

1 INTRODUCTION

EXPERTS IN THE INTERBELLUM

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This book is about the development of scientific conservation and technical art history. However, we should start with a warning: neither ‘scientific conservation’ nor ‘technical art history’ were used as terms in the period with which this book is primarily concerned, the final decades of the nineteenth century up to the mid-twentieth century. Both terms are of significantly more recent making, and interestingly, both terms were coined in a specific, somewhat polemical context in which the legitimacy of their approaches within the broader fields of conservation and art history were contested. Technical art history is a twenty-first-century term. In the late 1990s, David Bomford, trained as a chemist and formerly a Senior Restorer at the National Gallery in London where he was responsible for several publication projects in the seminal ‘Art in the Making’ series, coined the term *technical art history* to refer to a field of study concerned with the making of art that “goes far beyond the physical materials of works of art into questions of artists’ methods and intentions.”¹ Bomford invented the term in reaction against the New Art History, which he considered to be too one-sidedly focused on social context; technical art history, instead, entailed a return of the discipline to the object, as it privileged object-based museum research with a strong emphasis on the study of materials as the object of investigation and technical analysis as an approach and method.²

In a similar vein, the conservation theorist Salvador Muñoz Viñas coined the term *scientific conservation* around the turn of the twenty-first century to refer to a paradigm of conservation of which he considered the principles of truth, objectivity, and authenticity no longer to be universally applicable.³ Muñoz Viñas situated the emergence of scientific conservation to have taken place in the period between 1930 and 1950, when the involvement of natural scientists in the field of conservation intensified, and the paradigm to have become dominant in the post-World War II period. The criticism not only concerns the privileging of science in the field of conservation; more substantially, it extends to the questioning of the preservation of the material integrity of the object as the central aim of conservation. More recently, other conservation paradigms—performance and processual paradigms—have been developed which redefine the aims of conservation and explicitly contrast them with ‘scientific conservation.’⁴ Nevertheless, despite the absence of the term, practices and activities were pursued related to scientific conservation but under different names. In this book, we consider all activities of ‘restorers’ as part of the history of conservation, and we scrutinise the shifting role of science in their practices. Likewise, the practices of technical art historians carried different names. The use

2 *Sven Dupré*

of ‘examination’ and ‘diagnostics’ were widespread to denote the activities of both the connoisseur and the physician, revealing the intimate, long-standing connection between art and medicine.⁵

The terms are thus of recent origin. Yet, we turn to the period which Muñoz Viñas highlighted as the cradle of scientific conservation. The book takes as its starting point the final years of the nineteenth century which saw the establishment of the first museum laboratory in Berlin and groundbreaking international conferences on art history and conservation held in pre-World War I Germany. It follows the history of conservation and art history until the 1940s when, from the ruins of World War II, new institutions such as the *Istituto Centrale del Restauro* in Rome, the *Centraal Laboratorium* in the Netherlands, the Doerner Institute in Munich, and the Royal Institute for Cultural Heritage in Brussels emerged, which would shape the post-war art and conservation world. More specifically, the chronological point of gravity of the book falls in the interbellum, since especially conservators have highlighted the 1920s and 1930s as a crucial period for the rise of scientific conservation. Given the history of conservation, its roots in craft and artisanship, it has been not uncommon to consider scientific conservation, and the associated principles of objectivity, truth, and authenticity, as an emancipation from hands-on craftsmanship. “Science came to dominate the methodology of the treatment of objects,” according to Miriam Clavir, and she considers the period around 1930 as a key turning point in this shift towards scientific conservation and away from empirical restorer’s techniques.⁶

However, it is important to remain critical towards this conservation history which is also activated here to serve purposes of elevation of the status of the field and the profession. Already prior to the period between the two world wars, the professional identity and expertise of the restorer was much contested, and it would be wrong to simply equate the restorer with the craftsman. Rather, the restorer was situated at the crossroads of the different expert worlds. Noémie Etienne has shown that after the French Revolution and the opening of the *Musée Central des Arts* (the present-day Louvre), the role of the restorer was redefined, taking on the intermediate identity of the ‘connoisseur-artiste’ who had knowledge of the ‘practical theory’ of restoration and who shared the artist’s knowledge, yet was differentiated from the artist by giving up on ‘genius’ and sacrificing his own style.⁷ Moreover, neither was it the case that scientists dominated the fields of conservation and connoisseurship, let alone that their authority on issues of authenticity was unequivocally accepted in the interbellum. Instead, when scientists were called in as experts in court cases, their expertise was more often than not contested. One such court case concerned a painting “A merry man,” which the Dutch connoisseur Cornelis Hofstede de Groot had attributed to Frans Hals, and which was subsequently disputed on the basis of expert reports, by F. E. C. Scheffer, Professor of Inorganic Chemistry at Delft University, among others. In his 1925 pamphlet ‘Real or fake? Eye or chemistry?’ Hofstede de Groot refused to address Scheffer because “one cannot fight over art with a chemist.” In answer to the questions, he posed in the title of his pamphlet, Hofstede de Groot decided upon the eye as “the highest authority, just as the ear is for music. Here not the tuning fork, there not the test tube.”⁸

