Bulletin of the Anglo-Israel Archaeological Society

1982

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Meetings and News
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The Society does not accept responsibility for opinions expressed in this publication.

Editorial

It has long been felt by the committee of the Anglo-Israel Archaeological Society that members would welcome a permanent record of the lectures they have heard, and that a publication should exist which would enable them to see how the programme which the Society offers builds up over the years. It is also regrettable that those members who cannot always attend our lectures miss one of the most important and interesting benefits of membership in the Society. In recent years the Secretary has endeavoured to circulate very brief summaries of the talks, but we would like now to proceed to a more systematic review.

During the past year Mr John Day of Auto Wrappers Sales Ltd, has kindly offered to help our efforts in presenting to the public the best of Israeli archaeology by funding a publication. The committee felt that we could make a start in no better way than by producing a collection of lecture notes contributed by the lecturers themselves, where these were forthcoming. This, then, is our pilot issue, for circulation at the Annual General Meeting of 1982. It includes, in addition to lecture notes, short biographies of the lecturers, and various other news items on Israeli archaeology.

One aim of the Society is to encourage and aid interest, and wherever possible, actual participation in archaeological work in Israel. When funds are available, small grants are made to help archaeologists, students and interested non-specialists to take part in field work in Israel. Julia Haddon, a recipient of such a grant in 1981, has provided a brief report on her first dig - and we think that her contribution to this bulletin illustrates just how important such aid can be. We hope that Julia will build on this experience to develop her interest in archaeology further and to explore more of Israel's past. This summer other students were given small amounts of financial aid to participate in Israeli excavations, and we hope to include reports by them in our next issue, to be published for the Annual General Meeting of 1983.

We hope in future years to add to the scope of this publication by including current news of the archaeological scene in Israel, and perhaps even pieces of original research, contributed by our members or other specialists.

The committee would like the reactions of all members to the bulletin as it now stands, and would welcome your ideas and contributions to future editions. We should also like to include correspondence in our next issue, so please do let us have your comments.

Finally, on behalf of us all, we should like publicly to express our warm thanks to Mr John Day for the financial aid and enthusiasm which has made this venture possible, and for his interest in our Society and its future growth.

Biographical details of the lecturers

Alexander Flinder

Mr Flinder, a practising architect, has been an active member of the Anglo-Israel Archaeological Society committee for many years. He is a keen practitioner and organizer of underwater exploration and as one of the founders of underwater archaeology in this country is involved in the important Mary Rose Project. He was also recently Chairman of the Friends of the National Maritime Museum of Israel, Haifa.

Honor Frost

Honor Frost is a leading figure in the field of underwater archaeology. In 1981 the Italian Academy of the Llncei published the full report of her remarkable discovery of a Punic warship off Marsala, Sicily.

Ephraim Stem

Ephraim Stern is Professor of Archaeology at the Hebrew University. His book, *Material Culture of the Land of the Bible in the Persian period, 538 - 332 BC* won the Israel Prize; it has just appeared in an English edition.

David Ussishkin

Now Professor of Archaeology at Tel Aviv University, David Ussishkin completed his postgraduate studies at the Institute of Archaeology, London University. He spent last year on sabbatical leave at Toronto. He has been directing excavations at Lachish (Tell-ed-Duweir) since 1973.

Fanny Vitto

Fanny Vitto has been on the staff of the Israel Department of Antiquities for several years, working mainly in the Beth She'an area. She is now in Oxford working on a PhD thesis.

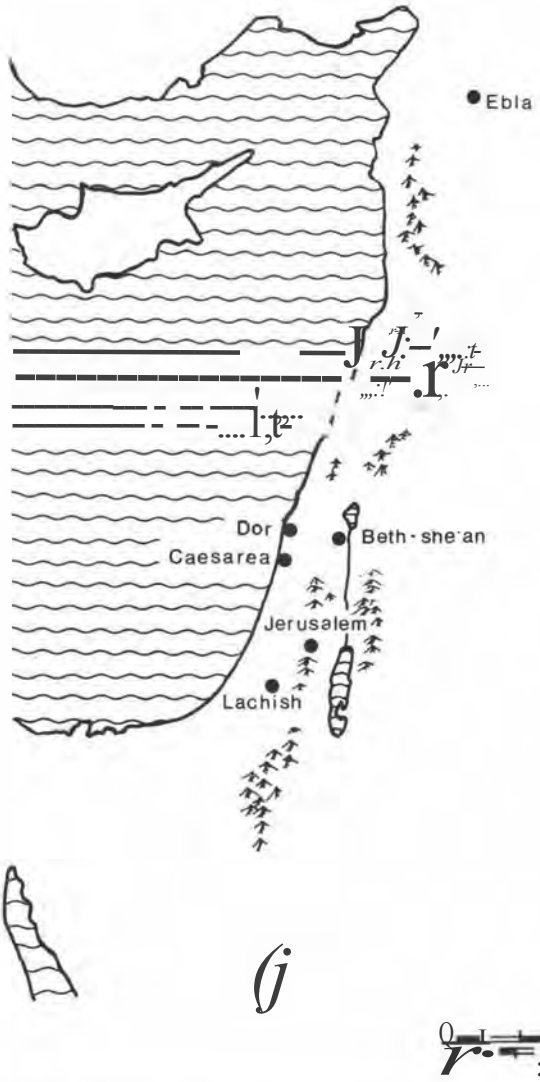
Michael Weitzman

Dr Weitzman is lecturer in the Department of Hebrew and Jewish Studies at University College, London. He has written a book on Ebla in collaboration with Chaim Bermant.

The Editors

Roberta L. Harris is a graduate of London University in Hebrew and in the Archaeology of Western Asia. She is currently a lecturer in Archaeology for the Extra-Mural Department of London University, and Visiting Lecturer in Archaeology at the City University.

Jeremy Schonfield, an archaeological editor with extensive experience of excavation in Israel, is at present involved in a survey of Byzantine remains in the Golan Heights.



Location of sites discussed in the text.

M. Card

The Archaeological Year in Retrospect

ASHLEY JONES

Some of us were once simple enough to believe that the politics of archaeology centred on academic institutions, and that professorial chair-hunting and budget-seeking activities were the currency of senior common-room discussion. Some of us also believed that the gentle discipllne of archaeology might help bridge the gap between Israel and her neighbouring states.

By these standards the archaeological seasons of 1981 and 1982 were not successful. Last year's season of archaeology was dominated by the City of David controversy between supporters of the Israeli Chief Rabbis and secular interests. Outraged Hassidim defended what they believed to be Jewish burial sites, while the director of the excavation, Dr Yigal Shiloh, was stoned. The matter was debated in the Knesset. This year's season has passed without such incident, although the religious threat still remains. If the religious parties in the present coalition decide to exact political payment, the future of archaeology in Israel could be at risk. It is also regrettable that the process of 'normalization' between Egypt and Israel seems to have by-passed the archaeologists so far.

