

## Dilmun revisited: excavations at Saar, Bahrain

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*About 2000 BC the island of Bahrain was at the centre of a prosperous trading community – the Early Dilmun civilization – that stretched from Mesopotamia to the Indus Valley. Excavations at the site of Saar have, since 1989, recovered much new information about the layout of the settlement and its local economy and social system.*

The roots of the Early Dilmun civilization (c. 2500–1700 BC) lie in the Arabian Peninsula, but during its most prosperous period, around 2000 BC, the islands of Bahrain were the centre of an innovative and independent trading nation that played a crucial role in the international commerce that linked Mesopotamia with the Oman Peninsula and the Indus Valley.

The role of Dilmun as an international trading centre is reasonably well understood, but in 1989, when the London–Bahrain Archaeological Expedition was formed by the author and Robert Killick, an Honorary Research Fellow of this Institute, and Jane Moon of the MacDonald Institute in Cambridge,<sup>1</sup> virtually no information was available on the domestic economy and social structure of the Early Dilmun period. Our main aim was to identify and explore a settlement site of the period to try to fill this gap in our knowledge. Thanks to the generous help and cooperation provided by the Ministry of Information and the National Museum in Bahrain, permission was granted to work at the site of Saar (Fig. 1). Some preliminary work had been carried out here by a joint Bahraini–Jordanian expedition between 1983 and 1985, which established the presence of a small temple and some houses of the Early Dilmun period just below the modern ground surface with virtually no overburden.

#### Location and plan of the site

The site lies in the lee of a north–south limestone ridge on which stood thousands of burial mounds, now largely destroyed. To the east is an area rich in springs used

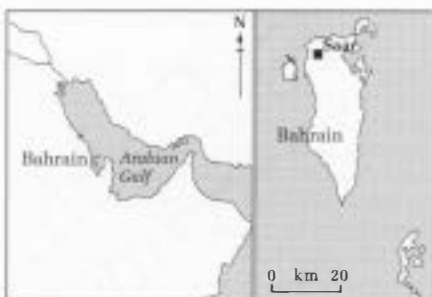


Figure 1 Bahrain, showing the location of the site of Saar.

today for date gardens. The sea lies about 3 km to the west and about 7 km to the east, but in the early second millennium BC there may well have been a sheltered anchorage below the site on the east because the coastline has since altered.

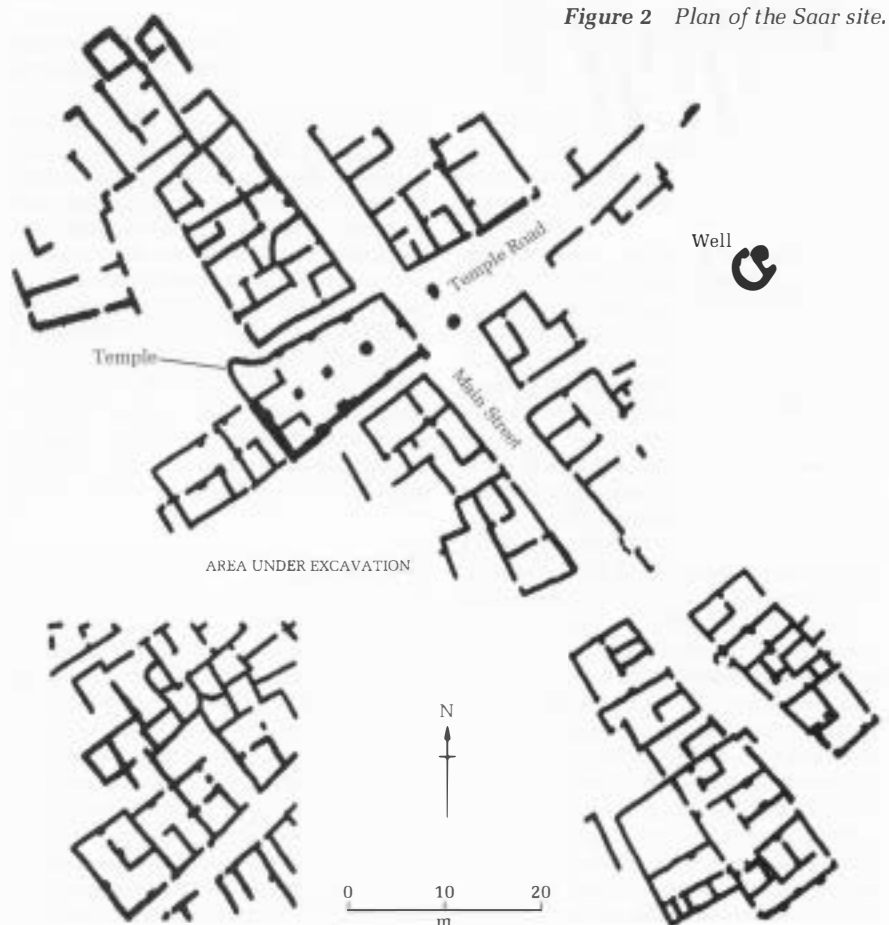
The limits of the site have now been established with some certainty on three sides and it is estimated that it originally covered about 2.5 ha, of which about 60 per cent has been archaeologically explored. Seven seasons' work has established the outline of the plan of the settlement with some clarity. It was dominated by the temple that stood on the highest point at an elevation of around 14 m at the junction of two major roads, now called Main Street and Temple Road (Fig. 2). The temple is isolated from the other buildings by two

