

HACKSILBER TO COINAGE:

NEW INSIGHTS INTO THE MONETARY HISTORY OF THE NEAR EAST AND GREECE

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THE SILVER HOARD FROM TEL DOR

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DURING THE MID-11TH CENTURY BCE, or a bit earlier, the Sikil town of Dor was destroyed. Shortly afterwards a new Phoenician town, built in its place, was overthrown by the Israelites under David (Raban 1987, 118-126, fig. 1). A hoard of silver was found in a space between two large buildings, part of the south harbor complex, which functioned as the town's main harbor during this period; these harbor remains are among the oldest known throughout the Mediterranean Sea. During underwater excavations in the harbor, A. Raban (1987, 126) concluded "... the harbor installations are the first in Palestine that can be definitely attributed to one of the Sea Peoples." He also noted their resemblance to harbor installations at the Minoan site of Mallia in Crete and at Kition in Cyprus.

The silver was found in a clay jug in excavations in Area D2 (fig. 1.1) supervised by Ayelet Gilboa. It had been inserted into a pit excavated in the floor of a structure dating to the late 11th or early 10th century BCE (pl. 1.1). For several years we had been excavating parts of the structures belonging to the southern harbor. Currently, we are excavating structures dated to the late 11th and early 10th centuries BCE which belonged to the Phoenicians and early Israelites. In the near future we hope to reach those levels of the harbor structures dating to the time of the Sea Peoples and perhaps even earlier in the Late Bronze Age.

The jug containing the hoard was discovered in a pit close to the foundations of one of these buildings. Although it had been first discovered at the end of the 1995 season, we left it *in situ* (having no idea of its contents!), until we had reached the associated floor and uncovered the entire locus during the next season. It then became clear that the jug had been hidden in a pit penetrating beneath floor level, its owner perhaps anticipating an impending catastrophe. Indeed, he or she appears to have acted with foresight, but was clearly unable to return to retrieve the contents of the hoard.

The stratigraphic position of the pit indicates association with a structure dating to the late 11th or early 10th century BCE. In one of these buildings we uncovered a beautiful assemblage of pottery belonging to the Phoenician Bichrome Ware family, typical of the early stages of Phoenician material culture. These vessels were probably produced in Tyre or Sidon. From these production centers, the ware was distributed southward: to the Galilee and the northern coast of Palestine, where it constitutes the main decorated pottery group.

Sherds of imported Cypriot Ware groups were uncovered upon the same floors, both in Area D2 and elsewhere. A few sherds of Greek vessels were also found, the earliest imported Greek pottery found so far in Palestine. Both groups of sherds strengthen the dating of the Phoenician vessels. The Greek vessels are from Euboea, the main trading center in central Greece at the time. They provide proof that maritime trade with the West had already been restored at this point. Prior to this discovery, it had been thought that maritime trade did not resume until a much later date.

The late 11th century renewal of trade relations with the West gained momentum during the 10th century BCE. The recent find of a large Euboean bowl at Tel Hadar, located on the eastern shore of the Sea of Galilee (Kochavi 1993, 26-7), furnishes further evidence of this. The bowl was found in a huge storage building destroyed at the end of the 11th

