



◀ Areas where part of the mural decoration on the vault of the lower cloister has detached in the former Totolapan Monastery.

Elsa Arroyo, IIE-UNAM

Elsa Arroyo Lemus*

Recovering Monastery Murals On the Slopes of the Popocatepétl Volcano

Yesterday the earth shook again. We haven't yet been able to comprehend or deal with the damage produced by last September's strong earthquakes, and we've already feared another disaster. According to National Seismological Service reports, this time the epicenter was 11 kilometers south of Pinotepa Nacional on the coast of Oaxaca.¹

We have heard a great deal about the fact that our country is located in an area of high seismic activity because of the convergence of five tectonic plates: the North American, Pacific, Rivera, Cocos, and Caribbean Plates. This has marked our cities and the response of our society, particularly after the 1985 earthquake. In addition to the terrible loss of human life and the incalculable damage to buildings and homes in urban populations, particularly poor and marginalized towns, the violent quakes of September 7 and 19, 2017 have noticeably affected the country's historic heritage.

According to official figures, the September quakes considerably damaged 1 821 monuments in the states of Chiapas, Oaxaca, Mexico, Morelos, and Puebla, as well as Mexico City.² It is no exaggeration to say that we have never before seen such massive, widespread devastation. It is not only a matter of the number, but also of the geographical scope of the damage that makes mapping and dealing with the problem so complex. While by this time, the monuments have been shored up and the rubble cleared, the critical period of reconstruction, rehabilitation, or at least consolidation of the architectural structures is barely beginning.³



Arturo Chapa, UNAM Graduate Program in Rehabilitation of Architectural Heritage

▲ Mural fragments in the process of being pieced together.

What is needed is a detailed review of the criteria and norms in place for intervening in the cultural heritage, and, above all, comprehensive projects designed to deal with the delicate problem of protecting it case by case, taking into consideration the obvious limitations in human and economic resources to do so. The results cannot be swift, and the decisions cannot be unilateral; the actions must take place in stages based on consensus among the agents involved with conservation, valuing, and research about the elements of our cultural heritage, but, above all, taking into consideration their contemporary uses. The authorities have estimated that reconstruction of the monuments will take until the second half of 2020.⁴ I think this is optimistic.

* Researcher at the UNAM institute of Aesthetic Research; elsa_arroyo@comunidad.unam.mx.



Eumelia Hernández, IIE-UNAM

▲ Collapse of the dome over the high altar in the San Guillermo Totolapan Church.

Interior of the Santo Domingo de Guzmán Church, Hueyapan. ▶

Earthquake Damage along the Volcano Route

Of the 33 municipalities declared disaster areas in the state of Morelos after the September 19, 2017 quake, eight are located in what has been called the Volcano Route due to the fact that their geography, history, and culture are particularly defined by the active presence of the Popocatepetl Volcano. In 1994, the sixteenth-century monasteries that are part of this geographical-cultural landscape were included on the United Nations Education, Science, and Culture Organization (UNESCO) World Heritage Site list. The document that proclaimed this, *Earliest 16th-Century Monasteries on the Slopes of Popocatepetl*,⁵ covers 14 monasteries, 11 in the state of Morelos and 3 in the state of Puebla.

At the time they were included, these federally-owned monasteries were part of a highly visible public policy: projects for the maintenance, media coverage, academic research, and above all, the interest in promoting the region as a *cultural landscape*. According the Convention Concerning the Protection of the World Cultural and Na-

tural Heritage of 1972, cultural landscapes are “the combined works of nature and man.”⁶ The proposal jibed with the international organization’s wave of renovation that sought to refresh and make more objective the way that sites of “outstanding universal value” were inscribed on the World Heritage Site list.⁷

For the Mexican government, it also represented an ideal, inspirational model that placed the country’s culture in the avant-garde and at the same time promoted its different regions through art and local customs from the point of view of tourism and economic and social community development.

**Yesterday the earth shook again.
We haven’t yet been able to comprehend
or deal with the damage produced by
last September’s strong earthquakes.**



Elsa Arrojo, IIE-UNAM



▲ Student volunteers work on-site to salvage the mural.

One noteworthy aspect of Mexico's 1994 inclusion on the World Heritage List is the mention of the monuments' excellent state of preservation, plus a description of their typology and their most important stylistic characteristics. Seemingly, the historical criterion was the most important reason for including them on the final list since, while other complexes were considered the first foundations of the mendicant orders, they were excluded from the route. This is the case of San Martín Huaquechula, a monastery of historic and artistic note located in the shadow of the Popocatepetl Volcano.

The UNESCO text makes no mention of the religious use that most of these former monasteries are still put to. Actually, 60 percent of the space in these buildings is taken up by churches, and all of the monasteries along the Volcano Route are used for liturgical activities. The federal government only manages three of the complexes (Huejotzingo, Tepoztlán, and Oaxtepec), since they operate as local museums.

Until last September's earthquakes, 9 of the 14 monasteries were used to house clergy and 2 also operated as offices or all-purpose rooms for the Catholic community.