In the spring of 1982 the Sinai was handed back to Egypt under the Camp David Agreement. The Ben Gurion University of Be'ersheba team under Dr Eliezar Oren working at Haruvit, had a grandstand view of the evictions at Yamit, and for the foreseeable future that will be the last Israeli excavation in the Sinai area.

When the archaeological season for 1982 got under way, two factors were in evidence: the Israeli attack on the Lebanon and the consequent squeeze on finances. The Lebanese campaign ensured that the Middle East stayed in the world headlines throughout the summer period, and this affected the recruitment of volunteers to work on the sites. Volunteers from the United Kingdom were few, whether because of the expense of participation or because of the political situation is difficult to tell; but it forced Professor Mordechai Gichon to abandon his excavations at the ruins of Aqed in the Shephelah.

The other casualty of the year was Dr Claudine Dauphin's season at the Byzantine complex at Dor. An illness forced her to cancel her spring expedition, and she was fully prepared for a September season when the Department of Antiquities notified her that her budget might not be forthcoming. She informed volunteers that their holidays might be at risk, upsetting arrangements at Dor for the second time.

Other activities scheduled for the summer went ahead as planned: the Hebrew University worked successfully at Tel Dor under Professor Ephraim Stern; as well as at Tel Yoqneam under Dr Amnon Ben Tor. The French Archaeological Mission excavated again at the Middle Bronze site of Tel Yarmuth under Dr Pierre de Miroschedji, and Yigal Shiloh completed a long season at the City of David in Jerusalem.

We all hope that 1983 will bring more stable times. David Ussishkin will be back at Lachish, and we hope that a newcomer, Adam Zertal, will be able to get a budget to start work on his project at Khirbet el-Hamam.

Grants given by the Society

Digging at Tel Dor

JULIA HADDON

In 1981 I received a grant from the Anglo-Israel Archaeological Society to spend part of my summer holiday in Israel working on a dig. It was a totally new experience for me, having neither studied nor been trained in archaeology. Tel Dor is situated on the Mediterranean coast about ten miles north of the Herodian city of Caesaria. Volunteers came to work at the site from all over the world and the project, directed by Dr Ephraim Stern, is scheduled to continue for five years.

The city was mentioned by Ramesses II in the thirteenth century BC, and in the Early Iron Age it was one of the cities that fought under King Jabin of Razor against the Children of Israel led by Joshua. In the Hellenistic and Roman periods the city was a port and a fortress. The Jewish community had a synagogue in Dorin **AD** 41-44, and Christian bishops lived there until the seventh century **AD.**

I joined the dig when it had already been in operation for two weeks. I was put in Area C, in which a large building, a road and, to the east, remains of a city wall were being discovered. The part of the building in which I was working had just been cleared to the Roman levels. I had never imagined we would find such large quantities of pottery. Stratigraphy (of which I had never heard) was of particular importance here. I was able to practise this new skill every day, with the added delight of finding treasures such as coins, plates, jugs and spearheads. But my most exciting find of all was a complete grinding bowl.

All this proved to be very hard work, for we had to start at half past four in the morning, even before sunrise, in order to finish by midday when the heat was too intense. By half past ten it would be uncomfortably hot and even picking up a shovel was an effort. Added hazards were scorpions, hornets and other insects eager to pounce on the unwary. Despite all this, the dig was very stimulating, not only because of the pride in discovering objects that have been hidden for thousands of years, but also finding out how an archaeological site is organised.

As I neared the end of my two weeks on the dig, Area C was looking very different from how it had been on the first morning when I arrived at the site. We had dug down a further five feet, and ladders were now needed to climb in and out of the squares. It gave me great satisfaction to take part in a dig that will help us understand so much about how people lived so many centuries ago.

Lectures given to the Society 1982

Honor Frost
Bronze Age stone anchors in the East Mediterranean
27 January 1982, Institute of Archaeology

Fanny Vitto
Jewish Villages around Beth She'an in the Roman and Byzantine periods - recent work
17 February 1982, Institute of Archaeology

David Ussishkin
The Lachish reliefs and the city of Lachish
4 March 1982, Geological Society, Burlington House

Ephraim Stern
New discoveries at Tel Dor
1 April 1982, Institute of Archaeology

Michael Weitzman
Ebla and its neighbours
12 May 1982, The New London Synagogue Hall

Alexander Flinder
The pool of Cleopatra at Caesarea and her Cypriot sister
22 June 1982, Institute of Archaeology

Jonas Greenfield
Recent epigraphical discoveries in Israel ; 1700 BCE-700 CE
7 July 1982, Institute of Archaeology

Summaries of Lectures

Bronze Age stone anchors in the East Mediterranean

HONOR FROST

In emergencies at sea, anchors alone stand between a sailing ship and destruction; small wonder, therefore, that they have always had symbolic significance and that anchors left as offerings are excavated in temples.

Divers also find groups of ancient anchors on the seabed, where they probably accumulated because, before man learned to sail against the wind, ships had to anchor on the nearest shallows in order to avoid being blown off-course.

It is from anchors excavated on land that a typology is being built up, which in turn serves to identify the anchors found by divers on the seabed. They then become clues to the nationality of the ships that carried them and the trade routes that they followed at given periods.

Large quantities of anchors have been raised by Israeli divers, who fully realize their potential interest. But unfortunately no great temple complexes containing anchors - comparable with those of Byblos, Ugarit and Kition in Cyprus - have as yet been excavated solely on land in Israel. It is therefore impossible at present to prove indigenous anchor forms and typology, and it is from sites beyond Israel that general comparisons must be sought. Further, in identifying lost and water-worn anchors it should be kept in mind that uqless they are inscribed, or of exceptionally diagnostic shape, the main criterion for considering them ancient is their size. This is because improvements in anchor design were quickly adopted on cargo-carrying ships, whereas small boats fishing in home waters and running no great danger, continued to use small stone anchors until very recently for reasons of economy. Consequently an anchor that can be handled by one man may well be modern, but a 300 kg stone is almost certainly ancient.

Even from my brief visits to the anchor collections in the National Maritime Museum, Haifa, and the Archaeological Centre at Dor (Kibbutz Nahsholim), it was apparent that there were Byblian anchors of a type that is securely dated to the 19th to the 16th centuries BC (and which is notably absent from, for instance, the anchor sites surveyed in Cypriot waters); two anchors characteristic of the Late Bronze Age towns of Kition and the nearby Hala Sultan Tekke, as well as an interesting pair of the domed 'Egyptian type', bearing incised steering oars. Long-term research, based on the recording of weight, shape, lithological identification etc., will doubtless produce important information about the ships that carried Bronze Age trade to these shores.

Jewish villages around Beth She'an in the Roman and Byzantine periods

FANNYVITTO
Department of Antiquities, Jerusalem

Beth She'an is blessed with a favoured location; first, it has a relative abundance of water which ensures fertility and prosperity, and secondly, it is a strategic point which dominates highways connecting it with many other important centres. Such a situation inevitably had a historical impact: it was involved in numerous wars and conquests, and various ethnic elements settled there in the course of its long history, which goes back at least to the Early Canaanite period. In about 700 BC the site was mostly deserted, and in the middle of the 3rd century BC a new town was built there which evinced a strongly Hellenistic nature. In about 108 BC the city came under purely Jewish (Hasmonaean) rule, but this period came to an end in 63 BC when th!! town was taken by Pompey, who restored its Hellenistic culture.

