ENERO-JUNIO 2020 JANUARY-JUNE 2020

Technoheritage 2019, Technart 2019, AIC 47TH Annual Meeting: Conservation in Mexico in Perspective with the World

Ir a versión en español

10.30763/Intervencion.230.v1n21.09.2020 • YEAR 11, ISSUE NO. 21:340-348

Submitted: 25.07.2019 · Accepted: 03.02.2020 · Published: 21.09.2020



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Three of the largest and most significant international congresses of conservation and applied technology for cultural heritage, *Technoheritage* (Spain), *Technart* (Belgium), and the annual meeting of the *American Institute for Conservation* (AIC, United States), took place between March and May 2019. These congresses provided an insight into the latest research in the discipline. This review focuses on specifying the international trends and reflecting on those lines of research as well as viewing training in Mexico in perspective with some of the most developed countries in the conservation of cultural heritage.

KEYWORDS

conservation congresses; research; international dissemination

onservation-restoration is an interdisciplinary profession since it combines multiple aspects of knowledge and fields of study. The important scientific innovations produced every year, both in the technological and theoretical aspects, are disseminated and discussed among universities, laboratories, and research centers in multiple congresses.

Mexico produces highly relevant research in the field of cultural heritage conservation, since it has three graduate schools in conservation-restoration: the Escuela Nacional de Conservación, Restau-



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ración y Museografía (ENCRYM), the Escuela de Conservación y Restauración de Occidente (ECRO), and the program provided at the Universidad Autónoma de San Luis Potosí (UASLP), as well as institutions such as the Coordinación Nacional de Conservación del Patrimonio Cultural (CNCPC), the Laboratorio Nacional de Ciencias para la Investigación y Conservación del Patrimonio Cultural (LANCIC), the Red de Ciencias Aplicadas a la Investigación y Conservación del Patrimonio Cultural (Red-CAICPC), the Instituto de Investigaciones Estéticas (IIES-UNAM), and the Laboratorio de Análisis y Diagnóstico del Patrimonio (LAPIDA). Despite these valuable assets, much of the knowledge produced is not disseminated internationally.

The three congresses mentioned in this review brought together researchers from all over the world. Although there were few Mexican speakers (García, 2019; Guzmán, 2019; Mata, 2019; Ortega-Ordaz et al., 2019, 2019a, 2019b, & 2019c), our contributions, due to their excellent quality, did not go unnoticed. Attending congresses like these makes it possible to discern similarities and differences in the research and practice of cultural heritage conservation. Therefore, more than just strictly reviewing those events, this text is an opportunity to present and compare the situation in Mexico at the international level.

TECHNOHERITAGE 2019

The first of these congresses was the *IV International Congress of Science and Technology for the Conservation of Cultural Heritage*, organized and created by *Technoheritage* and the *Instituto Andaluz del Patrimonio Histórico* (IAPH). It benefited from the collaboration of several Spanish universities and organizations, among which stand out the *Universidad de Sevilla* (US), the *Universidad Pablo de Olavide* (UPO), and the *Consejo Superior de Investigaciones Científicas* (CSIC), to mention a few.

This fourth edition of the congress took place in Seville, Spain, from 26 to 30 March in the pavilions of the us, and it had five main topics: the development of new digital graphic instruments such as Building Information Modeling (BIM), and Geographic Information Systems (GIS); the management and sustainability of information regarding cultural heritage; importance, social value, and policies in the management of information for its conservation; risk management and monitoring; and development of products, technology, and materials for their conservation, and evaluation of physical, chemical, and biological deterioration agents and mechanisms.

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Architectural registration, conservation, and restoration played a leading role in the course of the congress, with architectural restoration having the most innovative presentations. Among the topics, it is worth mentioning the application of different 3D digitization techniques, BIM-GIS, or even the innovative project of artificial intelligence applied to the preventive conservation of heritage buildings. This last project, also known as *Art-Risk*, proposes the use of software capable of making decisions regarding land use planning, urban planning, and the treatment of historical heritage, while also considering vulnerability and risk factors. In this sense, Spain has established itself as a pioneer in architectural conservation, with organizations such as Tutsosmod, Petro-BIM, UPO, and CSIC.

