

# A MIDDLE BRONZE AGE III JUG FROM THE LEBANESE COAST AT TELL ABU AL-KHARAZ, JORDAN VALLEY

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## INTRODUCTION

Excavations at Tell Abu al-Kharaz in 1998 uncovered an atypical bichrome-decorated jug in Area 7, which is in the northern part of the site (see map in Fig. 1). It shows some resemblance to Cypriote Bichrome Wheel-made Ware as regards the overall

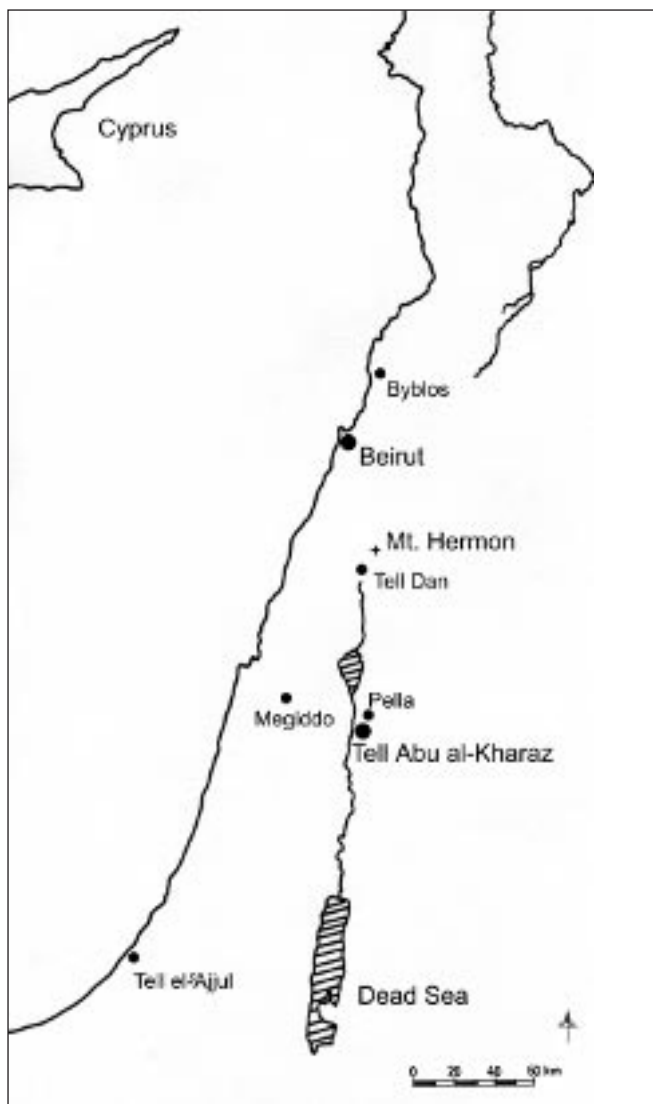


Fig. 1 Schematic map of the area with some of the places mentioned in the text

shape, and a certain kinship with Chocolate-on-White Bichrome, which is a not uncommon find at Tell Abu al-Kharaz, as regards the light pinkish-white, burnished, slip and the decoration in reddish-brown and black. It was decided to investigate the fabric of the vessel petrographically. The results of this analysis, the report on the find context and the proposed chronology will be presented.

## The jug (Fig. 2)

### 1. Description

Id. no. K98XLAL215-1: Jug with flared rim, long, wide neck with diverging profile, globular body, one vertical handle on shoulder, slightly raised flared ring base; wheel-made, medium-hard-fired<sup>1</sup> (approximately 4 according to Mohs index) under oxidizing conditions, pinkish-brown medium-fine<sup>2</sup> fabric, a few



Fig. 2 The jug from Tell Abu al-Kharaz

<sup>1</sup> The surface can easily be scratched with window glass.