This book further complicates the linear progression narrative of conservation and connoisseurship shifting from art and craft to science in the 1920s and 1930s. Following the lives and trajectories of artists, chemists, collectors, museum professionals, and administrators, and the institutional contexts in which they operated

(from museums to universities and laboratories), this book shows how developments in science and technology changed practices of art history and conservation without adopting a teleological and linear narrative. Instead, it scrutinises the collaborations and conflicts between conservators, chemists, and art historians to reveal how they fought over authority and expertise in a period marked by political upheaval and two world wars. In this book, we adopt an approach which highlights expertise and the importance of shifting epistemic hierarchies in matters of conservation and art history. Historians of science and technology, such as Eric Ash and Ursula Klein, have convincingly argued that experts in the context of the early modern state were neither scholars nor artisans, but hybrid figures combining practical knowledge with scholarly wisdom.⁹ In the histories of conservation and art history, in this book, we will be likewise attentive to the hybridity of the knowledge experts claim to possess.¹⁰ Expertise is also closely connected to the institutions where it is performed. Artistic expertise is associated with connoisseurship, based on ‘bibliographic knowledge’ and visual skills, and its rise in the eighteenth century has been connected to institutions such as the art market and the museum.¹¹ Focusing on the central issue of expertise, this book investigates practices of conservation and art history, moving beyond individual case studies of institutions, museums, and laboratories. It revolves around a set of questions: how was expertise negotiated and shaped in collaborations and conflicts between conservators, chemists, and art historians? Which cultures of expertise emerged in the period? Who was included and excluded? What were the preferred and neglected objects, materials, and forms of knowledge? How did developments in science and technology impact practices in art history and conservation? What role did political, social, and institutional contexts play in the formation of expertise in conservation and art history?

HISTORIES OF CONSERVATION AND ART HISTORY

Only in the past half century, since the 1970s, has research on conservation history been undertaken in a more sustained fashion.¹² Especially, in the more recent decades of the twenty-first century, we have seen a true proliferation of in-depth studies of major figures in the field of restoration and conservation (e.g., Willem Antonij Hopman and Martin de Wild in the Netherlands, or Paul Coremans in Belgium); research into the conservation histories of important works of art (e.g., Rembrandt’s *Night Watch*) and key institutions and museums (e.g., the Doerner Institute in Munich, the Fogg Museum in Cambridge, Massachusetts), and studies focused on particular places, countries and times (e.g., Weimar Germany or France before the Restoration).¹³ In 2004 David Bomford and Mark Leonard brought together a collection of source texts related to historical and philosophical issues of conservation, published by the Getty Conservation Institute.¹⁴ These historical studies form significant building blocks of a more broadly conceived history of conservation. However, there has not been such an attempt since Alessandro Conti’s *Storia del Restauro e della Conservazione dell’ Opere d’Arte*, originally published in 1973, and translated into English by Helen Glanville in 1998.¹⁵ Acknowledging that this is a desideratum, even the recent series ‘The Art of Conservation’ in the *Burlington Magazine* is more a piecemeal collection of historical case studies. Nor does the present book fill this gap; instead, it revisits some case studies from the perspective of the formation of expertise in conservation and restoration.

Conti's seminal work on the history of conservation and restoration adopts a *longue durée* perspective, and its focus on the sixteenth to the nineteenth centuries brings out that there is a much older concern with issues of restoration, repair, cleaning, preservation, and conservation before the period of the final years of the nineteenth century until the 1940s discussed in this book. Moreover, rather than offering a European or global history, Conti's book concentrates on Italy and France. One important eighteenth-century figure is Pietro Edwards, who connects both countries as he supervised Venetian cultural heritage at the time of Napoleon's military victory preceding the appropriation of Venetian artworks and their transfer to the *Musée du Louvre*. In September 1778, Edwards was appointed as director of the restoration of public pictures of Venice and the Rialto. Elizabeth Darrow has portrayed him as a key figure in the transformation of the restorer from a craftsman into a 'philosophe,' and as overseer of the restorers' laboratory in which the "most scientifically advanced methods in Europe" of the time were applied in restoration projects.¹⁶ Ann Massing and Noémie Etienne have discussed the history of restoration in France in the same period, and Zahira Véliz and Ángel Aterido have shown how the role of the restorer evolved from the sixteenth century until the foundation of the Museo del Prado.¹⁷