smaller alleys that run north and south of it. East of Main Street two more small roads have been identified parallel with Temple Road, leading eastwards towards the settlement's well. This well has a diameter of 2.5 m, is stone lined and sunk to a total depth of 3.66 m. It has a stone coping, and the remains of a shallow stone-lined channel run east from the mouth of the well. The smaller roads divide up the houses in the centre of the settlement into blocks of not more than four or five, which are sometimes grouped around an open space, quadrilateral in plan. The layout is less regular in the "suburbs". Main Street itself runs south from the temple for about 200 m before becoming impossible to trace. It would be unwise to overstate the regular nature of the layout of the settlement, but some sort of overall planning seems probable. This was considerably modified during the life of the settlement.

#### The temple

The temple (Fig. 3), which dominated the settlement and which must also have been visible from far out to sea, is built of the local stone, held together with gypsum mortar. The walls were originally heavily plastered both inside and out. It is trapezoidal, 17.5 m long, with a curious bulge in the exterior wall in the northwestern cor-

Figure 2 Plan of the Saar site.





**Figure 3** Aerial view of the Saar temple in the 1990 excavation season, showing adjacent houses on the right-hand side.

ner. Access was by a single rather narrow door at the eastern end of the building. In its second and last phase, the rear of the building was subdivided into three separate areas and the roof was supported on three centrally placed pillars. There were two altars, one on the south wall and one on the north side of the central pillar. Each is decorated with a plastered feature at the back in the shape of a horizontal crescent. It has been suggested that this may be a schematic rendering of bulls' horns or that it may represent the Moon. There is evidence for burnt offerings of fish and vegetable matter having been made on each altar.

In addition to the altars, there are three platforms, two against the east wall and one along the north one at right angles to the other two. All these features are very finely plastered, and on the top of the largest, which survived intact from the early phase of the building, the imprint of a rectangular base is still preserved.

In the open area outside the front of the temple are five circular bases, possibly the remains of further offering tables or altars, although, as it is impossible to reconstruct their original height, we cannot entirely exclude the possibility that they were pillars.

During excavation, it quickly became apparent that the temple had undergone at least one major rebuild. It was possible to reconstruct the plan of the earlier phase with some confidence, although its floors could not be removed as the whole structure was in danger of collapse. The earlier building was similar to the later one, but had only one altar on the south wall, whereas the platforms were more elaborate, with two of decreasing size against the north wall and only one on the east approached

by two low steps. Outside the building, the five bases were preceded by two others, one circular and one shaped like a keyhole. After a series of minor repairs, the walls of this phase were cut down, the interior of the building was filled with sand, and the upper temple was constructed using the stubs of the earlier walls.<sup>2</sup>

A trench 5.45m deep was cut to bedrock through the floor of the earlier temple and demonstrated that there had been an even earlier building. A heavy stone wall was found with a series of plastered floors running up to its south face, but nothing could be said about the plan of the building it had belonged to. Below this wall was windblown sand, from which came the first examples of chain-ridged ware found at the site. This pottery is typical of the mid-third millennium so-called City I period on the island. Radiocarbon dates from the trench confirm this dating and provide a range of dates between 2500 and 2000 BC for these deposits. A radiocarbon date for the latest phase of the temple suggests that it may have remained in use into the seventeenth century BC.

**The houses**

About 60 units have now been identified, although many have not been fully investigated. All are built of roughly finished local stone, and many conform to a single plan with minor variations (Fig. 4). In its simplest form, this plan consists of two rooms, an outer L-shaped area and a smaller, inner room. The inner room was normally roofed, but it is not clear whether the L-shaped one was or not. In at least one case (House 207) it appears to have been, as ceiling plaster was recovered from both areas. In others we may suggest that there was

simply a light palm-leaf roof supported on the shallow buttresses seen in the walls. Open yards can be identified in several houses, usually beyond the L-shaped areas.

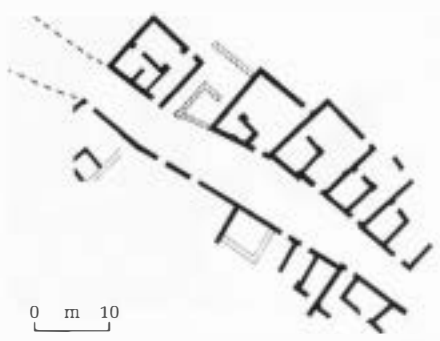
It is not merely the plans of these houses that are standardized; there is also a range of fixtures and fittings common to many to them. In the entrance passage, a basin for water is often found with two bowls, a higher and a lower one, usually well finished in grey plaster. A well furnished house had as many as three different cooking installations in the L-shaped areas, and storage jars have also been found sunk into the floors.

