



versión en INGLÉS



Impact of the International Course on Paper Conservation in Latin America. Meeting East at the Escuela Nacional de Conservación, Restauración y Museografía “Manuel del Castillo Negrete”

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Abstract

In 2014, 2017 and 2018 three teachers from the Escuela Nacional de Conservación, Restauración y Museografía “Manuel del Castillo Negrete” (ENCRyM) of the Instituto Nacional de Antropología e Historia (INAH), participated in the International Course on Paper Conservation in Latin America: Meeting East. The knowledge acquired impacted the teaching and learning of students of the Documents and Graphic Work on Paper Conservation Studio Seminar (STRDOGP), and the Documentary Conservation Studio Seminar (STCB). The adaptation, use of materials, tools, and conservation techniques were not the only contributions; the work discipline and organization enriched the teaching and professional practice that takes place in the ENCRyM.

Keywords

Documental heritage conservation; education; professionalization; Japanese techniques; conservation.



Background

In Mexico, within the Instituto Nacional de Antropología e Historia (INAH)¹ the conservation of documents and books was pioneered by Juan Almela Meliá who, in 1943, established a studio-laboratory on a Moneda Street building (Almela, 1949: 20), where he applied techniques learned in Europe; printed volumes from the sixteenth and seventeenth centuries, engravings, lithographs, cartographies, manuscripts, and watercolors were treated. The techniques used are reflected in his 1949 book: *Manual for the Repair and Conservation of Books, Prints and Manuscripts*, in which he describes in detail processes such as cleaning, washing, and bleaching, tear repairs, and placement of infills (Almela, 1949: 14). His concept of conservation includes the idea of reconstructing the works of art, but also of recognizing the objects as a work of art and a historical document at the same time. The conservations are based on the process having been “practiced, or at least tested” (Almela, 1949: 21). From our twenty-first-century paper conservator point of view, many of his proposals are very invasive, with little analysis of long-term effects and without considering material compatibility, his conservation manuals are presented as recipes and the teaching method is based on the master and apprentice model. However, we understand that at the time those processes were pioneers in the field of book and document conservation and that they made use of the resources they had access to.

With the founding of the Escuela Nacional de Conservación, Restauración y Museografía (ENCRyM)² in 1968, the training of professionals in the conservation of Mexico’s documentary heritage began. The interest in the material was such that, by 1984, a technical degree in restoration of documents was offered.³ By 1987, the Taller de Restauración de Papel was part of the bachelor’s degree in restoration of movable cultural heritage –founded in 1970– (Peña, 2016: 55), in addition to the conservation on paper, the seminar included a subject on traditional bookbinding (Tapia, 2017: 2).

Along with the bachelor’s degree, the technical degree continued. In 1988, Professor Juan Chávez Morones, a bookbinder and INAH permanent employee, presented a curriculum that shared content between the technical degree and the bachelor’s degree, including the history of paper and books, the historical evolution of bookbinding, as well as practical conservation procedures. Although the contents are the same, the objectives are different: while the bachelor’s degree aims to train professionals capable of executing specific projects through the analysis and application of theoretical and practical fundamentals, the technical degree sought to provide students with a broad mastery of procedures only.⁴

The predominant training model in the ENCRyM is the studio seminar, where students are expected to be able to recognize the qualities of the cultural property, its deterioration dynamics, and the conservation processes through the treatment of specific cases of original cultural property, thus acquiring cognitive abilities and skills in conservation. The studio seminars integrate teachers from different areas of knowledge: biology, chemistry, history, art history, plastic artists, artisans,

¹ National Institute of Anthropology and History (note from the translator).

² National School of Conservation, Restoration and Museography (note from the translator).

³ The technical degrees taught at the ENCRyM lasted two years, the entrance requirement was to have completed middle school, it had an introductory first semester, and from the second semester on only one object of study was chosen (paper, mural painting, or easel painting) for the following semesters. The technical program was in operation during the 1980s.

⁴ AHENCRyM, Juan Chávez Morones, Plan de estudios para el curso de encuadernación. Carrera técnica y licenciatura. Ciudad de México, 1988, p. 1.



among others to provide advice, monitoring, and assessment of the student's formative action from different angles and multiple approaches to the problems and decisions to be taken (Tapia, 2017: 4).

By 1998, the subjects of conservation on paper were separated from the Paper Studio Seminar and the Documentary Material Conservation Studio Seminar⁵ was created, thus giving books recognition as a type of cultural heritage with a structural system formed by different materials and not only paper. The program's purpose was to bring the student closer to conservative bookbinding and to provide the knowledge to treat materials with more information and a greater theoretical base (Romero, 2008: 2).

Nowadays, the Documents and Graphic Work on Paper Conservation Studio Seminar (STRDOG) and the Documentary Conservation Studio Seminar (STCB), taught in the eighth and ninth semester respectively, work collaboratively, and provide continuous follow-up for a year to students who choose those spaces. The STRDOG includes a basic bookbinding studio, while the STCB offers classes on contemporary paper materiality within the book, to name a few.

The close communication between the two workshops has benefited—among other things—from the training received in the International Course on Paper Conservation in Latin America: Meeting East.



