

13 Megalithic Architecture in Malta

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COMPARED WITH the other regions of Europe being considered—Iberia, Scandinavia, even the British Isles—the Maltese islands are minute and would hardly seem to merit a chapter to themselves in a work such as this. The evidence which has survived there, however, is out of all proportion to the islands' size, and no study of megalithic architecture, particularly as regards origin and function, would be complete without them. Further, it gives me the opportunity to contribute to this volume, and to record my profound thanks to Glyn Daniel for directing my interest towards both the Mediterranean and megaliths many happy years ago.

Malta and Gozo together have a surface area of only 320 sq. km and lie nearly 100 km from the nearest other land, Cape Passero in south-east Sicily. There is unequivocal archaeological evidence throughout prehistory for contact with the larger island and beyond in the form of imported raw materials, notably a good brown flint from the Monti Iblei and obsidian, from Lipari and, to a lesser extent, Pantelleria (Cann and Renfrew 1964). But equally clear is the minimal extent of cultural dependence during the period of the temples, 4000–2500 BC; the number of sherds of foreign manufacture so far recovered in Malta is barely a score, against many millions in local wares.

1 Skorba, the 'shrines' of c.4000 BC, possible ancestors of the Maltese temples. Lengths 8.40 and 5.60 m.

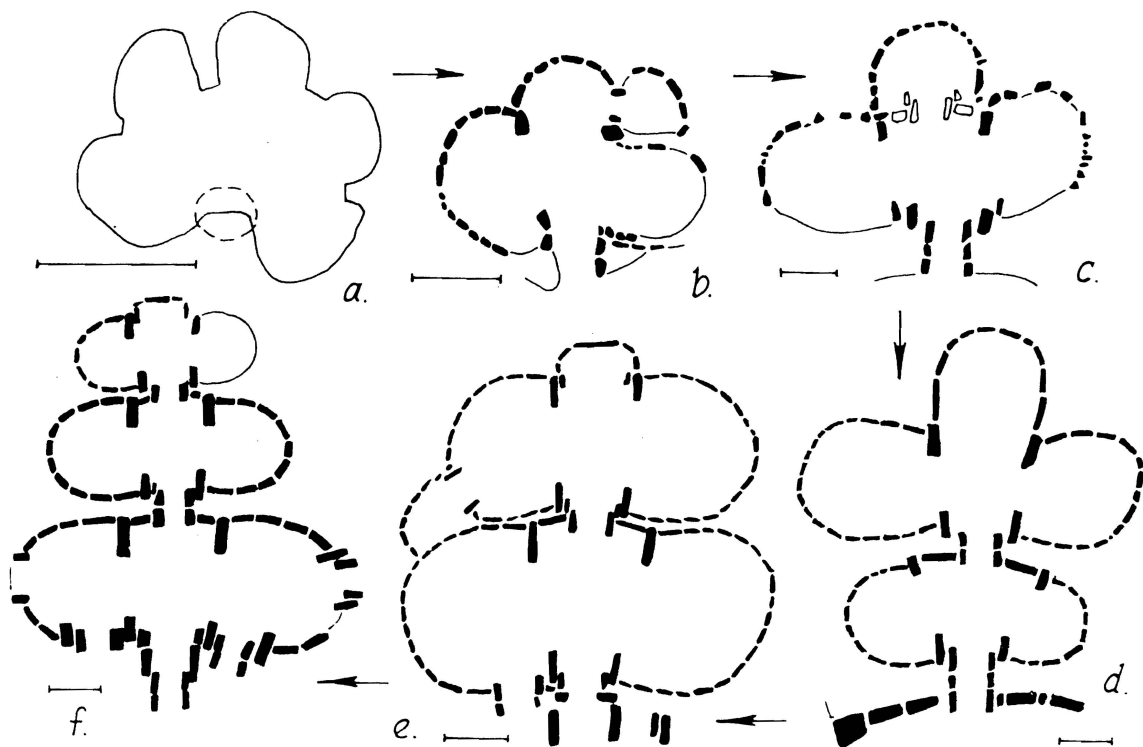


Although overseas influences on temple architecture cannot be excluded, there is little to suggest that they in any way explain its introduction to the islands. Closer study reinforces the argument by failing to reveal any but a few superficial details of similarity with architecture elsewhere. Some of these details are too generalized to carry much weight, others lose all significance when radiocarbon dating places them substantially earlier than their suggested prototypes.

Megalithic architecture in Malta, then, is an indigenous phenomenon, and its origins and function must be sought in the purely local context. The account given here follows closely that suggested by J. D. Evans (1959, 84-134), expanded but not materially altered by details discovered subsequently. I would freely admit that it is not the only possible interpretation of the recorded facts, but it seems easily the most convincing, given the evidence at present available.

