be suitable for studies of scholars. Without question it surpasses everything that has existed so far . . .

It seems that Röhricht was not able to go and see this model himself, for in his bibliography he writes that 'Tobler saw it in Munich and mentioned it in his personal working copy of his bibliography'. Unlike Tobler, Röhricht did not usually add critical remarks, but on this occasion he went out of his way to quote Tobler's last two sentences, emphasizing the quality and importance of the model (Röhricht 1963, 660–1).

The second item to be discussed here is mentioned by Thomas in the following short remark on the inside back cover of Tobler's personal copy of his bibliography—'In the Codex Iconographicus, in the library in Munich, no. 196, "drawings of plans for Dr T. Tobler's voyages in the Holy Land", most of them done by him.' Thomas wrote on the cover of the file itself that they had been brought to him in accordance with Tobler's will. Thomas catalogued them on 16 April 1877, about three months after Tobler's death, and they remain in the manuscripts department. Although Röhricht was aware of their existence there is no sign that he examined the file personally. It appears as no. 51 in his list of Tobler's Palestine publications (Röhricht 1963, 382).

The file contains 46 sheets of drawings connected with Jerusalem and its surroundings, apparently prepared before Tobler's second excursion or during the five months he spent in Jerusalem on that occasion. 'On 4th September 1845 he started his second journey to Palestine, supplied with 696 folio pages of extracts from all possible books and manuscripts and many plans, maps and drawings, [travelling] via Munich . . .' (Wolff 1879, 1787). This voyage was, in many ways, the most important of the four that Tobler made to Palestine, for it was during this visit that the study of the country became the main, and almost the only axis of his life (Heim 1879, 60–1; Furrer 1894, 397). The research he carried out provided the data for three monographs—on Bethlehem; Calvary and Siloam and

the Mount of Olives—three books about Jerusalem—a two-volume work on its topography; *The Medical Topography* and *Reminiscences*, twenty-five reports and articles, most of which appeared in the geographical periodical *Das Ausland*, and a map of the streets and alleys within the walls of the city (Röhricht 1963, 379–81, nos 2–27; Stern and Goren 1988, 46–7, nos 2–38).

The thin file mostly contains drawings employed by Tobler in his publications:
1. Nine pages of drawings and sketches made by Tobler in Jerusalem, that provided the basis for his two maps of the city. The first of these, published in 1849 and again in 1853, was the first plan to be issued which included all the streets, alleys and paths (Tobler 1849b). The second plan was an improved version published in 1858, jointly with the Dutch cartographer C. W. M. Van der Velde (Van der Velde 1858; Tobler 1855). Tobler's detailed survey was the first to achieve the kind of accuracy attainable only by highest quality fieldwork (Tobler 1851).
2. Plans and drawings of Bethlehem, including a sketch of the Church of the Nativity after Bernardino Amico, a Franciscan who served as Guardian of the *Custodia Terrae Sanctae* at the end of the sixteenth century (Amico 1953). Tobler copied his plans and then checked, annotated and corrected them at the sites themselves.
3. Three plans of the Church of the Holy Sepulchre and drawings of its façades.
4. Many plans of single tombs or groups of tombs around Jerusalem, including the Tomb of Absalom and tombs associated with the Prophets, the Judges, the Kings and Jacob, as well as others in the Kidron Valley or the Hinnom Valley.
5. Sketches and plans of the Dome of the Rock.
6. A copy of a Crusader map of Jerusalem, entitled 'A Plan of Jerusalem as it was in the Crusader period'.

The drawings could easily be traced in Tobler's volumes, since most of the sketches were used in the publications.

Tobler's working methods were described by Johannes Nepomuk Sepp (1816–1909), a Catholic historian from Munich, who visited Palestine for the first time in 1845, and became famous as a leading, though controversial figure in German Holy Land research until the end of the century. Sepp described his first meeting with Tobler as follows:

> A welcome incident brought me to meet Dr Titus Tobler. I still remember vividly the first meeting, after which we, without knowing each other, went to sleep for some hours after the celebration of the Nativity in the vault of a monastery in Bethlehem, beside a murderer running away from Egypt. I knelt before the altar of Christ's birth full of emotions I had never felt before, as a man to my left started measuring the steps with a measuring cord and a folding measure: one could think that he wanted to make sure that until his next visit the Holy Grotto would not be replaced: this was Tobler. We both thought that we were opposite characters and suited to complement each other conscientiously; anyhow we considered ourselves to be opening a new chapter in the history of Palestine pilgrims. I applauded with the fullest appreciation his extreme thoroughness; only a German can work as diligently as he . . . Never were greater scientific results achieved for smaller financial expense as by Tobler, who is suited to the task by his tough perseverance and effort (Sepp 1863, I, viii–ix).

The drawings provide support for Sepp's appreciation of his scientific fellow-traveller, and also give evidence of Tobler's detailed preparation for each visit. Tobler collected every piece of historical and geographical data in order to use it all as a basis for comparison with the present position, and to enable him to reconstruct processes of development and change. Tobler took all the measurements himself and prepared many of the sketches, but he was aware of his limitations and engaged others for the more complicated drawings. In Jerusalem he met a young architect from Berlin, named Gustav Borstell, and employed his talent for graphic art and drawing. 'Thanks to him', wrote Tobler, 'I was supplied with views that surpassed, in their reliability of detail, everything that existed before' (Tobler 1849, 287).

