

CeROArt

Conservation, exposition, Restauration d'Objets d'Art

HS | 2014

Teaching Conservation-Restoration

Communications

Promoting conservation culture through exchange in training on traditional and contemporary lining methods



MARIA AGUIAR, NICO BROERS, OLIVIER VERHEYDEN, ANTONIO IACCARINO IDELSON, PAOLO ROMA AND ANA CUDELL

<https://doi.org/10.4000/ceroart.4405>

Abstracts

Français English

L'enseignement en conservation-restauration est considérablement influencé par le contexte culturel dans lequel il est élaboré. Selon le pays d'origine, le traitement structurel de peintures sur toile varie largement, reflétant les conditions climatiques mais également les traditions d'enseignement. Via un programme Erasmus, des méthodes de rentoilage et de doublage traditionnelles et contemporaines utilisées en Belgique, en Italie et au Portugal ont été comparées, réunissant des enseignants et des étudiants de l'École Supérieure des Arts Saint-Luc de Liège, l'Università degli Studi Urbino "Carlo Bo" d'Urbino et the Escola das Artes, Universidade Católica Portuguesa.

Conservation training is much influenced by the culture context in which it is developed. Depending on the country of origin, structural treatment of canvas paintings widely varies, reflecting climate conditions but also training traditions. Via an Erasmus Programme, traditional and contemporary lining techniques used in Belgium, Italy and Portugal were compared, bringing together teachers and students from École Supérieure des Arts Saint-Luc de Liège, the Università degli Studi Urbino "Carlo Bo" from Urbino and the Escola das Artes, Universidade Católica Portuguesa.



Index terms

Keywords : échange, pratique, culture et conservation, techniques de doublage et rentoilage

Keywords: exchange, training, conservation culture, lining techniques

Full text

Introduction

- 1 In 1993 the “Guidelines for education and training in the conservation of monuments, ensembles and sites”¹, by ICOMOS stated that: *...The active exchange of ideas and opinions on new approaches to education and training between national institutes and at international levels should be encouraged. Collaborative network of individuals and institutions is essential to the success of this exchange.*
- 2 Later on, in 1997, E.C.C.O., also re-affirmed the importance of a collaborative network for education and research and the need to implement a programme to support these actions: *...the setting up, as a matter of urgency, of a programme of cooperation and exchange within a European network of training and research institutions*².
- 3 The creation of a network in conservation training in Europe has been based, in most cases, on the mobility of individual students or teachers under Erasmus or Marie Curie opportunities. The possibilities to take this step further and to achieve a wider collaboration between academic institutions must be found, regarding their benefits: sharing of knowledge, encouragement of dialogue between teachers and among students from different backgrounds and traditions, or the promotion of respect between peers. The multicultural environment is also an important aspect in such collaborations as it provides richer teaching and learning context.
- 4 Born from an original intention of collaboration between the conservator-restorers Antonio Iaccarino Idelson³ and Olivier Verheyden⁴, a two year *Intensive Program (IP) – Lifelong Learning Experience*, entitled “Comparative Studies of Traditional and Contemporary Lining Methods” was organized by the École Supérieure des Arts Saint-Luc in Liège, Belgium, under the auspices of the Erasmus Programme of the European Commission, with the participation of the Università degli Studi Urbino “Carlo Bo” from Urbino, Italy and of the Escola das Artes, Universidade Católica Portuguesa from Porto, Portugal.
- 5 The programme aimed to study, perform and assess a selection of lining methods, in accordance with the traditional or the most representative techniques used in Belgium, Italy and Portugal. The project started in the final months of 2012 and is still ongoing. The first year involved 6 teachers, Olivier Verheyden and Nico Broers from the Belgian school, Antonio Iaccarino Idelson and Paolo Roma from the Italian institution and Maria Aguiar and Ana Cudell from the Portuguese university. The participant list included 23 students from bachelor’s and master’s degrees.
- 6 Each academic institution decided which group of students was most adequate to participate in the IP, according to their studies plan, ranging from the first degree (three-year bachelor) at the Università degli Studi Urbino “Carlo Bo”, to the MA from L’École Supérieure des Arts Saint-Luc and from the Escola das Artes. All the students involved were pursuing studies on easel painting conservation.



