The Dilbat Hoard

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IN APPRECIATION OF EDITH PORADA

INTRODUCTION

The gold necklace said to be from Dilbat in the Department of Ancient Near Eastern Art at The Metropolitan Museum of Art (Figure 1) has long been understood as the most exquisite and important example of extant jewelry from the Old Babylonian period (ca. 1894–1595 B.C.). Comprising four richly granulated pendants, a central disk weighing more than fifteen grams, two tiny goddess figures, and variously shaped gold beads, the necklace has been cited as a superb and miraculous survival of jewelry from eighteenth-century B.C. Mesopotamia. Granulated gold seal caps, said to have been found with the necklace, were dated with it, while four associated seals were dated to the early part of the subsequent Kassite period because of their texts. The precision and beauty of the granulation on the smallest rosette pendant (see Figure 43) is not equaled in the second millennium B.C.

While preparing a new publication of objects from a mid-fifteenth-century B.C. tomb that belonged to three foreign wives of Tuthmosis III and is now in the Department of Egyptian Art at the Metropolitan Museum, I had the privilege of examining the Dilbat necklace for craftsmanship, style, and function. The diverse types of beads, number of pendants, and lack of any colored elements led me to investigate both the origins of the necklace and ancient Near Eastern jewelry of the second millennium in general. My conclusion is that the necklace and objects long associated with it were most probably a hoard of wonderful but individual items buried together in a pot at Dilbat and that their manufacture date is plausibly in the seventeenth rather than eighteenth century B.C. (see Figures 11–23 for all items in the Metropolitan Museum). This essay collects information from earlier descriptions of the objects, describes the individual components (see Appendix), and reviews the comparative data that support a late Old Babylonian date. At the same time that this study attempts to assess the jewels, it seeks to create greater appreciation of these most remarkable products of goldsmiths’ art from ancient Babylonia.

THE ALLEGED PROVENANCE

Dilbat, the ancient name for Tell al-Deylam, is a mound twenty kilometers south of modern Hilla and thirty kilometers south of Babylon, below the confluence of the Tigris and Euphrates Rivers of modern Iraq. Until 1989 no scientific excavation had been undertaken at this ancient city, but a good deal of information from texts had been gathered by Eckhard Unger in the 1930s. Above all, this information came from tablets obtained previously by Hormuzd Rassam and illicit diggers, but some was also obtained through the occasional boundary stone, stela, or relief that mentioned the site. From the textual sources Unger was not able to say whether Dilbat/Deylam played a significant historical role in ancient times. He did suggest that Dilbat may have been an important distribution center for agricultural products and that proper excavation might demonstrate this.

Texts originating at Dilbat, or referring to it, are primarily Old Babylonian (first half of the second millennium B.C.) and New Babylonian, Assyrian, or Persian (first millennium B.C.). Texts also exist from the Akkadian (ca. 2334–2154), Ur III (ca. 2095–

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The Kassite period is dated from the Fall of Babylon, commonly placed at 1595, but no Kassite texts are datable until about 1425. Of interest are the Old Babylonian texts mentioning rulers Sumuabum, Sabinum, Hammurapi, Ammiditana, Samsuditana, and the family of Ammisaduqa; seal impressions in Berlin from this period and "probably" from this site have recently been published by Evelyn Klengel-Brandt. Also of interest is the mention of Kassites in late Ammiditana and Ammisaduqa texts from Dilbat (end of the seventeenth century B.C.). The city god of Dilbat was Urash, a god of agriculture and war; there were apparently temples for him, his consort Ningal, the gods Adad, Shamash, and Sin, and other deities.

Today an expedition from the University of Chicago considers Dilbat—on the basis of surface sherds—to be a city where more or less continuous history might be traced from the beginning of the third millennium B.C. to the middle of the first (Figure 2). In his first season at the site in 1989-90, James Armstrong found mostly Sasanian and Islamic pottery on the surface of the western mound, but on the eastern mound, he gathered pottery dating from 3000 to 300 B.C. and noted traces of the earlier illicit digging at the northern end. He found Old Babylonian sherds in his area A; at B, late Old Babylonian houses with burials (seventeenth century) in which late Kassite kilns and burials had been dug (thirteenth century); and in C, mainly Akkadian and/or late Early Dynastic domestic and...
funerary remains, with Ur III–Isin/Larsa material (ca. 2093–1763 B.C.) dug into them. While it is possible, therefore, that the objects in the Metropolitan originally came from Dilbat, it must be borne in mind throughout this study that they were not scientifically excavated there. Considering all the evidence, the alleged provenance is a probability, not a certainty.

**EARLY DESCRIPTIONS OF THE HOARD FROM DILBAT AND DISCUSSIONS OF ITS DATE**

The first mention of the Dilbat necklace was made by Bruno Meissner in a 1914 study of Old Babylonian sculpture. Commenting on how few precious objects of this period had been preserved, he welcomed the important gold jewelry “recently” entering a Berlin private collection, and he printed a photograph of a necklace belonging to “Herrn Dr. [Georg] Hahn” of Berlin (Figure 3). Meissner suggested that a Hammurapi-period date for the necklace was established by the seals said to be found with it. Apparently, granulation—as on the necklace’s pendants and on seal caps of the find (hereafter to be understood with qualification)—had not been attested in ancient Babylonia before. He identified the pendants as symbols of the sun, the moon, lightning, and “the Venus star” but doubted that the figures of goddesses belonged on the necklace for lack of parallels.

Meissner made two further references to the necklace and caps, and the Egyptologist and art historian Wilhelm von Bissing suggested that the necklace might be mid–rather than early second millennium. But it was Eckhard Unger, with a special interest in Dilbat, who published the most informative details of the find and discussion of its objects. In 1929 he reproduced one of the goddess figures by permission of the owner, “Frau Dr. [Frida] Hahn, Berlin,” dating it—like Meissner—to the period of Hammurapi, at that time 2000 B.C. The next year Unger referred to the necklace as having been found in the city of Dilbat, south of Babylon, together with a few cylinder seals. He also published a photograph (Figure 4) which allowed him to describe the goddess figures with...
Figure 4. Gold items from the "Dilbat hoard" published by Unger in 1931 (from Unger, "Topographie der Stadt Dilbat," pl. 2)
horned headdresses and to link the lightning forks, crescent, and ray disk to the weather god Adad, moon god Sin, and sun god Shamash, respectively. Both goddesses were illustrated separately from the necklace, and two series of interlocked rings (nineteen plain, twelve knurled), two pairs of earrings (one braided, one twisted), and a “nose-ring(?)” were included. Unger found the pendants much finer than the seals associated with them and attributed the difference to the materials used. He understood the treasure’s owner to be Parbi, son of Azia, priest of Sin, as named on one seal (now MMA 47.115.1), and gave the name of another seal owner as Adad-gamil, son of Ra’mkiti, a priest of Sin and of Anmartu (now MMA 47.115.4). He included a photograph of a third seal (now MMA 47.115.2) with its impression and the caps Meissner had illustrated in 1920.

The next year Unger used the photograph in his 1931 article, “Topographie der Stadt Dilbat,” and gave details of the “unique Old Babylonian treasure found in Délâm,” made available to him for publication by its owner, Frau Dr. Hahn of Berlin. This time he termed the seals very decadent and dated them to the end of the (Old Babylonian) period “(1850 v.Chr.),” suggesting that they and the jewelry had been buried at the onslaught of the Hittites and Kassites (today referred to as the Fall of Babylon and dated ca. 1595 or 1530 B.C., depending on the chronology chosen). The objects in the treasure, “found in Délâm south of Hilleh, in a pot as treasure [Schatzfund] and as described in notes of the owner,” included:

- Four cylinder seals, 8 mm high, 19 mm broad, inscribed with Old Babylonian signs [MMA 47.115.1-4, as below];
- Necklace comprising 188 gold beads; 7 pendants (sun, two Ishtar stars, crescent moon, lightning, two goddesses);
- Gold wire 20 cm long, 3.5 mm thick, bent;
- 19 smooth, 12 knurled, 2 twisted, 2 braided “hair rings(?)”;
- “Nose-ring(?)” with ring for suspension;
- 2 caps for cylinder seals, 11 mm high, 12 mm broad;
- 1 cap for cylinder seal;
- 2 small gold bowl-like disks, perhaps remnants of cylinder seal caps.

Also said to be in the hoard were much oxidized silver, more gold rings, and a cylinder seal by then lost.

A few years later Dietrich Opitz discussed the Hahn objects from photographs and concluded that the seals and necklace were later than Meissner thought. He considered the seals to be most likely of Kassite date, and, noting that granulation was not known in Babylonia much before the end of the Old Babylonian or beginning of the Kassite period, he further observed that there were no parallels in the Babylonian (or any earlier) period of a necklace with so many symbolic pendants. On the assumption that all objects were from one find, he felt that the rosette pendants spoke for a comparatively late date.