The documents described here, which are typical of Tobler's working methods, indicate his scholarly attention to detail, the range of his sources, and the wealth of his knowledge. They also illustrate his links with other scholars in the fields. As one scholar wrote at the beginning of the twentieth century: 'To this very day, he who desires to concern himself with the history of these places must begin with Tobler's investigations' (Benzinger 1903, 589). This view is not only far from unique among the writer's contemporaries, but we find it repeated among scholars of our own day as well (Bliss 1907, 226–8; Ben-Arieh 1979, 74, 133, 139).

Notes

1 Various documents are located in the Israel State Archives, Section 67: Files from the German Consulates in Jerusalem and Jaffa, 1838–1939. File 433; Thalmann 1981, 172–3.

2 Staatsbibliothek Preussischer Kulturbesitz, Berlin, Handschriftenabteilung, Libr. impr. c. not. mss. Octav 103; Bayerische Staatsbibliothek, München, Handschriftenabteilung, Codex Iconographicus 196. We are grateful to both libraries for their generous help and for permission to use the documents in this publication.

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Book Reviews

King, P. J., *Jeremiah An Archaeological Companion*, Westminster/John Knox Press, Louisville, Kentucky, 1993. Pp. XXV + 204. 66 illustrations, 4 maps, 2 charts.

Professor King is known for his expertise both in Biblical Studies and in Near Eastern, and more especially Palestinian archaeology. Both are brought to bear in the present volume which aims to offer his readers a better understanding of the person of the prophet Jeremiah and his book, by presenting him in the framework of his intellectual and material environment. The latter, in particular, is of course fairly well known now, owing to the substantial contribution made by archaeological investigations in Jerusalem and elsewhere, in recent years.

The book is clearly intended for the general reader, who will benefit from the introductory matter (such as a chronological chart, a chart of archaeological periods, and a list of Books of the Bible, in addition to the Introduction proper which familiarises him very briefly with archaeology and Biblical Studies—there is a short section on Archaeology and Jeremiah. He is also told, in the Introduction and on pp. 9–10, about the difficulties which the text of the Book of Jeremiah presents to scholarly analysis. Here the author refers the reader to several recent commentaries for information. Thereafter the biblical text is simply offered, where apposite, according to the Revised Standard Version, without any observations of a source-critical nature, and only very occasionally with a remark that a textual passage may date from a time before or after that of Jeremiah (on p. 39 Jer, 49:23–27 is attributed to the eighth century BC, and on p. 69 Jer, 31: 38–40 is said to date possibly from the time of Nehemiah). This approach will probably suit most of the intended readership: those intent on further information will find it in the commentaries referred to.

The main body of the book is arranged according to a very comprehensive plan. There are altogether ten chapters (each with a number of sub-divisions). In each, quotations from Jeremiah's texts relevant to the matter discussed are adduced. The first chapter introduces the reader to the person of Jeremiah the Prophet, and the nature and contents of his Book. Chapter 2 deals with the historical background of the book, and chapter 3 with the geographical setting of the Oracles against the Nations; historical and archaeological evidence is also given as required by the contents of the chapter. Chapter 4 deals similarly with Edom and Judah, and chapter 5 with Jerusalem, Lachish, and Azekah. With chapter 6 we enter more general discussions. Inscriptions and literacy are here dealt with, while chapter 7 is concerned with worship and architecture. Chapter 8, thereafter, informs us about funerary and mourning customs. In chapter 9 agriculture is dealt with, and in particular various food plants—grain and fruit trees—are referred to, as well as

balm. Chapter 10, finally, reports on crafts, pottery and pottery making in particular, but deals also with wine and wine making and oil lamps, as well as metallurgy (the latter entry in particular is fairly general, but the question is raised why iron came to supersede bronze in some spheres of use. There are also short sections on other metals. The book concludes with notes to the individual chapters, a selected bibliography, an index of subjects and names, and an index of authors.

Professor King has supplied his readers with a book which is both very serviceable and informative, and is also well produced. In particular the numerous line drawings and photographs are clear and support the text well. The footnotes and entries in the bibliography are well chosen, and will be of benefit to readers wishing to pursue the subject further. Even without this, however, they should acquire an insight into the world which Jeremiah addressed, and also into what he was intending to communicate.

B. S. J. Isserlin

Gibson, S. & Taylor, J. E., *Beneath the Church of the Holy Sepulchre, Jerusalem. The Archaeology and Early History of Traditional Golgotha* (Palestine Exploration Fund Monograph, Series Maior I). London: Committee of the Palestine Exploration Fund, 1994, Pp. xx + 102. ISBN 0 903526 53 0. £19.50.

It is a salutary experience for those—like this reviewer—long immersed in the written record of the Church of the Holy Sepulchre, familiar from Eusebius and other Christian sources, to be exposed from time to time to the hard facts of the building's complicated archaeology. They have just cause to be grateful for this impressively detailed new monograph, which appears twenty years after the last major English treatment, the Schweich Lectures by Charles Coüasnon. Having collaborated on work in Jerusalem in recent years, Gibson and Taylor are well placed to assess developments since Coüasnon (mostly the contribution of V. Corbo and the *Studium Biblicum Franciscanum*), and to set out the current state of archaeological knowledge: a glimpse at their reconstruction of the plan of the Constantinian complex (p. 75) will reveal substantial modifications from Coüasnon, notably the rejection of his hypothesis of a separate chapel of the Cross to the east of the rock of Calvary, between it and the basilica.

