

## CARBON, MALTA AND THE MEDITERRANEAN

A series of five carbon results from the British Museum Laboratory re-opens the controversy of a year or two back in ANTIQUITY, with contributions from Professor Bernabo Brea (1960, 132), Professor J. D. Evans (1960, 218; 1961, 143), and myself (1961, 300; 1962, 59). They are worth examining for what they mean to each other, to Malta, and to the Mediterranean. All are  $\pm 150$  B.C.

In stratigraphic order they are:—B.M. 141, Tarxien Cemetery phase, 1930 B.C.; B.M. 143, Tarxien, 2430; B.M. 142, Ggantija, 3290; B.M. 147 and 145, Zebbug, 3050 and 3190. To these should be added two earlier published dates, B.M. 101, Tarxien Cemetery, 2535; B.M. 100, Zebbug 2690. Though three of these, 142, 101, and 100, are inconsistent with the rest, none is really wild. 142, much too high when compared with the two Zebbug dates, was from the ruins of a hut, probably old timbers from its roof. 101, also too high, must have a similar explanation, a roof timber from the temple incorporated in the later cemetery level. 100 came from clay with Zebbug sherds used to make up a Ggantija phase temple floor. The sample was clearly charcoal of temple date trodden in. The first result from all this is to demonstrate graphically the value of a series of dates over a single one.

The chronology of the Maltese sequence now looks something like this. First settlement, Ghar Dalam phase (Early Neolithic), 3800 (until two more samples now in hand are published, this is still rather a guess); second immigration, Zebbug (Early Copper Age in the new terminology), 3200; first temples, Ggantija (Middle Copper Age), 2750; destruction of the temples, Tarxien Cemetery (Early Bronze Age), 2000. These dates vary between three and five centuries earlier than those held hitherto. They all, however, pull the same way.

## NOTES AND NEWS

Contacts outside Malta are in three main directions. Eastwards they occur at four points in the sequence. In the Middle and Late Neolithic, elements of Cycladic derivation appear—a bone tube and terracotta figurines with characteristic triangular tilted faces. These are before 3200 B.C., a much higher date than one would expect. The thickened lip bowls noted by Evans have now been found in contexts as early as Ggantija, before 2500 B.C., so the chronological difficulty of relating them to Thermi and Troy II now disappears. Then in the later temples appear two traits which must derive from Minoan Crete, the pillar altars of Mnajdra and the relief spirals of Tarxien. At shortly before 2000 B.C. the correlation of the spirals with Mycenaean shaft-grave stele immediately falls to the ground. Lastly the immigration of Early Bronze Age peoples now links well with the Middle Helladic at 2000 B.C. as Brea suggested. A date of 1500 or so for the faience beads in the Tarxien Cemetery is not excluded by this if one supposes a long duration for the cemetery. This is by no means impossible though implying a greatly diminished population since the preceding temple period. The following Borg in-Nadur phase is known to cover quite as long.

To the north there are too few dates for comparisons to be made. In fact the Maltese ones can be used loosely to date the cultural groups in Sicily with which correlations can be made. These are mainly early, Ghar Dalam deriving from Stentinello, Red Skorba equivalent to Marmo-Diana, Zebbug springing from San Cono-Piano Notaro, and Tarxien overlapping Castelluccio.

A westward link between Malta and Sardinia (shown, e.g. by the tunnel handles) again carries the new dates with it, here in the Safieni and Tarxien phases in the later centuries of the third millennium. Other contacts are much more tenuous. In particular, the Maltese dates put the beginnings of megalithic architecture there at around 2750 B.C., i.e. appreciably before the first dates yet obtained for it in the West Mediterranean. And if it could have given Sardinia and Spain their megaliths, why not ultimately New Grange its spirals? It is too soon to claim these facts as necessarily significant but they will have to be remembered in future discussions.

The position as regards the opposed interpretations of “backwater” and “emporium” is not affected by the dates. Two more imported sherds have come to light in the last campaign at Skorba in Middle and Late (but mixed) Neolithic levels, long before the earliest temples. These and the handful of Thermi-bowl sherds are not sufficient to shake my faith in the combined geographical and cultural evidence that the Copper Age temples of Malta were built entirely with local Maltese resources.

DAVID TRUMP