Various Mishnaic and Talmudic statements provide us with hints at the presence in Beth She'an of two communities - Gentile and Jewish - living alongside each other. Whereas Jews in all periods kept the biblical term - Beth She'an - for the city, non-Jews, from the Hellenistic period to the Arab conquest, used a Greek name - Scythopolis Nysa - for whose origin several explanations have been proposed; none so far carries conviction. Ancient authors tried to connect it with the legend of Dionysos, who was said to have buried his nurse Nysa in Beth She'an and placed Scythians to guard the tomb (whence Scytho-polis = the city of the Scythians).

Archaeological evidence attests the Hellenized character of Beth She'an. Surrounded by a city wall, its buildings were those of a Gentile city: heathen temples, a theatre, a place for athletic contests. Numismatic, epigraphic and material evidence show that that various Graeco-Roman divinities were venerated there, chiefly Dionysos, but also Athena, Zeus and so on. There is early evidence of a Christian community in the town: in AD 303 the first martyr of the persecutions of Diocletian was Procopius, a Scythopolitan; and as early as AD 318 there is mention of a Bishop Patrophilus. Numerous early-Byzantine churches and monasteries have also been uncovered or are referred to in written sources.

The few Jews known to have lived inside the city wall seem to have been very Hellenized, as is shown by a building complex unearthed inside the city near the western gate, where, next to a small Jewish prayer hall, a large room belonging to a wealthy Jew named Leontis had its mosaic floor decorated with the god, Nilus, and scenes drawn from the Odyssey.

Archaeological discoveries seem t9 indicate that most of the Jews mentioned in the Mishnah and the Talmud in connection with Beth She'an had settled actually outside the city wall as well as in various agricultural settlements surrounding the Gentile town. These discoveries include:

1 A synagogue dating to the end of the 4th or to the beginning of the Sth century **AD**, the floor of which bears depictions of the Ark of the Law, menoroth and other ritual Jewish objects. It was found about 280 metres north of the city wall of Beth She'an.

2 In 1973 a synagogue, in use from the 3rd to the 7th centuries **AD**, the last two phases of whose mosaic floors depict geometric patterns together with ritual Jewish objects, was discovered near Kibbutz Maoz Haim and belonged to an ancient settlement situated 4 kilometres east of Beth She'an.

3 About 5 kilometres to the south of Beth She'an another synagogue of an ancient agricultural settlement, the Rehov synagogue, in use from the 4th to the 7th centuries **AD**, was unearthed in recent years. The five seasons of excavations conducted there by the author on behalf of the Israel Department of Antiquities have yielded a marble chancel screen with a menorah, polychrome mosaics and numerous Aramaic inscriptions, inserted in the mosaic floors or painted on the plaster which originally covered the columns and walls of the building.

4 Near Kibbutz Tirat Zvi, part of a Byzantine building whose mosaic floor depicts, besides geometic patterns, a seven branched menorah and a shofar, has been uncovered, and although the dig has not been completed it seems to have been the synagogue of another settlement, located 8 kilometres southeast of Beth She'an.

5 The discovery in 1929 of the 6th-century **AD** synagogue of Beth Alpha, with its remarkably preserved mosaic floor representing the sacrifice of Isaac, a zodiacal wheel, the Ark of the Law and other ritual objects, has had a major impact on the knowledge of Jewish art and ancient synagogues and attests the existence of a Jewish settlement 7 kilometres west of Beth She'an.

6 At Danna, about 14 kilometres northwest of Beth She'an, a Jewish community seems also to have lived, as a basalt lintel bearing a relief carving of a seven-branched menorah was found.

7 Within the walls of the Crusader fortress of Belvoir (Kochba), about 9 kilometres north of Beth She'an, some stones were found in secondary use which had motifs depicted on them in relief: a menorah, an Ark of the Law and a dedicatory inscription in Aramaic. Most likely they originally belonged to a synagogue which might have stood in the vicinity of the later fortress.

Written evidence for the geographical distribution of Jews and Gentiles in the area is supplied by an extensive mosaic inscription in Aramaic, found in one of these Jewish settlements surround Beth She'an, in the Rehov synagogue (see the Plate). The striking inscription contains a text whose essence is known from rabbinic sources, but this constitutes the earliest copy so far. It deals with the religious injunctions of the sabbatical year in which the lands must lie fallow, and with the setting aside of tithes during the other six years, including a detailed list of the areas to which these rules pertain: those inhabited by a Jewish population were liable to their observance, whereas those with a non-Jewish

Mosaic inscription in the narthex of the Rehov synagogue, containing in its opening lines topographical details concerning Beth She'an.

majority were exempt. One of these exempted places is Beth She'an itself. Whereas in the extant rabbinic versions this area appears only in a very brief form, the first paragraph of the mosaic inscription gives full topographical details. It reads:

These are the places which are permitted around Beth She'an ['permitted' is to be taken in the sense of 'not liable to the sabbatical injunctions because pagan'] : on the south which is the gate of the campus until the white field, on the west which is the gate of the [oil] press until the end of the pavement, on the north which is the gate of the watch-tower [or of Sekuta] until Kefar Karnos, and Kefar Karnos is as Beth She'an, and on the east which is the Dung gate until the tomb of Panoktayah and the gate of Kefar Zimrin and the gate of the uncleared field. Before the gate it is allowed and beyond it is forbidden.

Although accurate translation is impossible, since many of the places mentioned are given in a form which was without doubt clear to contemporaries but which is no longer, this enumeration of the gates and limits of Beth She'an discloses that the town itself was exempted because it was mainly Gentile, and also that a certain area outside the city walls was considered as exempted probably because it contained the fields and estates belonging to the Gentile inhabitants of Beth She'an. But beyond these limits, the rest of the province was not exempted since it was, apparently, thickly settled by a Jewish population, as the various archaeological discoveries in recent decades seemed also to attest.

This unusual inscription was in all probability the text of a letter received by the elders of the town to which the synagogue belonged as an answer to questions they had put to the rabbinic authorities about the application of the religious laws of the sabbatical year in an area, like Beth She'an, where Jews and Gentiles lived side by side. Incidentally, an

earlier copy of this letter was found in the same synagogue, painted on the plaster of one of the pillars of the nave, and this one ends with salutations-addressed to the inhabitants. Because the letter's substance was so important the text was later recopied, without the salutations, on a more durable surface, the mosaic floor of the narthex. It shows the concern of the population of one of the Jewish settlements near Beth She'an to cope both with the neighbourhood of a Gentile city and with the observance of the Law. No doubt they had frequent contacts with their fellow-citizens, mainly in the economic sphere. The Gentile inhabitants of the city probably bought some of the agricultural products grown by Jewish farmers, whereas the Jewish villagers went to the town to purchase what they could not find in their villages, and likewise to buy clothes manufactured by the linen industries of Beth She'an, whose fame was worldwide. Problems naturally appeared through such contacts, and the rabbinic authorities supplied them with written rules. The Rehov inscription, as well as other statements which are to be found in the Mishnah and the Talmud, constitute examples of such rulings: which products Jews might legitimately purchase; which fields were located within and which beyond the exempted limits; what were the limits of permission regarding attendance at the city's fairs, with which heathen rites and sacrifices were connected; or what rules had to be observed in the case of trade exchanges?