Gibson and Taylor, who do not make any claim to present a comprehensive discussion of the whole Church, organise their material in two parts. The first aims to elucidate recent excavations since 1970 at the eastern end of the present Holy Sepulchre church, in the area belonging to the American patriarchate. The first chapter results in some clarification of the main phases of the site's history, from remains of its early use as a stone quarry through the construction of the Hadrianic forum of Aelia Capitolina to the foundations of the Constantinian church. A by-product of these excavations was the discovery in 1971 of a stone decorated with a ship drawing and (partially indecipherable) Latin inscription, which provides the rest of the substance of Part I: details of the subsequent history of this stone and a comprehensive discussion of the type of ship represented and possible readings

of the inscription. The authors prefer to speculate on a Hadrianic rather than Constantinian context for the creation of the drawing, judiciously rejecting fanciful notions that it was the work of an early Christian pilgrim newly arrived at the holy places. In any event the discussion makes a fascinating detective-story, if somewhat marginal to broader questions of the archaeological history of the site.

Part II follows recent excavations to trace the topography and building history of the Golgotha area, from quarry-turned-extramural graveyard to Hadrianic forum and temple precinct, finally transformed into Constantine's Christian complex around the Holy Sepulchre. The authors sensibly aim at introducing some terminological exactitude to clarify the complexities, claiming ancient authority for the use of the name 'Golgotha' (the Gospels' "place of the skull") to refer to the entire area of ancient quarry used by the Romans as the scene of public executions, to be distinguished from the single geological feature known as the rock of Calvary where Christian tradition would ultimately locate the crucifixion (and "in the course of the Byzantine period" transfer to it the name 'Golgotha', p. 59). Ancient authority, however, is less unanimous in support of this distinction than the authors maintain: while fourth century sources such as Cyril and Egeria may still appear to use 'Golgotha' as a description of the site in general, already in Constantine's day the Bordeaux pilgrim can speak of a precise location as "*monticulus Golgotha, ubi dominus crucifixus est*", surely a specific natural feature which it is hard not to identify with the rock of Calvary.

A significant gain from the archaeological detail assembled here should be some clearer appreciation of the differing elevations which comprised the Constantinian complex. The Martyrium basilica, long known from the depiction on the Madaba mosaic to have been raised above street level to the east and approached by a flight of steps, is revealed here as also considerably higher up than the courtyard to its west in front of the Tomb, which in turn had to be approached upwards from this same courtyard. The elevations mean that the rock of Calvary, rising only some two metres above the floor-level of the basilica, would have been dwarfed by the adjacent building. Such data will entail disregarding the false but influential impressions derived from imaginative visual depiction of the buildings such as that in the apse mosaic of Santa Pudenziana in Rome. The same elevation measurements are also persuasive of the contention argued on p. 68, contrary to the prevalent traditional understanding, that the upper part of the rock of Calvary had always remained visible and exposed as part of the Hadrianic shrine to Venus, and thus had no need of revelation by Constantine's excavators (whose attention was directed to the concealed Tomb). The authors' archaeological data are more convincing in this regard than their *argumentum ex silentio* from Eusebius ("nothing is said of the Rock's discovery")—whose silences, especially in the account of the Jerusalem buildings, are never what they seem. They acknowledge as much in their discussion of the discovery of the supposed wood of the Cross (pp. 83–4), following current arguments which, in the inevitable absence of any basis in archaeology, rely heavily on the interpretation of meaningful Eusebian silences.

Gibson and Taylor are led by most of the ancient evidence to conclude that the Hadrianic temple site associated with the forum of Aelia, and covering the area of Golgotha, was focused solely on the worship of Venus (pp. 68–9), although the attempt to explain away a seemingly contrary passage of Jerome (alluding to the worship of Jupiter "in place of the Resurrection") as mere poetic licence is less than convincing: so little is securely known of the layout of Hadrian's colony that cautious uncertainty is in order. The evidence points to some form of Jupiter-cult elsewhere in Aelia on the site of the Jewish Temple, and the authors are able to reinforce this by reference (p. 70) to the recent publication of Byzantine documents labelling the Temple area as the 'Capitol' of the Roman colony (in contrast to the received opinion which identifies the pagan complex on Golgotha as Aelia's Capitol). Their acceptance of the view that archaeological remains north of the Temple Mount are to be identified as a second, eastern 'forum' of Aelia is more questionable, for it is an identification based only on a passage in the *Paschal Chronicle* which speaks of Hadrian's city possessing two '*demosia*'—surely an elastic term applicable to virtually any kind of public building, and by no means necessarily a forum.

Notwithstanding such points of argument in relation to the understanding of the ancient sources, this monograph performs a welcome service in making accessible to an English readership some of the latest results of Jerusalem archaeology. There will be less excuse in future for those of us who think and write from afar about the early Christian Holy Land to plead ignorance of the plain facts on the ground, "where these things were preached and done" (Euseb. *Hist. Eccl.* iv.26.14).

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Dar, S., *Settlement and Cult Sites on Mount Hermon, Israel: Ituraean culture in the Hellenistic and Roman periods*. BAR International Series 589. Tempvs Reparatvm, Oxford, 1993. Pp. 325, figs 89, black-and-white plates 20, photographs 136.