The last of the scholars who could have had some firsthand or secondhand information of a Dilbat find was Ernst Herzfeld (1879–1948), who published, in 1941, a few more details and a drawing of two pendants (labeled “F. H.”). He stated that the pendants belonged “to a complete necklace of 200 gold beads with seven pendants, found in 1911 in a place south of Hillah-Babylon, in a closed jar together with many other ornaments of gold and silver, and with four agate [sic] seals with their gold mountings.” He dated the jewelry to the First Dynasty of Isin (ca. 2017–1837 B.C.), rather than the subsequent Old Babylonian period, referring back to Meissner’s earliest publication, but he illustrated a medallion from the In-Shushinak deposit at Susa, about 1500 B.C., as comparative material.

Various types of evidence in the Ernst Herzfeld papers in the Freer Gallery of Art and the Arthur M. Sackler Gallery Archives at the Smithsonian Institution indicate that Herzfeld probably knew the Dilbat objects before their first published account by Meissner (Figures 5, 6). Herzfeld had included “Tell Dilaim” on a map he published in 1911 of a trip along the Euphrates, and his Notebook S-7 reveals that in June of that year he was in touch with dealers in Baghdad and Hillah. Most importantly, the photograph Meissner used appears to be one of those Herzfeld took in Iraq. Unger’s “gold wire,” cap parts, and four seals appear in other Herzfeld negatives, although only twelve of Unger’s nineteen plain gold rings are shown, while a two-part earring appears that Unger did not list (Figure 5, upper right, and Figure 39). More puzzling is the appearance in two photographs of part of a Parthian earring set with cabochons (center top). Unfortunately, no notes have been located that would clarify on what basis this earring (and two Islamic necklace elements photographed alone in another negative, perhaps at the same time) was included with the Dilbat objects. Records in Washington and New York show that Herzfeld sold seals and gold jewelry
Figures 5, 6. Seals and jewels from the Dilbat hoard, photographed by Ernst Herzfeld with a Parthian earring (photos: Freer Gallery of Art and Arthur M. Sackler Gallery Archives, Smithsonian Institution neg. nos. 3236, above, and 3233, below)
to the Hahns in the 1920s (see note 18) and offered the Dilbat necklace for sale on Mrs. Hahn's behalf sometime before December 1946. Whether he was the means by which the Dilbat objects and provenance information reached the Hahns before 1914 cannot be proved, but it is a reasonable possibility.

During the summer of 1939, when the Hahns and their son Peter were in England, the Dilbat necklace, four seals, and a few gold items were photographed in the British Museum with a Protoliterate-period stamp seal and three sets of Parthian or south Russian earrings. (This information, kindly supplied by Jonathan Tubb, is preserved in a “deposit book” entry and two photographs taken by the museum; Figure 7 shows the gold items and the later earrings.) The Protoliterate seal and two of the three pairs of late earrings had been purchased by Herzfeld in the Near East.18 It will be noted that the plain and knurled rings in the Unger and Herzfeld photographs, as well as the two-part earring in the Herzfeld photograph, are missing from the British Museum photograph, presumably left behind in Berlin. Herzfeld died in 1948; when the Dilbat necklace was offered to the Metropolitan Museum in December 1946, it was through a New York dealer on behalf of Dr. Hahn, who was then living in Mexico. After the Museum purchased the necklace in 1947, Dr. Georg Hahn gave the four seals to the Museum.

Since 1970 scholarly discussion of the Dilbat objects has been limited to the necklace and seals, with the question of date eliciting varied opinions, as it had in earlier years. K. R. Maxwell-Hyslop adopted a Kassite date for the seals, on the basis of Edmond Sollberger's opinions forwarded by Prudence Harper of the Department of Near Eastern Art at the Metropolitan Museum; 19 she illustrated seal 47.115.2 with its impression, as Unger had in 1930. But for the necklace—which she took to be arranged as it had been in antiquity—she advocated an Old Babylonian date and one closer to 1800 than 1600.20 Of interest here was her citation of two pendants in Leiden of “Ajul type... so close to the Dilbat [rosette] that it could have come from the same workshop as the Babylonian piece” (see p. 24 below).21 Her date for Tell el-Ajjul (“Ajul”) was Middle Bronze II, about 1700—1550 B.C. (for gold objects from this site, see note 10, Lilyquist 1993).

R. M. Boehmer discussed several Dilbat pendants in 1972 and acknowledged the earlier “circumspect and sensitive” opinion of Opitz that he understood to be for a Kassite date.22 Boehmer discounted the dating of the necklace by means of the seals, since even if all items had been found together, the necklace could be later than the seals;23 he inclined toward a Kassite date of about 1500—1300 B.C.24 According to a private communication (August 1993) from Peter Calmeyer, however, Boehmer feels that his opinion may need modification due to a hoard found in 1976 at Larsa, somewhat south of Dilbat. Two pendants were found here with features comparable to those on several Dilbat pendants (cf. Figures 14, 17, 28), and the Larsa hoard was dated by its excavators to the eighth year of the Old Babylonian ruler Samsuiluna, about 1736 B.C.25 This was the first richly granulated object with an archaeologically derived Old Babylonian date.

Winfried Orthmann's entry in the Propyläen Kunstgeschichte also predated the discovery of the Larsa hoard. Understanding the Dilbat necklace to be part of an Old Babylonian or Kassite deposit, of about 1800—1500 B.C., he thought a definite date impossible due to the continuity of goldworking traditions between the two periods.26 Congruent with a late Old Babylonian or early Kassite date were the long proportions of the goddess figures; familiar from the Kassite period were the granulated seal caps. He also suggested that, as kings of the Neo-Assyrian period wore necklaces with divine symbols during the first millennium B.C., the Dilbat necklace might also have been made for a ruler.

In 1978 and 1979, excavations at Ebla (in modern Syria) yielded the second important archaeological find of Near Eastern goldsmithing from the pre-Fall of Babylon era (Figure 32). As published by the excavator, Paolo Matthiae, the Ebla finds provide comparative material for the Dilbat objects—even though they came from a kingdom centered at modern Aleppo rather than near Baghdad.27 These finds were not cited by Joachem Wolters in his 1983 study of granulation; Wolters termed the Dilbat necklace “early Kassite (1700—1600 B.C.).”28 In 1985 Madeleine Trokay noted a connection between pre-Kassite Dilbat granulated objects, the large Larsa disk, and granulated earrings at Ajjul, “approximately 1625—1550.”29 On the basis of Neo-Assyrian representations and the jewels recently found in Neo-Assyrian tombs at Nimrud, Trudy Kawami raises the possibility in a forthcoming article of a first-millennium date for the Dilbat necklace.30
NEW OBSERVATIONS OF THE OBJECTS

It will readily be agreed that the beads and pendants that appear strung together in Figures 1, 3–5, and 7–10 show many styles. The small four-bead spacers at the ends in Figure 1, for example (a-12; see Appendix and Figures 11–22 for this and subsequent gold items, all of which are part of accession number MMA 47.1), are too numerous and too small for the large fluted beads on the bottom row near the center of the necklace (a-2). At the same time, the goddesses (e, f)—with a loop on the back of each head unlike the bails on the disk, crescent, and lightning pendants—were connected to three-bead spacers by modern wires. Also, the small clasp (a-9.1 and a-9.2) was positioned above the crescent, closed and without function. Furthermore, there were no colored beads in the assemblage, an uncommon if not unknown feature of ancient Near Eastern jewelry.

