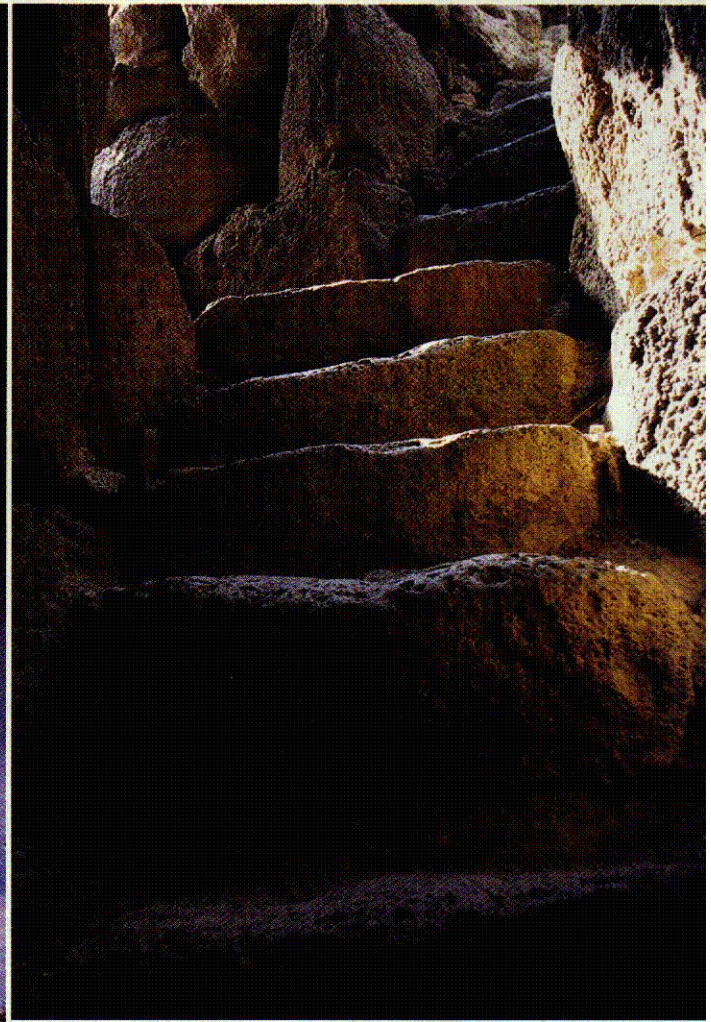
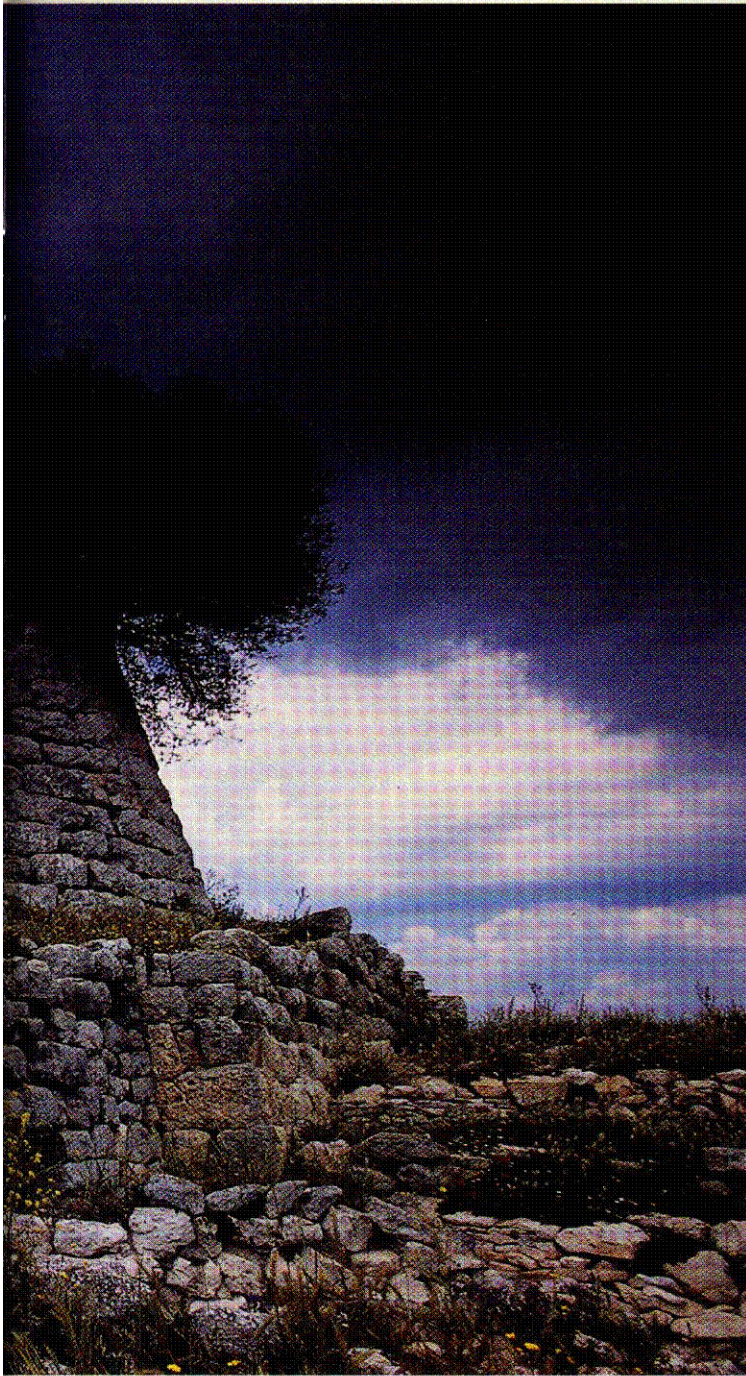


