

Claude Doumet-Serhal
Dafydd Griffiths

MIDDLE BRONZE AGE JARS FROM LEBANON: A COMPARISON ACCORDING TO VESSEL CAPACITIES

38

The capacities of the Middle Bronze Age jars from Sidon and Tell el Ghassil have been calculated for the purpose of comparison with the Tell Arqa jars (Thalman, in this issue p. 26, fig. 1), with the ultimate aim of investigating whether there might be a correlation between capacity and function or whether there might be some discernible pattern in the capacities that might indicate the use of standard units of volume. The capacities of vessels from Sidon and Tell el Ghassil were determined by using a scale drawing and approximating the internal volume to that of a series of squat cylinders. Each cylinder having a volume of $\pi r^2 h$. In spite of the objections that have been raised as to the appropriateness of using tomb vessels in an attempt to classify vessels by volume all capacities were calculated. Estimates were made even when the jar necks were broken. Volumes are calculated up to the narrowest point of the neck.

The majority of jars in the earliest phase of the Middle Bronze Age MB IIA/ MB I/1 at Sidon are vessels with small capacities ranging from 5 to 10 litres. Another distinctive early form also found in this period is the spouted hole-mouth jar with an average capacity of 22 litres (see p. 7-8).

Two storage jars from Sidon's phase 2 with a much larger capacity of respectively 43 and 63 litres combine a technique of manufacture whereby the body is handmade and the neck is separately

thrown and added afterwards. Sometimes an applied band of clay is added around the join (see also a jar with a capacity of around 115 litre in phase 4). In other examples the join itself is directly incised. Both of these serve the dual purpose of decorating (disguising) the join and strengthening it (see p. 11, 32).

On the basis of this production technique the Byblos Montet jar was dated between the Early and the Middle Bronze Age (see p. 11). This same mixed technique observed by Thalman in Tell Arqa phase N (see p. 32) is also found in Tell el Ghassil level X.

Most of Sidon's vessels from phase 3 and 4 are not easily transportable because of their larger capacity and the absence of handles.

The classical Canaanite jar with two handles and a capacity of 25 to 30 litres believed to have been used for transportation became popular in Tell Arqa's phase M. This type of jar remains poorly represented at Sidon. Sidon's two-handle jar has a capacity of only 19 litres and may have been used as a household vessel for short-term storage. The same applies to the Tell el Ghassil jars which have a capacity of between 4 and 10.5 litres.

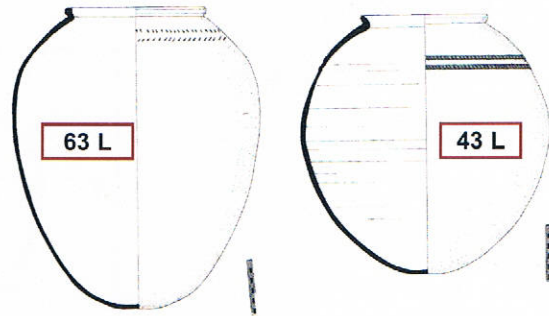
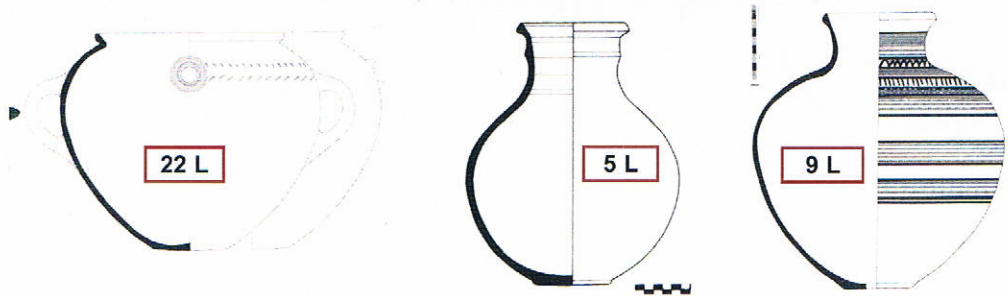
This investigation of jars according to vessel capacity has not enabled us to determine the precise function of each vessel. It may be that data from future excavations will provide information whereby function can be related to vessel volume.