On the other hand the Gentile population was faced with different problems, resulting from interaction with their Jewish neighbours who did not generally take an active part in civic duties or public life because of the pagan rituals involved, but nevertheless played an important role in the local economy and trade. One of the main problems seems to have been the danger of conversion in the case of Gentile slaves employed by Jews. To try to restrict such contacts and to obviate the risks, the Roman and Byzantine emperors issued several decrees which limited the liberty of the Jewish population. So, in an attempt to solve the problems which might arise from interaction between the two elements in the population, Jews and Gentiles, both issued rules and decrees, above all to prevent the other community from attracting members from their own, and from endangering their own identity by acquiring too much influence.

The Lachish Reliefs and the City of Lachish

DAVID USSISHKIN
University of Tel Aviv

The eight seasons of excavation at Lachish (Tell ed-Duweir) by the Tel Aviv University under David Ussishkin have since 1975 produced remarkable confirmation of the historicity of the famous Lachish Reliefs, found in Sennacherib's South-west Palace at Nineveh by Sir Henry Austin Layard, and now exhibited in the British Museum. These are but one of three types of source material for the campaign of 701 BC which brought the Assyrian army to Judah. The least ambiguous perhaps are the literary records. These comprise the narrative in II Kings 18, and the Assyrian Annals for the year in question. Both agree in their basic account of Sennacherib's campaign. Judah was attacked after the Philistine cities, and the king established his headquarters at Lachish, sending an expeditionary force to Jerusalem where Hezekiah was forced to render tribute to the Assyrians. These texts illuminate the archaeological evidence for a massive destruction of Lachish discovered by the Wellcome-Marston expedition under J.Starkey in the 1930s, further investigated by present excavations with the aim partly of examining the record provided by the reliefs.

The partially excavated South-west Palace at Nineveh in which they were found contains a triple suite (Rooms XXIX, XXXIV and XXXVI) leading from the large courtyard (XIX). This suite is entered principally by a centrally placed door from the courtyard, the innermost chamber - which contains the reliefs - being the smallest. The entries to all three are guarded by pairs of guardian figures *(lamassu)* in descending order of size, so that from the courtyard the three pairs of figures could be seen flanking the scene of the seige of the town of Lachish. The arrangement is unusual and seems to emphasize Sennacherib's pride in his achievement: Lachish was the largest and strategically most important city of southern Judah (the tell now covers some thirty acres).

The reliefs are not easy to interpret, however. The three central orthostats of the series - which totals about ninety feet in length - seem to be missing their edges, tops and bottoms, so the scenes do not align exactly. However the Assyrian seige ramp, with the unusually large number of seven battering rams attacking the wall, are clearly visible. One principle difficulty of interpretation lies in the central orthostat: the 'upper wall' above what appears to be a free-standing tower is now identified as the lateral outer gate of the city through which deportees emerge to be sent away info exile. Other problems lie in the left-hand orthostat - the clear depiction of two city walls at the corner of the city - and in the right-hand orthostat: the artist's apparent rendition of a single city wall with a tower above it. This appears to be connected with the wall on the central slab above the seige ramp.

The series also includes the king seated on his ivory throne on a hill opposite the town and across a valley. He is receiving the reports of his chief officers and the submission of the captives from Lachish.

The current excavations have sought to clarify these points. They have confirmed Miss Olga Tufnell's original identification of Level III as the town destroyed by Sennacherib, and have demonstrated that a seige ramp was indeed constructed to attack the city at its southwest corner. Here a saddle of land leads between the tell and the adjacent hill, which should therefore be the site of the Assyrian camp, although there is no direct proof for it; and this corner, together with the main double gate in the western defences, would be the most open to attack, especially since the road to the gate leads up from the saddle at the southwest. The vantage point of the Assyrian artist appears to be that of Sennacherib himself, on the hill of the Assyrian camp where the south-facing outer gate appears frontal - as rendered on the central seige orthostat. The emerging file of deportees must be artistic licence, the seige and capture shown happening simultaneously. Above the gateway the apparent upper wall is in fact the enormous platform of the Palace/Fort - the principle building of Lachish in the 8th century BC. Its superstructure has entirely disappeared, but Starkey's excavations revealed its foundations, twenty feet deep and some ten feet wide on the western side, still easily seen from the Assyrian camp above and a little to the right of the protruding outer gate, just as depicted on the reliefs. The last season of excavation has also shown, in the opinion of archaeologists, that the so-called outer wall was actually not free-standing, but was a revetment some fifteen to twenty feet in height, which contained the glacis running up to the foot of the fortifications along the crest of the mound. The left-hand orthostat of the seige sequence, therefore, which seems to show a double line of walls at the northwest corner of the city, is hard to reconcile with this new evidence; the answer may lie in the buttress with seven strong bastions which Starkey found at this point, and which may have been an outer fortification to defend this angle of the main wall. It is also felt that other temporary parapets may have been erected above the gate and elsewhere for the use of defenders during the crisis.

The inner gate of the Level III city was a huge six-chamber affair, its foundations going down some ten feet; it adjoins the defensive wall, which is approximately eighteen feet wide. Both would have had a superstructure of mudbrick on the massive stone foundations.

The 1981 season also revealed more of the Palace/Fort complex. This must have been the residence of the governor and his administrative headquarters. Its platform covers about three-quarters of an acre. To the east is a large regular courtyard with troop quarters to the south and east. Plans are still fragmentary, but the whole area covers approximately two and a half acres. More will be revealed in the next season of excavations, due to take place in 1983.

Hellenistic Dor

EPHRAIM STERN
The Hebrew University, Jerusalem

Historical background

Dor - known today as Khirbet el-Burj - was, in the Assyrian, Babylonian and Persian periods, the capital of the province covering the major settlement areas of the Phoenicians of the Carmel coast and the Plain of Sharon, commanding the area 'from Dor to Jaffa'. In these periods Dor was one of the most important port cities of Palestine. The tell now lies near Kibbutz Nahsholim.

The latest city of the Persian period seems to have been damaged and perhaps even destroyed in 345 BC, during the great revolt of the Phoenicians against the Persians. But after a short while the city once again began to prosper.

Literary evidence shows us that in the Hellenistic period Dor was an especially strong fortified city. Josephus refers to Dor as a 'fortress difficult to take' *(Antiq.* XIII vii 2). Polybius *(Hist.* 66.5) tells us that Antiochus III beseiged the town in 219 BC, but was unable to conquer it. Some eighty years later this story was repeated, when Antiochus VII besiged Dor from both land and sea in an unsuccessful effort to oust his rival Tryphon, who had taken refuge within its walls (I ***Mace.*** 15:10-14; 25-27). The next reference is from the days of Alexander Jannaeus (104-78 BC) who, on the eve of his ascent to power, gained control of many of the foreign cities of coastal Palestine. That Dor was among them is implied by the passage in Josephus *(Wars* I vii 7) referring to the restoration of many of these cities - including Dor - by Pompey to their foreign settlers in 57 BC.