The use of stone masonry in Malta is attested from the time of the earliest known inhabitants, immigrant farmers of the Ghar Dalam phase (Trump 1966, amending and dating Evans 1953, 1959), deriving immediately from Sicily and bringing a variant of that island's Stentinello culture with them. Associated radiocarbon dates at Skorba gave readings of 4190 ± 160 bc (BM 378) and 3810 ± 200 bc (BM 216). Unfortunately, a single 11 m length of straight stone wall, a footing for one of mudbrick, is the only structure that has yet been located (Trump 1966, 10), so nothing can be said of building plans. By the end of this first cycle of cultural development in the Red Skorba phase, 3225 ± 150 bc (BM 148), a building of two oval chambers, 5.60 and 8.40 m long, had appeared nearby (ill. 1). It had much more substantial walls, still for upward continuation in mudbrick. The absence of a reasonable floor surface, easy access or any hearth, and the presence of a number of figurines, tentatively suggested that the rooms were shrines, but this cannot be pressed. The masonry was of uncoursed but in no sense megalithic stonework.

The immigrants who initiated the second cycle of cultural development c. 3200 bc brought with them, in the Zebbug phase, a material culture recognizably related to that of the San Cono-Piano Notaro culture



2 The evolution of the Maltese temples. a rock-cut tomb, Xemxija 5; b lobed temple, Mgarr East; c trefoil temple, with later cross-wall, Skorba West; d 5-apsed temple, Ggantija South; e 4-apsed temple, Mnajdra Central; f 6-apsed temple, Tarxien Central. The scale measures 3 m.

of Sicily, probably including the practice of excavating rock-cut tombs for their dead (Whitehouse 1972). This seems more likely than that they invented this burial rite in the islands independently.

The rock-cut tombs call for a digression, the relevance of which will become apparent shortly. Though they are not themselves megalithic, it has long been recognized that, at least in western Europe, there is some sort of relationship with megalithic tombs, if only one of parallel development. There would be some truth in the view that both are artificial substitutes for natural caves, and could arise wherever caves are found inadequate as chambers to accommodate collective burials (Whitehouse 1972). I leave it to colleagues writing on other areas to explore possible relationships there, and look forward to seeing the results of their latest thinking, but must myself confine my attention to the Maltese temples.

The earliest of these known are the group of five at Ta Trapna, Zebbug (Baldacchino and Evans 1954; Evans 1971, 166), which are, however, of little relevance here since their original form is unclear. At the time of discovery they consisted of no more than oval depressions in the rock, but whether these were the surviving remains of chambers entered from a shaft, or of simple shafts, or are exactly as first constructed cannot now be determined. With one very notable exception, the other tombs are of the more characteristic

shaft-and-chamber form, the latter simple oval or kidney shaped (Nadur, Xagħra, Xemxija tombs 3, 4 and 6), or more elaborately lobed (Xemxija 1, 2 and particularly 5). All contained material of the Ggantija and later phases, Xemxija having in addition a little going back to Zebbug. It seems, then, that rock-cut tombs were coming into use in Malta early in the fourth millennium BC.

It was early in the Ggantija phase of pottery development in Malta, around 2800 BC (3500 BC) that the islanders began to build massive stone monuments of Cyclopean or orthostatic masonry, the famous prehistoric temples. They can best be explained as the result of a decision to build a copy of a lobed rock-cut tomb of the Xemxija 5 type above ground. Some change of function is also implied, and it could well have been this, elaboration of ceremonies before the tomb, which produced the need for a more appropriate setting than the shaft in bare rock offered. The small eastern temples at Kordin III and Mgarr show the sort of structures that would result, though excavation at

the latter in 1960 (Trump 1966, 17-19) showed that this building probably belonged in the succeeding Saffieni phase. If the lobed temple/rock-cut tomb link is not accepted, the similarity of plan must be explained as later convergent development of the two classes of monument, or else complete coincidence. This would make the trefoil temples, to be considered next, the earliest form, with no antecedents since the Red Skorba 'shrines' five centuries earlier. Apart from traces of simple huts at the Skorba site, no above-ground buildings dating to the Zebbug and Mgarr phases have been located. A derivation of the lobed temples from the tombs, already a considerable intellectual leap, must surely appear more likely.

Perhaps before proceeding further, we should justify the use of the term 'temple'. There is fortunately strong supporting evidence. The complete absence from the built structures of contemporary burials excludes a funerary function, the internal chambers would seem too small for assembly, and though a domestic use cannot be quite so categorically denied, it is hardly more convincing. Their interpretation as places of worship, temples, does not depend solely on negative evidence. In the ceramic repertoire, one vessel shape which occurs in extraordinary numbers and often in both enormous and minute sizes, equally clearly non-functional, has been plausibly recognized as an offering bowl. Handsome decorated blocks in the temples seem better fitted to serve as altars than tables. Numerous statues, again one at least greater than lifesize, look like cult figures. Holes far too small for passages connecting separate chambers have been interpreted as oracle holes, though the exact nature of their use cannot now be recovered. All these indentifications are clearly matters of assumption rather than proof, but all are reasonable and mutually consistent.