Legacy *in* Stone

Sardinia's ubiquitous towers recall a time of fortified farmsteads.

by ROBERT H. TYKOT

photographs by SANDRA DAVIS LAKEMAN



Wild olive trees grow from the wall of the central tower of Nuraghe Is Paras (Nuraghe of the Monks), left, located in Isili in south-central Sardinia. It rises to a height of 42 feet and includes an intact 38-foot-high corbel-vaulted dome, below, the highest known in Sardinia. A spiral staircase, above, once connected the three levels of Nuraghe Santu Antine in Torralba. This structure, named after St. Constantine but popularly known as Sa Domu de su Re (the House of the King), must have reached at least 69 feet before some of its stones were carted off during the nineteenth century to build a fountain in the neighboring village.

A mosaic of ancient history described by D.H. Lawrence as “lying outside the circuit of civilization,” the 9,300-square-mile island of Sardinia was in fact widely settled and in the mainstream of western Mediterranean cultural developments during the Neolithic and Bronze Age. The Greeks called the island Ichnussa, or footprint, because of its shape, but Sardinia’s central location makes the term metaphorically appropriate as well. During the Late Bronze and Iron ages, significant trade and contact existed with the eastern Mediterranean; Phoenician colonies were established; and the island was dominated by a succession of Carthaginians, Romans, Vandals, Byzantines, and others. Nevertheless, many elements of the indigenous Bronze Age Nuragic culture that characterized Sardinia beginning





about 1750 B.C. survived into the medieval period. More than 7,000 stone monuments known as nuraghi (their Sardinian name, meaning a stone structure or pile with a hollow interior) still dot the modern landscape. Decades of intensive archaeological investigation by local and foreign scholars have provided a solid foundation for an understanding of the Nuragic culture and its relation to other Mediterranean societies.

The earliest nuraghi, constructed in the Middle Bronze Age between 1750 and 1500 B.C., follow two basic designs: one a tower with walls several feet thick that slope inward like a truncated cone, and the other a broader, flat-roofed structure with a central corridor and side chambers. Both types were constructed using stones that average 1,000 pounds each, without the benefit of mortar. The tower nuraghi, which continued to be built through the

Late Bronze Age, typically have diameters of about 40 feet and heights of 35 to 70 feet depending on their number of stories. Even the simplest single-story towers have a staircase within the walls that spirals up to the roof and two or more side niches in the central chamber below. Many nuraghi have second and even third stories, each level with a corbel-vaulted ceiling and wooden lofts and platforms to

make efficient use of the space.

The more complex nuraghi, which developed during the Late Bronze Age and continued to be elaborated on through the Early Iron Age, are clearly defensive in purpose; subsidiary towers and circuit walls with arrow slits surround the original nuraghe and usually a courtyard with a well. Su Nuraxi in the town of Barumini, now a UNESCO World Heritage Site, is one of the best examples (its name means "the nuraghe," in the Sardinian language). It has an inner wall with four towers surrounding the central tower and courtyard, as well as an outer circuit wall linking seven additional towers. Numerous huts and other structures have been excavated outside this defensive wall. A carved stone model of a nuraghe was found in the center of one, a larger meeting hut with benches around its inner walls.

Unlike the similarly constructed Mycenaean tholos tombs, which the Sardinian towers predate by a few centuries, the nuraghi were used as residences. Excavations in the towers and surrounding villages have produced abundant evidence of cooking and domestic activities, as well as workshops for the manu-



The main tower of Nuraghe Palmavera, a limestone and sandstone tower complex near Alghero in northwestern Sardinia, as viewed through the doorway of one of the three circuit wall towers, above. The staircase, left, leads into the domed chamber of the sacred temple well at Santa Cristina, a Nuragic sanctuary complex at Paulilatino in west-central Sardinia.



facture of textiles, ceramics, metal tools, weapons, and figurines. Well-known votive bronzes, often representing warriors or priests but also including animals and boats, come mainly from sacred wells and sanctuary sites such as Santa Cristina in Paulilatino. The deceased were collectively buried in semi-subterranean gallery graves known as *tomba di giganti* (giants' tombs), which typically include a forecourt defined by standing megalithic slabs.

While the Nuragic people left no written language, their architectural and archaeological remains suggest a relatively conservative and homogeneous culture, with the nuraghi developing from fortified farmsteads for nuclear family groups by the Late Bronze Age into a tiered hierarchy of settlements led by chiefs. Sardinia was, by then, an important part of a shared Mediterranean culture. Aegean ceramics and copper oxhide ingots have been found at some two dozen sites on the island, Sardinian pottery has surfaced on Lipari and



Crete, and Sardinian warriors and mercenaries are mentioned in eastern Mediterranean and Egyptian texts.

Sardinia's numerous stone towers continue to intrigue prehistorians as well as photographers fascinated by the relationship of architecture to landscape. On these pages, architect-photographer Sandra Davis Lakeman makes the most of the island's warm Mediterranean light in capturing the emotive power of these ancient structures. ■

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A basin for domestic or ritual use, above, lies within the complex of Su Nuraxi in Barumini in south-central Sardinia. A doorway, below, provided access to the large courtyard of Nuraghe Arrubiu in Orroli, one of the largest nuraghi in Sardinia. Called Arrubiu (red) because of the reddish color imparted by its lichen-covered basalt stone, it is located on an open, windy plain in southeastern Sardinia.