<sup>2</sup> This refers to a modified Wentworth scale (WENTWORTH 1922: 377–392; 1933: 633–634; intermediate sizes are

recorded as well in the description of the illustrated vessels; cf. FISCHER 1999: 4 and *passim*).

coarse grey and reddish-brown inclusions, thin pinkish-yellowish-white slip, wheel-burnished, reddish-brown and black (or rather very dark greyish-brown) decoration.

### 2. The colour measurements

The results of the colour measurements with a Micro Colour Analytical (MCA) device according to the method described in FISCHER (1999 and references<sup>3</sup>) are presented in Table 1.

Colour measurements <sup>4</sup>	a+	b+	L	C
	(red)	(yellow)	(intensity)	(saturation)
fabric	13.1	20.7	47.4	24.5
slip	8.2	16.9	70.9	18.8
“red” decoration	16.2	8.4	41.9	18.3
“black” decoration	10.5	8.2	44.1	13.6

Table 1 Colour measurements of the fabric, slip and decoration

### 3. The petrography

Y. Goren, Tel Aviv University, writes:<sup>5</sup>

“Petrographically, it presents a very interesting combination of two rather unrelated geological formations: the matrix is marine Miocene marl with its typical features (foraminifera etc.) but the inclu-

sions come from the lower members of the Lower Cretaceous sandstone and tuff formations, including the typical trachytic basalt that exposes in Lebanon. The Miocene marl which does not expose south of Tyre indicates a coastal Lebanese provenance. The only place where the two formations meet is the area between Beirut and Juniah on the Lebanese coast. So Beirut is a good candidate but Byblos is too remote.”

### The find context<sup>6</sup> (Figs. 3 and 4).

#### 1. The area

The jug was excavated in 1998. It derives from Area 7, which is in the northern part of the site just below the flat-topped plateau of Tell Abu al-Kharaz and close to a steep slope. The dominating structure in this area is the stone-built city wall to the north which runs along the steep slope in an approximately east-west direction towards the Jordan Valley. It was constructed at the end of the Middle Bronze Age (MB) period but it was reused at least as a foundation for new structures during all phases until the Iron Age. Domestic buildings and structures which show signs of industrial activities were built against the city wall. Remains of three occupational phases, namely Phases IV/1–2 and V, which belong to the earliest phases of reoccupation after the Early Bronze Age,<sup>7</sup> were discovered.

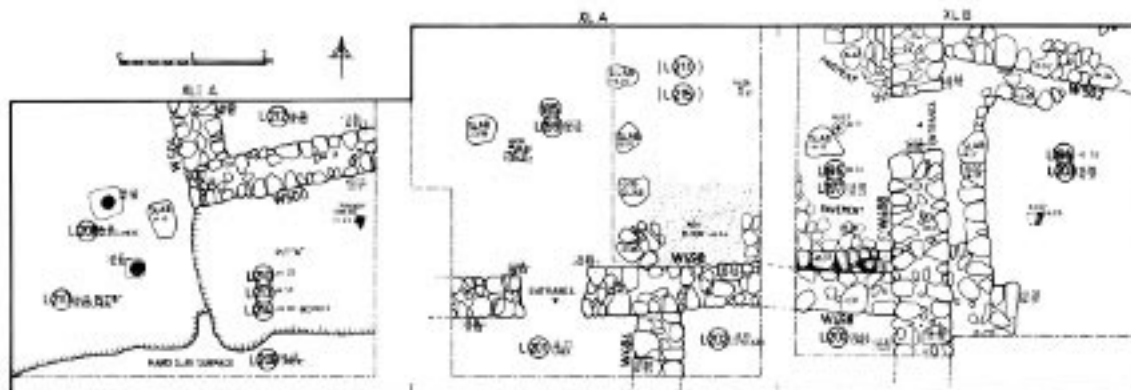


Fig. 3 Part of Area 7 with test trench outlined (L211, 215)

<sup>3</sup> This refers to an easily accessible short version of the study of the recording of colours, which is based on FISCHER 1988.

<sup>4</sup> Average of five measurements each (fabric, slip, “red” and “black”)

<sup>5</sup> A more comprehensive report is forthcoming (email from Y. GOREN on September 2, 2002).