In the trefoil temples we see the first formalized plan, and can recognize the prototype of the later forms. Already present are the concave and monumental façade, trilithon entrance passage, paired lateral and single terminal chambers (somewhat misleadingly described in the literature as 'apses'), and the use of both orthostatic and megalithic blocks. Surviving examples include the western temples in the Mgarr, Kordin III and Skorba groups. If we do not need to look outside the islands for the form of the temples, nor do we have to for the constructional techniques. With stone so readily available in Malta, as is immediately apparent to any visitor, its use, even in exceptionally large blocks, occasions no surprise. There can be few areas in the world where the incentives to megalithic building were greater.

Subsequently the trefoil temples were all altered by having the large central chamber closed off with a

substantial cross wall, apart from a central lintelled doorway. There are perforations in the jambs apparently to support some form of door or screen of wood or leather, and bar holes by which it could be secured. It was investigations at Skorba which proved this cross wall to be a later addition, as is very probably the case at the other two sites.

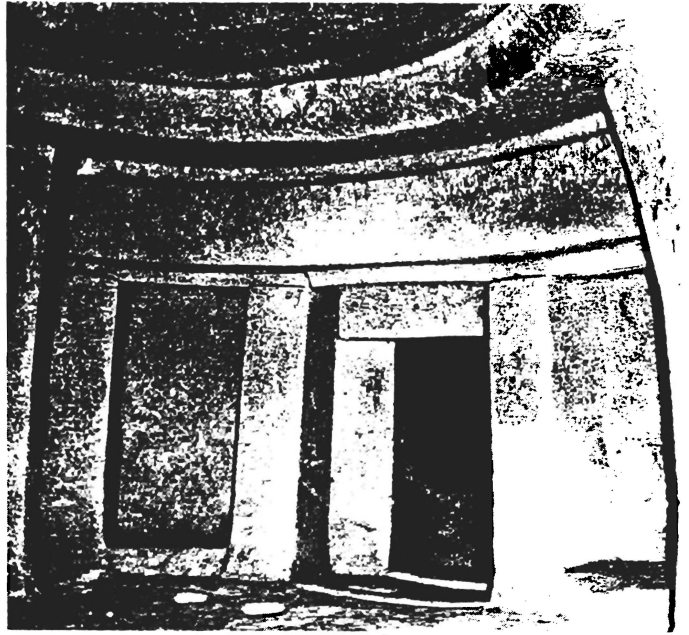
This stage of development, with its division between an inner area which could be securely closed off and the more public outer chambers, can be convincingly recognized again in those temples with five apses. The same result is achieved here by the addition of an extra pair of apses between the façade and the lateral apses of the trefoil plan. Seating for a door is again provided in the central passage between the two pairs, and serves the same purpose as the closing wall across the terminal apse, which is therefore not needed. The five-apse plan is represented at the Ggantija South, Hagar Qim North and, probably, Ta Marziena. All these temples, note, were shown by material in their floors to be still of the Ggantija phase. In other words, we are dealing so far with a typological seriation. It must be frankly admitted that this sequence is unsupported by (though in only one, possibly unimportant, respect (at Mgarr East, referred to above) contradicted by) the evidence of associated pottery. Further, there are a number of sites, or elements of compound sites, which do not fit into the classification, either because they do not follow a regular apsed plan, or because they have been too damaged for their original form and affiliation to be determined.

The final stage, excepting the six-apse temple of Tarxien Central, includes all the temples whose under-floor and wall deposits include material of the Tarxien phase, a terminus post quem for their construction. Their distinguishing feature is the reduction in size of the central apse of the five-apse plan to a mere niche. Perhaps the three-apse-with-closed-terminal chamber was felt to be clumsy, and the five-apse-with-three-closed too roomy in its inner parts. Be that as it may, all Tarxien phase temples in the main line of development are of this four-apse-and-niche form. One example, the Ggantija North, yielded only material of the Ggantija phase in the areas sampled, but since this gives, as already mentioned, only a terminus post quem, it is possible that it could fall in the later phase, making the correlation lobed/three/five apses - Ggantija phase, four apse - Tarxien phase, complete. Tarxien Central is unique, though clearly only a variant on the four-apse plan, in having an additional pair of apses making six in all. Associated pottery places it in an advanced stage of the Tarxien phase and so later than the four-apse temples on either side of it at this complex site.

The description of this sequence may seem a little laboured, but is designed to stress the progressive advances made by the designers of these buildings. This shows in many other ways. All the early temples were built of rubble masonry, and were probably originally plastered to a smooth surface internally and painted. Only at the Ggantija and Skorba could this be demonstrated. In these, only the external walls and the doorways and passages were of truly megalithic construction, of carefully selected or well-tooled orthostatic blocks. Later, all walls were so constructed, giving a much more impressive result. For one thing, tooled blocks, meeting along the whole of their adjacent faces, gave much greater stability, and successive courses could be over-sailed as horizontal arches, allowing the roof opening to be appreciably narrowed before it was closed with a beam and thatch ceiling. At Mnajdra South (ill. 8), Hagar Qim and Tarxien Central, this over-sailing is shown in the surviving walls, together with the inward slope of the blocks which proves the horizontal arch – as opposed to the corbel – principle of construction. Nowhere outside Malta is this principle known at such an early date, probably well before 2500 BC: indeed the horizontal arch has rarely been used elsewhere at any period.

