Decoding the Megaliths

by Mark Rose

A young scholar searches for the meaning of Malta's ancient temples
It was a baptism by fire,” recalls Reuben Grima of his first real assignment out of college. The Hypogeum, a vast 5,500-year-old burial complex carved into Malta’s limestone bedrock, was threatened by water seepage and the corrosive effects of carbon dioxide exhaled by tourists. That was in the 1980s. During the 1990s, Grima was involved with a project supported by UNESCO, which had designated the subterranean monument a World Heritage site, to address these problems.

It was there, at the Hypogeum, that I first met Grima about a decade ago. He had joined Malta’s museums department in 1992, a year after receiving his degree, and was appointed site curator of the Hypogeum. Grima walked me through the multilevel site, explaining the progress, from walkways and lighting to climate control, in safeguarding the Hypogeum and reopening it to the public five years after it had been closed. It was an immense responsibility for someone that young, but looking back at it today, Grima, now all of thirty-four, says in his quiet, matter-of-fact way, “It exposed me to the realities of completing a complex project in a sensitive environment while meeting tight deadlines.”

Grima had no childhood epiphany, no single moment of inspiration in which he decided to become an archaeologist. Indeed, growing up in an island nation with strong cultural traditions, he might well have developed an insular outlook, but that was not the case. “My grandfather owned a cinema where my dad took care of the bar for many years,” he recalls. “I used to watch a movie on the big screen practically every weekend during the 1970s, before we had color television. Meanwhile, my mother, a teacher, was forever carting books home from the public library for me to read. These influences opened up whole worlds of experience to me.” In childhood rambles through the countryside around Mosta, the village where he was brought up, he and his friends came across ruins and old buildings. Trying to make sense of these strange and crumbling structures was, he says, his first encounter with the past and with archaeology.

Grima was one of the first students in the University of Malta’s archaeology program, launched in the late 1980s. It was a pivotal time, as the country embarked on efforts to develop a homegrown archaeology and heritage service after years of relying on British and Italian colleagues. During his summers as an undergraduate, he took part in the excavation of the Neolithic burial site at the Xaghra Circle, on the island of Gozo, a joint project by the University of Malta and Bristol University. “The excavation season at Xaghra used to run from late August through September, when the combination of heat and humidity was often at the limits of the bearable,” he recalls, “but participating in the extraordinary discoveries on this site, from the thousands of skeletal remains to the figurines that were used in burial rituals, certainly made it worthwhile.”

Today with Heritage Malta, which oversees the country’s archaeological and cultural assets, Grima is the curator for a number of the country’s most important Late Neolithic (3600 to 2500 B.C.) temple sites, including the six that make up the combined Megalithic Temples of Malta entry on UNESCO’s World Heritage List. Looking after these monuments is, he frankly admits, completely out of scale with the resources now available to deal with it. “One of the main challenges,” he says, “is
Reuben Grima, adjusting lights in the 5,500-year-old Hypogeum, believes megalithic temple locations were chosen based on landscape factors like adjoining fertile plains.

to build a team that is well equipped to deal with the issues posed by the management of these sites.” At present, Grima is part of a core group, along with Katya Stroud, a young archaeologist specializing in conservation and management of the temple sites, and Mario Galea, an experienced conservator, that relies on specialists and university and government colleagues.

WHEN NOT CONSUMED BY HIS DAY JOB—looking after Malta’s World Heritage sites—Grima does his own research, much of which is focused on understanding the megalithic sites. Having taken a year at the University of Reading in England in the mid 1990s for his M.A., he is now completing his Ph.D. at the Institute of Archaeology in London, focusing on the landscape context of the Maltese megalithic structures and on public understanding of archaeological sites and landscapes. At present, he is finishing his dissertation during his free time: evenings and weekends. In trying to get his mind around the megaliths, Grima has come up with some innovative suggestions.