It is important to underline that the most noteworthy damage to these monuments is located precisely in the areas used by the religious due to accumulated maintenance problems that have recently become more severe.

While some of these buildings were restored while their inclusion on the World Heritage List was being negotiated, the repairs were limited to the most visible places: the atrium, the main façade, and the cloister. The collapse of domes, walls, and plaster caused by the earthquakes has shown that the maintenance done years ago has not continued nor has it been as effective as needed. Mexico's conservation milieu does not enjoy a "culture of prevention" that would put a priority on a program of continuous activities to care for, repair, and restore heritage buildings.

The monasteries' murals were among the characteristics that made them unique and representative and worthy of selection for the 1994 declaration. At the time they were created in the sixteenth century, the decoration of the walls acted to define the use of the architectural space and point out its possible future uses. The walls tell the foundational stories of the mendicant or-

ders and the objectives of their utopian mission in the New World.⁸

As you walk through a monastery, its murals unfold, opening like the pages in a book, facilitating their understanding. With the plaster missing after the earthquake, we can no longer do that, nor can we reactivate “the power of the images.” But we have to add that this is but a new addition to what was already missing and the scars from prior collapses. The sixteenth-century murals seem destined to disappear; discounting certain exceptions, the projects to restore them cease when the edifice itself has been stabilized.⁹

The authorities have estimated that reconstruction of the monuments will take until the second half of 2020. I think this is optimistic.

The Institute for Aesthetic Research Brigade

Since its foundation in 1935, the UNAM Institute for Aesthetic Research (IE) has included among its substantive tasks the conservation and defense of Mexico’s cultural heritage. As a public university, we assumed the responsibility of participating in the process of registering, understanding, and prioritizing the damage caused by the September 2017 earthquakes, and of proposing and carrying out concrete activities based on our research areas.

At first, we created a brigade of academics and university specialists to visit and make a photographic record of the monuments along the Volcano Route. It was not easy to select the area of study. The decision was motivated by factors like the historiography, the contemporary value place on the area, and the heritage status of the monasteries. We obtained images of the state of the build-



Eumelia Hernández, IIE-UNAM

▲ Cracks and debris in the vault of the San Juan Bautista Church in Tlayacapan.



Ricardo Alvarado, IIE-UNAM

▲ Plaster detached from the mural painting on the vault of the former Tetela del Volcán Monastery.



ings, some in imminent danger of collapse after the earthquake—we should also remember that it rained heavily right after the September 19 quake. Today, these photographs are part of the IIE digital catalogue, documentary evidence added to the collection's historic images.

When our photographic brigade traveled through the monasteries on the slopes of the Popocatepetl Volcano, in addition to severe structural damage, we found important areas of the murals that had collapsed and broken up. It was then that we decided to formulate a project to recover these fragments, in danger of being swept up as

Our work aims to make visible the enormous problem of raising and recovering these public goods reduced to fragments.

ruble, now or in the future when no one remembers their origin. We did fieldwork with undergraduate history and visual arts students and graduate students in architectural restoration and art history in December 2017 and January 2018 to protect, catalogue, and research the collapsed, fragmented mural paintings in two of the monasteries along the Volcano Route: San Juan Bautista Tlayacapan and San Guillermo, Totolapan.¹⁰

This initiative, developed with the authorization and monitoring of the National Institute of Anthropology and History's National Coordinating Body for Preservation of Cultural Heritage and its Morelos Center, has used a specific methodology for registering and cataloging collapsed mural paintings. Once restoration begins, this methodology will facilitate the identification of the formal composition and the place the fragments detached from.

Guided by the ideas of urgency, mobility, and solidarity, our work aims to make visible the enormous problem



▲ The San Juan Bautista Tlayacapan Monastery after being propped up and cleaned.

Arturo Chapa, UNAM Graduate Program in Rehabilitation of Architectural Heritage

◀ Student volunteers working to save the collapsed mural at the former Totolapan Monastery.

of raising and recovering these public goods reduced to fragments, which, in previous disasters were almost certainly thrown away as part of the rubble. As mentioned above, the damage to the heritage buildings goes far beyond the architectural structures themselves; and, it is precisely the conservation of all their pictorial goods and the buildings that hold them that gives meaning to the use and enjoyment of the monuments by society today.

Based on this experiment in recovery, research, and teaching, we have learned to dialogue with both institutions and communities. We have also opened a way forward for thinking about and discussing how we in academia



▲ On-site activities to recover the Tlayacapan mural.



▲ Collapsed buttress on the south side of the former Tlayacapan Monastery's atrium.