Ancient sources do not support such an assemblage either. Textual references are equivocal, although representations from the Old Babylonian period usually show necklaces made of rows of beads, with only an occasional single disk, or a crescent with a disk, in the middle (see Figure 29; cf. also a single pendant from a first-millennium-B.C. burial, Figure 30). Three or more identical disks may be represented on terracotta figurines of the second millennium, and an actual example of one such collar may have been found at Ebla (Figure 32a). A recently excavated terracotta from Uruk depicting a god of the Underworld (Figure 31) has various adornments on the torso; the Dilbat pendants, with their sturdy bails, could in theory have been similarly fastened to a life-size statue—or have been suspended from a cord on a living person. But there is no evidence for varied types of symbols strung together during the Old Babylonian period or, apparently, the Kassite period. And, although
we may be hampered by not knowing who was allowed to wear such symbols in the second millennium, that they were potent, awe-inspiring entities cannot be doubted.37 Technical considerations also indicate that all five pendants were not made for the same object. The bails show different characteristics: the two rosette disks have a double granulated bail, the crescent a single granulated bail, the ray pendant a double melon bail and the lightning pendant a single melon bail. The pendants also differ in quality: the smallest rosette is the finest and the ray disk the least proficient. (Kim Benzel, a curatorial member of the Museum’s Department of Ancient Near Eastern Art and an accomplished goldsmith, states that the goldworker responsible for the errors on the ray disk is unlikely to have made the two rosette disks as judged by quality and style.) Compositional analyses of some of the items, undertaken by M. T. Wypyski at the Metropolitan Museum, found similar alloys

Figures 8–10. Details of various beads and spacers as strung in the Dilbat necklace in Figure 1 (photos: Bill Barrette)
Figure 11. Various types of melon beads and parts from the Dilbat necklace, actual size (photo: Bill Barrette)

Figure 12. Three types of melon-bead spacers from the Dilbat necklace, actual size (photo: Bill Barrette)

Figure 13. Ball, barrel, and biconical beads with spacers from the Dilbat necklace, smaller than actual size (photo: Bill Barrette)

Figures 14–16. The Dilbat ray disk (MMA 47.1b). Diam. 3.5 cm. Note the incomplete bail at the top, the collapsed hemispheres on the face, and the notched tabs of the bail on the reverse. (photos: Bill Barrette)
Figures 17, 18. The Dilbat rosette pendants (MMA 47.1c–d). Left to right, c: diam. 3.3 cm; d: diam. 2.1 cm (photos: Bill Barrette)

Figure 19. The Dilbat suppliant goddesses (MMA 47.1e–f). H. 3 cm. Note the loop ring on the back of the head for suspension. (photo: Bill Barrette)

Figure 20. Dilbat pendants (MMA 47.1g–i). Left to right, h: w. 2.6 cm; g: w. 1.4 cm; i: greatest diam. 2.3 cm). Note the bails on left and center and the untrimmed plate and off-center loop on right. (photo: Bill Barrette)

Figure 21. The Dilbat seal caps and ear ornament (MMA 47.1i–l). Left to right, j: h. 1.4 cm; i: greatest diam. 2.3 cm; k: h. 1.1 cm; l: h. 1.2 cm (photo: Bill Barrette)
in some objects (expressed in relative weight percentages) but not those that fit together typologically or stylistically:

- small rosette pendant, an a-5 or a-6 melon bead, and an a-14 biconical bead (ca. 78% gold, 22% silver);
- ray disk, large rosette, crescent pendant, and a goddess figure (ca. 89% gold, 10% silver, 1% copper);

bead in a-2 (ca. 89% gold, 8% silver, 3% copper);
lightning pendant (ca. 96% gold, 3% silver, less than 1% copper).

The two rosette disks were cleaned by J.-F. de Lapérouse of the Museum during the course of the present study, and it became apparent that only the lightning forks and crescent (and possibly the “nose-ring”) were visually similar; the ray disk is a rich gold, the large rosette quite yellow, and the small
rosette pale, almost silvery, with patches of red around areas of granulation.

As for possible relationships according to weight, while the smaller of the Larsa disks was one-third the weight of the larger (2.5 vs. 7.5 grams), measurements of the weights of each Dilbat pendant did not show definite relationships:

- ray disk (with collapsed hemispheres and melon bail): 15.75 grams;
- large rosette (with modern reinforcement on back): 15.7 grams;
- small rosette: 7.1 grams;
- lightning: 2.3 grams;
- crescent: 4.5 grams;
- “nose-ring”: 5.5 grams;
- goddess figures: e, 1.95 grams; f, 1.8 grams.

I would suggest that one craftsman made the two rosettes and the crescent (but either at different times or for different necklaces) and that he could have made the lightning forks but would not simultaneously have made the large ray disk or the spacers of Figure 8.

Several general features suggest that the Dilbat objects as listed by Unger were indeed a hoard, that is, a mixed group of scrap and finished objects brought together for an unknown reason. These features are: (1) reported burial in a pot, (2) seals made for at least four different owners (a fifth one was lost), (3) plain and textured rings in large series (additional rings were also reported), (4) condition of bangle (Figure 36), (5) reported quantity of oxidized silver, (6) damaged ray disk and large rosette disk, and (7) “nose-ring” (ear ornament?) if it is considered untrimmed (Appendix, 47.11). At Larsa, the jar-hoard referred to above contained the following:

- gold granulated disk-pendant (Figure 28);
- smaller electrum disk also said to be granulated;
- silver crescent-pendants;
- gold beads and earrings;
- shell ornaments;
- stone beads;
- gold and silver scrap from jewels;
- unworked stone;
- cylinder seal;
- sealings;
- weights;
- stone and metal tools.

Collections of metal are known from Tell el-Ajjul in Palestine (ca. 1650–1450 B.C.39 and from the Kaš shipwreck (ca. 1300 B.C.), to name only two sites that yielded objects that will be discussed below. Such assemblages could have belonged to looters, traders, or temple workshops. Texts from the Old Babylonian temple at Ishchali, for instance, indicate that jewelry deliveries were made monthly, presumably as gifts for a goddess.40 First-millennium Neo-Babylonian texts from Sippar concerning metal-smiths’ work indicate that at that time “the main duty [of goldsmiths] was limited to the repairing of golden objects . . . which [according to texts] were used in very great numbers as adornments of [gods’] garments.”41 While the excavators of the Larsa hoard believed their find to have been the property of a temple goldsmith, buried during a period of danger, other possible owners and reasons could have brought the items together.42 For the Dilbat objects it is enough to understand that the items are quite disparate and unlikely to have been used together or to have been made at the same time by the same craftsman. Given these variables, the dating of individual objects must be carefully considered.

Comparative Dating for the Objects Associated with Dilbat

The objects above have been dated to both the Old Babylonian and Kassite periods. To choose one period over the other, let alone narrow the date within one of those periods, one must wrestle with two factors. First of all, absolute chronology does not exist for those periods. Dates for the Fall of Babylon—the event that brings the Old Babylonian period to an end—can be placed at least half a century apart, depending on which of the currently popular chronologies is chosen. Second, although the arrival of the Kassites in Babylonia is known to have been one of the contributing factors to the Fall of Babylon, there are no extant texts that can be dated to the Kassites until about 1420. In other words, there is a one- to two-hundred-year gap in which there are no dated documents from Mesopotamia.

Notwithstanding these factors, two questions are posed here: (1) can the seals be used to help date the other objects, and (2) does the rich style, fine craftsmanship, and wealth represented by the pendants date to the Old Babylonian period or the Kassite period, and when?

Seals and Seal Caps

The Metropolitan Museum seals are as follows (see Appendix for translations kindly provided by W. G. Lambert):
47.115.1, banded brown and white agate; Figure 23, second from right, and Figure 24 impression. Two suppliant goddesses frame a three-line inscription, open space between their backs. The inscription names the owner, a (m) servant of the god Sin;

47.115.2, banded brown and white agate; Figure 23, right, and Figure 25. A four-line inscription invokes the god Nabû; a suppliant goddess is followed by a bull, lightning fork, and vertical object less deeply carved than the goddess and inscription;

47.115.3, carnelian; Figure 23, second from left, and Figure 26. Four-line inscription with figure, presumably a suppliant female deity. Inscription is a dedication to the goddess Šarpanītum, consort of Marduk, and gives the name of (f) owner;

47.115.4, microcline [feldspar]; Figure 23, left, and Figure 27. Worshiper or suppliant female deity facing a four-line inscription. Like .1, seal names (m) owner, a servant of the gods Sin and Amûrû.

Each of the four seals belonged to a different owner and shows different degrees of wear (see Appendix); two of them—.1 and .2—might have been used with caps (cf. j through n, Figure 22). They appear to have been the work of four different seal carvers. They could well have come from a hoard.

In determining the manufacturing dates of the seals, the problem of a time gap is compounded by the facts that “Old Babylonian” features continue into the Kassite period and “Kassite” features make their appearance already in Old Babylonian.45

All four seals have inscriptions with one or two (divine) female figures. Lambert, in a consideration of the texts on the four seals, dates them to the Old Babylonian period. The type of inscription on seals .1 and .4 is generally considered Old Babylonian, but he goes on to state that the inscriptions of .1 and .4 are “never” Kassite.44 And while the inscriptions on .2 and .3 are typologically Kassite, he states that he can cite examples within the Old Babylonian period for almost all textual features on the four seals (no signs of recarving being evident in the photographs).