Unfortunately, though fragments of wall plaster covered in red paint were found at both the Ggantija and Skorba, we do not know if this was applied in patterns or as an all-over wash. The walls of the Hypogeum demonstrate both. Certainly altar blocks and other internal fittings within the temples had their surfaces decoratively carved in three successive styles. In the first flat surfaces were relieved by being sparsely pitted. Then the pitting, by either pecking or drilling, was much more closely spaced and framed within a relief border. Later still, spiral designs were carved in relief like the borders, the pitting being relegated to the background or suppressed altogether. A fragment from Wiel Filep suggests that this background was painted red, the relief designs being reserved, and this may well have been general practice. More ambitious designs were occasionally attempted, particularly at Tarxien (animal friezes, repeat curves; see ill. 4), and there is a notable piece from Bugibba portraying two fish. This could be contemporary with the third style or constitute a fourth: we do not have chronological evidence as we certainly do for the earlier ones. For example, the central altar in Tarxien South shows a fragment of a style 2 panel left as a result of the floor level having been raised when the rest was cut away to take style 3 relief spirals. Artistically too, then, there is evidence for progress and innovation, paralleled in the case of the spirals in the decoration of the pottery.

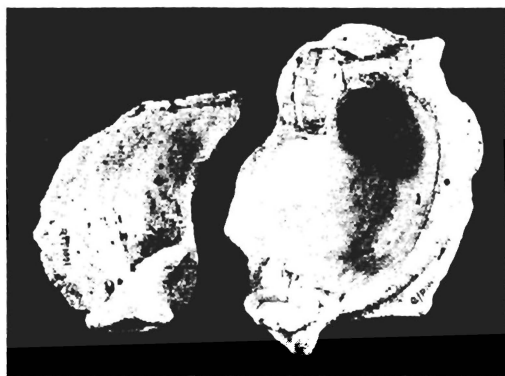
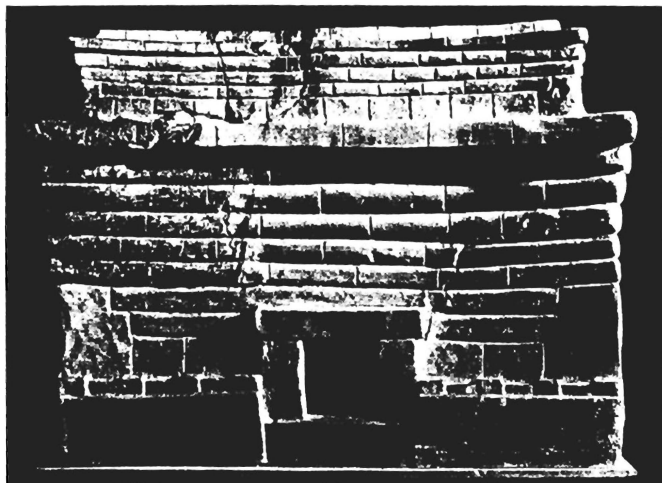
Technically the remains testify to the introduction



3 *The Hypogeum, the rock-cut temple at the heart of the site. Height of doorway 1 m.*

4 *Altar in Tarxien South. Note the relief spirals and D-shaped plug. Height of altar block 1.15 m.*





of two constructional aids, one probably very generally spread, though rarely so clearly demonstrated as here, the other apparently unknown outside Malta. Many orthostats show a prominent notch in the middle of a long side, the clearest examples being visible in Tarxien East. This notch must have been deliberately cut to take the tip of a sizeable lever with which the final adjustment of the block into position could be effected. The value of such an aid is obvious when one remembers that individual blocks could reach a weight of 19 tonnes. A stone roller beneath a massive threshold slab in Tarxien Central demonstrates the use of cannon-ball-like spheroids frequently found on temple sites. Timber rollers have long been postulated as aids to the moving of megalithic blocks, but we have no other records of 'ball-bearings' until several thousand years later.

All this builds up to an impressive record of the highly ingenious designers, engineers, architects even, who were responsible for the development of the Maltese temples (Trump 1980). The title 'architect' perhaps needs further substantiation, but this is not far to seek. There are a number of well-known contemporary illustrations of temples, both two-dimensional engravings and three-dimensional models. With many of them, we cannot demonstrate that they were other than artists' views of buildings already erected. For example, though the temple façade beautifully carved on a limestone slab from Tarxien (ill. 5) strongly suggests an architect's elevation, prepared in advance to show what was required, this is now unprovable.