Since time immemorial, the geographical area known as the Land of Israel has comprised a patchwork of different peoples, languages and cultures and this state of affairs is reflected in biblical and post-biblical writings alike. The border areas were especially diverse in their ethnic make up in antiquity, with Aramaeans and Arabs prominent in the north and east and Edomites in the south. Notwithstanding the numerous archaeological investigations that have been made throughout the Levant over the past century, our knowledge of these peoples and their relationship with their neighbours is still sketchy, to say the least. This fact emerges clearly from modern historical works on the subject (Millar 1993). Therefore, any study which furnishes new archaeological data on a whole region is vitally important.

This monograph describes the results of an archaeological survey of the southern slopes of the Hermon mountains, in former Syrian territory, on behalf of the

Department of the Land of Israel studies, Bar-Ilan University, between 1982 and 1990. It also contains a useful gazetteer and summary of the sites explored in the first Hermon Survey (1969–74) and in other investigations in that area prior to 1990. The crucial importance of these surveys has been underlined by the fact that several of the Hermon sites have suffered badly due to the construction of fortifications and roads, as well as through natural decay. Therefore, Dar and his colleagues have been performing an invaluable service in recording them. Not content to apply the new names which have been given to the sites by Israeli soldiers and investigators, Dar and his students have taken the trouble to ascertain the traditional Arabic names of the sites, which, in certain cases, seem to throw light on their origin. One example is the ruined village of Bir an-Sobah, whose name may be linked to the *stelae (matzevot)* associated with its cult site. On the other hand, the name of another site, Kafr Dura, is believed by the local inhabitants to be of ancient Greek or Hebrew origin. The area covered in the more recent survey is approximately 80 sq km (although the map of the sites does not include a scale!). In antiquity this land would have formed part of the district of Paneas, and indeed almost all the sites surveyed lie within 6 km radius of the famous cult centre to Pan that was established at one of the sources of the Jordan. This survey is a commendable achievement, not least because the locality abuts the cease-fire line with Syria and evidently the team were put at considerable personal risk.

For the most part, Dar's expeditions have been largely limited to surface surveys, and yet the finds are rich and diverse. They have brought to light and recorded temples, open air cult enclosures, ancient military installations, farmsteads, houses, mine workings, a Roman-Byzantine stone bridge and a shrine to Abraham venerated by Jewish, Muslim and Druse pilgrims alike. Minor finds include a miniature shrine, items of metalwork including a complete bronze altar as well as fragments of sculpture, coins and pottery. The inclusion of more recent buildings in the local style has highlighted the fact that traditional construction methods and economic activities, including mining, continued with little change up to very recent times. An excellent example is the *ma'atzera* (grape honey press) at Ma'atzerat Jubata (pp. 168–70). Dar provides a useful summing up of the traditional economic activities of the region, based on his findings (pp. 132–33). These were predominantly animal husbandry, subsistence crop agriculture, and lead mining (pp. 145–49). As an introduction to the survey, the reader is provided with a useful overview of the geography of the Hermon mountain range and a historical outline of the area.

The unusual cult enclosures on Mount Senaim stand out as the most impressive of Dar's discoveries and deservedly receive a prominent place in this study. The upper cult enclosure is large but is bereft of temples. It seems likely that the rituals were practiced in the open and that they involved the veneration of large stelae, which have been found set up in pairs, and ceremonial meals. Another enclosure at a lower level contains a pair of temples, of irregular dimensions which back onto the same rock mass at different levels, impacting on one another at an acute angle. Neither is likely to have been completely roofed although the facade of the

lower structure is fronted by a Classical *in antis* porch and pediment. The architecture of these structures and others examined in this study has an unrefined, rustic quality about it, far removed from that of the grand monumental buildings of the main centres, such as Paneas and Baalbek, and is more interesting in reflecting a local vernacular style. Within the lower enclosure were found nine or more altars, one carved with an image of Helios which, together with the remains of several stone statues of eagles, would seem to indicate that the syncretic cult of Ba'al Shamin—Zeus, encountered in neighbouring areas, was celebrated at this site.

There are many other valuable finds reported in this work which will reward patient study. However, it is not without some faults. Some of the flaws signify lack of adequate editing in the final stages of preparation for publication. There are many minor typographical errors and also some more serious slip-ups. Photographs 1 (a picture taken in 1867 of the Deir al-'Ashayir Temple in the Lebanese portion of the Hermon) and 2 (a group photograph of the expedition members) are nowhere referred to. However, the writer cannot be blamed for the poor resolution of the plan in Fig. 55 as printed, which makes it impossible to read the numbering of the loci.

However, more serious is the fundamental question of the connection between the area covered by this study and the Ituraeans. The Ituraeans have a fascination for their connection with the Jews in the Hasmonaean and Herodian periods. They were a Semitic tribe of nomads that occupied the mountains of the Anti-Lebanon and the adjoining Beqa'a Valley in Classical antiquity (Schürer 1973, 561–73). They emerge into the light of history in the 2nd century BC, when they are referred to as having a kingdom with its capital at Chalcis, which has been identified with Majdal 'Anjar, on the road from Beirut to Damascus. Under their able king, Ptolemy Mennaeus (ca. 85–40 BC), the Ituraean domains were extended in all directions, including the south, with the district of Paneas falling under their control. He allied himself with his Hasmonaean neighbour, Aristobulus II (67–63 BC) against Pompey, providing refuge for Aristobulus' children, and both he and his son Philip wedded Hasmonaean princesses. The Ituraean kings were deprived of most of their territory by Augustus, owing to their acts of banditry, Herod the Great receiving the areas of Paneas and Ulatha. The Ituraeans seem to have cultivated their physical prowess even under Roman rule, achieving fame as archers and contributing entire *alae* and cohorts to the Roman army.