Aims

- 7 The aims of the programme were based upon pedagogical and research issues. The pedagogical goals were the promotion of education and training in conservation and the generation of a network between European academic institutions and students. The moment of convergence for teachers and students from the three schools was the organization of a two-week workshop to perform and experiment with different lining techniques, at the École Supérieure des Arts Saint-Luc.

Fig. 1 Advertisement of the Workshop at the entrance of the École Supérieure des Arts Saint-Luc



The two-week workshop location

Authors' credits



8 The research aims were related to the survey on published or unpublished references about lining treatments; to undertake a critical review of the information collected; to interview a number of professional conservator-restorers and gather their opinions and

findings regarding various lining materials and techniques and finally, to evaluate the properties of each method in order to undertake comparative studies on their performances.

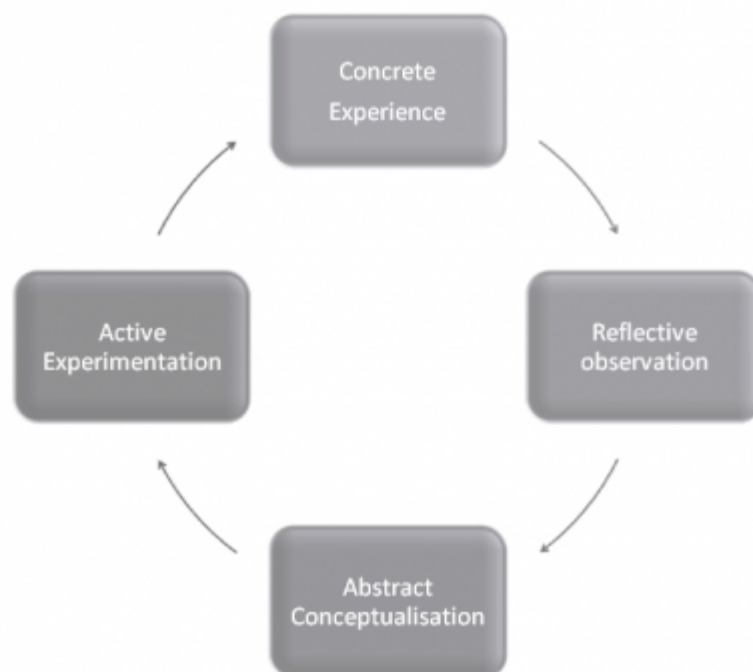
- 9 The preparation of a multilingual publication gathering selected material produced during the workshop (presentations, methodology descriptions, images, recipes) is being prepared as a didactic tool to be made available among the conservation community. The construction of a database of a comprehensive bibliography about lining and the publication of the outcomes of the comparative studies are also expected.

The teaching system and the learning process

- 10 The format of the IP promoted an opportunity for the students to focus on a particular topic during an extended period of time, enabling them to build conceptual knowledge supported by concrete experience. The model of active learning is a common ground on conservation training, where the theoretical concepts taught are demonstrated through practical exercises, leading to consequent discussion of the principles versus the results achieved, towards an integrated balance of practice and theory.
- 11 However, this is the process seen from the point of view of the teacher and it is necessary to consider how the learning process takes place in the human mind.
- 12 David Kolb proposes a model to explain how learning takes place on an individual basis and, according to his theory⁵, learning is a 4-stage cycle that includes experience, reflection, abstraction and experimentation. The concrete experience is the basis for observations and reflections. These reflections are assimilated and distilled into abstract concepts from which implications can be derived. These implications can be actively tested and serve as guides in creating new experiences

Fig. 2 Kolb's learning model





Model based on four-stage cycle: experience, reflection, abstraction and experimentation.

- 13 According to the author, the learner must be involved in all these stages – experiencing, reflecting, thinking and acting – in order to form knowledge. Otherwise students will be thinking about a problem but, not putting their ideas in practice, will stop at the level of reflective observation; or students will only have the knowledge of the abstract concepts and will be able to apply them to practice but the missing experience and reflection will not give them a realistic approach; or, finally, students will stay at the experimentation level without progressing towards reflecting and thinking about the problem, being therefore incapable to have the full perspective and to build knowledge.
- 14 The preparatory work before the workshop and the intensive agenda of the two-week workshop turned out to be very positive in pedagogical terms. It functioned as a modular programme, where the study, reflection, experimentation and discussion of lining methods was the single subject-matter, bringing the different perspectives into debate.
- 15 Each school was responsible for the preparation and demonstration of specific lining techniques, according to their cultural and geographical traditions or to the most representative systems used in its country. Traditional wax-resin lining and Florentine paste-glue lining were presented and performed by teachers from the Belgian and Italian schools respectively.