Spain and France are geographically on the margins of this book. Scholarship on art conservation history has strongly focused on Europe, and this book is no exception, with good reasons. This is not to deny that there are important conservation histories written and to be written for non-European worlds. However, the rise of scientific conservation, which is the focus of this book, took place in modern Europe. Within Europe, more space is given to Germany in the book, and again with good reasons, given the leading role of German experts in the establishment and expansion of academic art history and of scientific conservation and the establishment of museum laboratories in the final decades of the nineteenth century. However, the history of conservation and art history is a transnational history as it was shaped by a multitude of transnational exchanges and travel, also across the Atlantic. Major figures around the Fogg Museum in Cambridge (Massachusetts) were in frequent contact with experts in Europe: for example, Alan Burroughs, who built the world's first archive of X-ray images at the Fogg Museum, depended upon visits to European museums and the exchange of X-ray images with conservators and museum professionals in Europe, such as Martin de Wild.¹⁸ The transnational outlook of the history of conservation and art history was enhanced by the forced expulsion and the diaspora of Jewish and other professors of art history and conservators from Nazi Germany in the 1930s. A leading figure in this regard was Helmut Ruhemann.¹⁹ Born in Berlin to an upper middle-class family of secular Jews, Wilhelm von Bode appointed him as Chief Restorer and Curator at the Kaiser-Friedrich Museum in 1929. Already in contact with major figures abroad, such as the American conservator George Stout and Harold Plenderleith at the British Museum, Ruhemann moved to the National Gallery in London when the Nazis dismissed him from his job in Berlin. Just as Ruhemann changed the way restoration and conservation were approached in England, the diaspora played a major role in the history of conservation.

This book is foremost concerned with the shifting role of science in conservation and connoisseurship. Yet, it is important to keep in mind that interest in materials and techniques in the nineteenth and twentieth centuries was a catalyst for textual research, leading towards editions of Cennino Cennini's 'Libro dell' Arte' and the Mayerne manuscript, as much as for scientific investigations of objects and materials

in laboratories.²⁰ Concerns about the quality of paints and painting materials were drivers behind Adolf Wilhelm Keim's work on *Maltechnik*, and the *Versuchsanstalt und Auskunfstelle für Maltechnik*, established in 1907, and directed by the chemist Alexander Eibner, was one of the first facilities of this kind to become affiliated with a university (the *Technische Hochschule* in Munich).²¹ The literature on conservation history is mostly concerned with the conservation of paintings, again with good reasons, given the role of paintings and painting materials as preferred objects of study in the formation of experts in scientific conservation. However, when in 1889 the German chemist Friedrich Rathgen established the first museum laboratory, at the *Königliche Museen* in Berlin, it was used for the scientific investigation of antiquities; the history of conservation cannot be written in isolation from the history of archaeology.²² Other museum laboratories were established in the interbellum: in the 1920s Alexander Scott argued for the establishment of a laboratory at the British Museum, which thanks to his rhetorical efforts turned into a permanent facility a decade later; in 1928 Edward Waldo Forbes, the director of the Fogg Museum at Harvard University, inaugurated the Department of Technical Research, and in 1931 in the wake of the Rome conference, the Louvre also established a permanent laboratory.²³ From the perspective adopted in this book it will be interesting to see in which ways laboratories became places of authority.

A significant stimulus for the development of scientific conservation and the establishment of laboratories for the scientific examination of works of art was the conference organised by the *Office Internationale des Musées* in Rome in 1930.²⁴ The proceedings of this international gathering of museum experts were published, and a manual on the conservation of paintings intended for the use of conservators and curators appeared. In the 1930s, following the first international conference, the French art historians Fernand Mercier, director of the *Laboratoire microradiographique* of the *Musée des Beaux Arts de Dijon*, and Henri Focillon, director of the *Musée des Beaux Arts* in Lyon, distinguished between 'external technique' and 'internal technique.'²⁵ 'External technique' is visible at the surface of a work of art by use of the naked eye or photography. 'Internal technique' concerns the artistic process which can only be analysed by application of radiography. Together with ultraviolet illumination, X-rays were the imaging technology driving new ways of studying the artistic process in collaboration with art historians at museums. Other early adopters were the art historian Walter Gräff at the *Alte Pinakothek* in Munich and the already mentioned Alan Burroughs at the Fogg Museum.²⁶ In this book, we will discuss how the art world engaged with this new type of visual expertise. Scholars have begun to write this history, but it is worth noting that the scientific examination of art, and in particular, imaging technologies, is completely absent from general histories of art history.²⁷