Although the Banias region, of which the area surveyed formed part, was for a short period held by the Ituraean king, Ptolemy Mennaeaus, it was some distance from the heartland of Ituraean settlement. Dar takes it as read that the southern slopes of the Hermon were occupied by the Ituraeans, but his evidence for this assumption is rather thin. He makes much of the distinctive Golan Ware, that has been found at his sites. The crude pottery, which incorporates coarse grits is found fairly widely across the Golan as far south as Farj (Dauphin and Gibson 1994, 14; *idem* 1992–3, 17) and is redefined as "Ituraean" pottery, following Gutman (1973). To justify such a firm identifica-

tion with the Ituraeans, the author would need to demonstrate a distribution of this pottery throughout the Ituraean territories, and in particular in the Beqa'a Valley and the Anti-Lebanon Mountains. The same is true of the architecture and other material remains. Thus, one looks in vain for detailed comparisons between the Hermon sites and those of Lebanon, such as Niha and Temnin al-Foka. Nor does the occurrence of an isolated Safaitic inscription (p. 17) or Ituraean coin (coin of Ptolemy Mennaeus from Bir an-Sobah, p. 131) provide proof of Ituraean domination of the southern Hermon. Coins, especially, have the habit of diffusing well beyond the area of their circulation. Thus, for example coins of the Hasmonaean king Alexander Jannaeus have been found beyond Judaea at Antioch, Dura Europos, Cyprus, and elsewhere (Meshorer 1982, 697–98). The cult items and practices that have been identified at the Hermon sites provide no firm link with the Ituraeans either: the veneration of sacred stones is encountered across the Levant from Emesa (Homs) in Syria to Arabia and even the Semitic names found on the inscriptions (p. 77) do not provide an unambiguous pointer to the Ituraeans, when we are not even sure whether they were Arabic or Aramaic speakers. Certainly, much work remains to be done to elucidate the Ituraeans and their material culture and this will require archaeological investigations north of the Hermon range where their presence is documented. In the meantime, the verdict must be left open regarding the identity of the population of the southern Hermon in the Roman period, beyond the fact that it was of Semitic stock.

These reservations should in no way detract from the extremely useful archaeological information that Dar has contributed. His presentation of the material is generally excellent and his generous combination of photographs and line drawings brings clarity to his written account. The wealth of new material that is presented in this book amply demonstrates the rewards to be had from studying sites off the beaten track.

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David M. Jacobson
(Palestine Exploration Fund)

Segal, A., *Theatres in Roman Palestine and Provincia Arabia*. E. J. Brill, Leiden, 1995. Pp. ix + 117, 155 figs.

At the height of the Roman empire, in the 2nd century AD, the writer Pausanias suggested that the physical amenities of any settlement calling itself a city should include a theatre (*Description of Greece*, X.4.1). Such was the popularity of these monuments, even in the Roman east, that not all have been excavated and others remain to be found. Thus we are reminded that ancient sources record a theatre at Jerusalem and an *Odeion* at Caesarea and that an inscription from Saccaea in the Hauran attests to one there, all yet to be located. However, we may add to the present corpus a small theatre building at Tell el-Ashari—thought to be the site of Dium—recorded at the beginning of the century (*ZDPV*, 13, 1914.125). It is also possible that the theatre at Shechem/Nablus 'discovered' in 1979 (p. 78) may be related to the seat blocks found there in 1927 (*PEQ*, 1927.104–10).

The gestation of this welcome book has taken some time. It was largely written in 1989–90, and it is a pity that this was too early for the author to have taken advantage of political ease of travel to have visited some of the sites east of the Jordan. The thirty theatre structures discussed here are distributed throughout present day Israel, Jordan and southern Syria.

The book has a comprehensive introduction, which defines the theatre as a cultural import into alien lands. Of the four areas discussed, the first two, Herodian and Nabataean, plausibly represent 'alien lands'. The last two areas, the Hellenised cities and those areas within Roman rule were more receptive to these imports. However, by the time most of these theatres were built, the whole area was under direct Roman rule.

Herod the Great is said to have built theatres (and other monuments) throughout the east but Segal intimates that those in Judaea (specifically Sepphoris) 'served the members of the court' rather than Judaean citizenry at large (p. 9). It is interesting to note that many of his cities, such as Caesarea and Jericho, also contained multifunctional cultural venues.

Theatres built within the Nabataean realm would also appear to have been a cultural import. However, little enough is known about Nabataean social life as it is, and the generalisation that all their theatres were of a cultic nature may be exaggerated. The complex at Sahr certainly appears to have been cultic but the use of an imported architectural form and the Greek word *teiatra* could have been adapted for differing purposes. Segal's argument goes on to suggest that Nabataean theatres had a ritual necolotary use but admits (p. 7) that not one of the five Nabataean theatres discussed here can be stated with certainty to have been built in a cemetery area. However, the theatre at Petra is still stated to have been built within the necropolis (pp. 6, 91) but the 'caves' truncated by the theatre were not necessarily tombs.