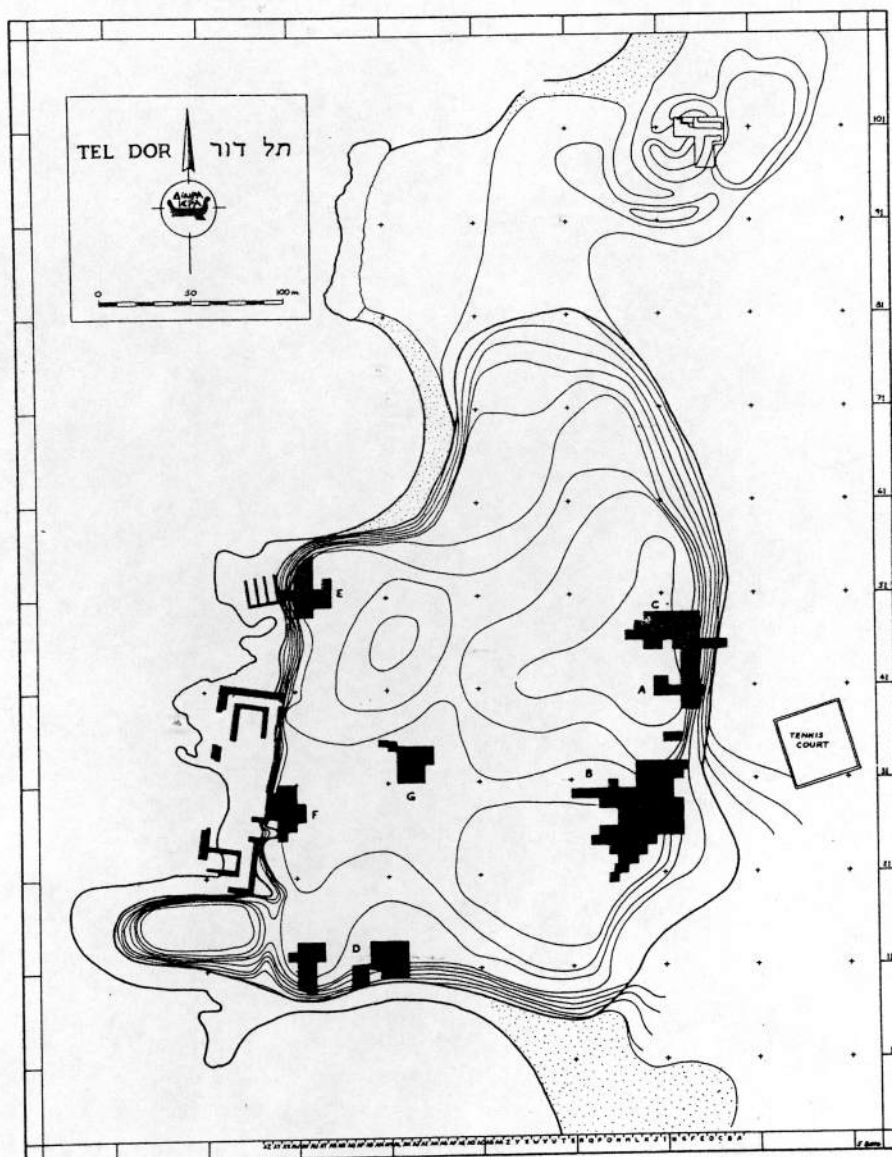
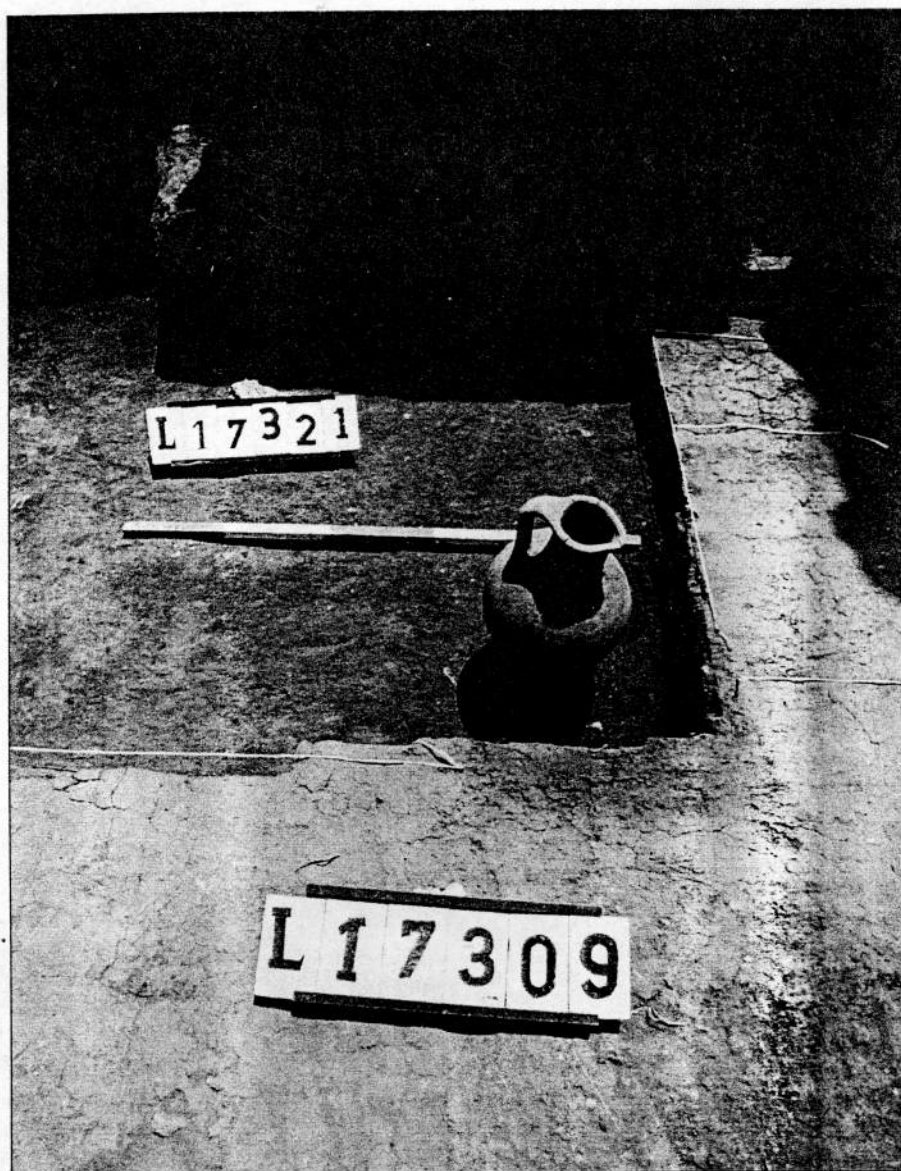