Figure 1. Tools used during the International Course on Paper Conservation in Latin America: Meeting East.
Image: ©Laura Milán, 2018.

⁵ Since 2012, the space changed its name to Seminario-Taller de Conservación Bibliológica (Documentary Conservation Studio Seminar).

Meeting East and the ENCRyM

The first approach to oriental techniques in paper conservation took place at the end of 1997, after the conservator Marie Vander Meeren⁶ when she attended to the Japanese Paper Conservation Course (JPC) course⁷ and returned to Mexico, where she implemented the processes learned with specific materials and tools. With the subsequent changes of teachers in charge of the studio, some of the techniques were lost or distorted, for example, by confusing the uses and functions of the brushes, using dry brushes that are traditionally wet, and vice versa. In 2014, conservator Victoria Casado took the International Course on Paper Conservation in Latin America: Meeting East, which was directly reflected in the intervention practices within the studio. In 2017, Pilar Tapia participated in the course, which reinforced the transmission of knowledge and application of the techniques to the students, since both teachers know and understand the techniques and their results. Laura Milán attended the 2018 edition of the course, hence acquiring knowledge and giving continuity to the training of students as they passed through the eighth and ninth semester of the degree, thus teaching the conservation on documents, graphic work, and documentary material.

A first issue facing the adaptation and adoption of techniques and materials is their acquisition, i.e., some materials are relatively easy to obtain from Mexican suppliers, such as Japanese paper, starch, Klucel[®], and methyl cellulose. Others, such as Japanese brushes, are not easily available, their cost is high, and the administrative audit of their purchase is complicated. This has been remedied with some national suppliers, who obtain the materials and tools, but the cost is even higher since the supplier bears the import costs and then issues the sales invoice through their company.

National alternatives have also been sought to replace Japanese materials, for example, bamboo-based brushes and goat hair work as *noribake*, natural fiber brushes as *uchibake*, and agave fiber brushes as *nadebake*.

Adoption of conservation materials and techniques

Through the years, experiments have been carried out at the STRDOGP and the STCB with vegetable origin adhesives such as starches, rubbers, and cellulose derivatives. In the early 1990s, the main adhesives used in conservation were carboxymethyl cellulose (CMC) and rice starch, with the development of research and greater knowledge of the materials both in Mexico and abroad, they were replaced. For example, CMC was replaced by methyl cellulose (MC), which is more stable and unlike the first does not change color over time, and rice starch was replaced by modified wheat starch. Another cellulose derivative also used in the studio is hydroxypropyl cellulose or Klucel[®] G, which is mainly used to produce reactivated products, unlike before when it was used only as a strengthening for paper and leather.

Purified wheat starch was used only in special cases (such as linings) and it was cooked in an oven, in a somewhat intuitive way—until it was transparent—and without being very clear about the transformation process of the starch granules during cooking. The application was almost immediate, which did not allow the gel to finish forming. It was diluted with water, but the sifting and kneading process was omitted.

⁶ Dr. Marie Vander Meeren oversaw the Paper Conservation Studio Seminar at ENCRyM from 1995 to 1998 (Milan, 2021).

⁷ The ICCROM and the National Research Institute for Cultural Properties, Tokyo, Japan (TNRICP), created in 1992 the JPC, taught in Japan and aimed at training Western professionals in paper conservation under the supervision of Japanese masters (Crespo, 2016).





Figure 2. Example of Japanese brushes used during the International Course on Paper Conservation in Latin America: Meeting East. Image: ©Laura Milán, 2018.



Figure 3. National alternatives to Japanese brushes. Image: ©STRDOGP, 2021.

After the course, the hydration of the starch is now carried out, as well as the necessary cooking times to achieve its greater adherent power and therefore stability over time, this process is carried out in microwaves, and it is prepared in small quantities according to the processes that will be developed. The kneading process is carried out with a sieve (*norikoshi*) and in a wooden bowl (*noribon*) once the wheat starch paste is cold and cooked, adding water. How the prepared adhesive is stored has also changed, in the past, it was stored in the refrigerator, nowadays it is kept at room temperature in an airtight glass container.



Figure 4. Sieving, kneading, and dilution process. Imagen: ©Ivana Quinteros, 2018.

At STRDOGP, we currently have the *uchibake*, *nadebake*, *noribake*, and *mizubake* Japanese brushes. The last two are used in large-scale works of art to hydrate homogeneously. Mounting brushes are used according to the thickness of the paper being adhered to. The *nadebake* is the most used in the studio to adhere the lining paper, in thin documents, with passes from one side to the other. The *uchibake* is used for tapping on thick paper works of art to ensure adhesion during lining. In addition to the Japanese brushes, there is also the *noribon*, which is the wooden bowl used to knead the starch, and the *norikoshi* for sieving or sifting.



Figure 5. Japanese brushes and tools at the STRDOGP. Imagen: ©STRDOGP, 2021.



In addition to the correct use of the brushes and the improvement in the cooking and preparation of the wheat starch paste, the flattening with tension on the worktable or with the application of partial humidification and controlled weight on the table also began to be applied.