MIDDLE BRONZE AGE JARS FROM LEBANON: A TENTATIVE
COMPARISON ACCORDING TO VESSEL CAPACITIES

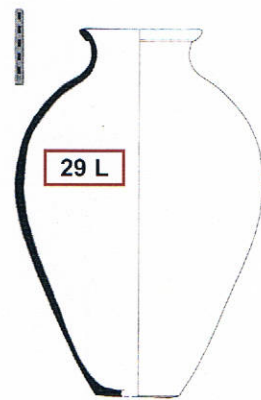
SOUTH LEBANON

SIDON

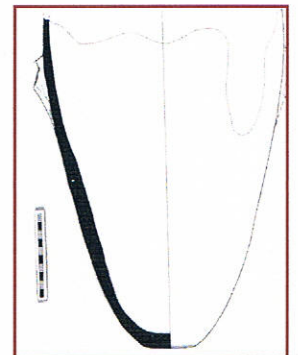
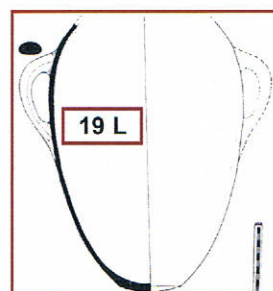
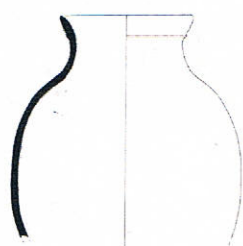
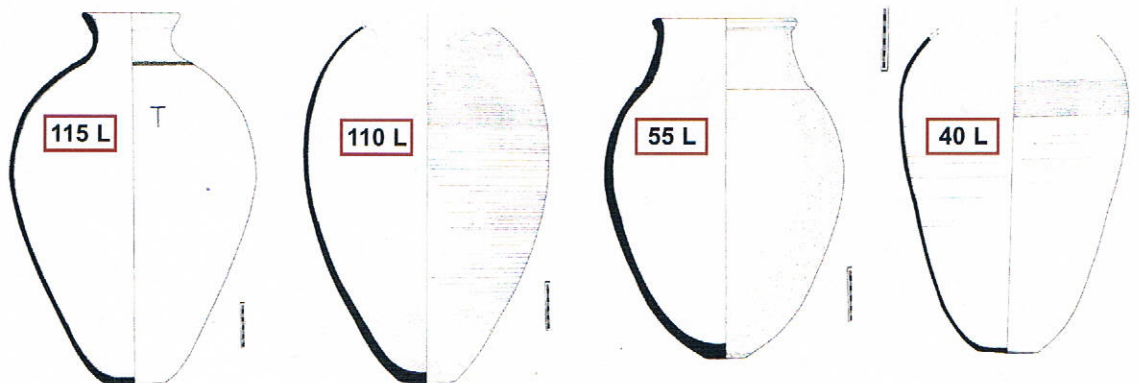
Phase 1 & 2
MB I = MB IIA