The restoration of buildings in Spain is worth mentioning. Rather than carrying out aesthetic restorations of buildings that encapsulate or mimic their historical phases, Spanish conservators are betting on comprehensive rehabilitation and urbanization (Ludevid, 2015). The awareness of and respect for the historicity of the building do not lose sight of the notion of its current function and what new generations of architects have to offer. Therefore, it is not unusual to find historical buildings with stylistic adaptations or contemporary furniture.

The organizers of the congress made guided visits to different cultural spaces, among them the headquarters of the *Instituto Andaluz del Patrimonio Histórico* (IAPH), which contributes to the development of regional cultural policies and also functions as a research institute. The theoretical vision concerning the conservation of moveable heritage is not so different from that which prevails in Mexico, since most of the theoretical criteria, terminology, and procedures taught in its main schools of restoration come from Spain (Egido, & Calderón, 2008; Martínez, *Sánchez-Mesa*, & Sánchez-Mesa, 2001; Muñoz, 2003). Nevertheless, on getting to know the workshops, it is possible to observe that the work dynamics are very different since the institution only has two restorers who work on between two and four works a year. This difference is striking when compared to the working methods in the CNCPC or in any museum of the *Instituto Nacional de Antropología e Historia* (INAH).

In terms of figures, the situation in Spain sounds alarming, given the large quantity of restoration graduates in relation to the job market. It is a complex problem, however, since approximately 40% of young graduates in Spain are overqualified for the jobs they hold. The problem is severe in the field of art and humanities (Herrera, 2017) since there is no legal framework of its own for higher studies in conservation of moveable property (Viñas, 2008,

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2011). The research produced is, nevertheless, having a significant impact on the study of cultural heritage.

TECHNART 2019

On the other hand, *TechnArt* 2019, the *International Conference* on the Application of Analytical Techniques for the Characterization of Works of Art, was held in Bruges, Belgium. It took place from 7 to 10 May 2019 at the Old St. John's Hospital in the city center, organized by the University of Antwerp and *Musea Brugge* (Municipal Museums of Bruges). The main topics addressed the application of analysis through x-rays (xrf, pixe, xrd, sem-edx), confocal microscopy (3D µ-xrf, 3D µ-pixe), synchrotron, different spectroscopy techniques (FT-IR, Raman), UV-VIS, NIR (absorbance and reflectance), LIBS, magnetic resonance techniques (HPLC, GC), mass spectrometry, imaging techniques, mobile spectroscopy and spectrometry, and hyperspectral imaging.

The congress was organized in three parallel exhibition halls and two poster sessions, where the primary researchers were from the fields of chemistry, biology, physics, and mathematics. There was little participation from conservators, a factor perceived in the presentations in the sense that the investigations explored in detail the transformation mechanisms of the materials and the new diagnosis or characterization methodologies, but did not emphasize their direct application to conservation.

The above led to an atypical experience in *TechnArt* as a conservation graduate presenting instrumental studies at a congress of chemists, physicists, biologists, and mathematicians. This is due to the way of studying the discipline. In Mexico, the training involves learning to work with a great variety of materials such as ceramics, easel painting, mural painting, paper and documents, sculpture, metal, textiles, and photography, in addition to the chemistry, biology, and history of each material, and the theory of conservation and preventive conservation. On the other hand, students in Belgium, and many European institutions, are usually trained in only one material, without going too in-depth into the theory, chemistry, or biology of the materials because there are specialists in conservation science in charge of those areas.

These observations do not discredit conservation training in Europe but make evident the differences in professional training. Although the high technical specialization of European professionals makes them extremely skilled in execution, it reduces individual reflection and significantly narrows the professional field of the con-

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servator-restorer. Nevertheless, it motivates the formation of complete interdisciplinary groups. In the case of Mexico, working with interdisciplinary groups is part of the training. In practice, however, two situations arise: conservators become incredibly independent, to the extent that sometimes they dispense with the collaboration of other professionals. On the other hand, the great diversity of materials with which they work daily prevents specializing in any specific one.

ANNUAL MEETING OF THE AMERICAN INSTITUTE FOR CONSERVATION (AIC)

In the case of the United States, the 47th annual meeting of the *American Institute for Conservation* (AIC) took place, which, in addition to bringing together its different departments, opened its doors to researchers and suppliers of conservation products from all over the world. The Mohegan Sun casino in Uncasville, Connecticut, hosted the event in its showrooms from 13 to 17 May 2019. The topics were so diverse that they took place simultaneously in multiple showrooms, classified into architecture, electronic media, painting, wood artifacts, textiles, paper and documents, sustainability, photographic materials, collection conservation, archive conservation, and technical research and study.