Fig. 3 Preparation of materials.





Preparation of the traditional wax-resin lining adhesive

Authors' credits

Fig. 4 Traditional Italian lining methods



Preparation of the lining canvas

Authors' credits

- 16 The use of Beva® adhesives and acrylic dispersions was demonstrated in different variations: Beva® Lining applied with cold emulsion, or heat reactivated, by spray, with laminate and transparent (using melinex® as a lining support) was demonstrated by the Portuguese school.

Fig. 5 Beva lining methods





Sealing of the system on the low-pressure table

Authors' credits

- 17 Teachers from the Belgian school performed Beva film® lining and acrylic dispersion linings (nap bond)

Fig. 6 Discussion on the Beva film lining with interleaf



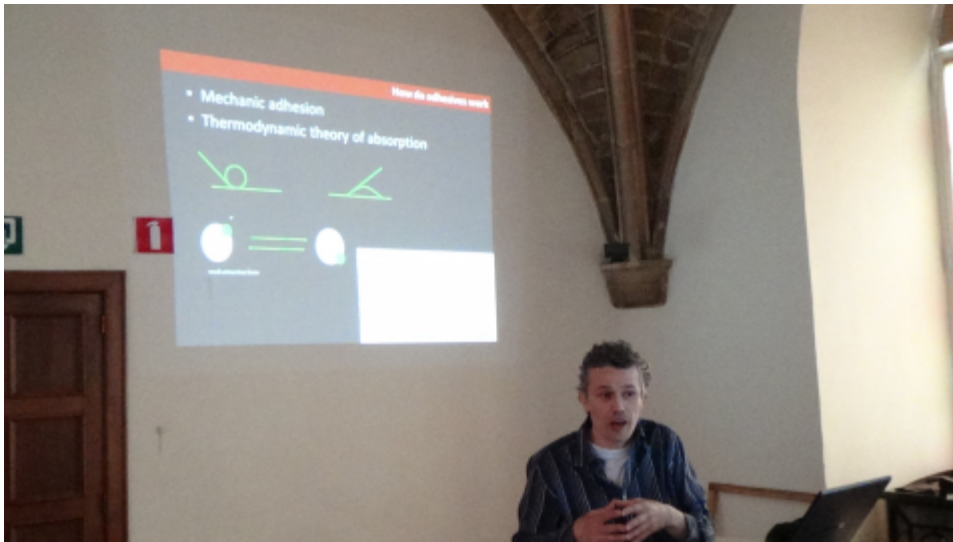
Active reflection during the ongoing process

Authors' credits

- 18 A modification of mist lining and the Roman paste lining technique were presented by the Italian school. Hilka Hiiop, head of the conservation department from the Art Museum of Estonia presented a sturgeon glue lining.
- 19 The structure of the workshop built on daily presentations treating a specific lining technique.

Fig. 7 Daily presentations for each lining technique





Introductory session about adhesive behavior.

Authors' credits

- 20 Theoretical concepts were presented and discussed, providing the starting point for the sessions. Demonstrations followed which constituted an opportunity to experiment and explore the practicalities of each technique, opening space for discussion and individual reflection that turned into larger debates at the end of the day.

Fig. 8 Debriefing at the end of the day



Gathering for discussion and reflection

Authors' credits

- 21 The intensive and open-minded ambience provided the appropriate ground for new experiments, that occurred even during the workshop and later at each academic institution. The learning cycle did not stop after the two-week workshop, as students were invited to bring together their reflections, their notes and write a comprehensive essay, supported on documented sources.



Promoting conservation culture through exchange

22 Teaching conservation, especially structural intervention took place in the past by training as apprentice restorer. It was common that some of them ended up specialized and devoted to the treatment of the support, separating it from the surface interventions. These so-called “liners”, were often employed by restorers to perform the lining or the transfer processes⁶.

23 During the reign of Napoléon Bonaparte an astonishing amount of paintings were transported to Paris and after his defeat an important amount of artworks returned to their original collections. The paintings traveled for months. Although the transport of paintings was often carefully planned and special devices were sometimes used, climate conditions and vibration resulted in a great amount of structural damage, creating an opportunity for exchange of conservation culture.