FIGURE 1.1 *Tel Dor: plan of excavated areas and view of area D2*

century BCE which, like Dor, contained many local wares including early Phoenician Bichrome Ware jugs. More Late Protogeometric Euboean vessels are now known from Tyre and from Cyprus (Coldstream & Bikai 1988, part 2.35; Waldbaum 1994, 53-66).

The Greek sherds from Tel Dor were shown to two experts. Prof. J.N. Coldstream of the Department of Greek and Roman Archaeology at University College London dated them roughly to the 10th century BCE, presenting numerous parallels from the main Euboean site of that period, Lefkandi. He referred to these wares as "Euboean Late Protogeometric." The second expert, Dr. Irene S. Lemos, of the Department of Classics at the University of Edinburgh, a student of Prof. Coldstream's, even designated one of the sherds from Dor as "Middle Protogeometric" and suggested a date around 950 BCE! The Dor and Tel Hadar stratigraphy and dates combine to suggest that Euboean pottery specialists may have to

PLATE I.1 *The Silver Hoard jar in situ*

move the date of their material back to the late 11th/early 10th century. The imported wares from Cyprus and Greece, as attested at Dor, therefore, illustrate the renewal of trade connections between East and West as early as the beginning of the Iron Age, the so-called "Dark Age."

The net weight of the Phoenician silver hoard, after cleaning, is approximately 8.5 kg (around 19 lbs). This represents a large sum of money. We do not yet have a basis for calculating its comparable present-day value. Somewhat later, during the 8th-7th centuries BCE, one royal Judean shekel weighed 11.5 g (a royal Judean limestone shekel-weight was indeed found at Dor) and assuming that 60 shekels were one maneh and 60 maneh equal 1 talent (kikkar), we have a hoard consisting of *ca.* 12 maneh or one sixth of a talent (Stern 1971).