Excavations

In 1980 and 1981 our first two seasons of excavations were carried out at Dor, in which extensive areas of the well-preserved Hellenistic city were revealed just below the surface. The tell, approximately half a kilometre long and about 400 metres wide, covers some 130 dunams. The excavation was carried out under the direction of the author on behalf of the Institute of Archaeology of the Hebrew University in Jerusalem and the Israel Exploration Society, with the participation of Boston University, New York University and Sacramento State University. The excavation team was assisted by members of Kibbutz Nahsholim and by the staff of the Agricultural High School of Pardes Hanna. Three areas were opened on the tell, along its eastern side.

Fortifications

From the outset of our excavations, it became apparent that Hellenistic Dor was surrounded by a particularly strong wall, built of finely hewn sandstone blocks. Along with the towers of Samaria and the recently discovered stronghold of Acre *(Qadmoniot* 40/

1976 pp. 71-74), this is undoubtedly among the most impressive fortification systems remaining from the Hellenistic period in Israel. The width of the wall is two metres and its stones, about a metre and a half wide, are arranged so that their short ends are facing outwards (headers). The relative pliancy of the sandstone and jts ability to absorb blows without shattering helped it to stand fast against the highly developed battering rams of the period. In some places the wall is preserved to the height of three metres.

Remains of three almost square towers projecting from the wall about 50 metres from each other have so far been discovered. One of these is on the north side of the city's eastern gate and adjacent to it. Its Hellenistic stages have almost been eradicated by the Roman building activity directly above. The tower itself was also damaged, but the other two towers, especially the middle one in Area A, are quite well preserved. An interesting detail of this latter tower is the square pillar built of large stones in its centre, which doubtless served to support a flight of wooden stairs built around it, allowing the defenders to reach the roof. As far as we know, this is the earliest known example of this kind of staircase, which was to become popular in the local architecture of the Roman and Byzantine periods.

The wall, tower and gate were all discovered on the eastern side of the site. These imposing fortifications help shed light on how Hellenistic Dor was able twice to withstand the seiges of major armies without falling, and they graphically illustrate Josephus' description of the city as a 'fortress difficult to take'.

We found evidence that this Hellenistic wall was built above and on the general lines of the earlier Persian wall. It seems that the wall was probably not erected at the beginning of the Hellenistic period, since we found beneath it a phase from the early part of this period, at which the earlier Persian wall was perhaps still used for defence. A coin found within this lower phase dates from the reign of Ptolemy II Philadelphus (246-185 **BC).** It seems therefore that the wall was built either towards the end of his reign or soon afterwards, because we know that the wall was standing in 219 **BC,** at the time of Antiochus III's seige.

The city plan

In all three excavated areas - and especially in Area C - parts of the residential section of Hellenistic Dor were uncovered. We now know that the Hellenistic city, and perhaps even that of the Persian period, was laid out according to the exacting 'Hippodamian grid'. According to this system a city is divided into quadrilateral sections, each with a specific function: the temple quarter, public buildings, living quarters and so on. The blocks of buildings are separated by straight streets, with smaller streets or alleys meeting them at right angles.

Aerial photographs have shown us that the quarter of public buildings at Dor, which most likely included the agora, the theatre and other structures, was located in the northern part of the site. Of these, only the theatre has been partially excavated in a campaign of the late 1950s. The British excavations of the 1920s at Tel Dor exposed remains of a temple of this period on the western side along the seashore, which is perhaps the largest temple of Hellenistic date so far revealed in Israel. It is not unlikely that other temples were located close by.

In the latest campaign, in which all three of the excavation areas are along the eastern edge of the tell, we uncovered parts of the residential quarter stretching on this side from the gate in the south to Area C in the centre; that is, for a length of some 200 metres, undoubtedly continuing to the north end of the tell.

Our investigations to date show that along the inner face of the city wall, for its entire length, stood a long row of stores and workshops. In one of these rooms we found a thick layer of crushed murex shells, used in the production of the famous Phoenician purple textile dye. The doors of the shops opened on to a completely straight street running parallel to the wall from north to south. On the opposite side of this 2-metre wide street we found the fine facade of a long, narrow residential building, in all three excavated areas. The eastern doors of this house open onto the street fronting the row of shops. The house itself is about 20 metres wide. During our latest season we uncovered its western side, which faces onto another street, parallel to that on its east. This elongated building, whose traces were found over dozens of metres, was probably crossed by alleys leading from one street to the other, but these seem to fall outside the areas excavated so far. Our feeling is that another identical building or block of houses will be unearthed on the west side of this second street. The block was divided lengthwise as well as widthwise into smaller units, whose doors opened to the direction of the closest street in each case. It is reasonable to assume there was originally an upper storey. In one or two places we found traces of basements. It seems also that the easternmost street, between the residence and the stores, was originally roofed to provide shelter for pedestrians.

This building survived throughout the Hellenistic period - that is, from the beginning of the 3rd until the 1st century **BC** - and today is preserved to the height of 2 metres and more. It seems not to have been violently destroyed at least until the days of Alexander Jannaeus, but was rebuilt from time to time, and each time the floor was raised (we found rooms with as many as three Hellenistic floors, one above the other), some openings were blocked and the walls built higher. In this way, from one phase to the next, the inner division of the building and the functions of its rooms changed - in one stage, two plastered pools for the storage of water were even added. But none of the alterations changed the external walls. Many coins have been found on the various floors, as well as stamped handles from Greek wine amphorae.

Some floors were of crushed chalk, and others of pressed clay, while the outer walls of the building were built in the accepted style of the period: mostly of well-hewn sandstone ashlars laid out in 'headers', a smaller version of the city walls. The inner walls and division, however, were built in the striking and typical Phoenician style: ashlar pillars with a filling of smaller fieldstones. It is fair to say that the plan of this building is Greek while its structural details are Phoenician.

Small finds

Hellenistic Dor was a thriving port and many foreign products were imported. So it is not surprising that the finds from within the houses are exceptionally rich, and a high proportion are imports.

Among the pottery we have many examples of local pots, including storage jars, jugs, bowls, juglets, pilgrims' flasks, 'frying pans' and so on. Because of the relatively exact dates which can be attached to the different stages of the buildings, and the richness and variety of the ceramic finds, Dor is sure to serve in future as a valuable key for understanding the ceramic development of this period. More than 200 complete pottery lamps have been found, mostly of common types, but some (such as a seven-spouted star-shaped example, and one resembling a ***Chanuka*** lamp) are rare and even unique.

A great number of imported pots from other Mediterranean countries have been found, notably some fine wine amphorae from Greece whose handles were stamped by the wine producers. Most of these stamp impressions (which already number more than a hundred) are from the island of Rhodes, and some from the neighbouring Cnidus. We have been successful in fully reconstructing one or two of these. Other imported pots have been recovered, from nearly all the familiar groups of the Hellenistic world.