But the terracotta model from Hagar Qim (ill. 6) shows a five-apsed temple in the form of wall stumps, a form in which no temple could have physically appeared even during the course of construction. It is an abstract plan, presumably drawn up before building (of Hagar Qim North?) was commenced. Even more intriguing is the stone fragment from Tarxien (ill. 7) showing a complex building of rectangular rooms on an ashlar podium, intriguing because no building remotely like this is known in Malta of that period. It would seem that a plan was prepared but never put into effect – the Planning Committee turned down so revolutionary a design, and the architect was required to submit a more traditional, and more acceptable, scheme in keeping with the apsed structures already

5 The limestone façade model from Tarxien. Width as restored 39 cm.

6 The terracotta temple plan from Hagar Qim. Width of larger fragment c.12 cm.

7 The limestone rectilinear building model from Tarxien. Length surviving 29 cm.



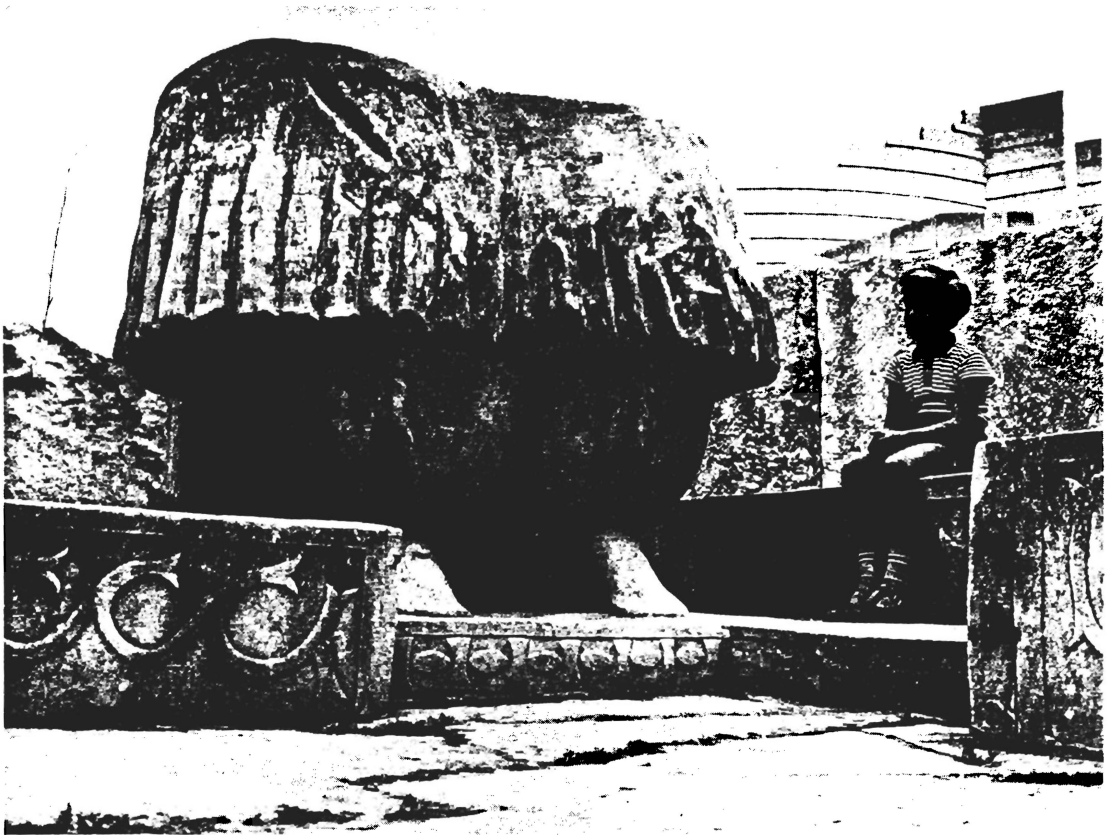
standing on the site. It is very difficult here not to speculate beyond the material finds, to reach out to the people behind the objects. Even if we regard the Planning Committee and its decisions as too hypothetical to be taken seriously, we certainly seem to have an individual, the architect, inherent in that physical evidence.

We need to remind ourselves of the antiquity of the period we are talking about. The span of the Maltese temple development covered 2800–2000 bc, c. 3600–2500 bc. In comparison with Mesopotamia, it began about the same time as the mudbrick temples of Eridu and Uruk, though Tepe Gawra is older, and it ended around the time of the Royal Cemetery at Ūr. As regards Egypt, its end overlapped by only a century or so the building of the pyramids (Renfrew 1972). Imhotep, who is honoured as the world's first architect for his introduction of stone masonry in the Step Pyramid of Sakkara, could have been a contemporary of that other nameless architect who worked on

8 Mnajdra South, interior of the first apse. Note the trilithon doorway, porthole slab, two oracle holes, and the over-sailing and inward slope of the upper blocks in the wall. Width of apse 6.20 m.

Tarxien Central. He in turn was a thousand years later than his predecessor who had designed and built the first of the Maltese temples.