The event stood out for its excellent organization and infrastructure. The presentations were of interesting topics that combined conservation with deep reflection. There were discussion forums with the general public at the end of each of them, which enriched the topic with specific case studies. The best example of this was during the general sessions, when theoretical and philosophical reflections on the discipline were made both in case studies and from the contributions of analytical techniques and historical research (Aronson, 2019; Durant, & David, 2019).

The AIC disseminated its lines of research, collaborations with laboratories and universities, and publications. It encouraged all attendees to participate in its Post-Prints and the *Journal of the American Institute of Conservation* (JAIC). The varied and comprehensive approach of this journal means it accepts publications of instrumental and technological advances, case studies, conservation theory and philosophy, and preventive conservation, among others.

The congress also stood out for its suppliers and sponsors pavilion, where there were demonstrations and offers of different products, tools, and equipment. Among them were the publications of the Getty Institute, the portable archaeometry and char-

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acterization equipment of Bruker, the laser cleaning systems of GC Laser Systems, the spectroscopy instruments of Xpectraltek, and the conservation materials and tools of Atlas Preservation, Kremer, and Talas.

During the poster session, there was the opportunity to meet the representatives of *APOYONLINE*, whose non-profit organization provides support for Latin American conservation students and congress members to attend and participate in international workshops or congresses. The organization works through donations and volunteers. Thanks to this dynamic, several representatives from the ENCRYM, the *Centro Nacional de Conservación y Restauración* (Chile), the *Universidad de Buenos Aires* (Argentina), the *Universidad de los Andes* (Peru), the *Museo de Puruchuco* (Peru), the *Museo de Arte de Ponce* (Puerto Rico), *Arte Restauro Boliviano* (Bolivia), and the *Universidad Nacional de San Martin* (Argentina) were able to attend.

CONCLUSIONS

This review highlights many aspects that provide a glimpse of the differences that exist in terms of practicing and teaching the discipline of conservation. It is not a question of which is better or worse, but rather that there are different models of training and work, regarding which one must be critical and selective. In Europe, the tendency concerning training is the high specialization of the conservators in one material. In contrast, in Mexico, the convention is to learn how to work a great variety of materials, although, despite the difference, the work and application criteria are very similar.

This text also intends to demystify the idealized conception of the so-called first world, since, notwithstanding the adversities of the cultural sector in Mexico, the research produced on the conservation of cultural heritage is competitive at an international level. It suffices to observe the projects produced by Mexican conservation schools and the research carried out by Mexican institutions.

Nevertheless, it is not only a matter of extolling how the profession is practiced since there is still much to improve and change—starting with speaking out as a discipline. Conservators produce a great deal of potentially relevant information. However, they tend to record most of it in reports and files that do not leave the institution archives and libraries, and what little information does spread tends not to be from the guild of Mexican conservators. Therefore, only a small part of it has an international impact. It is ironic to witness how foreign research centers produce high impact publi-

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cations on Mexican cultural heritage with information well-known by conservators in Mexico, but that goes unpublished. By the same token, Mexican conservators are disconnected from the main lines of research since Mexico is only just beginning research already done in other parts of the world decades ago.

The low priority given to research in Mexico and the difficulties involved in the bureaucratic system of its cultural institutions may hinder Mexican conservators from disseminating their work. It is necessary, however, to continue contributing so that the intellectual production is not lost or detached from reflection that is made at international level—working to grow as a discipline.

ACKNOWLEDGEMENTS

I would like to thank all the researchers who collaborated in the projects presented during the conferences addressed in this review, especially to Dr Emanuel Bojórquez-Quintal (Ladipa) from El Colegio de Michoacán (Colmich, Mexico), the MSc. Angela Ku-González from the Centro de Investigación Científica de Yucatán (CICY, Mexico) and Dr Carlos Cruz-Cárdenas from the Centro Nacional de Recursos Genéticos of the Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (CNRG-INIFAP, Mexico); also to MSc. Diego Quintero-Balbás of the L'Università di Bologna (Italy) for his observations; to Pictórica Taller, especially to BA. Arantxa Ramírez and Grad. Jimena Fernández, who gave invaluable contributions during the Technoheritage 2019 congress; and BA. Angélica Díaz, who was highly involved in preparing the presentations.

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