Considering other aspects of the seals, a late Old Babylonian date is also justified, although the overlap of styles does not allow certainty.45 In 1948 Porada pointed out that seals with suppliant goddesses and inscriptions “bridge the transition from the Old Babylonian style to that of the early Kassite period when inscriptions became the most prominent part of seal designs.”46 She also pointed out the colorful
nature of the stones used, a feature Dominique Collon also notes. Porada—who was preparing the British Museum Kassite seals for publication at the time of her death and who particularly studied the dating of the Dilbat seals for me—believed all four seals to be Old Babylonian rather than Kassite, although she considered one of them to be quite late and none outstanding or particularly well carved. Klengel-Brandt—who, like Porada, examined the seals first-hand—sees .1 and .3 as seventeenth century but notes that the three shallow symbols on .2 could indicate recarving. Furthermore, the condition of seal .4 is such that Porada had suggested it was worn horizontally and Klengel-Brandt that it was recarved. These indications mean that the seals could have been used for some time before burial in a hoard, and—as Boehmer pointed out—could predate the gold.

As for the seal caps from our Dilbat hoard—each with a series of granulated triangles—they reflect patterning on impressions from the reign of the Old Babylonian ruler Samsuiluna (1749–1712 B.C.) to the end of the dynasty. However, granulated seal caps are associated most with the Kassite period (none exists except for the Dilbat caps). And while Kassite impressions often show more elaborate designs than the triangles on our three caps, the date of about 1425 for the first dated texts leaves open more than a century within the Kassite period where the simpler cap-types may have been used. Interestingly, none of the late Old Babylonian impressions thought to be from Dilbat and published by Klengel-Brandt show granulation. Cap j (and m?) might have been used with seal .1, while caps k and l could have been used with seal .2 (cf. Figures 22, 23). But the caps are not intrinsically dated and are apparently the only granulated examples extant from the Old Babylonian or Kassite period.

**PENDANTS**

Among the Dilbat pendants, the two rosette disks probably offer the best evidence for date of manufacture. Each pendant (Figure 17) has eight rays, eight subsidiary flowers, and eight petals on each flower. F. A. M. Wiggermann states that eight-part flowers are associated with Ishtar, and at least one terracotta plaque of the Old Babylonian period shows such flowers worn at the breast and ears of a female figure. But the rosette was not restricted to one deity, and therefore the association of these disks to a particular deity cannot be definite. The similarity of one disk to the other, however, cannot be ignored.

An Old Babylonian date for the rosettes is suggested by the largest Larsa medallion (Figure 28) and the three Ebla disks (Figure 32a). The Larsa pendant compared with the largest Dilbat disk (Figure 17, left) shows that on both pendants the outer edge is rounded—and lined with rows of granules—and that a dominating central rosette is present; the Larsa disk has six rays and the Dilbat eight; and the Larsa disk has a notched tab on the reverse side below the bail, while the large Dilbat rosette has two such tabs (like the other two Dilbat disk-pendants). However, these similarities should not obscure the fact that the Larsa disk (dated ca. 1736 by its excavators) is simpler and more geometric than the large Dilbat rosette pendant. It has only a small hook for suspension, not a substantial bail; the large Larsa disk has a central field and two concentric rings rather than one unified field (which is also the case with the three Ebla disks); it has hemispheres covered with granules rather than flowers made of granule-covered hemispheres with subsidiary clusters of grains; and it has dotted crescents interspersed with the hemispheres in the outer field. True, the center of the Larsa disk gives the effect of a flower, but the disk is generally geometric and without the rich floral character of the Dilbat disk.

The small Dilbat rosette pendant (Figure 17, right) is even more richly granulated than the large one. While it also has eight rays, the rays are almost
Figure 29. Old Babylonian representations of necklaces with central pendants (from Boehmer, Die Kleinfunde von Bogazköy, fig. 7)

Figure 30. A necklace found in a 10th-century B.C. burial at Lefkandi, Greece (photo: Mervyn Popham)

invisible because of the crowding of the central flower by subsidiary flowers. Compared to the large Larsa disk, this pendant is naturalistic and decorative rather than abstract and symbolic (see Figure 48 for the relative sizes of the disks being discussed). The date of the two Dilbat rosettes compared to that of the large Larsa disk will be discussed in the next section.

The goddess pendants (Figure 19) have “Old Babylonian” connotations. Such figures are often considered representations of the goddess Lama, a protective goddess who is occasionally mentioned in pairs in Old Babylonian texts; texts state that both Samsuiluna and Ammiditana dedicated two statues of her. Agnès Spycket has no suggestion as to how these particular figures were used. A small gold pair is in the Louvre (from “Babylon” in 1909, Figure 33), and a single example is in the British Museum (acquired in 1910, Figure 34). For dating, however, it is perhaps safer to refer to the examples as suppliant goddesses (as on Dilbat seal 11, Figure 24) and to recognize that similar figures appear also in the Kassite period—on seals and stelae and as architectural ornament. Seidl, who has studied Kassite stelae, considers the Dilbat pendants to be Old Babylonian and the earliest items from the group in the Metropolitan Museum.

The large ray disk is probably a symbol of the sun god Shamash, who, as mentioned above, was worshiped at Dilbat (Figure 14). E. Douglas Van Buren wrote that Shamash’s symbol was a disk with four pointed rays, interspersed with undulating streams, but Wiggermann finds six points and undulating rays—as on the Dilbat disk—more indica-
tive of Shamash, and Kawami identifies the Dilbat example as a "shamshatu." Boehmer studied such features in 1972 and connected some starlike disks with the goddess Ishtar; but the Dilbat disk, with its large central boss and undulating rays, certainly gives the impression of a sun symbol, notwithstanding the occurrence of undulating strands on a more decorative object from Ebla (Figure 32c). The tab on the back of the disk is notched.

The lightning fork (Figure 20, center), symbol of the weather god Adad (also worshiped at Dilbat), offers one particular characteristic for dating: its bail is wrapped with wire as on the bail for the smallest Larsa disk.

The crescent pendant (Figure 20, left) is a symbol of the moon god Sin, also worshiped at Dilbat. It finds its closest parallel in shape among examples gathered by Boehmer from Kültepe level Ib (ca. 1810–1740 B.C.) and Boghazköy (after 1500 B.C.). Its staggered-triangle pattern of granulation occurs about 1750–1400 on a nose-ring/earring from Ebla (Figure 32b), earrings from Ajjul, and pendant and cylinder beads from Kamid el-Loz in the Levant (Figures 41–43); the pattern has a history even in the first millennium B.C.

BEADS

Gold beads from our Dilbat hoard could date to the Old Babylonian or the early Kassite period. The ball, barrel, and biconical beads of Figure 13 are ubiquitous, and even the melons of Figures 11 and 12 go back to the Uruk period before 3000 B.C. (round beads with flat ends, ribbing in between, sometimes a distinctive collar between the bead proper and its end). However, melon beads were found in the Ebla tombs cited above (ca. 1800–1600 B.C.), at Ajjul, and at Kassite Aqar Quf (ca. 1400 B.C.). Fluted beads (having concave channels) with wire around each end (Figure 11, a-1 and a-2) are less common; they occur in the necklace of the priestess Abbabashi from the Ur III period (ca. 2112–2004 B.C.) and perhaps in a late Ur III grave at Nippur, all with six to eight flutes (a-1 has eight; the beads of a-2 have more). As the terminology for melon and fluted beads does vary, the references to Ur III times should not be taken to mean that fluted beads date only from that period; several types were found at Ebla.

EAR ORNAMENT AND EARRINGS

The "nose-ring" (Figures 20, 21, i) is thought by Benzel to be a complete object, finished in all respects except for the filing of the two plates at the ends of the curved tube. It thus could be an ear ornament, with the off-center loop designed to carry a suspended ornament. No parallel exists.

The current location of the earrings ("hair-rings") in the Unger and Herzfeld photographs is not known today (Figures 35, 37–39; cf. Figures 4–7). The smooth examples, more than nineteen, could
Figure 35. Gold twisted earrings from Dilbat, detail of Figure 7

Figure 36. Gold bangle and seal caps from Dilbat, detail of Figure 7

Figure 37. Gold braided earrings, detail of Figure 7

Figure 38. Gold smooth and knurled earrings from Dilbat with Parthian earring, detail of Figure 6

Figure 39. Gold two-part earring with braided earrings from Dilbat, detail of Figure 5
probably date to many periods and certainly to the Middle and Late Bronze Ages. The braided and twisted rings have parallels at Tell el-Ajjul, although the correspondence is not exact. The most unusual items are the twelve knurled rings. These appear to be formed of an ear wire that meets in the center with a hollow beaded sheath suspended from it. Two ridged pairs were found at Ajjul (Figure 40), and another example there appears to have been textured. But assuming our rings are second millennium, their closest parallels are fourteenth-century Kassite earrings where the ear wire fastens at the side.