<sup>6</sup> FISCHER 2006a.

<sup>7</sup> The site was not occupied between the end of EB II Phase III) and the later part of the MB (Phase IV/1), i.e. an occupational lacuna of more than thousand years (FISCHER 2000).

## 2. The find context in relation to the phasing of Area 7

The carefully built foundation of the city wall follows the natural course of the tell in this area from east by south to west by north. It is here approx. 2 m wide and preserved to a height of 0.7 m. The foundation trench of this wall, which was dug into EB (Early Bronze Age) layers, could be exposed at several spots.

There are a number of closed rooms and open spaces from the phase immediately postdating the remains of the test trench from which our jug derives (Fig. 3). They form a casemate system. One of these rooms is Locus (L) 196, 203 limited by Walls 488 and 502. Another space, a paved and roofed courtyard, is to the west (L195, 197). It could be reached through an approximately 0.8 m entrance and is limited by Wall 498 to the south. Remains of a stone pavement were found in the courtyard. A stone-lined posthole and three stone slabs lie in a row and represent, together with additional stone slabs, the bases of wooden roof supports. A lot of ash was found in this space and is very likely the result of the destruction of a straw roof by fire. Another open space could be reached west of the row of stone slabs (L185, 199). An additional stone slab for a wooden roof support was found here. Part of a furnace, a tuyère and a lot of

ash were exposed in this space. A 0.8 m wide entrance leads to another room to the south (L201). An additional room (L200, 202), separated from the former by Wall 484, lies to east of the former room and to the south of the paved courtyard (see above, L195, 197). Only the corner of a structure was exposed in the westernmost part of Area 7 (Walls 500, 504; L212). The loci south of this structure were disturbed and are a mixture of all periods found at the site (L208, 209, 210, 213, 214).

A test trench in the eastern part of Trench XLA (L211, 215; Fig. 4) exposed one of the earliest MB occupational phases at the site, which is in fact late in the overall MB sequence of the Levant. A destroyed wall and a posthole were found together with our jug, which lay in destruction debris with a lot of ash. The jug was stored in a structure which burnt down, collapsed and broke our jug. Evidence of this can be observed on its surface and on the broken sections as dark coloured patches and traces of ash.

The pottery from the two loci to which our find belongs is as follows:

L211 Parts of: 1 Chocolate-on-White (I?) jar; 1 decorated juglet; 79 undiagnostic body sherds; and 3 residual EB sherds.

L215 Parts of: 1 Chocolate-on-White Bichrome sherd, 1 Chocolate-on-White (I?) sherd, 1 bowl, 1 concave disc base of a decorated bowl, 1 sherd of a decorated bowl, 1 jug, 1 cooking pot, 14 bichrome-decorated sherds; 150 undiagnostic body sherds; and 86 residual EB sherds.

## CONCLUSION AND DISCUSSION

There is evidence of three occupational phases in this area which to judge from the pottery belong to Phases IV/1–2 and V. There is a closed casemate structure, which includes the city wall, interrupted by open spaces. One of the latter is exemplified by the find of an oven of the *tabun*-type which was built against the city wall in the eastern part of Area 7. Manufacturing activities are demonstrated by the following finds: a lime-plastered bench with numerous unfinished flint tools which proves the local production of lithic tools;<sup>8</sup> and the find of a part of a furnace, the tuyère, in an area with a layer of ash close to the spot where our jug was found. This may point to production of copper, or, as is more likely