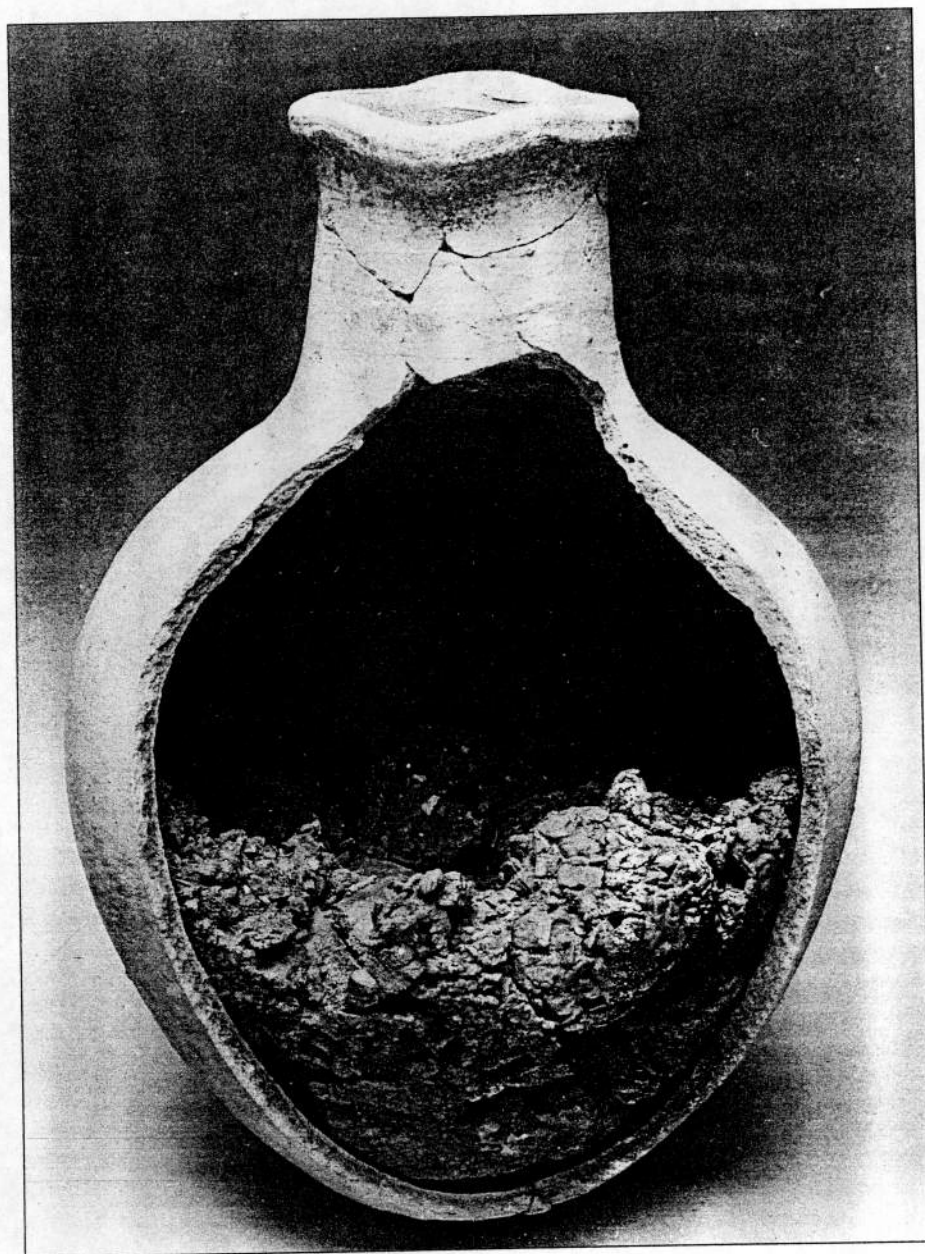
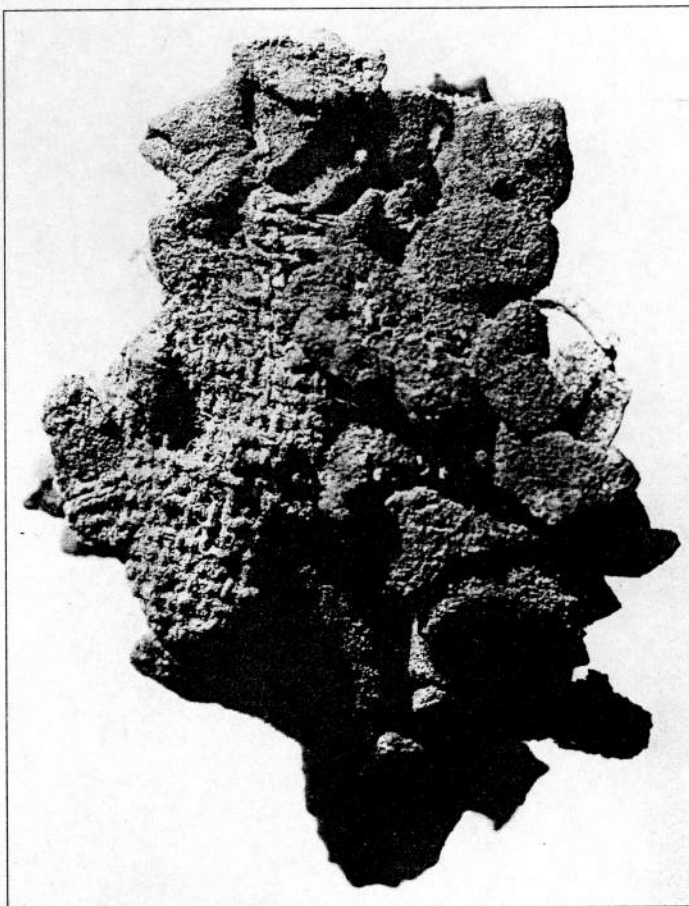