**BANGLE**

The large ring with incised ends (Unger’s “gold wire,” Figures 5, 7, 36) would have been about 7 centimeters in diameter. Parallels exist in both the Middle Bronze and the Late Bronze Ages.

**FURTHER DISCUSSION OF DATE**

We return now to the question of whether additional indications of date might be extracted from the Dilbat rosette disks. There are two general factors that could make such an endeavor promising: (1) the size of the ray disk and the exceedingly high quality of the rosette, crescent, and lightning-fork pendants presuppose a stable culture, wealthy clients, and expert craftsmen; (2) if their provenance is Dilbat, 30 kilometers south of Babylon, its Babylonian rulership could have terminated when the Hittites and Kassites descended in either 1595 or 1525 B.C. On the other hand, these two factors are not aided by a third, namely, that there is very little extant Kassite granulation for study.

The Larsa pendant from southern Iraq and the Ebla jewels from northwest Syria show that high-quality granulated jewelry was created before the Fall of Babylon. The Ebla nose/earring (Figure 32b) has a pattern similar to that on the Dilbat crescent (Figure 20, left, and Figure 43), while a ferrule from the Ebla tombs (Figure 32d) shows that the overwhelming opulence of the small Dilbat rosette was in existence then too. (Even the undulating strands of the Dilbat ray disk are found at Ebla, Figure 32c.) However, the precise, rather dry style of the Larsa and Ebla disks (Figures 28, 32a) also appeared at Ajjul (more crudely) and continued at Kassite Aqar Quf (ca. 1400) and Middle Elamite Susa (thirteenth century).

The dates of the Dilbat pendants do not appear to be far apart, as indicated by bails and tabs, style of granulation, format, and quality. Is there anything that can anchor them more specifically between Ebla and Aqar Quf, no matter what their provenance? Jewels of the Levant (Tell el-Ajjul, Kamid el-Loz) and from the Kaş shipwreck are less fine than those at Larsa and Ebla (see Figure 43 for our objects compared with beads believed to come from Kamid el-Loz), but is this owing to a difference of time or culture? In contrast to Maxwell-Hyslop’s published opinion, I do not believe that all high-quality gold craftsmanship originated in Mesopotamia.

There is no sure answer to this question, but finds from the Levant, Anatolia, and probably Egypt provide additional documentation for consideration, as follows. The Dilbat rosettes have a more decorative, less abstract format than the Larsa medallion. The former have rather naturalistic flowers—the latter, a series of lunar crescents and hemispheres. Wiggermann states that there is too little evidence to say whether this iconographic variability means a chronological difference; Benzbel believes—from a technical standpoint—that the stylistic differences need not mean a different date. However, it should be noted that a further step toward decoration can be observed on two disk-pendants now in Leiden that should be dated after 1500. These pendants are identical to each other except for slight differences in size and detail (Figures 44, 45 for one of them); they are the medallions Maxwell-Hyslop called “so close to the Dilbat [rosette pendants] that [they] could have come from the same workshop as the Babylonian piece[s].” In fact, no rays are present.
on the Leiden disks, only a central flower with five petals and seven such subsidiary flowers. Projecting inward from the edge of each pendant is a series of isolated triangles, and each bail is decorated with staggered and facing triangles. On the back of each disk, a single tab comes to a point rather than a notch, a feature noted on an Astarte-type pendant of the Kaş shipwreck. It is evident from photographs that some of the Leiden petals are dotted, the center of each flower is surrounded by a wire ring, the triangles of the larger disk are poorly shaped, and the back plates of both pendants are bumpy because of impurities in the gold or poor preparation.

While the Leiden pendants have no archaeological context, the pendant from Kaş just cited has a terminus ad quem of about 1300 B.C. Dated perhaps a century earlier are jewels excavated at Kamid el-Loz in modern Lebanon, in which staggered facing triangles decorate the bail of a pendant, gold cylinder beads (Figures 41, 42), and biconical beads that I believe are from the same find (Figure 43, shown with Dilbat objects d, g, h). The Kamid el-Loz pendant has a notched tab in back like the Larsa and Dilbat configuration (cf. Figures 16, 18, 42, and note 57), although its edges are folded as in later Late Bronze II or III pendants from Kaş. Elsewhere I have argued that the tomb in which the Kamid el-Loz jewels were found dates to Late
Figure 43. Dilbat pendants d, g, h with beads believed to come from Kamid el-Loz (gold cylinders and biconical beads, blue frit collared beads) (photo: author)
Figures 44, 45. Front and back of one of two gold pendants in Leiden (photo: Rijksmuseum van Oudheden)

Figure 46. One of two gold falcon earrings in Leiden (photo: Rijksmuseum van Oudheden)

Figure 47. Gold falcon earring in the Musée du Louvre (photo: Bill Barrette)
Bronze I, the pre-Amarna period about 1550–1400 B.C., after the end of the Old Babylonian period in Mesopotamia and before substantial remains of the Kassites are documented about 1420 B.C.

The Leiden disks were almost certainly found in Egypt; they were acquired by the Rijksmuseum in 1828 from Giovanni Anastasi, a Swedish consul who formed a collection in Egypt. From that Anastasi collection also came two falcon earrings (see Figure 46 for one of them) with features similar to those on earrings from Tell el-Ajjul. It is curious that there were two floral disks from Anastasi, one slightly larger and differently detailed than the other, as in the Dilbat group. Also curious is the fact that a falcon earring in the Louvre—acquired in 1827 from the Piedmontese consular agent for France, Bernardino Drovetti (Figure 47)—is virtually identical to the Leiden pair of earrings. There are several instances where Egyptian groups were split up by consular agents, and, as the Leiden and Paris objects are otherwise unparalleled, it is likely that all three earrings and the two rosette disks were from one find in Egypt. In any event, the glittery earrings excavated at Ajjul are no earlier than the end of the Middle Bronze Age and could be Late Bronze I, about 1550–1450 B.C., a period in Mesopotamia that covers the Fall of Babylon up to the time when texts of the subsequent Kassite dynasty can be dated. The Kaş shipwreck referred to above, of about 1300 B.C., yielded a granulated pendant which George Bass, its excavator, thought had its closest parallel in the Leiden earrings.

In summary, the following points have been made: (1) the four seals could have been made in the late Old Babylonian period and deposited before the fall of the dynasty; (2) features on our Dilbat pendants can be compared with jewels from Larsa and Ebla and seal impressions to indicate a date no earlier than 1750; (3) while the Dilbat bails are more complicated than those on the Larsa disks and the fifteenth-century Kamid el-Loz pendant, their notched tabs are not the type used on the Leiden disks or a plaque in the Kaş shipwreck from about the fourteenth century; (4) the Larsa medallion has six rays and a six-lobed central rosette and the Dilbat rosette disks have eight rays, but the Leiden pendants have no rays at all, only a central flower with eight subsidiary flowers. Furthermore, all Leiden flowers have five petals (like examples from Tell el-Ajjul and Late Bronze Age Megiddo), rather than the eight or ten of the Dilbat pendants.

**CONCLUSION**

The parallels for the objects associated with Dilbat range from late Old Babylonian to Kassite. Ancient texts and a recent archaeological survey indicate that Dilbat was occupied in both periods. Various features indicate that the objects could have formed a hoard. Virtually all of the objects have second-millennium parallels.

In my opinion, the manufacture date of the granulated Dilbat pendants is later than the granu-
lated Larsa disk. Goldsmithing is of high quality in the first half of the second millennium at both Larsa and Ebla. If items in the West can be taken as representative of the quality of goldsmithing in Babylonia, the Dilbat items are earlier than the Ajjul/Kamid el-Loz/Leiden-Louvre/Kas objects (dated generally to the second half of the second millennium). The lack of wealth attributable to the early Kassite dynasty indicates that the very end of the Old Babylonian period, 1700–1600 B.C.E., is the best estimate for the manufacture date of all of the Dilbat objects. As for the deposition date of a presumed hoard at Dilbat, the good condition of the small rosette, crescent, and lightning forks should mean that little time had expired between their use and their burial. Perhaps the two seals naming Sin, the scrap, the damaged and incomplete objects, and the pendants in good condition were from a temple storehouse and the event that brought about their burial was the Fall of Babylon. In all events, our Dilbat objects, probably from a hoard, are unique and precious documents from the ancient world.

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NOTES


7. These Kassite remains were not of a culture that would have yielded the Dilbat hoard: Armstrong, personal communication, April 1991.