The interesting point about these alien imports is that they were generally constructed much earlier than those within the Hellenised or Roman areas. Segal suggests that cities there did not feel a need for theatres, for their emergence only

began in the late 1st century AD. Further constructional booms occurred in the mid-2nd century and the early-3rd. By this time, as Pausanias noted, theatres had become almost essential and virtually all of these buildings were constructed on civic initiative. Indeed Pliny the Younger (on Bithynia in the early-2nd century) noted a civic rivalry in construction where the building of a theatre at Nicaea almost bankrupted the city (*Letters* X.39, 40). By this time there was little interest in high drama, but great emphasis on mime and popular shows and many theatre buildings were later adapted to take water shows. Segal has discussed this aspect in an earlier article (*SCI* 7–9, 1985/88.145–65), curiously absent from the bibliography.

The architectural analysis begins with a categorisation of the theatres under the headings of: urban theatres, urban ritual theatres, and extra urban ritual theatres. The example of the southern theatre at Gerasa exposes again the exaggeration in this concept of ritual association, for it is a distortion to state that it is 'located in the area of the Zeus sanctuary' (p. 18). The theatre utilised the same hill as the temple but there is no indication of direct architectural connection and the entrances to the two structures were diametrically apart. The theatre at Canatha was not urban in the true sense for it lies outside the city walls, and an implied ritual association (p. 27 n. 35) is certainly not borne out by observation on the ground. The absence of detailed archaeological work there denies any proof.

It may also be noted that little is known of the settlement at Sabra, certainly there is no indication that it was a 'sanctuary area' (p. 18), but I concur that it probably had the same relation to Petra as Birketain did to Gerasa and so on. Incidentally the famous Maiumas inscription from Birketain comes from a gateway at the southern entrance to the whole complex and does not refer to the theatre specifically.

Architecturally the buildings portray a number of interesting variations and some guesswork has been included on the many theatres not yet (fully) excavated. The useful table of comparative data numbers the corpus roughly from north to south but a grouping by area, type, size or date might have been preferable. Nevertheless such architectural quirks are noteworthy; the multi-functional building at Legio, the oft-discussed recesses at Scythopolis, the side walls at Bostra, the stage of the southern Gerasa theatre, the fact that the Antipatris theatre may never have been finished and that the one at Pella is unique in facing south. However, we may note that the Sabra theatre is also unique in having a Greek-style plan despite the assertion on p. 21 that all here are "Roman".

Indeed the discussion has a great reliance on Vitruvius and it may be argued that the views of a first-century BC metropolitan architect do not often bear much more than a general resemblance to far flung provincial theatres mostly built two hundred years after his death. Likewise the glossary makes no attempt to utilise Greek terms which were more likely to have been used in this part of the world.

The terminology used by Segal for the various buildings would seem a little rigid for he rejects the term *odeion* because none are known to be roofed (p. 62 n. 99, pp. 85–6 n. 187) although no ancient sources define this. It is pertinent to note that

whereas the southern theatre at Gerasa is specifically described in an inscription as a 'theatre', the northern one is also described in an inscription as an '*odeion*', this does not seem to have hindered Segal in saying 'In this inscription . . . the theatre is called an *odeion*'! (p 74). In fact there is some evidence that this building was also roofed!

My own theory (*ARAM* 4:1&2, 1992. 265–81) is that many cities had differing theatre structures for differing civic needs, a theatre, an *odeion* (which, like that at Gerasa could also be used as a *bouleterion*) and a smaller structure usually outside associated with festival or cultic needs. Such triads exist at Gerasa—where Segal has missed this point in his discussion of the three buildings there (p. 75 n. 152)—Caesarea, Gadara and Petra. Equally those cities with two buildings—Scythopolis, Philadelphia and possibly Abila—would seem to have a theatre and an odeion.

The book is an advance on earlier discussions (Frézouls etc.) as it provides a comprehensive wealth of data. It is also most stimulating, and must remain a basis for theatrical historians and archaeologists concerned with ancient Palestine and Arabia.

Julian Bowsher
(Palestine Exploration Fund)

The Anglo-Israel Archaeological Society: Hon. Secretary's Report 1994–5

The past year has seen a successful series of nine lectures given to the Society on a wide range of subjects as follows. Mr B. Boyd, '*Natufian bone technology—an overview*'; Prof. H. Williamson, '*Recent discoveries at a biblical city: Tel Jezreel*'; Dr A. Curtis, '*Ugarit: Clues from a Canaanite city*'; Dr D. Bahat, '*Masada revisited*'; Dr D. Pringle, '*Recent researches on the churches of the Crusader kingdom*'; Dr A. Biran, '*Biblical Dan and the House of David inscription*'; Prof. A. Crown, '*The Samaritans, their literature and the codicology of their manuscripts*'; Dr I. Finkel, '*Ancient board games from the world of the Bible*'. Two of these were joint lectures. The paper given by Dr Dan Bahat was arranged in association with the British Israel Arts Foundation, as part of the lecture tour organised for him by that body; the lecture by Dr Biran was the annual joint lecture of our Society and the Palestine Exploration Fund, but this year, in view of the importance and the topicality of Dr Biran's newly-found inscription, it was not only under the auspices of our two Societies, but also with the Institute of Jewish Studies. As part of our programme we also circulated to members of the Society details of the annual Richard Barnett Memorial Lecture.

We are lucky during this past year to have secured Viscount Allenby of Megiddo as our new Hon. President and we extend a warm welcome to him in the name of the whole Society. At his invitation we were able to hold a unique reception for all our members which took place on the terrace of the House of Lords in the splendid weather of this past summer. The evening was arranged as one of a series of events which form part of our current membership drive. The financial problems of the Society are still exercising the minds of your Committee. Since natural wastage has, over the past twelve months, slightly diminished membership numbers, it is becoming increasingly important to recruit new blood to the Society.