Phase 3
MB II



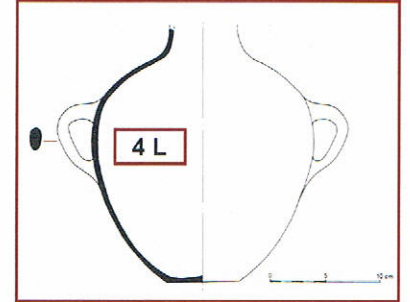
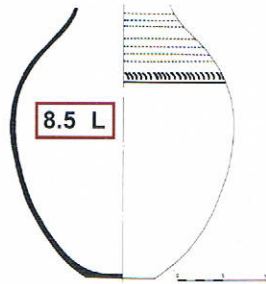
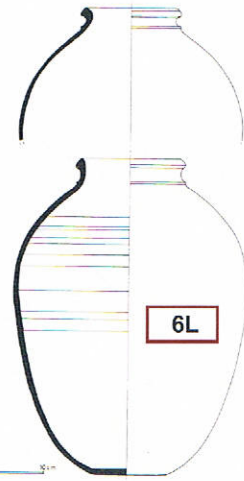
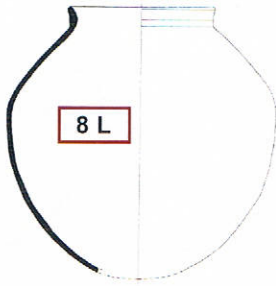
Phase 4
MB II/III



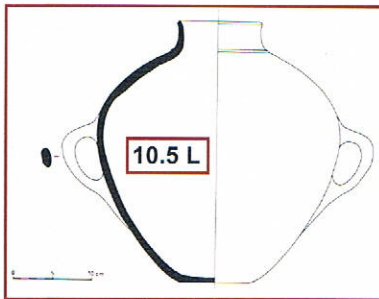
**TELL EL
GHASSIL**

BEKA'A VALLEY

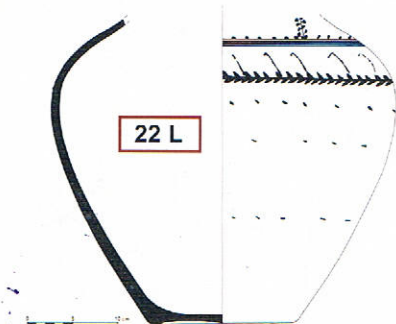
**Level XI
(around 1775)**



**Level X (1775-
1750/1650)**



**Level IX
(1650/1500)**

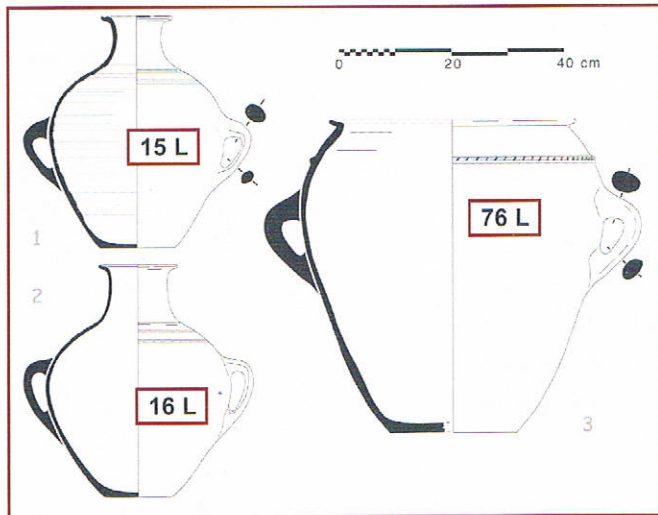
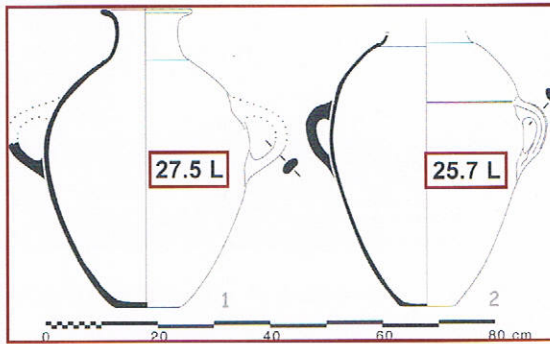


TELL ARQA

NORTH LEBANON

(from Jean-Paul Thalmann's article in this issue p. 25-37).

**Phase N
(2000-1750)**



**Phase M
(1750-1550)**

