THE MARZAMEMI SHIPWRECK EXCAVATION
A Late Antique Church Under The Sea
BY JUSTIN LEIDWANGER AND ELIZABETH S. GREENE

The 6th century AD was marked by the ambitious rule of Justinian (527-565) and his brief renaissance of the Roman Empire. More than two centuries of division and setbacks in the west had left half of the once Mediterranean-wide empire in the hands of Vandals, Ostrogoths, and others. Dedicated efforts by Justinian and his stalwart generals brought North Africa, Dalmatia, Sicily, Italy, and the Iberian peninsula back into the fold. Driven by the vision of an empire unified not only politically, but economically and religiously, Justinian launched prolific building projects that sought to restore the symbolic features of Roman life: civic spaces, fortifications, and religious structures. Military triumphs are often short lived, and Justinian’s empire soon lost much of its reconquered territory, but the mark of this flourish survives today particularly in the many 6th-century churches constructed across the Mediterranean, including the Basilica of San Vitale in Ravenna, and the magnificent centerpiece of his program, Hagia Sophia in Constantinople. These buildings feature marble from the imperial quarries at Proconnesus in the Sea of Marmara paired with a lavish assortment of decorative stones drawn from all corners of the Mediterranean world, a symbol of the breadth and power of the imperial order.

DISCOVERY AND EARLY EXPLORATION
In 1959 a local fisherman spotted marble columns and carved stone blocks about a kilometer off the coast of Marzamemi in southeast Sicily; explorations throughout the early 1960s by Gerhard Kapitän identified these as elements of religious architecture and connected the submerged remains to a lost ship from the era of Justinian. Kapitän spearheaded the recovery of hundreds of artifacts, surveyed the site remains, and published a moving narrative of the “church wreck,” with its cargo of prefabricated components destined for assembly somewhere in North Africa. There is obvious appeal to such a system of standardized imperial construction in the late Roman world, particularly in association with Justinian’s interest in religious architecture, but this narrative may tell only part of the story. To what degree does the assemblage stand as a symbol of imperial agency in rebuilding the Late Roman west, and how much influence did the emperor hold over economic connections between the quarrying and transport of marble on the one hand, and the financing, design, and construction of churches on the other? Was the emperor the primary instigator of luxury shipments, or did massive quantities of marble travel as standard commercial goods alongside the wine, oil, and grain that fed the empire? Who was charged with their transport, and what sort of ship was entrusted with this massive and expensive stone cargo weighing more than 100 tons?

NEW INVESTIGATIONS AT MARZAMEMI
With such questions in mind, a collaborative team from Stanford University and the Sicilian Soprintendenza del Mare began investigating the “church wreck” at Marzamemi in 2013. Through survey, excavation, and analysis, the research program has begun to answer questions about the ship’s place in the complex interconnections—political, economic, and religious—of the late antique Mediterranean. At a depth of only about 8 m (25 ft), the site is marked by its collection of marble elements in a sandy depression on a seabed of reef and rock. The shallow depth means that winter storms buffet the site, wedging small artifacts deep beneath boulders, and on occasion moving even larger elements. Multi-ton rocks and reef have collapsed onto the site and now sit atop arop columns. Such challenging topography in a dynamic marine environment has made careful mapping through traditional and innovative systems a priority in order both to contextualize Kapitän’s earlier work and to keep track of objects that appear and disappear in shifting sands between seasons. Excavation relies on an ever-growing international team. In 2016 the core group was comprised of more than 30 student and staff archaeologists, conservators, and specialists from six countries. The shallow depth facilitates the use of water dredges to remove sand. Because each dredge can be operated with a single water pump, surface support for dive operations is relatively minor: a single extra boat ferries pumps, fuel,
and additional scuba tanks out to the site each morning. The warm water and depth make long dives possible. The moving and lifting of heavy marble elements presents its own set of challenges, but support from professional divers in Marzamemi, the Guardia di Finanza’s diving team and naval operations in Pozzallo and Siracusa has allowed us to move these boulders off the site safely and to raise the architectural finds to the surface.

