

## EASTERN MEDITERRANEAN INFLUENCE ON NEOLITHIC MALTESE TEMPLE BUILDERS

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In the "Melita Historica" (Vol. 2, No. 1, 1956), I put forward the theory that Neolithic temple builders in Malta had used a system of measurements the basic numbers of which were equivalent to (a) the multiples and sub-multiples of 10 inches; and (b) the equivalent of 18 inches.

The last paragraph of the above mentioned contribution is as follows:

"I understand that research work at Neolithic sites in some of the islands in the Mediterranean is contemplated in the not far distant future. When the result of the field workers' excavations comes to be studied it would be possible to learn with a fair measure of certainty whether the system of measurements was imported to or exported from Malta, and whether the system as I have explained it above is foolproof or not."

Since 1956, two important events occurred. The first is the publication in English of the book entitled "Malta" by Professor J.D. Evans, being a short account of the prehistoric cultures of Malta based on the Prehistoric Survey which he had carried out here. The second is the partial excavation of the Skorba Neolithic Temple by Dr. David Trump, Curator of Archaeology, Malta Museum, in 1961.

Without wishing to be dogmatic in the least (a very dangerous mental attitude in scientific research), I may state with a measure of confidence that in the light of present evidence:

(1) The Neolithic Maltese architect used a system of measurements to build the temples excavated in Malta, the basic measure of which was the multiples and sub-multiples of 10 inches; and

(2) That the system of measurements was imported to Malta which was in contact with other Mediterranean islands and the Middle East.

Students of the Maltese Neolithic Period may be inclined to think that the above points are too far-fetched, too impossible to prove. The following will prove the contrary.

In addition to the measurements of lintels, uprights, etc, which I have quoted in my contribution published in the "Melita Historica", Professor Evans in his book "Malta" gives the following:

Mgarr Temples: 35 feet x 25 feet overall (420 inches x 300 inches)

Ggantija Temples: 110 feet approx. overall length (1320 inches).

Ggantija Temples: 90 feet approx. overall length (1080 inches).

Mnajdra North Temple: 70 feet approx. overall length (840 inches).

Tarxien Middle Temple: 80 feet approx. overall length (960 inches).

Evans' conjectural reconstruction of the facade of Tarxien Temples, utilizing the evidence of the surviving portions of late facades, gives the height of 30 feet (360 inches).

The most recent important discovery is Skorba. In his lecture to members of the Malta Archaeological Circle at the British Institute in November 1961, Dr. Trump gave the following preliminary measurements of Skorba's typical trefoil temple: Overall length and breadth 45 feet x 45 feet (540 inches x 540 inches).

Since the multiple of 10 inches as a basic measure occurs again and again, this could not be attributed to pure coincidence. Therefore, it is safe to state that in the light of present evidence as quoted above, "the Neolithic Maltese Architect used a system of measurements and a basic figure of this system was the equivalent of 10 inches."

With reference to foreign contacts I must again quote Professor Evans. Throughout his book "Malta" he refers to foreign contacts by the Neolithic Maltese. After pointing out that temple culture in Malta was of a quality unique in Western Europe in prehistoric times, he writes as follows:

"Despite its powerful individual expression, however, this culture has also something of the character of a solitary outpost of Near Eastern and Aegean civilization in the barbarian West. For the importance of Malta as a key to the trade of the Western Mediterranean was not long in being discovered. There is some evidence that quite early in the second millennium B.C. ships from the Aegean Island of the Cyclades may have called there and it seems that a little later about the middle of that millennium, the trade goods of the powerful Minoan and Mycenaean civilization of Crete and Greece exercised a profound effect on the development of the various arts in Malta. Perhaps the Mycenaean merchants made a base in Malta for the purpose of trade with the islands further west as they certainly did in the Lipari Islands."