This might be a suitable moment to return to the subject of the Hypogeum (ill. 3) (Evans 1971, 44). We suggested that the temples began with an imaginative leap, surely by an individual – let us build a copy of a rock-cut tomb above ground, where it will be so much more conveniently accessible for us to carry out communally the associated rites and ceremonies. Long after, it was asked why, when the underground cemetery of interconnecting rock-cut tomb chambers under what is now Hal Saflieni had grown so large, a temple along the lines of those being built at the time



9 The giant statue in Tarxien. Width of skirt as restored c.1.60 m.

was not carved out of the solid rock as part of that site. The suggestion was acted on. At the centre of the Hypogeum can still be seen the chambers carved in close imitation of the above-ground architecture, with such details as trilithon door-frames, pierced door slabs ('porthole' entrances), wall courses projecting in order to narrow roof openings, together with ochred spirals and wash decoration, all preserved by being cut and painted deep below ground. This part of the site, if we interpret the often inadequate excavation reports aright, did not contain burials, so was probably in function as well as form more closely related to the temples than to the rock-cut tombs from which the Hypogeum sprang. The great water cistern at one end of the site would seem also to fit better into a religious context than a funerary one. The revolutionary decision to construct, or rather excavate, a temple below ground must once more imply an individual initiative, even if it was effected by that individual's society.

The contrast between this and the situation with all other ancient megalithic architecture, indeed pre-historic architecture of any kind, hardly needs spelling out. Elsewhere, the great majority of monuments are so firmly rooted in the tradition of the society that erected them that there seems no room for individual architects, rather a long line of architects, each trying not to make innovations. Even where a particular structure stands out as a masterpiece – the Cueva de Romeral, Gav'r'inis and Maes Howe might be instanced – our only evidence on the designer is what can be read directly from his architecture, and that is usually but little. It is not surprising that study, if it extends beyond the monuments themselves, does so in the direction of the societies they were meant to serve, or in the efforts of the labourers who raised them, but very rarely, and then often controversially, to the designers, the architects. Thanks to their technical innovations, and above all their models, we can approach much more closely to those of Maltese temples.

Such a discussion leads us on naturally to a consideration of the role these temples played among the communities who built them. The evidence that they really were places of worship has been already briefly

reviewed, though a little more should be said on what can be recovered of the religious beliefs and practices of the time. There is here little to imply connection with megalithic sites elsewhere, whether funerary, astronomical or religious, unless the Maltese 'mother goddess' of fertility and death can, as an act of faith rather than proof, be equated with the much more shadowy 'dolmen deity' of western Europe. The evidence is as follows.

The deity of the temples is presumably to be recognized in the above-lifesized statue in Tarxien (ill. 9). Despite the loss of its upper half, this can be equated iconographically with similar standing figures, though of smaller size, from Hagar Qim (ill. 10) and Ta Silg, and seated ones from Tarxien and, in a slightly different posture, Hagar Qim. All these represent a grossly corpulent figure, skirted or nude, on which, however, sexual characteristics are noticeably lacking. That should immediately advise caution in the use of terms like 'mother goddess' or, less flattering, 'fat lady'. When figures of the same proportions are clearly female, as with the 'sleeping lady' from the Hypogeum, they are on a much smaller scale and no longer necessarily divine. Another terracotta from Hagar Qim is a delightful female figure with none of the grossness of the others, but again not necessarily a goddess.

But despite that hesitation, the underlying idea of fertility symbolism remains probable, and receives unequivocal support from other finds, particularly from Tarxien. There a wall relief shows a very male bull and a very female sow, with no less than fourteen piglets at suck, immediately adjacent. This site has, too, produced several indubitable carved phalli.

Suggestive but less explicit is the link between the temple deity and death, probably implied by the tomb-to-temple development, more certainly by the funerary temple within the Hypogeum.

Practices should be more easily recoverable by archaeology than beliefs. Animal sacrifice is well attested. The flint knife and goat horn core from the 'cupboard' in the decorated altar in Tarxien South, and the dove skeleton in the central niche of Skorba East, are but two examples. Animal bone was frequent on many sites, and the rows of animals carved in relief at Tarxien hint at the same. The forecourts so apparent at most sites must have been designed for open-air ceremonies before the shrines, but the content of those ceremonies is now quite irrecoverable.

Two pieces of evidence suggest the presence of a priesthood of some kind – and I do not include the so-called 'priest' figurine from Tarxien, whose sex and calling are alike matters of conjecture only. The distinction in the temples between 'public' outer

parts, in which the decorated blocks are concentrated, and 'private' inner parts, with doors which could be barred only from the inside, indicates that access to those inner parts was restricted to a small and in some way privileged group of people. Whatever passed through the 'oracle holes', they too imply two classes of person, one positioned in the inner, even secret, chamber in contrast to the other in the outer or public part of the building. The 'oracular' reverberation of a deep voice in one chamber of the Hypogeum cannot be considered conclusive unless it can be shown to have been deliberately planned, which seems unlikely. It is tantalizing how far the evidence will take us before it gives out, with so many questions still unanswered.