As for the linings, we applied the knowledge acquired in the course, in the section taught by professors Florencia Gear, Luis Crespo, and Marie Vader Meeren, since Mylar® was replaced by polyethylene plastic, which is more flexible and facilitates the adhesion process of the paper that will give the emerging support.



Figure 6. Use of polyethylene plastic in place of Mylar®.
Image: ©Laura Milán, 2018.

Finally, we started to teach linings, prepared and carried out with Klucel G®. This process has been used in small and medium-scale works of art such as advertising posters. It is an excellent option for water-sensitive works such as those with soluble inks and even manuscripts with iron gall ink.



Figure 7. Preparation of reactivates for lining, fieldwork in Torreón, Coahuila. *Image: ©STCB, 2018.*

Also, within the STRDOGP program, teaching has been included through demonstrations and practicals of infills with pulp, although so far, no original work of art has been treated with this method, since the process is long and there is not enough time for the students to complete it fully and finish the entire conservation treatment.

Japanese techniques have been used to square paper and to produce and apply *orebuse* (Japanese paper strips) as tear repairs. The Japanese paper used is obtained through national suppliers and it is known that it is not made of 100 % *kozo* fibers, since it contains hemp and wood fibers in very low proportions, however, it has had excellent results. Cutting Japanese paper with water has also been adopted to facilitate its cutting with a feather finish, if required, for tear repairs and infills, since before it was cut with scissors or a cutter and feather finished with a scalpel.



Figure 8. Demonstration of *Orebuse* during the International Course on Paper Conservation in Latin America: Meeting East. Image: ©Laura Milán, 2018.

Another radical change has taken place in the drying process. Previously, a hydraulic press was used in the studio to dry work that had been washed or lined, and a large amount of weight was also applied on the top of the work of art. Nowadays, drying is done in a controlled manner changing blotters in order to naturally dry the paper fibers.

Within the course, the topic of capillary washing using Sontara® was addressed⁸, although it is not carried out in the studio as part of the program, it did lead to an investigation that resulted in the preparation of Astrid Sánchez Carrasco's bachelor thesis. (Sánchez, 2019). For this research, Paraprint OL60®⁹ was purchased, with which favorable cleaning results were achieved; however, several lines of research have emerged from this research, such as washing with inclination variables, washing using different water temperatures, among others.

⁸ Sontara® is a non woven fabric composed by polyester and wood fibers. Has high absorption and resistance.

⁹ Paraprint OL60® is a white non-woven fabric, 100% viscose, reinforced with an acrylate binder. It has a grammage of 60 g/m² and 0.5 mm thickness and is used in the industry for wet air filtration and medical applications.



A highlight of the Japanese philosophy is the order with which they approach the work—planning, and patience to obtain results—this has been inculcated to students during the theoretical classes of both STRDOGP and STCB and is practiced during the treatment of works of art in the studio, which promotes that students, before carrying out any process, have a structured conservation proposal and prepare all the materials and equipment necessary to practice the treatment.



Figure 9. Demonstration of lining materials and tools during the International Course on Paper Conservation in Latin America. Meeting East. *Image: ©Laura Milán, 2018.*

Conclusions

Three professors who are part of the teaching staff of the ENCRyM's seminars and studios on the documents and graphic works of art on paper conservation and the documentary conservation have had the opportunity to be trained at the International Course on Paper Conservation in Latin America: Meeting East, which has made possible the successful adaptation and adoption of techniques and materials in both studios. The knowledge acquired in the course has influenced the training of several generations of conservators at the ENCRyM.

In the studios mentioned above, the incorporation of knowledge acquired in academic training by integrating the course information into the content or didactics of their curriculum is evident the knowledge taught to students has changed over the years and will continue to change. Knowing, understanding, and applying different conservation materials, tools and techniques provide a range of possibilities in the treatment of cultural property.



At STRDOGP and STCB, we provide students with the necessary training so that they can make appropriate decision making, considering the cultural heritage as a container and transmitter of ideas and thoughts, which is part of a system and not just a set of matter.

The constant training of teachers is necessary not only as a way of personal formation but also as the way by which the knowledge transmitted to students is up to date and provides them with different opportunities for intervention.

The ENCRyM, as the institution responsible for training professionals in cultural heritage conservation, offers training courses for personnel from various institutions in charge of documentary heritage conservation. The courses are given according to the student's profile and the scope of their conservation. However, the task of designing and teaching refresher courses for professional restorers who, although they have a bachelor's degree, require training to update their knowledge in both the theory and practice of conservation remains pending.

This text is the first approach to analyze the evolution and change in the way of teaching, learning, and practicing documentary heritage conservation at the ENCRyM. However, many loose ends and ideas can lead to different lines of research and analysis such as the study of the information contained in the conservation reports and the various curriculum of the seminars dedicated to the intervention on documents, which, when confronted, would provide information on the evolution in the decision-making process of conservation.

The professional conservator knows that each work of art is unique and should be conserved as such, so there is no reason to apply a certain method or material just because it is new or has been used in other cases. In this sense, the study of the object before it is treated and the determination of the aim of its conservation will indicate the treatment and therefore the most appropriate materials and equipment, which may or may not be Japanese.

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