



Conserving the *Kasbah*

Team members carrying out documentation of the wall paintings at Kasbah Taourirt.



Kasbah Taourirt in Ouarzazate, Morocco.

Home to a rich tradition of buildings constructed in earth, Southern Morocco is an important center of Berber culture—the indigenous people of North Africa whose culture dates back to 3000 BC—and of earthen architecture, with over three thousand historic urban settlements known as *ksour* and four hundred historic buildings known as *kasbahs*. These magnificent earthen fortifications and villages are a testament to the region's rich culture and history, and have drawn explorers, researchers, and tourists to the area for centuries. While some important sites have been protected and preserved, many other earthen fortifications and villages are deteriorating and the vast majority are threatened by obsolescence and abandonment, which leads to gradual deterioration and, ultimately, collapse.

These issues are due in part to changes in the economic and social structure that supported them, as well as uncontrolled urban development. The Getty Conservation Institute (GCI) is working with CERKAS (Centre de Conservation et de Réhabilitation du Patrimoine Architectural des zones atlasiques et subatlasiques) to preserve one of the most important sites in the region—the fortified Kasbah Taourirt.

"The methodology developed in collaboration with the GCI to preserve this site will also be used by our personnel in the future to restore similar sites in the region," said Mohamed Boussalh, director of CERKAS.

The oasis village of Taourirt (a *ksar*), dating from the twelfth century, was strategically located at the intersection of major trans-Saharan trade routes that once

brought spices, gold, and other goods across the Sahara from Timbuktu to the rich imperial cities of Morocco. It is now embedded within the modern city of Ouarzazate. Located in the city's core, the Kasbah Taourirt, a registered national monument, was originally one of the residences of the Glaoua Caïd, a powerful family that ruled the region during the late nineteenth and early twentieth centuries. This impressive complex of buildings features castle-like defensive walls and rich traditional Berber designs, including carved plasterwork, decorative ceilings, and mural paintings.

The GCI has been collaborating with CERKAS since 2011 to develop a conservation and rehabilitation plan (CRP) for the site. The CRP takes into consideration the whole ensemble and each of its sectors, its connection with the adjacent historic community (the *ksar*), their original natural setting, and the urban context. The objective of the CRP is to establish a conservation process that respects the original building fabric, preserves technical know-how, demonstrates appropriate re-use of such sites, develops a participatory process, and builds local capacity in these areas.

Training and capacity building are important components of all phases of this project, including documentation, rehabilitation planning, analysis of earthen materials, and practical conservation approaches. Staff and graduate students from Carleton University at Carleton Immersive Media Studio (CIMS) in Canada have trained CERKAS personnel in surveying techniques while developing an architectural survey of the entire site.

"Recording of heritage places should be directly related to the needs, skills, and the technology that are available to the end users—CERKAS staff in this case—who are responsible for the management and care of these sites. The project has chosen techniques that CERKAS staff can easily use on other sites," said Mario Santana Quintero, faculty member at CIMS.

The project team also includes experts in the conservation of wall paintings who are working within an important sector of the Kasbah known as the Residence of the Caïd, which has suffered from abandonment since the 1950s. These rooms feature traditional Berber patterns and motifs that are incised and painted onto plaster. Bat infestation and the failure of the roof have contributed to the deterioration of the decorated surfaces. Over the past several field campaigns, GCI conservators working with CERKAS staff have documented the condition of the wall paintings. During the most recent field campaign, which took place earlier this year, conservators demonstrated techniques to stabilize and protect the wall paintings prior to the implementation of structural interventions on the residence walls and roofs. Once structural repairs have been completed, a comprehensive wall paintings interventions plan will be carried out for the conservation of the decorated surfaces.

As part of the dissemination strategy, CIMS is working with CERKAS on the development of a website as a repository of information related to the Kasbah of Taourirt which can be used by CERKAS and researchers to develop similar rehabilitation projects for earthen sites in the region.

Most importantly, conserving the Kasbah demands a multidisciplinary approach that addresses economic, social, cultural, and technical challenges. "An important component of the project is to facilitate discussions between CERKAS, the municipality of Ouarzazate, and community groups about issues and opportunities presented by the site, with the objective of arriving at a common vision for Kasbah Taourirt's future use," said Claudia Cancino, senior project specialist at the GCI, who is managing this project.

The Conservation and Rehabilitation Plan for the Kasbah of Taourirt is a project of the GCI's Earthen Architecture Initiative.



Above left: GCI conservators and CERKAS staff stabilize the wall painting.

Top right: A selection of locally available earthen materials have been gathered for analysis.

Right: Project consultant and CERKAS staff carrying out architectural survey using a total station.