24 Experienced French and Italian restorers were employed by the European courts after the Napoléon reign to restore and to train restorers⁷. The lining and transfer techniques were, in this way, spread and further developed and got more and more common during the 18th and 19th centuries. Traditional methods which have been used for decades and sometimes centuries have, by being taught from generation to generation, undergone adaptations and modifications. The Italian paste lining method alone has numerous variations as the Italian participants successfully demonstrated.

25 Conservation and restoration methods did not only change during the centuries but also depending on the location. Often, issues like climate and available materials play a major role in the occurrence and success of a certain method. That is the case for sturgeon glue lining, rather unknown outside Russia and its neighbouring countries. The ease of resources and ancient experience in the manipulation of the materials available, made it a method widely used inside these borders. This preference seems to be more based on the availability of material rather than on climate issues as other colder climate countries in the Northern Europe preferred non-aqueous adhesives to avoid humidity problems. For this reason, wax-resin thermoplastic adhesive was regarded more adequate for such places. In contrast, the warmer Southern Europe countries had a tradition of aqueous lining based on paste glue adhesives. However, these approaches were not always well defined geographically, since it is also necessary to take into account the cultural influences each country has undergone. If, traditionally, wax-lining was expected to be the preferred method in Belgium, and paste glue lining or glue lining in Italy and Portugal, that was not always the case there. Although paste-glue lining was more common, the co-existence of wax-linings occurred, probably because of the influence of Belgium institutes such as the Institute Royal du Patrimoine KIK IRPA, due to its collaboration with the first school of conservation in Portugal, the Instituto José de Figueiredo (Lisbon), in the XXth century. Another example of cultural exchange took place when the Napoléon campaigns led French and Italian restorers to the rest of Europe. Climate conditions were probably not the central requirement then when selecting a lining method but rather the experience of the restorer.

26 These examples underline the role of certain geopolitical and cultural politics played in the development of some of those techniques which have influenced the current reality in each country.

27 On a small scale and without pretension of giving/defining a comprehensive perspective, the different practices in use in the Northern and Southern Europe countries were highlighted during this project. In Belgium, the traditional method of



wax-resin lining is still used, at the same time as synthetic adhesives such as Beva and Plextols. However, the former method is less and less used and taught. This carries the risk of losing the consciousness of such a technique and its gestures. In Italy, also the traditional methods are used together with synthetic adhesives and in Portugal, it is more common that lining is performed with synthetic adhesives, although wax-lining is still in use by older restorers.

28 That brings us to the teaching profile because the cultural influences and the specific cultural background of the teachers is relevant. The academic training nowadays is more aware of the implications inherent to the lining action, thanks to the important studies and research done after the Greenwich International Conference, in 1974. On the base of that knowledge, we often refer in our courses to the traditional methods and explain their advantages and drawbacks and the reasons why they have been replaced by more modern techniques. Nevertheless, traditional techniques are still in use. To be acquainted with them is important, in order to know how to deal with a painting lined with such methods, to understand the influence upon its current condition and, what is most important, to understand why those methods have been used or are still used.

29 However, the practicalities of some traditional techniques require a great deal of experience to be reproduced and it becomes apparent that many variations were developed, adding greater difficulty to teachers. For example, paste glue lining is a well-known method in Italy, but how many students in Belgium or even in Portugal have ever experienced this technique? How many of us, teachers, are able to perform a traditional paste lining? And, when it is possible to undertake it, another difficulty immediately arises, that is which method to choose, as regional differences occur in Rome or Florence as well as variations of the procedure or materials more recently introduced by conservators.

30 A similar situation occurs with recent methods that have been developed in certain regions when knowledge about them is not so widespread.

31 Beva 371® and different Plextol® based methods seem to be the most common ones in the conservation studios today. The lining technique and the supports used for lining are however not the same in every country, as was demonstrated during the Workshop. Some methods such as the transparent Beva® lining using melinex® as a support find their origin in USA, spreading then to Brazil. Portugal has of course close links with Brazil, due to the colonial history and the common language, and it is therefore not a surprise that this method is known in Portugal. But it is also comprehensible that other north Europeans have never heard about it and even more likely have never performed the method.

32 This can lead to profound misunderstanding of lining techniques which have a direct impact on the conservation of paintings.