With this in mind a delightful new membership brochure has been produced in full colour, thanks to the exertions of Mrs Barnett and Mr Rosenberg. The amount of work needed to produce it was a great surprise to the whole Committee and we owe both of them our thanks for their dedicated effort.

In spite of financial problems the Society was able to make two grants during the past year, one to an archaeological illustrator who was charged with the preparation of drawings of the pottery from the Dor Project of Landscape Archaeology and one to an Israeli archaeologist for travel to this country in order to re-analyse some of the finds from the Lachish expedition which are now held in the collections of the British Museum.

Our annual *Bulletin* is now highly regarded on a world-wide basis, but unfortunately its future is still far from assured. If any member of the Society, upon reading this Report, has any ideas for securing future funding for it, please do contact any member of the Committee, or our secretary, Mrs Murray at the offices of the Society. Without additional financial backing the *Bulletin* may well founder, which would be a severe loss, not only to the Society, but also to the world of academic archaeology.

Our office is still provided for us, free of charge, by the Friends of the Hebrew University. In these hard-pressed days it behoves us even more than usual to extend to them our heartfelt thanks for their kindness.

Roberta L. Harris

Honorary Treasurer's Report 1994–5

Our audited accounts for the year ending 31 December 1994 show that the Society made a slightly larger surplus this year of £3308 as compared with a figure of only £197 for last year. This is to an extent due to the fact that some bills for Society expenses were received (and paid) after the year end. This total also takes into account the interest received on our Appeal Fund.

Our income from subscriptions and donations rose fractionally to £5940 and our expenses regarding meetings, i.e. room hire, lecturer fees, projectionists' fees, etc. dropped nominally. Grants to students totalled some £700.

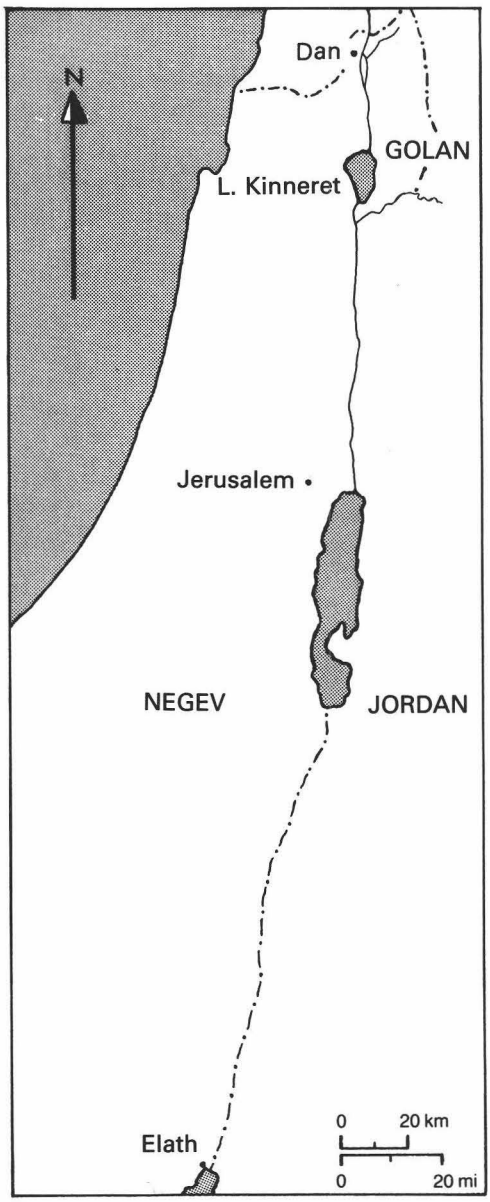
Though this year's figures do show a small improvement it is essential that, in order for us to continue running a series of highly successful lectures, giving grants to students and publishing our *Bulletin*, that our membership is boosted which will thus increase our income. Could I, as last year, request that each of you introduce one new member and also request that you endeavour either directly, or by your influence, to persuade individuals, trusts or other charities to make donations to us. I can assure you that this will transform the Society.

It would be most amiss of me not to thank publicly, once again, our Secretary, for the magnificent work which she has continued to undertake on our behalf and at what I can only describe as a highly moderate salary. I do wish to thank Carole Murray personally on behalf of all of you and in particular on my own behalf.

Finally, I must once again thank Bob Glatter of Blick Rothenberg Chartered Accountants most sincerely for his great generosity in continuing to act as our Honorary Auditor and as usual, for making no charge for the preparation of our Accounts.

Richard Domb

Summaries of Lectures



New Discoveries at Dan and the Aramaic Stele

Avraham Biran

The illustrated lecture presented the results of twenty-eight years of excavations at biblical Dan. Beginning with the Neolithic period, Dan, originally called Laish, became a major urban centre in the 3rd millennium BC (the Early Bronze Age). In the 2nd millennium (the Middle Bronze Age) it was surrounded by a massive sloping earthern rampart, with a remarkable gate built of three arches, discovered standing as originally built. From the Late Bronze Age a well-built tomb with Mycenaean imports was found.

The tribe of Dan conquered the city in the 12th century BC and when Jeroboam set the golden calf there in the late 10th century BC it became a major cultic and administrative centre. In the 9th century BC a city wall and complex gate system was built, probably by Ahab. These defences were destroyed during the Assyrian conquest in 733/732. In the rubble of the destruction fragments of an Aramaic stele was found, mentioning a king of Israel and a king of the House of David, i.e. the Kingdom of Judah.