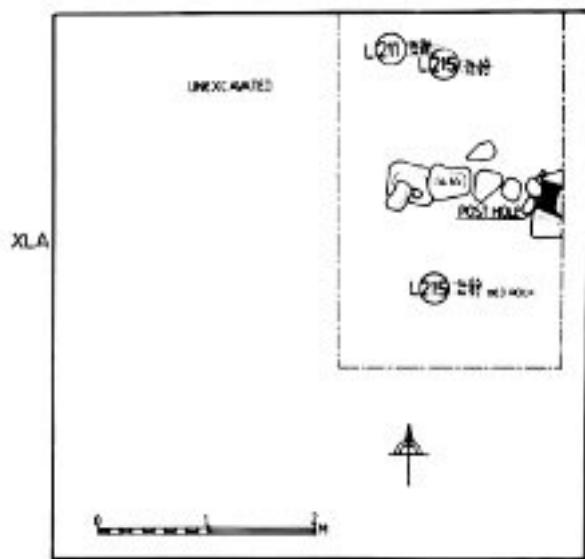


Fig. 4 Test trench Area 7

<sup>8</sup> These features are to the east of the detailed plan illustrated in Fig. 3.

considering the geographical position of Tell Abu al-Kharaz far from any copper ores, it may indicate rather the alloying of copper and/or the remelting of bronze scrap and casting.

The pottery which was found together with our jug includes sherds of Chocolate-on-White I(?) and Chocolate-on-White Bichrome, together with examples of locally produced bichrome decorated fine wares, e.g. the Jordan Valley Burnished Bichrome Ware (cf. FISCHER 1999: 23–24 and figs.). The finds from the test trench belong to a phase ante-dating the exposed area where the industrial activities had taken place. However, in the light of parallel observations from other areas at the site it is not unlikely that extended excavations of the test trench may expose an area where similar activities took place. It may also be the case that some of the walls, which are now exposed and which are associated with Phases IV/2 and V, were originally built in Phase IV/1.

Exact parallels from sites along the Lebanese littoral around Beirut could not be found.<sup>9</sup> There is a jug from Petrie's excavations at Tell el-*c*Ajjul (PETRIE 1933: pl. 38: 60Q11) which is very similar as regards the overall shape but not the bichrome decorative pattern. EPSTEIN (1966: pl. II:11) has listed this specific jug as "Palestinian" Bichrome Ware, which is obviously an erroneous name because the majority of the vessels shown in Epstein's publication are Cypriote according to ARTZY (e.g. 2001: 161 and note 7). The provenance of this jug is "City II" according to Epstein, although the evidence for this is not clear. Horizon 5 (H5) of the new excavations at Tell el-*c*Ajjul provides parallel shapes to those from L199 at Tell Abu al-Kharaz, which post-dates our jug (FISCHER and SADEQ 2000, 2002; FISCHER 2003a). H5 is provisionally dated to the transition MB/LB, which corresponds, to judge from the imports from Cyprus and Egypt which were found in H5, to Late Cypriote IA2/B, and to late Hyksos to early 18<sup>th</sup> Dynasty.<sup>10</sup> Related shapes come from, for example, Megiddo X (LOUD 1948: pl. 39:5–10), where they were found together with Proto White Slip.<sup>11</sup> Shoulder handles, although we do not know if our vessel had a single or double handle because the handle is missing,

are quite typical of late MB contexts (cf. MAEIR 1997: 112–113) but they seem to appear already in Stratum XII ("MB IIA") at Tell Dan (ILAN 1996: 224, fig. 4:82). The author studied all available Chocolate-on-White vessels from Pella Tomb 62 at the University of Sydney (Pella House and Nicholson Museum). Fifteen of 29 investigated jugs are of Type II (FISCHER 2003b), i.e. high shoulder, on handle on shoulder, monochrome- or bichrome decorated. This type is closest to our vessel as regards the general shape. The 15 jugs from Pella Tomb 62 belong to the Chocolate-on-White I–II, and Chocolate-on-White Bichrome (FISCHER 1999). Tomb 62 is dated to MB IIC (MB III)–LB IA.