33 New methods can be linked to traditional experience. During the workshop, teachers and students reflected on new methods derived from the traditional ones. A new paste lining method was developed and tried out. A mixed lining (wax and glue) was presented by the Belgian participants and a modified mist lining technique based on the technique developed by Jos Van Och was introduced by the Italian participants.

34 It becomes clear that having students and experienced restorers and teachers from different European origins reflecting on treatments such as lining, which often has strong traditional background, enhances conservation culture.



Conclusions

35 Due to the pedagogical positive benefits it has been decided to replicate the two-week

workshop at the Universidade Católica Portuguesa in September 2014 and in Università degli Studi Urbino “Carlo Bo” in 2015.

36 The cultural exchange is moving forward with the preparation of a multi-lingual publication on lining techniques, written in French, Portuguese, Italian and English. That, among other advantages, will facilitate the translation of technical terminology on that topic.

37 The construction of a network between schools and the possibility to pursue other conservation topics is also being considered.

38

Notes

1 ICOMOS, Guidelines for education and training in the conservation of monuments, ensembles and sites, 10th Meeting, Colombo, 1993.

2 ECCO Professional Guidelines (III): Basic Requirements for Education in Conservation-Restoration, 2004.

3 Teacher at Università degli Studi Urbino “Carlo Bo”, Italy






4 Teacher at École Supérieure des Arts Saint-Luc, Belgium.





5 <http://www.simplypsychology.org/learning-kolb.html> . Viewed February, 10, 2014.

6 HACKNEY, S., “Paintings on canvas: Linings and Alternatives” , Tate Papers [Online], | 2004, Online since October, 1st, 2004, viewed June, 09, 2014. URL : <http://www.tate.org.uk/research/publications/tate-papers/paintings-on-canvas-lining-and-alternatives>

7 GUSTAVSON, N., « Retracing the restoration history of Viennese paintings in the Musée Napoléon (1809-1815) », CeROArt [Online], | 2012, Online since April, 11st, 2012, viewed June, 05, 2014. URL : <http://ceroart.revues.org/2325>; SKWIRBLIES, R., « Restoration of artworks in the Berlin royal picture collection between 1797 and 1830 », CeROArt [Online], | 2012, Online since April, 11st, 2012, , viewed June, 05, 2014. URL : <http://ceroart.revues.org/2356>

List of illustrations

	Title	Fig. 1 Advertisement of the Workshop at the entrance of the École Supérieure des Arts Saint-Luc
	Caption	The two-week workshop location
	Credits	Authors' credits
	URL	http://journals.openedition.org/ceroart/docannexe/image/4405/img-1.jpg
	File	image/jpeg, 656k
	Title	Fig. 2 Kolb's learning model
	Caption	Model based on four-stage cycle: experience, reflection, abstraction and experimentation.
	URL	http://journals.openedition.org/ceroart/docannexe/image/4405/img-2.jpg
	File	image/jpeg, 60k
	Title	Fig. 3 Preparation of materials.
	Caption	Preparation of the traditional wax-resin lining adhesive
	Credits	Authors' credits
	URL	http://journals.openedition.org/ceroart/docannexe/image/4405/img-3.jpg
	File	image/jpeg, 500k
	Title	Fig. 4 Traditional Italian lining methods
	Caption	Preparation of the lining canvas
	Credits	Authors' credits
	URL	http://journals.openedition.org/ceroart/docannexe/image/4405/img-4.jpg

	File	image/jpeg, 1.2M
	Title	Fig. 5 Beva lining methods
	Caption	Sealing of the system on the low-pressure table
	Credits	Authors' credits
	URL	http://journals.openedition.org/ceroart/docannexe/image/4405/img-5.jpg
	File	image/jpeg, 1.4M
	Title	Fig. 6 Discussion on the Beva film lining with interleaf
	Caption	Active reflection during the ongoing process
	Credits	Authors' credits
	URL	http://journals.openedition.org/ceroart/docannexe/image/4405/img-6.jpg
	File	image/jpeg, 1.3M
	Title	Fig. 7 Daily presentations for each lining technique
	Caption	Introductory session about adhesive behavior.
	Credits	Authors' credits
	URL	http://journals.openedition.org/ceroart/docannexe/image/4405/img-7.jpg
	File	image/jpeg, 1.1M
	Title	Fig. 8 Debriefing at the end of the day
	Caption	Gathering for discussion and reflection
	Credits	Authors' credits
	URL	http://journals.openedition.org/ceroart/docannexe/image/4405/img-8.jpg
	File	image/jpeg, 650k