In the chapter "Religion and Life in Ancient Malta," Professor Evans writes:

"The late temples have other and more specialised features, however, the altars and little cupboards or tabernacles of slabs with or without central pillars. These also can be brought into relation with the ancestor cult, and are in fact merely a further elaboration of it, though perhaps their appearance in Malta is due to the influence of Aegean traders in the first instance. As early as 1901, Professor Arthur Evans demonstrated that there was a close resemblance between the pillar niches of the Maltese civilization and Albert Mayr remarked on the similarity of the mushroom-shaped monolithic altars at Hagar Qim to a common Aegean type altar. We now know that these types of altar and niches first appear in the Maltese temples quite suddenly, at the end of Phase D or beginning of Phase E, at a time when Aegean influence is beginning to permeate the whole culture of the Islands. Nevertheless, they illustrate the point that a people only takes over from another what it can incorporate into its own culture."

But there is other evidence as well. Flint tools were found in prehistoric tombs at Zebbug and as flint is not a local product therefore it was imported. The piece of obsidian found at Mgarr was also imported. The ceiling of the hall or as it is more commonly known 'The Oracle Chamber' in the Hypogeum at Tarxien is painted with red ochre. This ochre is not found anywhere in Malta, therefore it too was imported. Thus foreign influence in prehistoric Malta is no longer a theory but a fact

When Maltese temple builders were still thinking of and working in stone, the Egyptians had already jumped the Neolithic hurdle and were sprinting through the Bronze Age. Thus the Egyptians were living in a period classed as the Middle Empire, that is, from the 11th to the 13th Dynasty which Egyptologists estimate at about 2100 to 1700 B.C.

They were in constant contact with Crete and Greece, and Egyptian influence was felt everywhere in all Middle and East Mediterranean islands including Malta.

At this time the Egyptians were a highly cultured race. They were proficient in the arts, sciences and crafts. They had conquered neighbouring countries and — important where Neolithic Malta was concerned — they were a seafaring nation.

In my constant search for measurements, I have come across those taken in Egypt during field work by well-known archaeologists including Sir Flinders Petrie, the world-famous archaeologist and acknowledged Father of Egyptology.

Given in yards, feet and inches, these measurements are those of the many pyramids, shafts, chambers, furniture and rock tombs of the now extinct race of Pharaohs.

The similarity of the Egyptian measurements with those of the Neolithic Maltese is so striking that it is hard not to believe that the system was not imported from Egypt. These measurements I reduced to inches as I had done with measurements of local temples with the following result:

The base of the Pyramid of Dashur is 8,640 inches and the height 3,900 inches. Those of Cheops are as follows: base 9,060 inches, height 5,772 ins. In the Cheops Pyramid there is the so-called grand gallery and a king's chamber. This gallery is 1,836 inches x 336 inches; the chamber is 228 inches x 412 inches x 206 inches.

A shaft leading to the tomb of the Mother of Cheops is 1,020 inches long while the carved bed on which she had slept and which was found in the tomb is 120 inches long, 96 inches wide and 84 inches high.

Some obelisks are 768 inches, sphinxes 108 inches, and shafts 360 inches. A hypostyle hall has columns 828 inches high x 144 inches thick. Sethi's tunnel leads to an oblique dept of 5,640 inches or just over 156 yards.

As the reader will note the basic figure of all the measurements I have quoted is 10 inches, its multiples and sub-multiples.

No doubt the similarity is so striking that:

Since Prehistoric Malta was in contact with foreign countries as I have proved above;

Since Egypt was so far advanced culturally while Malta was so far behind; and

Since the basic measure in Egypt as in Malta was equivalent to 10 inches, while in 1956, I have put forward the theory that Neolithic temple builders may have used two basic measures, namely, 10 inches and 18 inches, I have now come to the conclusion that they used one only, that is, 10 inches as I have stated above;

Therefore in the light of present evidence the Maltese temple builders used a system of measurements which they had learnt from their foreign contacts, possibly Egypt.

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