**Plant and animal remains**

Preservation of charred plant remains is poor and few seeds have been recovered, in spite of an extensive programme of retrieval by flotation. However, there is evidence for small amounts of wheat and barley being present. The many quernstones and rubbers certainly suggest that seeds of some sort were extensively processed. One flax seed suggests that this plant may have been one of the sources of oil. Dates were eaten in quantity and the stones (seeds) survive in large numbers, together with carbonized palm wood and phytoliths of palm leaves and fronds.

Bone preservation, on the other hand, is excellent and large quantities of fish and mammal bone have been collected and await detailed study. Fish was the major source of protein and the remains include many of both the inshore and deepwater species found in the waters around Bahrain today. Many shells are also present and they include the pearl oyster (mainly *Pinctada* spp.). The quantities of oyster suggest that it was probably eaten, or used for bait, rather than sought for the pearls. Tiny seed pearls have been found in the course of the excavations, but they are too small to have been of any value as ornaments.

The assemblage of mammal bones is dominated by sheep and goat, and there is very limited evidence for the presence of cattle, camel and an equid. Wild animals also provided some protein. The remains of gazelle are relatively the most common, although they do not seem to have been a



**Figure 4** Plan of Houses 100-110 at Saar.

significant food source because total numbers are small. Dugong is occasionally found, and the remains of the Indian grey mongoose and a small unidentified feline are two curiosities.

**Pottery and small finds**

Because the site was abandoned in an apparently orderly manner, there are relatively few small finds. Only objects that had been lost or were too heavy or too broken to carry were left behind. The pottery is remarkably uniform and, with the exception of the chain-ridge ware already referred to, all belongs to the first two phases of City II at the Qala'at al Bahrain, as recently defined by Fleming Højlund.<sup>3</sup> Cooking pots predominate, together with large storage jars, often ridged, and smaller jars with a strainer fitted into the neck. There are also large flat plates, usually with a distinctive yellowish wash. Six different clay fabrics have been identified, but there is no evidence for pottery manufacture on the site or in the immediate vicinity. Decoration on jars and plates is minimal, consisting of the ridges already mentioned and of simple linear patterns or slips wiped off in stripes. Some of the apparently non-local material is painted with simple designs in black on red or buff, and is closely related to Wadi Suq material from Oman, and one or two pieces appear to have an eastern Iranian or Indus Valley origin. It is interesting that there is virtually no Mesopotamian ware present.

Simple copper artefacts may have been cast on the site, because droplets of copper are commonly found and a bun-shaped ingot, apparently of Omani origin, was also recovered. Other finds, too, indicate contacts with areas outside Bahrain. Containers made of the stone generically known as softstone are present and include well known types of plain and spouted bowls generally dated to the early second millennium. Lids with stalk handles are also present and both bowls and lids can be matched in Oman. Other stone artefacts include an Indus Valley weight in banded chert, two bullet-shaped weights in haematite, which appear to be Mesopotamian, and some small carnelian beads. Other beads made from bitumen, which analysis has shown to be of Iranian origin, are also present.

**Seals and sealings**

One of the biggest surprises of the excavations at Saar has been the enormous amount of glyptic material present. We have now more than 80 round stamp seals made of chlorite or steatite (Fig. 5) and 300–400 fragments of seal impressions, all in the local Early Dilmun style. The designs are immensely varied and are very widely distributed across the settlement. The seals were apparently mainly used for economic purposes, implying that much of the Saar

population was actively engaged in the exchange of goods, and perhaps in their manufacture. Because all the seals and seal impressions are in the native Early Dilmun style, it also shows that most of the commerce for which we have evidence was taking place within the Dilmun polity itself. The limited range of foreign goods for which we have evidence were probably redistributed from their port of entry.

The evidence from our excavations suggests that the small town of Saar was primarily a fishing and date-gardening community, largely self-sufficient, but obtaining a limited range of imported goods through a larger centre. That centre was probably the Qala'at al Bahrain, 6km to the northeast. The site of Saar flourished for about 300 years in the early second millennium BC, at a time when Bahrain was a vital entrepôt in the complex network of trade routes that linked Mesopotamia, the Arabian peninsula, Iran and the Indus Valley. The excavations described here have given scholars their first insights into village society and the local economy on the Bahrain islands, so that, for the first time, Bahrain's important international role can now be set firmly in the context of its own indigenous culture.

**Notes**

1. The London–Bahrain Archaeological Expedition is sponsored jointly by the Institute of Archaeology and the Bahrain Ministry of Information. Harriet Crawford retired as a director in 1995, but remains as a consultant studying the glyptic finds from the site. Permission to use illustrations from the excavations is gratefully acknowledged.
2. H. Crawford, R. Killick, J. Moon (eds), *The Dilmun Temple at Saar* (London: Kegan Paul International, 1997).
3. F. Højlund & H. H. Anderson, *Qala'at al-Bahrain I: the northern city wall and the Islamic fortress*. (Aarhus: Jutland Archaeological Society Publications, vol. xxx, no. 1, 1994).



Figure 5 Two Early Dilmun stamp seals from Saar.