Once recovered, artifacts are brought to the Palmento di Rudini, a restored 19th-century winery situated on a bluff overlooking Marzamemi. While the front of the facility has been transformed into a local museum, conservation takes place in the rear section where plastered wine vats now store ancient objects and outdoor tanks hold marble columns undergoing desalination. Office and conservation space allows artifacts to be processed, recorded, photographed, catalogued, and studied. The winery offers numerous options for museum displays and audience engagement. Cavernous underground tunnels that once stored wine raise an intriguing prospect for future display where visitors might “immerse” themselves in the site safely and to raise the architectural finds to the surface.

The new elements raise questions about building program for which this cargo was destined, but the patronage and mechanisms behind such projects. Continued excavation will surely lead to additional finds. The dynamic marine environment has resulted in the breakage and erosion of objects, making reassembly and even accurate object counts rather difficult. Despite these challenges, it is clear that many pieces were transported in a rough “quarry state,” designed for finishing locally, wherever local might have been. To facilitate research on these heavy elements, a program of 3D documentation uses high-precision structured light scanning to create models of each stone find, allowing for virtual reassembly of individual elements. 

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PAINT BY NUMBERS AND MORE

Small finds discovered in association with the stone may suggest a shipment that included not only the major building blocks for a church, but elements for its adornment as well. In a jarring contrast to the blue-green depths of the underwater environment, small lumps of golden orpiment and red-orange realgar—both compounds of arsenic—stand out. Such minerals have been found on ships before, including at Serçe Limanı, where they were interpreted as depilatory agents in a grooming kit. The Roman encyclopedist Pliny the Elder (35.31) noted that these bright minerals were used as pigments to color paints, which seems more likely in this context. Chunks of amber glass and small slabs of polished marble in shades of green and white or grey may have served other decorative purposes as well.

While the cargo of architectural and decorative elements speaks for a shipment of goods destined for quite lavish construction, excavation has revealed other artifacts that tell a somewhat less lofty tale, reflecting the lives of sailors and perhaps their own private commercial initiatives. Kapitän’s records include some number of transport amphoras, which must have assumed to reflect the crew’s provisions, loaded at the ship’s point of origin and restocked as necessary along the way. But dozens of amphora lids discovered in a discrete area of the site over the past three seasons raise the possibility that these jars reflect a secondary cargo of some processed agricultural commodity like wine or oil. The number cannot compare with the 900 jars on the 7th-century Yassada vessel, but it raises questions about how such opportunistic ventures might be explained in the context of an imperial shipment. An assortment of fragmentary cooking and dining wares in a variety of forms and fabrics might also hint at a more diverse crew than the earlier model affords.
The new elements raise questions about not only the size and scale of the religious building program for which this cargo was destined, but the patronage and mechanisms behind such projects.

FIRST CLUES TO THE SHIP
What sort of ship was needed to carry this massive cargo of building stone, decorative elements, and amphora? In a discussion of stone as a symbol of luxury, Pliny (36.1) noted the cutting of mountains to yield marbles of a thousand colors, and the ships that transport them across the sea, but offered no clues about the construction of the actual vessels. The sole hint at specialization comes from the satiric novel of Petronius (Satyricon 117.12), in which a complaining servant compares himself to the patronage and mechanisms behind such projects.

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ELIZABETH S. GREENE
INA Affiliated Scholar
Brock University

JUSTIN LEIDWANGER
INA Affiliated Scholar
Stanford University

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SUGGESTED READING


Leidwanger, J., and S. Tusa. 2016. ‘Marzamemi II ’Church Wreck’ Excavation: 2015 Field Season.” Archaeologia Maritima Mediterranea 13: 129-143. (Reports on the 2013 and 2014 field seasons can be found in earlier volumes of the same journal)


For more information about the “church wreck” excavation and the Marzamemi Maritime Heritage Project, visit the Facebook page (SMarzamemiProject) and website: marzamemi.stanford.edu.