Eumelia Hernández, IIE-UNAM

It is time to creatively and responsibly imagine how to undertake the task of recovering, protecting, and preserving the heritage damaged by the earthquakes.

are going to meet the challenge of rebuilding our cultural heritage. Today, we must deal with this issue with the understanding that the monuments and their buildings are complex and require more attention than the government-paid insurance policy will provide. It is time to creatively and responsibly imagine how to undertake the task of recovering, protecting, and preserving the heritage damaged by the earthquakes. Not only as experts but also as civil society, we must demand that the guidelines, regulations, and criteria for intervention be updated. It will also be necessary to develop manuals for safeguarding and rescuing buildings in the case of catastrophes—whether natural or manmade—and promoting long-term programs to restore them, placing their contemporary use at the center of our discussion. **MM**



Eumelia Hernández, IIE-UNAM



Ricardo Alvarado, IIE-UNAM

▲ Debris from the collapse of the west gallery of the upper cloister in Tototlan.

Notes

1 Servicio Sismológico Nacional, UNAM, “Reporte especial. Sismo del 16 de febrero de 2018,” http://www.ssn.unam.mx/sismicidad/reportes-especiales/2018/SSNMX_rep_esp_20180216_Oaxaca_M72.pdf, accessed February 17, 2018.

2 Diego Prieto, director of the National Institute of Anthropology and History, quoted in Abida Ventura, “El patrimonio que los sismos destruyeron,” *El Universal*, December 27, 2017, <http://www.eluniversal.com.mx/cultura/patrimonio/el-patrimonio-que-los-sismos-destruyeron>.

3 The monuments have been attended to by government institutions through instruments like the Fund for Natural Disasters (Fonden), although the needs far surpass the estimated public resources earmarked for them.

4 Interview with Minister of Culture María Cristina García Cepeda, quoted in Alida Piñón, “Sumamos esfuerzos para atender sismos,” *El Universal*, December 21, 2017, <http://www.eluniversal.com.mx/cultura/patrimonio/sumamos-esfuerzos-para-atender-sismos>.

5 *Earliest 16th Century Monasteries on the Slopes of Popocatepetl*, World Heritage Committee, UNESCO, 1994, <http://whc.unesco.org/es/list/702>, accessed February 10, 2018.

6 *Directrices prácticas para la aplicación de la Convención del Patrimonio Mundial* (Paris: Centro del Patrimonio Mundial de la UNESCO, 2005), p. 48, whc.unesco.org/archive/opguide05-es.pdf, accessed February 17, 2018.

7 About the vagueness of the concept of “outstanding universal value,” see Henry Cleere, “The Concept of ‘Outstanding Universal Value’ in the World Heritage Convention,” *Conservation and Management of Archaeological Sites* (1996), pp. 227-233. The current definition of cultural heritage can be found in the *Convention Concerning the Protection of the World Cultural and Natural Heritage*, UNESCO, 1972, whc.unesco.org/en/conventiontext/, accessed February 17, 2018.

8 Historiographical literature about the importance and meaning of murals in sixteenth-century architecture is plentiful. Some fundamental texts include George Kubler, *Mexican Architecture of the Sixteenth Century* (New Haven, Connecticut: Yale University Press, 1948); Manuel Toussaint, *Pintura colonial en México* (Mexico City: Universidad Nacional Autónoma de México-Instituto de Investigaciones Estéticas, 1965); Constantino Reyes-Valerio, *El pintor de conventos. Los murales del siglo xvi en la Nueva España* (Mexico City: Instituto Nacional de Antropología e Historia, 1989); Jeanette Favrot Peterson, *The Paradise Garden Murals of Malinalco: Utopia and Empire in Sixteenth-Century Mexico* (Austin: University of Texas Press, 1993); Elena Isabel Estrada de Gerlero, *Muros, sargas y papeles. Imagen de lo sagrado y lo profano en el arte novohispano del siglo xvi* (Mexico City: Universidad Nacional Autónoma de México-Instituto de Investigaciones Estéticas, 2011).

9 Only a few sixteenth-century monastery murals have been intervened in in Mexico, and some of these interventions have sparked polemics about the use of the ethical conservation principles, for example, in the cloisters in the former monasteries of Malinalco and Tetela del Volcán. See Jaime Cama Villafranca, *Tetela del Volcán. Un ejercicio de conservación* (Mexico City: Instituto Nacional de Antropología e Historia, 2006), and “Malinalco: la polémica restauración,” *Proceso* (Mexico City), July 13, 2013, www.proceso.com.mx/189876/malinalco-la-polemica-restauracion.

10 This was the “Project to Recover the Mural Paintings in the Monasteries along the Volcano Route,” directed by the author, with support fieldwork coordination from Tatiana Falcón and Mónica Zavala, and in research organization for the UNAM art history graduate seminar “Heritage and Earthquakes” from Clara Bargellini. This initiative has been possible thanks to institutional support and financing from the UNAM Institute for Aesthetic Research and the PAPIIT IN402117 project “History of Art Technique. Approximations to the Materiality of Art Objects in the Sixteenth to the Eighteenth Centuries.” The institute’s director, Renato González Mello also arranged for funds from the Harp-Helú Foundation through the UNAM Foundation. Work is planned to continue in 2018 in collaboration with other university institutions, the National School of Social Work and the Morelia Unit of the National School of Higher Studies.