Other ceramic finds included several terracotta figurines and miniature vessels, which were probably votive offerings.

Fragments of marble sculpture were salvaged from within walls of Roman date, in secondary use as building material. All of these give more than a hint of what is still to be uncovered in Hellenistic Dor.

In several rooms we found loom weights and spindle whorls of clay, stone and lead, showing that the women of Dor spun and wove cloth at home. This might have been connected with the workshop for the manufacture of purple dye found in the city. We can therefore assume that most of the population of Dor at this time was Phoenician, for dying cloth was a skill at which the Phoenicians excelled.

We are at the beginning of the road, and plan to open additional areas of the Hellenistic period at Dor in coming seasons, when we can look forward to revealing more of one of the finest cities ever built in Israel.

Ebla and its Neighbours

MICHAEL WEITZMAN
University College, London

In archaeological terms, Syria has long received far less attention than other Near Eastern lands, yet is full of intriguing unexplored tells; and in 1963 the University of Rome despatched Professor Paolo Matthiae to select one for excavation. The Syrian authorities told him of Tell Mardikh, lying between Aleppo and Hama, where a farmer's plough in 1955 had brought up a great double trough of sculptured basalt, bearing reliefs showing a king pouring a libation, marching soldiers and snarling lions, which was datable on stylistic grounds to about 2000 BC. The site was enormous, covering 140 acres. Around it was a raised band, interrupted by four depressions; this, Matthiae deduced, covered the city wall and its four great gates. The centre too was raised about fifty feet above the surrounding plain, concealing the acropolis. Matthiae soon decided to concentrate excavations on Tell Mardikh. Two of the outer depressions were dug and great fortified gates were discovered. There were rich finds, especially of pottery and -statues, but very little epigraphical material, and certainly nothing that would reveal the ancient name of the site. Then in 1968 a headless statue was discovered, bearing an Akkadian inscription 'For the goddess Eshtar, a basin did Ibbit-Lim, King of the people of Ebia, bring in'.

The name Ebia was already known, but could hardly be said to be famous. The city first appears as one of the many conquests of Sargon the Great (c. 2350 BC) who reigned in Akkad (probably about 50 miles southeast of Baghdad) and founded a far-flung empire. His grandson Naram-Sin (c. 2275 BC) also boasts of conquering Ebia, and the name recurs in a few later commercial documents. Many locations in Syria and Turkey had been proposed for the site, but even this final identification caused little stir among specialists, who considered it a place of no particular importance.

By 1974 the Italians had begun excavating a structure on the southwestern slopes of the acropolis, which proved to be the royal palace of about 2300 BC, the date indicated by the pottery evidence. It yielded rich finds (notably a wooden carving of a king hol ing an axe) but most exciting of all were forty-two clay tablets inscribed in cuneiform. The following year a huge library came to light, which had once contained about 3000 tablets, 2000 of which survived in good condition. (Some reports have stated that up to 20,000 tablets survived, but this is because every fragment of tablet was recorded as a separate item.) The library was organised methodically: the shelf-marks could still be seen, although the shelves themselves had perished in a fire which had consumed the whole palace but which had, ironicall$_{Y,}$ baked the mud tablets to brick and had left most of them in an excellent state of preservation.

The tablets were shown to Professor Giovanni Pettinato of the University of Rome, who had read Ibbit-Lim's inscription. He expected either of two possible languages;

Akkadian spoken by the people of Akkad and later by the Assyrians and Babylonians, or Sumerian, a language with no known affinities. The Sumerians who had lived in Iraq since at least 3000 BC were probably the inventors of cuneiform, and Akkadian scribes cherished Sumerian as their classical language. Pettinato found much Sumerian, but flanked by expressions which made sense neither in Sumerian nor in Akkadian. One of these was IG.DUB to be pronounced ***ig*** (or ***ik)*** + ***dub*** (or ***tub),*** which often occurred near the end of a tablet. He guessed that it was related to the Hebrew root KTB 'write', so that the tablet closed with the formula: 'written by so-and-so'. Here then was a new Semitic language, which Pettinato called Eblaite, and continued to decipher through comparisons with its known relatives.

Although some texts as old as these from Ebla, or even older, are known from sites in Iraq, Ebla has yielded the earliest large library which promises a full picture of life in a great city. Interpretation of the texts is still in its infancy, and many details will naturally be revised as research proceeds. Economic texts form the majority, and, as they contain many numerals and Sumerian words, are the least difficult to understand. One of these records rations of barley for 260,000 people, and another speaks of a civil service 11,700 strong; neither can have been concentrated within the 140 acres of the city, but must have occupied suburbs and perhaps outlying colonies.

Ebla produced abundant wheat, barley and grapes, raised cattle, and had a flourishing metal-working industry in gold, silver, copper and tin. Above all, however, it was a textile centre, and the tablets name innumerable places with which Ebla traded, as far as Lachish in the south and Cyprus in the west, into Turkey to the north and to Iraq and beyond to the east. Ebla was ruled by a king *(malik),* in consultation with a council of elders *(abbu).*

There are also school texts. Some bear the early efforts of scribes struggling with the cuneiform script; a few are marked by the master with a large 'X', meaning the same now as then. Hundreds of textbooks, designed to instruct Ebla's student scribes in the pronunciation of cuneiform signs and in the Eblaite and Sumerian languages, are now performing the same function for today's scholars. There are many lists - of metals, precious stones, wooden objects, vegetation, animals, birds, fish, personal and geographical names, and much else. Some are bilingual, in both Sumerian and Eblaite, and in effect form the first dictionary, with some 3000 entries.

Professor Pettinato has counted some 500 gods worshipped at Ebia. Prominent are Rasap, Karnish and Dagan, each of whom gave his name to one of the four gateways of the city. The name of the pest-god Rasap is echoed in Hebrew ***resheph,*** 'plague, fiery bolt'; Karnish is the Moabite Chemosh (and 'Carchemish' is now explained by Pettinato as 'the karu (quay) of Karnish), while Dagan is the Philistine Dagon. Ebla's patron god was called Dabir; he was apparently a pest-god, since Hebrew ***debher*** means 'pestilence'. The rivers Euphrates and Balikh were deified. Sumerian and Hurrian gods were also venerated; the traditions of very different peoples blended harmoniously in Ebia.

One tablet records that a total of 2717 sheep were sacrificed each month: bulls too were offered, and bread and oil, beer and wine, and even ornaments and linen garments to adorn statues. A cult of the dead is suggested' by sacrifices offered for 'the laments of the kings', and to the 'fathers'. Festivals were celebrated of 'gathering the harvest' ***(a-sz-pu***), of 'anointing the head' and of 'consecration' (interpretations being tentative) and others

still obscure. Professor Pettinato translates one poem as a hymn:

> Lord of heaven and earth! There was no earth -
> Thou didst create it.
> There was no daylight - Thou didst create it.
> There was not yet the light of morning.