But if the specific functions and even more beliefs are so difficult to recover, the general ones of displaying and stressing a community's existence and separateness from other communities are much more readily apparent. Renfrew broke new ground when he pointed out (1973, 147–67) that the distribution of the temples could be interpreted as mirroring a social or political grouping of the population of Malta at the time. While his criterion for the 'really big' temples was both somewhat arbitrary and inconsistently applied, the pattern changes little when all known buildings of the temple period are added in. The only danger comes

10 Limestone seated figure from Hagar Qim. Height 23.5 cm.



as foci for the ceremonies which marked off tribe from tribe. What we cannot explain is the multiplication of temple sites within each group, but this is hardly more of a problem than that long recognized, the reason for the multiplication of temples on each site.

One crucial piece of evidence seems to have been consistently undervalued. The stone trough in Kordin III (ill. 12) was, as recognized by Evans (1971, 73), an integral part of the temple into which it was built, though he had doubts whether the grooves worn into it were contemporary with the temple occupation. The fact that it is the only block of coralline limestone to be used on the site, having been transported at least a kilometre for the purpose, implies that it was chosen for some particular need, surely the grinding that was undoubtedly carried out on it. The substance ground, therefore, is likely to have been grain, as Ashby (Ashby *et al.* 1913, 42) originally suggested. The number and depth of the grooves, seven and at least 18 cm deep, in turn suggest a very considerable quantity of grain, probably over a long period of time. It would be interesting to speculate what proportion of limestone grit in the flour was considered acceptable. To me the implication seems clear that it was the community's grain being brought into the temple to be ground

under the immediate protection of the community's deity. There was almost certainly also a strong social element in this communal grinding of the daily flour. While the case would be greatly strengthened if every temple, or at least one in each territory, had its public quern, no other explanation seems to explain the facts from Kordin III so satisfactorily.

On the matter of the political organization of temple-period Malta, and the likelihood of some sort of chieftainship, I can add nothing useful to those points Renfrew has already advanced, and refer readers to his work (*op. cit.*).

A consequence of this patent link between the temples and the society which produced them is that the collapse of the one around 2400 BC can be regarded as prime evidence for the breakdown of the other. Despite the considerable body of information which has been recovered on these events, however (Trump 1978), its interpretation has so far produced no clear answers. The end of the temples is even more mysterious than their beginning. There is a hint of decline

12 *The communal quern of coralline limestone in the Kordin III temple. Length 2.66 m.*





13 *The Wied Znuber dolmen. Length 3.70 m.*

at Skorba, where the east temple went out of use before the west temple, to be used for rubbish dumping. Otherwise the collapse seems to have been sudden and complete, as if the whole population of Malta and Gozo had abandoned everything and fled the islands. So far, none of the many possible explanations, singly or collectively, is clearly preferred by the recovered evidence. It remains only to be hoped that future research, probably environmental and not necessarily within the temples themselves, will eventually allow us to suggest what really happened to destroy such remarkable buildings, their culture and their people.

It could be argued that Malta and Gozo's very isolation, giving us almost laboratory conditions so little affected by extraneous influences, automatically reduces their value for comparative purposes. This is not so, since no claim is being made, or can be made, that any one set of circumstances will provide answers for application elsewhere. On the contrary, although the islands allow us to advance a powerful argument for Maltese temple architecture being the result of a remarkable indigenous development, the product of not only a human community but of a few gifted individuals within that community, we have already noted in the appearance of agriculture in the Ghar

Dalam phase, and of new pottery styles and tomb forms in the Zebbug phase, equally clear examples of cultural diffusion, invasion even, however unfashionable that term now is.

Following the temple period, we have another example of massive overseas influence on the Maltese islands, which must represent an immigrant population. The use of megalithic architecture again comes into the story, though in a very different form. The culture of the Tarxien Cemetery demonstrates a total break with the tradition built up over the preceding millennium and a half. It owed nothing to the earlier inhabitants of its new home, its antecedents all lying elsewhere (Evans 1956). Only one of its cultural elements need be pursued here, that of building with large blocks of stone.

Some sixteen dolmens have been recorded from the Maltese islands, though the exact number is uncertain by reason of their often ruinous state. One at least, at Ta Hammud near the north coast, has produced an archaeological deposit of the Tarxien Cemetery phase, c.2500–1500 BC. Several of them are distinctive, if not exactly distinguished, monuments. Wied Znuber (ill. 13), Safi, the Misrah Sinjura and Wied Filep, to name only the four finest. These share characteristics in general and in detail with the Otranto group in the Salentine peninsula, the heel of Italy. They consist of a slab of limestone up to 4.40 x 3.80 m poised on stone

supports. The Misrah Sinjura has a groove cut around its margin on the upper surface, and this and the Safi and Bidni dolmens have vertical perforations through the slab. The suggestion that both are connected with libation rites is tempting, if speculative. Both these features can be paralleled in the Otranto area, implying some meaningful connection. Admittedly this takes us very little further in explaining how either group is affiliated to the mainstream of western European megalithic tombs. There is effectively nothing to suggest that they appeared independently in either of these areas, but hardly more to indicate how they could have reached either from further west.