References

Electronic reference

Maria Aguiar, Nico Broers, Olivier Verheyden, Antonio Iaccarino Idelson, Paolo Roma and Ana Cudell, "Promoting conservation culture through exchange in training on traditional and contemporary lining methods", *CeROArt* [Online], HS | 2014, Online since 07 October 2019, connection on 21 June 2022. URL: <http://journals.openedition.org/ceroart/4405>; DOI: <https://doi.org/10.4000/ceroart.4405>

About the authors

Maria Aguiar

Maria Aguiar did her conservation training in Portugal (Instituto Politécnico de Tomar) and England (DeMontfort University and Northumbria University) and teaches Painting Conservation at Universidade Católica Portuguesa. She holds a PhD on Painting Conservation from the last institution and has a special interest on nineteenth century painting.

Nico Broers

Nico Broers holds a Master of Arts in the Conservation and Restoration of fine art from the Northumbria University. He is teaching conservation at the ESA Saint-Luc de Liège and has a particular interest in structural conservation of paintings on canvas and the design of self-tensioning stretchers. Co-founder of *ARTBEE*, conservation studio based in Belgium, and *boite-de-conserve*, association of conservators working in the field of conservation and documentation of modern and contemporary art.

By this author

Alain Roche, *La Conservation des peintures modernes et contemporaines* [Full text]

Paris, CNRS, 2016.

Published in *CeROArt*, EGG 6 | 2017

Editorial [Full text]



Published in *CeROArt*, HS | 2017

Scientific investigation of copies, fakes and forgeries (Paul Craddock,ed.) [Full text]

Oxford, Butterworth-Heinemann, 2009

Published in *CeROArt*, EGG 1 | 2010

La restauration d'une œuvre monumentale de Lucien Simon [Full text]

Published in *CeROArt*, 2 | 2008

Olivier Verheyden

Olivier Verheyden is a trained painting conservator and holds a master Degree in History of Art and Archaeology from the Université catholique de Louvain. He is professor at the ESA Saint-Luc in Liège Belgium, and has a particular interest in traditional restoration methods.

By this author

Frankline Barrès, Les peintures transposées du Louvre: La transposition des peintures de chevalet en France de 1750 à 1848, [Full text]

Paris, Lharmattan, 8 janvier 2020, 410p.

Published in *CeROArt*, 12 | 2020

La Prise de Calais, une campagne de conservation-restauration épique ? [Full text]

Published in *CeROArt*, 9 | 2014

Antonio Iaccarino Idelson

Antonio Iaccarino Idelson teaches structural conservation of canvas paintings at Università di Urbino since 2002 and has given workshops in different institutions in Italy and other countries. Researches on tensioning systems for canvas paintings (wrote "Il tensionamento dei dipinti su tela" in 2004), lining and consolidation methods. President of Equilibrarte srl, conservation company based in Rome with frequent international collaborations.

By this author

Reflections on the relation between conservation and science [Full text]

Published in *CeROArt*, 7 | 2011

About the choice of tension for canvas paintings [Full text]

Published in *CeROArt*, 4 | 2009

Aiming at reproducibility in lining canvas paintings [Full text]

A research on cold lining methods

Published in *CeROArt*, 11 | 2019

Paolo Roma

Paolo Roma graduated at Opificio delle Pietre Dure of Florence and specialized in the restoration of easel paintings, with particular interest for the canvas and wooden panel structural treatments. He has worked and works in Venice, Veneto, Rome and Siena. Since 2012 he teaches at the University "Carlo Bo" of Urbino collaborating with the teacher of structural restoration of on canvas paintings.

Ana Cudell

Graduation in Conservation and Restoration; PhD in Conservation of Paintings; Researcher of Conservation of Contemporary Art at the Research Center for Science and Technology of the Arts at Escola das Artes, Universidade Católica Portuguesa, Porto, Portugal.

Copyright



CeROArt – Conservation, exposition, restauration d'objets d'arts est mis à disposition selon les termes de la licence Creative Commons Attribution - Pas d'Utilisation Commerciale - Pas de Modification 4.0 International.