Church-building in the Kingdom of Jerusalem

Denys Pringle

More than 400 church buildings are known to have existed in the twelfth and thirteenth centuries AD within the area occupied by the Crusader Kingdom of Jerusalem and of these, remains of some 200 buildings survive. Only a few of them are

still in Christian use. Some others survive as mosques, while the rest are mostly represented by no more than ruins, foundations or dispersed architectural fragments.

In 1979, a project to compile a historical and archaeological corpus of the church buildings of the Kingdom of Jerusalem was initiated by the British School of Archaeology in Jerusalem. The first volume of the resulting *Corpus* was published by Cambridge University Press in 1993, and the second (of a projected three-volume work) will appear in 1996.

During the twelfth century a number of churches belonging to the various Eastern churches were rebuilt. The major cathedrals, however, were in the hands of the Latins. Principal among these was the Church of the Holy Sepulchre itself, which besides serving as the parish church of Jerusalem was also the seat of the patriarch. Below the patriarch were the four archbishops of Tyre, Caesarea, Nazareth and Karak in Moab. Below them came eleven bishops, two of whom, the bishop of Jubayl and the Orthodox abbot of St Catherine's monastery on Mount Sinai, had sees that were effectively outside the secular control of the kingdom. We know nothing archaeologically of the cathedrals of Sidon, Banyas, Acre or Tiberias and little of Karak; but significant remains are left of those of Tyre, Caesarea, Nazareth, Bethlehem, Beirut, Hebron, Sebaste (Sabastiya) and Lydda.

Remains of Latin parish churches survive in a number of places. Some of them, such as those at Ramla, Saffuriya and Yibna (Ibelin), were aisled buildings, while others, such as those now represented by the village mosques at Fahma, Baitin and Sinjil, were small single-celled barrel-vaulted structures with a semi-circular apse facing east.

In addition to the parochial and diocesan organization of the Crusader Kingdom, an important part of the Latin religious establishment was represented by the monastic orders. At the time of the Crusaders' capture of Jerusalem in 1099, the only Latin religious houses in the city were the Benedictine monastery of St Mary Latin and its sister foundation for nuns, St Mary Magdalene (later called St Mary Major, or Parva). To these were soon added the monasteries of the Mount of Olives (Augustinian), St Mary in the Valley of Jehoshaphat (Benedictine), the *Templum Domini* (Dome of the Rock, Augustinian), St Mary of Mount Sion (Augustinian), and the convent of St Anne (Benedictine nuns). Outside Jerusalem, the Benedictines had a large monastery on Mount Tabor, and Benedictine nuns were established during the 1140s in Bethany. Cistercian houses included St John in the Woods in 'Ain Karim (1169) and Salvation, near Bait Jala (1161). Premonstratensian canons served at St Samuel (Nabi Samwil) and in the double house of St Habakkuk and St Joseph of Arimathea, located at Kafr Jinnis and Rantis respectively. Between *c.* 1220 and 1283, the Carmelites, an order of Latin hermits, built a church and monstery of St Mary in the Wadi 'Ain as-Siyah on the western edge of Mount Carmel. Many of the monastic churches were associated with holy places, which attracted large numbers of pilgrims.

A new kind of religious order to which the Crusades gave rise was the military order, made up of knights organized as a religious community. The Hospitallers, founded in 1113, came to combine the charitable activity of assisting the sick poor with the physical protection of pilgrims travelling to and from Jerusalem. The Templars were founded soon afterwards as a purely military order, with their headquarters in the 'Aqsa Mosque, in the southern part of the Temple precinct. These orders were later emulated by others, including the Teutonic Order, the Spanish Order of Our Lady of Mount Joy, the Order of St Lazarus (made up of leper knights), and the English Order of St Thomas of Canterbury. The castles of the military orders, such as Templar 'Atlit and Safad, Hospitaller Belvoir and Bait Jibrin, and the Teutonic Order's Montfort and Jiddin, were in effect fortified monasteries, with an enclosed central area including a chapel for the brothers, surrounded by

outer wards occupied by the lay people who made up the rest of the garrison.

The architects, artists and artisans responsible for building churches in the Crusader Kingdom in the twelfth and thirteenth centuries included both easterners and westerners. The stylistic influences to be detected in them are therefore diverse. However, a great deal more painstaking documentation of existing structures will need to be done before any general assessment can be made about the respective architectural contributions of East to West, and of West to East, at the time of the Crusades.

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Board Games in the Ancient Near East

Irving Finkel

This lecture offered a broad survey of the board games of antiquity in the ancient Near East, beginning with material from a handful of pre-pottery Neolithic settlements, where very little can be known of the games involved and moving on to the great historical cultures of Egypt, Mesopotamia and the Levant in general, where archaeology tells us a great deal. Board games characteristically travel from culture to culture, while exceptional cases do not, and this point was investigated in detail, with the help of slides of archaeological objects and materials.

In some cases, however, games survive for surprisingly long periods, and as a test case the example of the Royal Game of Ur was taken up. This race game was played throughout the ancient countries of the Near East from about 3000 BC, dying out in the record around the 4th century BC, but surfacing later in India, in a Buddhist site of the 12th century AD, and among the Jews of Cochin, who had probably been responsible for importing it from Babylon in the early centuries of the current era. This entails a record of continuous survival over a good 5000 years.

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