9. In 1920 he stated that the objects belonged to “Frau Dr. Hahn” and was slightly less definite that they belonged to the period of Hammurapi; Meissner also republished his earlier photograph and a photograph of two cylinder-seal caps (Babylonien und Assyrien I [Kulturgeschichtliche Bibliothek, 1. Reihe: Ethnologische Bibliothek 3] [Heidelberg, 1920] pp. 69–64). In 1926 Meissner identified the period of Hammurapi as dating “ca. 2000 v.C.” (“Goldschmiedekunst, D. Vorderasien” in Reallexikon der Vorgeschichte IV, part 2). Ex Bert, ed. (Berlin, 1945) p. 394; the Old Babylonian period was dated 2150–1850 B.C. in that publication.


15. Opitz, “Beginning of the second millennium” at the earliest. The seal with inscription mentioning Nabium [47.115.2] could be Kassite in all probability, while two others [47.115.1 and -4] were probably also Kassite on the basis of names: that of Ra‘im-ketty occurred in the Kassite period and that of Aziza “also seemed foreign” (the Kassite dynasty was Indo-European and the Old Babylonian, Amorite).


17. Prudence Harper first noticed the Dilbat necklace in the Herzfeld negatives, and Colleen Hennessey very patiently worked with me in using the papers. The negatives referred to
are nos. 310–316 in Photo File 13 (g). Edith Porada did not remember seeing Dilbat objects in the Hahns' home before World War II, which suggests that they were probably kept in a safe (letter of July 27, 1993).


19. Sollberger pronounced the seal with prayer to Nabu. Kassite and the seals naming Parbi and Adad-gamil also Kassite because the names of the fathers were well known in Kassite texts.


21. Maxwell-Hyslop mentions several points which would support an "early Kassite, c. 1600" date for the necklace: a goddess with flounced dress, raised hands, and horned crown—as worn by the two small Dilbat goddesses—appearing on a Kassite stela; the quality of granulation on examples from Canaanite Tell el-Ajjul and Kassite Aqar Quf (ca. 1400; see nn. 78, 82); and the technique of a roundel in Leiden (see p. 25 below). Features suggesting an earlier dating occurred at the Syrian palace of Mari: a frescoed representation of a moon god wearing a crescent, and a costume on the Goddess with Streams like that worn by the two Dilbat figures. She also mentions the Dilbat rosette disk, where nine hemispheres are juxtaposed with an eight-rayed star, but does not explain its significance.


23. Boehmer pointed out that figure pendants are known from Ugarit and Bogazköy in the late Bronze Age, and protective (or suppliant) goddesses appear on Kassite stelae and on seals of ca. 1400–1200 B.C.

24. In fact, Boehmer's supportive evidence for the pattern of granulation on the crescent, the existence of melon beads, and punctate decoration are not specific to the Kassite period: see Lilyquist, "Granulation and glass."

25. Arnaud, Calvet, and Huot, "Ilu-ibnisu, Orfèvre" through a combination of stratigraphy and texts.


27. Matthiae, "Gioielli." For a recent consideration of the dating of the Ebla tombs, see Lilyquist, "Granulation and glass," pp. 44–47.


32. A disk with crescent may be represented on an Old Babylonian figurine from Tello; see Ernest de Sarzec, Découvertes en Chaldée (Paris, 1884) pl. 441, no. 12. The granulated gold pendant in the ca. 1000 B.C. burial at Lefkandi, Greece, must have been an heirloom when buried (Mervyn Popham, E. Touloupa, and L. H. Sackett, "The Hero of Lefkandi," Antiquity 56 (1982) p. 172, pl. 23); the melon beads are gold and the date beads faience.

33. Du Mesnil du Bisson, "Souran et Tell Masin," Berytus 2 (1935) p. 132, pl. 50. The interpretation of three or more disks on the Syrian terracottas is not always clear: M. Mallowan suggested that incised disks might be tattoos, and cf. Selenkahiye, nos. 156 (p. 342, pl. 46) and 58 (pl. 42), in Leila Badre, Les figurines anthropomorphes en terre-cuite à l'âge du bronze en Syrie, Institut français d'Archeologie du Proche Orient, Bibliothèque archéologique et historique CIII (Paris, 1980). Other examples are Sélemiyeh no. 5 (p. 195, pl. 10), Tell Ta'yinat no. 3 (p. 253, pl. 21), and Chagar Bazar no. 6 (p. 285, pl. 30).

34. Entry no. 109 in Elba to Damascus; Art and Archaeology of Ancient Syria, exh. cat., H. Weiss, ed. (Washington, 1985). The representation from Tell Toukhan (Matthiae, "Gioielli," p. 218 n. 54) is not yet published.

35. R. M. Boehmer, p. 33, no. 62, in B. Böck et al., "Uruk 39 (1989)," Baghdader Mitteilungen 24 (1993); see also p. 126, no. 235. The lower part of this god's body is in a net, the upper part is presumably bare. The crescent and rosette below the beard have parallels but not the large rossettes on the shoulders or the crescent and rosette to either side of the beard. The latter are probably not part of a necklace; Nadje Wrede suggests they are earrings. The Dilbat pendants are too heavy to be worn as earrings.

36. Ursula Seidl, personal communication, Jan. 1993: the scale of representations often precludes such details from being shown, however. Opitz had called attention to the lack of early evidence in 1933.


49. Porada, letter of May 22, 1992. Seal 3 has the clearest indication of a late date, being stylistically similar to a British Museum seal she considered post-Old Babylonian (BM 89062: Collon, Isin-Larsa and Old Babylonian Periods, no. 591). This seal also has a line of inscription similar to that on an unquestionably Kassite seal in the Walters Art Gallery (Cyrus H. Gordon, “Western Asiatic Seals in the Walters Art Gallery,” Iraq 6 [1939] p. 15, no. 31) as mentioned in Lamberton, review of H. Limet, Les Légendes des sceaux cassites, in Bibliotheca Orientalis 32 (1975) p. 223. In comparison to the latest Old Babylonian seal impressions from Babylon published by Evelyn Klenk-Brandt, the carving of seal 3 “seems more simplified and made with drill and rotating disk” (see Evelyn Klenk-Brandt, “Altababylonische Siegelabrollungen,” Alterorientalische Forschungen 16 [1989] pp. 253–256). Collon dates examples in the British Museum similar to those here to the late 18th or 17th century.


52. Trokay, “Montures.”

53. A fragment of gold foil with granulation (presumably part of a large bead) was found in a Mitannian temple at Tell Brak in northeastern Syria (David Oates, “Excavations at Tell Brak 1985–87,” Iraq 49 [1987] pl. 59c). The temple is thought to have been built after 1550 and destroyed about 1270 B.C. On the basis of large granulated beads from Ugarit and Cyprus, this bead is probably no earlier than the Kassite granulated items in note 82.


55. Marie-Thérèse Barrelet, Figurines et Reliefs en Terre cuite de la Mésopotamie antique, IFA de Beyrouth, Bibliothèque archéologique et historique LXXXY (Paris, 1968) pl. 29, no. 308. The identity of such figures is not clear.

56. Arnaud et al., “Ilisu-ibnisu, Orfèvre.”

57. Confirmed for the Larsa disk by Harper in Baghdad. The strip has two horizontal incised lines. Each tab of the smallest Dilbat rosette has three horizontal lines incised on it. The purpose of such notched tabs—according to Benzel, to whom I am grateful for numerous discussions—is to create a stronger bond by allowing the solder to flood the joined area more evenly. The small Larsa disk also has a notched tab.

58. This difference has more to do with function than date, according to Benzel, who suggests that the Larsa disk required a different type of mount than the disks for the Ebla “collar” (Figure 31a). The Larsa suspension ring is not temporary; soldering it to the disk would have been done after granulation.


60. Spyczyk, personal communication, Feb. 1991. Maxwell-Hyslop has asked if they were made for statues, personal communication, Sept. 1990.

61. Louvre AO 4696; H. 2.5 cm; British Museum WA 103057, H. 5.55 cm.

62. Bohemer, entry 269a in Ortmann, Der alte Orient.


65. Paolo Matthiae, entry no. 110 (“Round Lid”) in Ebla to Damascus, H. Weiss, ed., pp. 238–239. For a dating ca. 1750–1650 B.C., see Liliqvist, “Granulation and glass,” pp. 44–47. The small disk from the Larsa hoard is similar to the ray disk from Dilbat but lacks undulating rays.

66. See Bohemer, Kleinfunde von Bogazköy, pp. 32–33.

67. Cf., for example, Brigitte Musche, Vorderasiatischer Schmuck, von den Anfängen bis zur Zeit der Achaemeniden (ca. 10,000–330 v. Chr.), Handbuch der Orientalistik VII: Kunst und Archäologie 1, Der alte Vordere Orient 2, Die Denkmäler B: Vorderasien, fasc. 7 (Leiden, 1992) pls. 71, 94, 103–104. See also note 53.