The difficulty of these texts is apparent from the translation by Professor Alfonso Archi, who has succeeded Pettinato as epigrapher to the expedition:

> King of heaven and earth! No wine
> He made the earth.
> No wool - He made the daylight.
> Lordship was not in existence and night.

Archi evidently believes the ways of the gods to surpass all understanding. Some thirty incantations, some of Sumerian origin, were discovered; their targets include scorpions and evil spirits.

The tablets also illuminate foreign affairs. A file copy of a letter despatched to Hamazi (probably just east of Lake Van) requests 'good soldiers' in return for wooden furniture.

Broadly speaking, the grammatical words are Eblaite, and the 'content' words Sumerian. For example, the salutation 'Thou (art my) brother and I (am thy) brother' runs in the original ***'an-ta*** ses u ***an-na*** ses'. Sumerian provides the words for 'brother' and, later on, for 'soldiers', 'furniture' and so on in the script, although the letter itself would have been read aloud in pure Eblaite, with each Sumerian element replaced by its Eblaite equivalent. The many remaining obscurities of Sumerian, plus those of the newly discovered Eblaite language, plus the fact that scribes give us no warning when passing from one to the other, combine to make the interpretation of the Ebla texts exceedingly difficult, delicate and, often, hazardous.

These problems have led to differing interpretations of a tablet received from Enna-Dagan, King of Mari on the middle Euphrates. It contains several sentences whose form, according to Pettinato, ran: 'The towns [names given] I beseiged, and I vanquished the King of Mari'. Pettinato concluded that Enna-Dagan was an Eblaite general who had conquered Mari and placed himself on the throne. However, Professor Edzard of Munich construes these sentences otherwise: '[Name] , King of Mari, beseiged and vanquished towns [names given]'. According to Edzard, Enna-Dagan is a native ruler, who has sent a 'letter of introduction' boasting of his predecessors' conquests. Another tablet, according to Pettinato, is a treaty between Ebla and Ashur, who had jointly founded a commercial colony. Yet Dr Sollberger of the British Museum rejects 'Ashur' and substitutes 'Abarsal', which he thinks was a neighbouring town; the treaty, although many obscurities remain, provided for mutual defence - 'if someone stands against Abarsal, Ebla shall protect the produce of Abarsal' - Ebla being the dominant partner, holding a monopoly of riverborne trade. Sollberger notes that the king of neither city is mentioned, perhaps because the treaty would remain binding after their deaths. Both scholars agree that it ends in a curse:

'If you go on an evil expedition you shall be cast out'.

Ebla shot to popular fame in 1976, when names similar to certain biblical ones were reported. Such similarities must be treated cautiously, because most cuneiform signs can be read in more ways than one, varying in different periods and localities. Whenever a new archive comes to light, one must determine afresh which pronunciations were current there and then for each sign; thorough analysis of continuous stretches of text is necessary before one can fix the pronunciation of names which carry no context within themselves. Most of the names were personal, for instance Ab-ra-mu, Da-u-dum, Ish-ma-il, even lsh-ra-il. They cannot refer to the biblical figures of similar names, since the archive is centuries older even than Abraham; they do, however, attest the antiquity of the names - provided that the readings are correct. Some names, such as Mi-ka-ia or Eb-du-ia, end in an element which some have identified with the Hebrew divine name Jah. An ending -ya, however, is known from Akkadian to have occurred in pet-names (rather like -y in English), so that -ya need not indicate a god at all; Professor Archi reports one man named first lshrail and later Ishraya on the same tablet. Names resembling Sodom, Gomorrah and the other cities of Genesis 14:2, and even of Birsha, one of their kings, were reported by Professor Freedman of Michigan to have occurred on a single tablet. As no other extra-biblical reference to these cities wasknown,Professor Freedman suggested dating Abraham to the period of the Ebla archive. However, the readings (apart perhaps from 'Sodom') have been gradually abandoned, along with the theory.

Ebla's relevance to the Bible is less direct, although no less interesting. For example, the expression ***be-Ii,*** 'my lord', used in place of a god's name, foreshadows Israel's reluctance to express the divine name. Again, the knowledge that Hebrew ***debher*** and ***resheph*** were names of gods, suggests that behind Habakkuk 3 :5 'Pestilence goes before Him, and plague comes forth at His feet' is an image of Canaanite gods reduced to mere attendants of the Lord. The god Malik identified at Ebla supports the traditional understanding of Moloch as a god, rather than, as in the New English Bible, a term for sacrifice. Many more such sidelights on the Bible can be expected as research proceeds, but the relevance of Ebla is broader. This library yields the earliest coherent picture of commerce, politics, religion, science and much else; in tracing the beginnings of almost any area of activity, one will have to go back to these tablets.

The scribes were swept away by the Akkadians, whether under Sargon or Naram-Sin, who burned the royal palace where the tablets lay. Rebuilt almost immediately, Ebla was again destroyed around 2000 BC by the Amorites; it was rebuilt once more, but it never recovere1 from a Hittite onslaught around 1650 BC. Thereafter small settlements grew up sporadically on the acropolis, the last apparently a community of Stylite monks sometime between the third and seventh centuries AD. The site was then abandoned until the arrival of Professor Matthiae's expedition.

The pool of Cleopatra at Caesarea and her Cypriot Sister

ALEXANDER FUNDER

Brechot Cleopatra - 'The Pool of Cleopatra' - is the traditional name given to the rock-cut tank situated on the headland which juts out into the sea just west of the Roman theatre at Caesarea. The architectural remains of which the pool is part first attracted my interest in 1964 when I formed the view that they were of a 'piscina', a fish tank of the Roman period. But it was not until 1973, after I had carried out a survey of a similar site at Lapithos on the northern coast of Cyprus, that I was able to investigate the Caesarea site in detail and confirm my original interpretation.

To understand this conclusion, it is necessary to be familiar with the architecture and technology of the piscina, which was popular in Italy during the period of the late Republic and the early Empire. According to Pliny, the fashion for owning 'vivaria' for fish was introduced before the end of the 2nd century BC by Licinius Murena, who earned this nickname because of his partiality for this species of fish. The stories surrounding fish tanks and their owners, whom Cicero scathingly dubbed 'fish-ponders', were many. It would appear that no expense was spared, and Lucius Lucullus is reported to have had a channel dug through a hill in order to bring seawater to his fish ponds near Naples. Seneca says that some people fattened sea fish in the piscina for the purpose of keeping their tables well supplied, however stormy the weather at sea might be; and Martial describes how, in the villa of his friend Apollinaris at Formiae, the table could always be furnished by the master, who could let down his line from his couch to catch turbot or bass, no matter how fiercely a storm was raging.