Our jug shows an interesting combination of features which are characteristic of Cypriote Bichrome Wheel-made Ware and of Chocolate-on-White/Bichrome, although it is different from both groups. The provenance of our jug is according to the petrography the area around Beirut, which lies between one of the proposed centres of production of Chocolate-on-White, namely the Mt. Hermon area, and the east coast of Cyprus, where Bichrome Wheel-made Ware was produced. Impulses from both the north-west and the south-east as a result of trade and inter-cultural contacts during this period have certainly influenced the shape and decoration of our jug. The date of the jug is according to the find context at Tell Abu al-Kharaz one of the earliest phases during the re-occupation of the site after the occupational lacuna which lasted from EB II until the later part of the MB (FISCHER 2006a). A date in the MB III is suggested on the strength of the internal sequence, in particular, and also of material from Tell el-*c*Ajjul, Tell Abu al-Kharaz, Pella, and Megiddo and the associated imports from Cyprus and Egypt.<sup>12</sup>

How and why did the jug arrive at Tell Abu al-Kharaz? I have pointed to different centres of production as regards Chocolate-on-White in my basic study of the typology, chronology and provenance of this ware, which in fact consists of six sub-groups (FISCHER 1999). One of the suggested centres of production of Proto-Chocolate-on-White Bichrome and Chocolate-on-White I is southern Lebanon, possibly

<sup>9</sup> I would like to thank C. Doumet-Serhal for her efforts to provide parallels to our jug from the Lebanese littoral.

<sup>10</sup> HEIN (2001: 129, fig. 4:29 – "8490"; 133, 134) and M. Bietak (personal communication) prefer the later date, in contrast to BOURRIAU (1997: 180, fig. 6.19: 9).

<sup>11</sup> OREN (2001: 130, fig. 2) listed one of the jugs from

Megiddo as Cypriote Bichrome Wheel-made Ware deriving from Megiddo X together with, inter alia, Cypriote Proto White Slip.

<sup>12</sup> The terminology is in accord with FISCHER 2006a: 358–364. The previous discussion highlights the problem of the transitional MB/LB period and assignment to either.

the area surrounding the Mt. Hermon massif. Near Rashiah el-Fukhar, for example, modern pottery is made of the same petrofabric (p.c. Y. GOREN). The distance from there to the area around Beirut from where our jug is assumed to come is less than 100 km, which is approximately the same distance as from the southern slopes of Mt. Hermon to Tell Abu al-Kharaz. Chocolate-on-White was very popular at Tell Abu al-Kharaz during the MB III and until the LB IB, and also, for example, at Pella (FISCHER 2003b), as finds from recent excavations have proved. The pottery from there undoubtedly reached Tell Abu al-Kharaz via the Hula Valley, passing Tell Dan and Hazor, and very likely continuing along the eastern shore of the Sea of Galilee<sup>13</sup> and further south along the Jordan Valley on its eastern side. This ware, together with other decorated table wares such as imported Cypriote Bichrome and Cypriote White Slip, was certainly the most exclusive painted ware on the Levantine market<sup>14</sup> towards the end of the Mid-

dle Bronze Age and at the beginning of the Late Bronze Age (FISCHER 2000). The predilection of the inhabitants of Tell Abu al-Kharaz for such an outstanding product of a highly developed ceramic industry as Chocolate-on-White was very likely also a reason for importing and testing similar products such as our jug. The petrography suggests the area around Beirut as the area of production from where it was mostly likely shipped to the Mount Carmel area and from there over land through the Jezreel Valley passing Megiddo and Beth Shan to Tell Abu al-Kharaz. A land route from Beirut to Tell Abu al-Kharaz seems to be more unlikely. It should, however, be emphasized that our jug, although of good overall quality, did not reach the high level of production technique of Chocolate-on-White. This together with the more remote position of Beirut may for the time being serve as an explanation of why our jug and corresponding wares are such rare finds at the site.

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<sup>13</sup> Compare the road maps in *Länder der Bibel* (1999: 14–15, Map 1.1) where the map suggests a road only along the western shore of the Sea of Galilee during the Iron Age, but a western and eastern road passing the Sea of Galilee during Roman times (*ibid.*: 16–17, map 1.2).

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<sup>14</sup> Only a few finds of Chocolate-on-White are reported from Lebanon, Syria and Egypt (see discussion and references in FISCHER 1999: 2; 2006b).

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