More than thirty years ago, Colin Renfrew of the University of Cambridge made one of the grand syntheses that made him famous in archaeological circles. It was then becoming clear from tree-ring studies that radiocarbon dates were inaccurate. If they weren’t corrected or recalibrated, the dates were too recent. Renfrew was the first to explore the implications of this for the Mediterranean, revolutionizing the prehistory of the region as a result. Dating of the Maltese megaliths had been based on similarities with monuments from Mycenae and other Late Bronze Age sites in the Aegean, which could be dated to the mid second millennium B.C. through connections with Egyptian historical chronologies. Trusting recalibrated radiocarbon dates from excavations at Skorba on Malta, Renfrew argued that the Maltese monuments were homegrown, not derived from an outside civilization. The dates proved, in fact, that they were the earliest monumental freestanding structures anywhere in the world. Renfrew then tried to explain how these megalithic temples came into being. In a bold step for the early 1970s—Mediterranean archaeology being conservative and rooted in classics and fine arts, not anthropology—Renfrew turned to Easter Island for an explanation. He noticed that in six places on Malta and Gozo there were pairs or clusters of temples. These, he suggested, could have been the centers of chiefdoms.

Part of Grima’s current research has revisited this interpretation, taking advantage of the new tools that have become available since. Using GIS (Geographical Information Systems, computer-based maps that allow the manipulation and analysis of geographical information), he is asking what factors prompted the early Maltese to build...
Scholars debate whether the view into temples, such as Mnajdra, below left, was more important or the view looking out, below right (at sunrise on the autumnal equinox).

where they did. He found no link between the temple placements and availability of building materials, harder or softer limestone. He found no link between the slope of the land and temple location—apparently building on the flat or on the slope was not a critical consideration to the Neolithic builders. But there were links to other factors. There was a tendency for temples to be located nearer to water sources rather than farther from them. Another link was accessibility to the sea, measured both in nearness to the coast and ease of transportation (an inland site with few obstacles might be more accessible to the sea than a site perched on a coastal cliff).

The most striking correlation he found was between the temples and the edges of fertile plains.

"Renfrew focused on site-site relationships, but I've looked more at site-landscape relationships," he says. "Of course, the two methods are complementary, and together they can give us a richer and more rounded understanding of the social organization and the natural landscape in prehistoric Malta. For instance, the natural division of the landscape by ridges and valleys was probably a significant influence on the social division of the landscape, as reflected by the temple buildings. It also appears that the temples were not necessarily 'central places' in the middle of their territory, but they could have been located near the boundaries of territories."

The temples, Renfrew believed, were the work of competing chiefdoms that displayed their power by erecting conspicuous monuments—again, the Easter Island parallel. It was the chief that organized the resources required to do the building—laborers, food, stone, and materials for finishing the wall surfaces, such as plaster. The Maltese islands are made of limestone, so construction using earth ramps and wooden levers was straightforward. How many people would it take? That would depend on how much time per year was spent building, when workers weren't needed for other activities. The labor needed to build a temple at Ggantija on Gozo is estimated at 15,500 man days, the equivalent of 131 men working three months a year for three years.

More recent interpretations, by Simon Stoddart and Caroline Malone, now at Cambridge, and Anthony Bonnano of the University of Malta, have suggested that it wasn't a chief who directed the construction, but a priest or priestess. The structures,
Of Tourists and Temples

Tourism is critical to the Maltese economy, and in recent months much of Reuben Grima and his colleagues' time has been devoted to developing a comprehensive plan for the preservation and improvement of the Tarxien site, a group of four megalithic temples. Today, more than 100,000 tourists come to Tarxien annually, most arriving in buses and overwhelming the small visitor's center. And the ruins, open to the rain and sun, are deteriorating. A draft proposal by the project team of which Grima is a member is now under review. Its objectives are deceptively simple: preserve the monument for future generations, make it more accessible to a range of audiences, and enhance the surrounding urban residential neighborhood.

To reach visitors with varying levels of interest, from students to tourists temporarily off the beach, the proposal stipulates clear signage and routes through the site tailored to the mildly curious (twenty minutes) and to megalith aficionados (sixty minutes). The expanded visitor center envisaged in the proposal includes more exhibition space, plus a cafeteria, gift shop, activity center for kids, and offices. A great deal of the committee's work dealt with practical considerations, as much traffic control as archaeological issues: How long does it take the average person to read a sign? Where do you park six buses in a crowded neighborhood? If three hundred people show up at once, how much lobby space do you need? How many toilets? I asked if this is what he studied in his university archaeology courses. He smiled, then made the point that even the bathrooms are very important. "It's a bit like restaurants really... Just by looking at the bathrooms, you can get a very good indication of the quality of the service that is offered."