69. Maxwell-Hyslop, Western Asiatic Jewellery, pls. 60, 94b, p. 165; the author also states that fluted beads occur at Mari (p. 91), but I have not been able to locate them.

There was no evidence for rich granulation in Mesopotamia before about 1750 and that Syro-Mesopotamian seal evidence supported a similar date for its occurrence at Byblos. Barbara Porter—a Ph.D. candidate at Columbia—and Kim Benzel have since pointed out to me that the headdress on Byblos fitting 10700 is most likely a peaked cap rather than the horned miter in profile, and that the only dated evidence for the cap is on impressions from Kültepe II (1920–1840 B.C.), not Ib (1820–1740 B.C.) (communications, Feb. 1994; Beatrice Tiessier states that the cap appears elsewhere only on Middle Bronze Age basins from Ebla: “The Ruler with the Peaked Cap and Other Syrian Iconography on Glyptic from Kültepe in the Early Second Millennium B.C.”, pp. 601–612 in Aspects of Art and Iconography, Anatolia and its Neighbors; Studies in Honor of Nimet Özgüc [Ankara, 1993]). Furthermore, Benzel sees the Byblos fitting as integral with Old Syrian seals (and the Ebla basins) where the style is linear, compartmentalized, and repetitious as opposed to circular, well conceived, and opulent—a style that can also be seen on seals from Babylonian Sippar and granulated jewelry at Ebla (“nose-ring,” ferrule, and acorns). Technically, Benzel sees the granulation at Byblos as unique, independent of Mesopotamia, and—although unique in design and highly skilled in the “line” technique—not as well conceived as that in Mesopotamia. Therefore she sees it altogether appropriate to date the Byblos fitting to the 19th rather than 18th century as I had done. I would still date the Egyptian/Egyptianizing objects in the Byblos deposits to late Dynasty 12–Dynasty 13 (further on the fenestrated ax, see Oscar White Muscarella, Bronze and Iron: Ancient Near Eastern Artifacts in the Metropolitan Museum of Art [New York, 1988] p. 387). Relevant to the case at hand—the date of rich granulation at Dilbat—is the date of the Ebla tombs, which I maintain as before. Interestingly, and again from a technical perspective, Benzel does not believe that the granulated earrings of my Ajul Group 1 (Lilyquist, “Granulation and glass,” p. 48) could have been made simultaneously—at the same location—as the earrings of my Ajul Group 2. (Note, however, the naturalism of the stag head versus the angular rosettes in idem, fig. 24b.) The important point at this stage of research is to define style and iconography in these luxury items.

86. Leiden Rijksmuseum inv. AO 1c. Leemans cat. G 337 (diam. 4.8 cm) and G 338 (diam. 4.2 cm); Conrad Leemans, Ägyptische Monumenten van het Nederlandsche Museum van Oudheden te Leiden. II. Monumenten behorende tot het Burgerlijk Leven (Leiden, 1846) pp. 24–25, pl. 42, no. 337; R. B. Halbertsma, ed., Ancient Art: Greece, Etruria and Rome, Chosen from the Collections of the National Museum of Antiquities at Leiden, the Netherlands (Leiden, 1990) p. 147, no. 110 (Leemans G 338). I am grateful to Maarten Raven for photographs and descriptions of the pendants and falcon earrings below.


89. C. Lilyquist, “Objects Attributable to Kâmid el-Lôz” (in press).

91. Leiden Rijksmuseum inv. AO 1d, Leemans cat. G 1272 and 1273; diam. 4 cm according to Olga Tufnell, for which see “Some Gold Bird Ornaments: Falcon or Wryneck?” Anatolian Studies 33 (1983) pl. 22 (G 1273). G 1272 appears in Leemans, Aegyptische Monumenten, p. 29, pl. 46, no. 1272; George Bass states that one weighs 11 grams and the other 12.2, in “A Bronze Age Shipwreck at Ulu Burun (Kaj); 1984 campaign,” American Journal of Archaeology go (1986) p. 287.

92. Acc. no. N 1855a, 4.4 cm diam. including granulation; kind reference from Diane Harlé to the J.-F. Champollion cat. of 1827 (Notice descriptive des monuments égyptiens du Musée Charles X [Paris] p. 81, no. 178).

93. Lilyquist, “General Djehuty.”

94. The Louvre acquired a penannular earring with braided wire decoration (N 1855b) with its falcon earring; a close parallel

Appendix

CATALOGUE OF OBJECTS

GOLD OBJECTS IN THE METROPOLITAN MUSEUM OF ART; acc. nos. 47.1a-1 to 1-14 and b–n, Fletcher Fund, 1947. All measurements are given in centimeters.

BEADS, SPACERS, AND FINIALS: MMA 47.1a-1 to 1-14

I. fluted (concave channels)

a-1: one large bead with eight channels, no core, a wire ring around each snipped hole. Diam. 1 (Figure 11, center right; Figure 9, center bottom).

a-2: fifteen coppery-gold beads with vitreous cores; concave collar, flat ends (Figure 11, top; Figure 9, upper right). No seam visible. String length 9.8; bead diam. 0.8.

II. melon (rounded convex ribs)

A. standard type (convex ribs, pseudo-wire ends, holes turned inward or left with cut edges exposed) with vitreous core.

a-3: one light gold, two pseudo-rings around each hole (Figure 11, center; Figure 9, lower right). Width 0.8.

a-4: five smaller, one pseudo-ring around each hole (Figure 11, center left; Figure 9, left). String length 3.5, bead width ca. 0.6.

B. standard type, no core

(1) large

(2) medium to small

a-5: one triple-bead spacer, and parts that would have made three additional such spacers: three broken doubles and three broken singles (Figure 12, upper left; Figure 10, top). Strung with slim triples (see below). String length 4; standard melon 0.5 wide, slim 0.3 wide.

a-6: three doubles and six singles strung together (Figure 12, upper right). String length 3.8; width of bead 0.5 + .

(3) small

a-8: eight slim (Figure 11, bottom left). Note flat ends with holes punched in. String length 3.5, bead width 0.4. Several may have core inside but their shape is more similar to a-8 than a-4.

a-9.1 and a-9.2: one clasp with sleeves that fit one into the other (Figure 11, bottom center). Basic unit is a slim melon with a sleeve fused over one end; a concave ring over other end, on the outer edge of which is a pseudo-wire edge. Width of each half of clasp, 1.

a-10.1 and a-10.2: two caps, for a cylinder bead? (Figure 11, bottom right). Each 0.6 wide. Each formed of a slim melon; a ring (incised with three parallel lines) fused to one end, a collar and disk (with core?) fused to other, a wire ring
covering the join. Diam. of incised rings same, so that one cannot fit inside the other.

C. slim, no collars

(1) medium: one triple; two doubles and three singles with tears or residue that indicate beads would have made two more complete triples; one single with residue that could have been part of a double or triple. All strung in a-5 (Figure 12, upper left; Figure 10, top).

(2) small: eight doubles. All strung in a-7 (Figure 12, bottom; Figure 10, bottom).

III. ball
A. a-11, brassy: two triples, fused; forty-six singles. Holes cut in (Figure 13, top; Figure 8). String length 5.7; 0.2 width bead.

B. a-12, small: five quadruples, fused and with reinforcing strips on back; twenty-four singles (Figure 13, center; Figure 8). Holes turned in. String length 2.7; bead width 0.2.

4. barrel
a-13, two individual, one triple spacer (Figure 13, bottom left; Figure 8). String length 1.3; bead width ca. 0.4.

5. biconical
a-14, thirty-two small individual (Figure 13, bottom right; Figure 8). Ends cut. String length 11.5; bead width ca. 0.3.

PENDANTS: MMA 47.1b–h
b, Sun or star (Figures 14–16):

H. 4.6, diam. 3.5. Round disk. Object was made by first attaching two strips at the top that clamp the disk. In the back, these strips are notched; in the front, they have been worked into the surface of the disk so that they are not visible. Each of the strips—covered by an incised sleeve with its opening at the back—runs into a melon bail of standard type. The melons appear to have a collar at each end that is capped by a disk with a band fused to its outer edge.

Decoration of disk consists of a rounded wire along the edge, passing over the suspension strips; a flattened hemisphere surrounded by a round wire, a small ball on top; radiating “V’s” and wavy lines (each set made of two wires that converge at a point, a wire between them; the straight rays point outward, the undulating rays point inward); and a series of twelve hemispheres.