But it would seem that it was more common for fish to be kept in piscina as pets than for eating. Two writers on Roman agriculture, Varro and Columella, give long instructions for the construction of fish ponds, and indicate how widespread and popular these installations were. The piscina, which was usually integrated with the maritime villa, was carefully designed to ensure a constant flow of seawater, thus maintaining the occupants in a healthy condition. The supply of water was achieved by a series of channels leading to and from the sea with intermediate sluice gates; and sometimes there were elaborately constructed tunnels leading from the sea to separate compartments, specially shaped to contain fishes of different species. So elaborate were some of these installations that their owners were often criticised for excessive ostentation, spending, it is said, more on the fish pond than on the villa. Indeed, it would appear that the fish piscina was something of a status symbol in Roman society, whose splendour is confirmed by the many remains which abound on the Tyrrhenian coast of Italy and Sicily. Some 26 sites have been identified in the Italian homeland, and many are in provincial Rome. They are of all sizes and shapes, including some which are totally circular.

The similarities between the Caesarea and Lapithos sites are most striking. The proportions of the main tanks on each site, for instance, are the same. Caesarea measures 35m x 18m, and Lapithos 27m x 14m, so that in each case the length is equal to twice the breadth minus one metre. In both installations the oblong central tank has a series of rock-cut channels leading to secondary tanks, which in turn lead to the sea. Water circulation is controlled by sluice gates of precisely similar design - by grooves cut into the channel walls containing sliding stone slabs. The secondary tanks on both sites are very similar in proportion and design.

However, Caesarea and Lapithos differ in one fundamental manner; this relates to the method of seawater supply and extraction. From studies of Italian sites it is clear that there are two distinct methods of supply; the fust is derived from wave power, and the other from tidal motion. Lapithos is a very good example of the former, whereas Caesarea adheres to the latter, but with the addition of a splendidly ingenious aid which I shall describe below.

The central Lapithos tank has at its sea end two elaborately constructed tunnel inlets from the sea. These tunnels are aligned to the predominant wind and wave direction, so that the effect of the sea rushing through the tunnels would be to impel the water with considerable force towards the furthest end of the tank and on through the extract outlets, thus maintaining a constant change of water. Control is effected by the systematic damming and undamming of the various sluice gates.

The water circulatory system at Caesarea, however, functions on a different principle. To the west of the main tank, and situated on a large platform at sea level, we see three or possibly four deep reservoirs. The small tidal change effectively replenishes the water within the reservoirs, which in turn are connected by channels to the main tank.

In the case of tidal feeding, however, one does not have the advantage of a wave-propelled circulation. Thus it is necessary to extract the water by some motive power. At Caesarea an extract system has been achieved in an imaginative and impressive manner. The principal extract channel, which leaves the south-side of the piscina, is routed through an exceptionally deep and narrow cutting in the bed-rock, and then terminates at sea level immediately above a round hole bored into the rock at sea level. It was observed that the effect of the waves within this hole stimulates a syphonic action which, by sucking the water out of the extract channel, produces a forced system of circulation through the interconnecting series of tanks and channels. Although the main extractor channel is presently filled with debris there is little doubt that if it were cleared, together with the inlet systems, the piscina could be made to work in its original form.

A rewarding finale to my survey at Caesarea was the accidental discovery of a fine mosaic terrace at the eastern end of the main tank. Two days of torrential rain had washed away the top layers of sand, revealing a mosaic which is very likely of Herodian date. Because of its position on the central axis of the main tank, it is certainly an integral part of the piscina layout. The central panel is made up of black, white and pink coloured tessarae arranged in a geometric pattern. The mosaics to each side of the central panel have a simpler design, being composed of a white background with regularly spaced small black motifs. This mosaic panel, together with adjoining areas, was subsequently cleared by Dr E. Netzer and Dr L. I. Levine. The central panel was found to measure 5.2m x

2.6m, and it was observed that the design was very nearly identical to that discovered in the Large Hall of the Winter Palace of King Herod in Jericho. This investigation showed that the mosaic panels were centred in a series of rooms to the east end of the main tank and testified to the architectural splendour of the site.

The authors of this later investigation, however, differed with my own interpretation of the tanks. They have expressed the view that the main pool was used for 'swimming and decoratively, and not for the keeping of fish'. Their view is that the series of channels and associated smaller tanks were of a later construction, and they suggest that this site could be that of the palace of King Herod at Caesarea mentioned by Josephus.

My own conclusions are based on a comparison of the architectural and technical details observed at Lapithos and elsewhere in provincial Rome, but most particularly in the many piscina installations found in the Italian homeland. It would certainly have been characteristic of Herod to build a maritime villa at Caesarea, which in common with those in the Roman homeland would almost certainly have incorporated a luxurious piscina.

Finally, an explanation for the title of this paper. I mentioned earlier that the traditional name for the site at Caesarea is 'The Pool of Cleopatra'. The traditional Greek name given to the piscina at Lapithos is 'The Pool of the Queen'. Mere chance?

Obituary

PROFESSOR SHMUEL YEIVIN

The death took place earlier this year of Professor Shmuel Yeivin after long illness. He had been living in retirement for many years. Professor Yeivin was the doyen of Israeli archaeologists, and had been the first Director of Antiquities appointed by the State on its formation when they took over the Antiquities Department from the British Mandate. He served in this post with wisdom and with great distinction for eleven years. We quote from the Jerusalem Post of 6 March 1982:

Professor Shmuel Yeivin became a professional archaeologist in 1923, at a time when such an occupation was not particularly fashionable. He was born in Odessa, Ukraine, on September 2, 1896, and came to Palestine as a boy of nine to study at Tel Aviv's Herzliya Gymnasium. He was among the school's second graduating class and, at the outbreak of World War I, was sent to the Turkish Army's officers school in Istanbul.

He served as a lieutenant in the Turkish Army for two years, and in 1916 he was the secretary of the first Jewish Constituent Assembly. Shortly afterwards, however, he left for England to continue his studies.

In 1923, Professor Yeivin graduated with honours in Egyptology from London University. He was the first Palestinian who excavated in Egypt at Luxor. In 1928 he again travelled to Europe, this time to undertake post graduate studies in Arabic and Semitic philology at the London School of Oriental Research and at the University of Berlin.

During the Thirties, he organized and participated in all the major excavations in Palestine, particularly those at Beth She'an. He also joined the Michigan University's archaeological expedition to Seleucia, Iraq.

Professor Yeivin was for many years chairman of the Jewish-Palestinian Exploration Society and research secretary of the Hebrew Language Academy. In 1944 he was appointed chief translator of the Palestine Mandatory Government.

In 1948 Professor Yeivin became the first director of the antiquities division of the Ministry of Education and Culture. He continued in this post until his retirement in 1959.

In 1961 he started teaching at the department of Ancient and Middle Eastern studies at the Tel Aviv University, where he became Professor of the Biblical Period in 1965.

Yeivin was the author of numerous studies on ancient history and archaeology and in 1955 received the Tel Aviv municipality's prize for his book *Kadmonuyot Yisrael* written together with Professor Avi-Yonah. In 1939 he wrote, with Professor Mazar, *History of Hebrew Writing.* He also excavated at Betar and wrote a book on Bar Kochba.

Yeivin, who was also secretary and editor of the *Biblical Encyclopaedia,* received the Israel Prize for Jewish Studies in 1968.

Professor Yeivin is survived by his wife, Batya (nee Shtern) and by his son, Professor Yehuda Yeivin.

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