And then there's the shelter over the temples. The Tarxien proposal contemplates installation of a protective shelter for the main part of the site that would cover an area of about 100 by 170 feet. Of course it has to protect the site, but at the same time it must have the fewest possible number of supports so as not to damage anything, not to impede pathways through the site, and not to interfere with the visibility of the site. To make designing it more challenging, the shelter should be "aesthetically pleasing" but can't outshine the temple ruins. "It will be interesting to see how the architects resolve this, but you know a shelter over the ruins was first proposed back in the 1930s," notes Grima. "It was never built after World War II. A scientific committee appointed in 2000 recommended that shelters be erected here and at three other temple sites. Realization of these measures will be one of our most daunting tasks in the years ahead."—MR

ey maintain, were not political statements but religious ones. In their view, temple construction reflected the growing isolation of the Maltese population. Over time the culture had less and less contact with the outside world—fewer exotic goods are found at later Neolithic sites than at earlier ones. That this happens as the temples become more and more elaborate is no mistake. They were the work of a culture under stress—faced with overpopulation in a small territory and cut off from the world. For Grima, however, this explanation has problems. English archaeologists Chris Hayden and John Robb, he notes, believe Malta was not as isolated as sometimes imagined. He finds the alternative proposed by Robb, that temple building was simply part of cultural-identity building, attractive.
As with other megalithic structures, the Maltese temples are a magnet for those speculating about astronomical alignments. There’s little doubt that the Maltese temples are oriented purposefully: when the axis can be determined, the temples face from southeast to southwest; the one exception (at Mnajdra) faces due east. The “why?” of that orientation is debated. One study suggested the temple builders might have tried to align with the rising of the Southern Cross constellation or the bright star Alpha Centauri over the horizon, but the study’s authors admitted the uniform orientation could mean simply that the builders wanted to avoid a northerly wind or preferred a sunny southern prospect. These guesses are based on the assumption that the viewpoint was looking out of the temple. But what if it were looking into the temple? From that perspective—which is what worshipers in the courtyard before the temple would have had—the view is in the opposite direction. Proponents of this interpretation, Stoddart and Malone suggest that a view to the north would have been toward Sicily, the ancestral homestead of the Maltese, and perhaps toward Pantellaria and Lipari, the sources of the obsidian prized by the Maltese. Given what they see as the increasing isolation of the Maltese island culture, they believe the orientation of the temples reflects a desire for both ancestral security and for power as symbolized by exotic goods.

Grima has taken a different approach to decoding the temples, looking at their arrangement and decoration, and working on the assumption that they might reflect their builders’ worldview. One intriguing observation he has made is that imagery related to the sea is found in some areas of the temples, while that related to the land is found elsewhere. Spirals are carved on stones forming the archways leading from the central corridor of temples and into the apses leading off it, which have raised floor levels. The spirals are used in contemporary depictions of boats elsewhere in the Mediterranean to indicate the sea. Also found in this location are carvings of fish at one temple and graffiti of ships at another. Furthermore, Grima believes that a large carved limestone block that serves as the threshold to an apse at yet another temple may well represent a boat. Within the raised apses, however, such carvings as remain today are of terrestrial animals and plants. So the temples may mirror the island cosmos of the Neolithic Maltese.

Grima strongly believes that archaeological research has important social responsibilities. In April 2001, vandals knocked over sixty stones in a nighttime attack on Mnajdra temple. No one has been arraigned for this crime despite intensive police investigations. Luckily, most of the megaliths were undamaged and have been returned to their original position. “One of the lasting lessons of that experience is that much remains to be done in the interpretation of the past to a wider public,” Grima says. “Such an act of vandalism would be practically impossible in a society where everyone understands, values and appreciates their archaeological heritage.”

Mark Rose is executive editor of Archaeology. For more on Heritage Malta, visit www.archaeology.org.