Even the function they served amongst the Maltese communities which raised them is uncertain. The associated material at Ta Hammut included broken pottery but no bone, and the small size of the chamber implied that any interment there may once have been must have been by cremation, as in the Tarxien Cemetery itself. All other dolmens had been stripped bare before discovery, so it is only an assumption, based on evidence from other parts of Europe, that the dolmens of Malta were burial chambers at all. In consequence, they offer us little help in the wider enquiry we are here pursuing.

Several menhirs have been recorded from the islands (Evans 1971, 198–9), but only two seem to be rightly so called. These are the well-squared pillars at Kirkop and Kerzem. Being without association of any kind,

they are undatable, and one can only note that similar pillars are known around Otranto, in the area which yields the best parallels for the Maltese dolmens. Other examples from Malta are unshaped and have scatters of temple-period pottery around them. They are probably, as that at Skorba was demonstrated to be, surviving blocks of temple-like buildings otherwise destroyed.

Malta and Gozo, then, have offered us excellent examples of both local evolution and diffusion from an external source in their megalithic architecture, their geography allowing us to trace both processes more clearly than is possible in many other areas. They serve to remind us that if a coin falls head-side-up on one occasion, or even on many consecutive occasions, that does not in the least alter the chances of its falling heads or tails on the next toss, provided only that the coin has not been mischievously given two heads. The origins of any group of megalithic monuments, or indeed of any other cultural trait, will be determined only when all the available evidence is assembled and weighed dispassionately.

Acknowledgments

All objects illustrated are in the National Museum of Malta, Valletta. Ill. 10 is by courtesy of the Malta Government Tourist Board; all other illustrations are by the author.

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Appendix

Catalogue of Temples and Rock-Cut Tombs

No. on map	Site	Form	Length (m)	Breadth (m)	Earliest material	Orientation
1	Ggantija North	4-apse	18.75	17.50	Ggantija?	133°
	South	5-apse	26.25	23.75	Ggantija	128°
2	Ghar ta Ghejzu	ruinous			Ggantija	
3	Xaghra tomb	r.c.t.	1.73		Ggantija?	
4	Santa Verna	3-apse?	16.90?	16.15?	Ggantija	120°?
5	Ta Marziena	5-apse	17?	16.80?	Ggantija	180°?
6	Xewkija	destroyed				
7	Borg li Mramma	anomalous		37.50 max.		
8	Li Mrejsbiet	ruinous				
9	Borg il Gharib	ruinous				
10	Armier	ruinous				
11	Ghajn Zejtuna	destroyed				
12	Xemxija 1-5	r.c.t.'s		5.65 max.	Zebbug	
13	Ta Lippija	ruinous				
14	Ras il Pellegrin	ruinous			Tarxien	
15	Li Mdawwar	anomalous			Tarxien	
16	Ta Hagrat, Mgarr W. E.	3-a	14	12.55	Ggantija	135°
		lobed	7.25	8.90	Saflieni?	176°
17	Li Skorba West	3-apse	14.20	18.30	Ggantija	139°
	East	4-apse	16.15	14.20	Tarxien	170°
18	Bengemma	r.c.t.			Ggantija	
19	Bugibba	3-apse?	?	13.45?	Tarxien	200°
20	Tal Qadi	3-apse?	10.50?	18.30	Tarxien?	78°
21	Il Maghtab	anomalous				
22	Mnajdra South	4-apse	15.15	13.65	Tarxien	103°
	Central	4-apse	18.05	16.60	Tarxien	148°
	East	3-apse	7.05	9.25	Ggantija	218°
23	Hagar Qim Central	4-apse, anom.	17.10	20	Ggantija	132°
	North	5-apse	16	7.30	Ggantija	184°
24	Sqaq il Bal, Qrendi	ruinous				
25	Debdieba	anomalous	23 max.		Tarxien?	
26	It Tumbata	ruinous				
27	'Hal Saflieni	r.c.cem. ruinous	29.40 max.	22.50 max.	Zebbug	
28	Kordin I	anomalous	20			
29	II	anomalous	25.50			
30	III West	3-apse	15.45	13.65	Ggantija	149°
	East	lobed	9.10	12.25	Ggantija	203°?
31	Tarxien West	4-apse	22.80	18.30	Early Tarxien	204°
	Central	6-apse	23.10	18.60	Tarxien	230°
	East	4-apse	15.60	12.60	Early Tarxien	200°
	Far East	5-apse	12	6?	Ggantija	176°
32	Hal Far	destroyed				
33	Borg in Nadur	4-apse	8.45?	8.45	Tarxien	108°
34	Hal Ginwi	anomalous	10.60 max.		Ggantija	
35	Ta Silg	anomalous	15.50			106°
36	Xrobb il Ghagin	4-apse	13.50	9.10?	Ggantija	135°