PLATE I.2 *The Silver Hoard jar after opening its side*

When we opened the jar (removing a part of its side in which there was an old break) (pl. 1.2), it became clear that the silver had been subdivided on the basis of units of weight and that each unit had been placed in a cloth bag (biblical *zeror kesef*) and sealed with a stamped clay bulla. Remains of the cloth were given to C. Shimoni of the Israeli Fibre Institute in Jerusalem for analysis. She identified the fabric as linen in a letter to me. The method of manufacture of the linen cloth was examined by another expert, A. Shefer, who established that each of the four pieces of cloth had been woven to a different density. The bag was probably made from four different pieces of fabric woven upon the standard warp-

FIGURE 1.2 *Bulla*PLATE 1.3 *Pieces of linen from bag holding part of the Silver Hoard*

weighted loom of the period (pl. 1.3). Examples of clay loomweights from this type of loom have been found in our excavation at Dor.

The bullae which sealed the linen wrappers were all stamped by a single scarab stamp seal, indicating that the entire hoard was the property of one person (fig. 1.2). D. Ben-Tor of the Israel Museum examined the bullae and has prepared a comprehensive report on these artifacts. She concludes that although the hoard dates to the Iron Age, the seal impression on the bullae was made by a Middle Bronze Age II seal, already several hundred years old at the time of its use by the Phoenician merchant. In her report, Ben-Tor pointed out that the motifs impressed upon the bullae, "... interlocking scrolls and spiral designs, are common on scarabs found at Middle Bronze Age Canaanite sites. The design found on the Dor bullae is also typical of Middle Kingdom-Middle Bronze Age patterns not found on other scarabs. A close parallel to the patterns occurring on the Dor bullae are found on Middle Bronze Age scarabs from Megiddo." We may add that these patterns also occur on scarabs from Dor and from nearby Tel Mevorakh.

The phenomenon of scarabs found in contexts that are centuries later than their time of production is well attested. When the time span between the time of production and the context is relatively short, such objects may be considered heirlooms. However, when several centuries separate the context from the date of production, it seems more likely that the early object was accidentally found and cherished for symbolic or other reasons.

The popularity of scarabs in Palestine during the Iron Age I-IIA is reflected in the occurrence of both Egyptian and local examples. Moreover, scarabs remained popular amulets throughout the first millennium in Egypt and in the Levant. Their popularity spread around the Mediterranean, where imports as well as local production are well attested. Middle Bronze Age scarabs were found in first millennium contexts in Ibiza and in Sicily, and a Middle Bronze Age scarab was recently found in a Late Roman tomb at Moza 'Illit. It is therefore not surprising to find that a Middle Bronze Age scarab was used at Dor during the late 11th-early 10th century. The bullae found at Dor provide additional evidence for the use of scarabs for sealing in early Iron Age Palestine. The scarab used for the Dor bullae may have been found accidentally, and was used either for its symbolic significance or simply for its practical shape and engraving.

The silver hoard from Dor consisted of 17 units weighed by the Phoenician merchant before being placed into linen wrappers. One of these units was separated from the others (they were found stuck together in the hoard) and weighed in the Israel Museum laboratories. It weighed nearly half a kilogram (490.5 g). It is unclear what Phoenician weight standard is reflected in this unit; indeed, we know very little about Canaanite-Phoenician weights and measures during this period. If, however, the standard resembled that in use in Palestine at a somewhat later date (8th-7th centuries BCE), reflected in the Bible and in the archaeological record, it is possible that the unit examined here was based upon a smaller shekel, and consisted of 50 shekels or one maneh. In that case, the total amount in this hoard is 17 maneh, a formidable sum in those days (Stern 1971).