Three hemispheres on the face are broken open (Figure 15), and part of the double bail is missing (Figure 16). Benzel states that these features are evidence of overheating, and, in fact, the entire disk has a melted look. Some areas are extremely shiny; this brightness and layering and blistering are indications of overheating, according to Benzel; and the surface is uneven due to impurities or poor preparation.

c, Large rosette (Figures 17–18, left):

H. 4.4, diam. 3.3. Round disk. Suspension seems to be effected only by notched strips on back sheet that run up through sleeves and merge into the bail itself. Each strip covered by a sleeve lined with four rows of granules. Bails may be series of five wires laid side by side, a concave collar at either end which is faced off by a disk with a wire edge. Reinforcing strip on back is modern, strengthening a tear.

Disk has convex strip of gold placed along its outer edge; three rows of granules line it and two rows edge it. In the center of the disk sits a large eight-petaled flower from which radiate eight square-cut rays, each with a row of grains on it. The flower is formed as follows. A collar supports a lobed plate with a hemisphere in its center. This hemisphere is covered by grains and surrounded by a square-cut wire. On each of the lobes rest clusters of granules surrounded by a round or square-cut C-shaped wire.

Beyond the central flower are eight subsidiary flowers, also composed of a supporting collar, lobed plate with a clump of granules on each petal, and a central hemisphere covered with grains; these flowers have ten rather than eight petals.

d, Small rosette (Figures 17, 18, right; Figure 43):

H. 3.4, diam. 2.1. Generally the scheme of c, but the flowers are more closely packed; the workmanship and condition are finer; the granulation is more elaborate (a row of granules is added along the edge of each petal of the central flower). All wire is square-cut except for that bordering each petal of the central rosette. The bail is similar to c’s, but each strip is covered by a band with three rather than four rows of granules, and each notched strip in back is incised with three lines.

Suspension strips clearly go into the bail melons. The convex gold strip along the circumference of the disk is lined and edged with four rather five than rows of granules. The petals of the central rosette sometimes show a larger ball
as a nucleus.
e and f, Goddesses (Figure 19):
H. 3. Each goddess is made of a piece of sheet gold with a seam down the back. Wire arms and striated suspension loop emerge from within the body, and the loop curves upward to fuse to the hair. The base plate has a hole in its center; its corners turn up (untrimmed, as suggested by Benzel), and the collar placed in its center receives the figure. The headdress has four sets of horns and is flat on top; the dress has six rows of flounces. The hands are held in a way that makes one of them fairly vertical, while the other is below and cupped toward it. Unger mentions damage ("Kunstgewerbe, I. Schmuck," p. 356); microscopic examination shows that the right arm and shoulder area of e are damaged, and a bit of gold adheres to the face. The right cheek of f has an indication that the right hand was once against it.
g, Lightning (Figure 20, center; Figure 43):
H. 3.3, W. 1.4. Each fork is made of a length of strip square in cross section (or possibly one continuous strip); a row of granules lines each face. At the top, wide suspension strips grasp the forks from front and back and run upward into a bail with standard melon form. These suspension strips are wound with twisted wire, square in cross section; the melon is the type used in a-6.
h, Crescent (Figure 20, left; Figure 43):
H. 2, W. 2.6. Crescent hollow. Rounded wire lies along top and bottom edges; these are pinched together at ends and are bordered with granules that get smaller at the crescent tips. Between the granules are small-gauge grains that make a staggered-triangle pattern on the front and a diamond pattern on the back. The flat suspension strips emerge from the top of the crescent top on either side of the wire, pass through a sleeve lined with three rows of granules, and merge into a bail bead. The bail is like the two rosette pendants, but single.

EAR ORNAMENT?: MMA 47.11i (Figure 20, right; Figure 21, second from left)
i, Greatest diam. of ring, 2.3. The object is composed of a tube with six rows of granules along its length; each end is covered by a sleeve and a plate. The smaller plate is square; the larger has only one straight side. A ring with two rows of granules is placed on the side of the tube. Benzel thinks the larger plate looks untrimmed, a sign that the object was never completed; filing would have been the last step in production, after granulating and soldering.

SEAL CAPS: MMA 47.1j–l
j. Large (Figure 21, left; Figure 22, second from right):
H. 1.4, inner diam. 1.3. Top surface has a hole with one row of granules (of various sizes) surrounding it; a knob was probably pulled away from the center of it. Circumference has series of six triangles, each with nine grains to a side (nine grains = 0.5); triangles rest on edging consisting of wire, row of granules, and second wire and are connected to one another by several grains. Gritty "plaster" inside cap, almost flush with edge; sides quite straight. Diam. roughly that of seal 47.115.1; could be used with it (for instance on a necklace), as long as seal did not have to fit into caps.

k and l, Pair (Figures 21, right; Figure 22, left):
H. 1.1 and 1.2, inner diam. 1. Same scheme as j, but triangles total eight and are close together, each side made of eight grains (also equaling 0.5). Sides taper in toward top, where there is a button. Top of button was a separate piece; hole in its center has ridge around it. Gritty "plaster" inside cap recessed 0.1 from bottom. Diam. approximately that of seal 47.115.2; could be used with it as long as seal did not have to fit into caps.

PARTS FOR SEAL CAPS?: MMA 47.1m–n (see also a-10.1 and a-10.2 above)
m, Fitting (Figure 22, center):
Diam. 1.0. Not from j (contra Herzfeld photo), but possibly from (missing) cap paired with j. Outer surface shaped like a bowl turned inward at the edges; in its center, a hole. Within the bowl sits a ring, the upper edges of which are torn.

n, Tapered cylinder (Figure 22, right):
Diam. 0.8. One edge is torn; the other has two parallel wires along its edge.

CYLINDER SEALS IN THE METROPOLITAN MUSEUM OF ART; acc. nos. 47.115.1–4, Gift of Georg Hahn. Translations and comments on date supplied by W. G. Lambert. The inscriptions on seals 0.1–0.3 lack a boxing line at the bottom.1
0.1 (Figure 23, second from right; impression Figure 24):
H. 2.9, diam. 1.4. Brown and white agate, edges least chipped.

pa-ar-GA (?)  ParGA (?)
dumu a-ZI/GI-ia  son of Aziya/Agiya.
ir *EN.ZU  servant of Sin.

The reading of the father’s name is unsure. Aziya occurs in an Old Babylonian text from Ur;² Sollberger, however, read Agiya, which is attested in the Kassite period. It is impossible to know which reading is correct.

0.2 (Figure 23, right; Figure 25):

[R]A(?)

[PA(?)] sag bi gal
ur4/kin nir di/ki(?)

su[m]?  who gathers all decrees.

Although the inscription type is Kassite, it occurs rarely on dated Old Babylonian tablets.³

0.3 (Figure 23, second from left; Figure 26):
H. 2.1, diam. 1.0. Carnelian; edges chipped.

dar-pa-ni-tum  Zarpanitum,
nin ša.la.su  merciful lady,
là-ma-sà-ni  Lamassani,
géme úh-la-ra-AN  slave girl of . . . . . .

The style of the text is better known as Kassite, but the name of the owner does occur in an Old Babylonian letter.⁴

“[The] title is the mystery. After “slave girl” one must have a divine or royal name, and if it is a god, then it must be a foreign god, since there is no divine determinative. There is no known king with a name which fits the somewhat difficult signs. However, unknown kings did exist, e.g., the Hana kings are partly known, and no doubt others existed of which we know nothing. So it could be a royal name. In other periods “slave” or “slave girl” can be used before an official’s name, but I do not remember any Old Babylonian seal with this feature.”

0.4 (Figure 23, left; Figure 27):
H 2.1, diam. 1. Microcline. No border top or bottom.

*adad-ga-m[il]  Adad-gamil,

dumu ra-im-ki-ti  son of Râ’im-kitti,
ir *EN.Z[U]  servant of Sin
ù *mar.d[ù]  and Amurru.

The name of the father is attested in Kassite period documents, but occurs in fuller orthography in the reign of Abi-esuh [Old Babylonian ruler between Samsuiluna and Ammiditana, 1683–1639 B.C.].⁵

ITEMS IN EARLY PHOTOGRAPHS SAID TO BELONG TO THE HOARD, PRESENT LOCATION UNKNOWN

Two gold twisted earrings (Figure 35). Wires quite thick and tapered toward each end, twisted all the way to the ends.

Two gold earrings with braided pattern (Figures 37, 39). Commonly such patterns were created by placing wires twisted in opposite directions side by side. The ends of these earrings are smooth; one earring is very worn.

[Gold] “double” earring (Figure 39). Two rings placed side by side; some texture on the surfaces.

Plain gold rings (Figure 38). Hollow, ends tapered.

Knurled gold earrings (Figure 38). Apparently a wire tapered at each end with a beaded sheath—tapered toward each end—suspended from it.

Gold bangle (Figure 36). According to Unger, 20 cm long, 3.5 mm thick. Four incised lines around each end.

NOTES