The hoard from Dor is not the only Early Iron Age silver hoard known from Palestine; it is instructive to consider other hoards of comparable time and place. A hoard from a nearby site, approximately parallel in date (end of the 11th century BCE), was found long ago at Megiddo in Stratum VIA (Loud 1948, pl. 229, 24). It consisted of units of silver which were also wrapped in cloth (here there were three units). We do not have the exact weight of this hoard nor information about the composition of the cloth wrappers. The hoard consisted mostly of broken pieces of jewelry.

Even longer ago, a hoard consisting of 26 units of silver was uncovered at Gezer (Macalister 1912, 262, fig. 408). It was contained in a jug or a jar (which is not described in the report). According to the excavator, R.A.S. Macalister, it may have been a "silver-smith's hoard," as such hoards used to be considered. Before many hoards had been found, it had been presumed that they contained material intended only for remaking jewelry. He dated it to the "early Israelite" period.

From later excavations comes the Arad hoard, found in Stratum II, which was dated by Y. Aharoni to the 10th century BCE (Y. Aharoni 1968; M. Aharoni 1980). This hoard, too, was contained in a jug, divided into cloth-wrapped units, and consisted of broken jewelry. The largest silver hoard of the period between the 11th and 9th centuries BCE (probably belonging to the 10th) was found at Eshtemo'a in southern Judah (Yeivin 1990). It had been concealed in five jugs and included jewelry and units of silver. On three of the jugs the Hebrew word *hamesh* ("five") was written in red paint. The net weight of the hoard is 28.055 kg. The net weight of the contents of one jug, found intact, is 4,495 g. It consisted (as at Dor) of silver tokens, jewelry and some pieces of cut-silver. Y. Yadin thought that these five containers and the inscription "five" represent 500 shekels. The problem, in that case, is that their weight does not correspond to the late Judean shekel of 11.5 g. Perhaps the shekel of this period was of a different standard, like ours. If so, it was probably a lighter shekel (Eran 1990). Our hoard differs from the others in that it consists mainly of

small, flat tokens cast in the shape of small coins and other pieces of cut-silver. Only a small portion of this hoard is broken jewelry. This is clearly not a silversmith's hoard, intended for reuse. Instead, we must regard it as a hoard of "money," i.e., silver to be weighed for payment. May we assume that it belonged to a Phoenician merchant who used the money for building and equipping seagoing ships or to buy merchandise to be traded in the lands to the West?

Several specimens of the silver from this hoard were submitted to laboratories to determine their possible origin. Results have been received on one of these samples, submitted to the laboratories of the Weizmann Institute of Science at Rehovot, and reported in "Analysis by Atomic Absorption," by N. Shay and M. Fontain. The silver was separated into its components, of which gold constitutes not less than 11%. Shay and Fontain note that silver containing comparable percentages of gold was extracted from the mines of Rio Tinto in southern Spain. Such speculations may, at best, form the basis for a hypothesis which must be carefully scrutinized and confirmed in the test results of other samples. Another possibility is that our hoard is the result of recycling older material.

It is tempting to see this hoard as possible evidence for trade between the Phoenician coast and southern Spain in the late 11th and early 10th century BCE. S. Wolff (1986) treated trade relations between East and West, as well as Phoenician silver production in Spain. He claims that "of all the metals, silver [used as money for payments and to store wealth] was the most important for the Carthaginian economy.... Since the early days of westward expansion, the Phoenicians sought Iberian silver. Indeed, it has been argued convincingly that the acquisition of Iberian silver was the probable cause of that expansion." "The archaeological evidence at Rio Tinto and Castulo (east of Rio Tinto) indicates that both sites, located in the most important silver production zones in ancient Iberia, had relations with the Phoenicians and Carthaginians."

The silver hoard found at Dor is of unique importance in five ways: its date, its findspot, its comparison to other hoards, the method in which it was assembled, and especially as an illustration of the history of trade relations between East and West.

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