THE BOOK AND THE CHAPTERS

The book has three sections. **Part I** discusses how major conferences —from the Munich Exhibition and Congress in 1893 to the first international conference on the scientific analysis of art in Rome in 1930— shaped a research community around the study of materials and techniques and issues of conservation. It also shows how scientific expertise developed in the newly established museum laboratories and how new imaging technologies, such as X-rays, were used and contested in court rooms. In her chapter, Kathrin Kinseher zooms in on the conference and exhibition

organised by the German Society for the Promotion of Rational Painting Methods in 1893 to scrutinise the fight over expertise in matters of painting materials between artists and scientists which would haunt the conflict between Alexander Eibner and Max Doerner. In the 1920s, standardisation of scientific procedures, the creation of large archives, and the establishment of museum laboratories were still largely in the future, and this meant that the scientist Arthur Pillans Laurie faced considerable opposition. Geert Vanpaemel shows in his contribution that the opposition to Laurie's scientific expertise was primarily due to the art world expecting too much in terms of certainty, more than Laurie could or even wanted to deliver. Analysing three famous court cases concerning fraud and authenticity, Uta Kornmeier traces the development of radiographic art expertise. By the mid-1930s, she argues in her chapter, X-ray images had been established as ways to authenticate and evaluate paintings. However, as Marco Cardinali reveals, the refusal to cooperate with the X-ray campaign initiated by the director of the Fogg Museum by many Italian art historians in the wake of the international conference in Rome in 1930 is evidence that this new visual expertise remained contested.

Part II investigates the role of science and connoisseurship in the teaching of art history and conservation in Europe, especially Germany, and the United States against the background of discipline formation and processes of professionalisation in art history, archaeology, and conservation. In her chapter on conservation in the field of archaeology, Caitlin O'Grady shows how terminology used in handbooks to describe actions of preservation are markers of how to distinguish experts from technicians. In the field of art history in the late nineteenth century a heated debate ensued about why and how art history should be taught at German universities. In her contribution to this volume, Anne van Dam argues that art historians navigated between conceptualising their new discipline as a specialisation and as a component of general *Bildung* and between the university and the museum as a site of art historical expertise. However, the realisation of formal education in the field of conservation in Germany was impeded by competition between conservators and art historians. As Michael von der Goltz shows in his chapter, science did not come to play a prominent role in the training of conservators in Weimar Germany. The contrast with the courses for art history students which Edward W. Forbes developed at the Fogg Museum is striking. The dream of a formal training programme never materialised, but there was a transatlantic legacy in making scientifically trained conservators an important asset to museums in the interwar period and the establishment of the Courtauld Institute of Art, Francesca Bewer argues.

Part III scrutinises practices of conservation developed in some major European museums, particularly the Ashmolean Museum in Oxford and the Rijksmuseum in Amsterdam. Likely more indicative of more general trends, Morwenna Blewett shows that during the nineteenth century and beyond the turn of the century, in-house conservation expertise was established at the Ashmolean Museum and was augmented by external experts with firm scientific knowledge. Esther van Duijn's chapter on the Rijksmuseum provides us with an interesting contrast. In the first half of the twentieth century, the Rijksmuseum also came to rely on in-house conservation expertise, but the restorers became increasingly invisible and international developments in scientific conservation seem to have largely bypassed the Rijksmuseum—a situation which would only change in the wake of World War II. The final two chapters of

this book show how the establishment and fate of major institutions in which scientific conservation developed, the Doerner Institute and the *Istituto Centrale del Restauro*, were shaped by the political upheaval of the 1930s and World War II. In his chapter, Andreas Burmester shows how Doerner's institute, due to massive financial and ideological support from the Nazi regime, developed into the leading art technological institute in the German Reich. Finally, Cathleen Hoeniger investigates to what extent the extreme damage to artworks caused by World War II in Italy spurred innovative restoration methods. Yet, as she argues on the basis of the language used by Cesare Brandi, director of the newly established *Istituto Centrale del Restauro* in Rome, the adopted methods were considerably more diverse than those emerging from scientific laboratories. Experts also drew upon approaches from archaeology as well as restorers' experiential knowledge.

Notes

- 1 Bomford, "Introduction," 9.
- 2 Cardinali, *Dalla diagnostica artistica*, 18–19.
- 3 Muñoz Viñas, *Contemporary Theory*, 65–90.
- 4 van de Vall, "Documenting Dilemmas."
- 5 Cardinali, *Dalla diagnostica artistica*, 20.
- 6 Clavir, "The Social and Historic Construction," 2.
- 7 Etienne, *The Restoration of Paintings*, 49–72.
- 8 "... omdat men over kunst nu eenmaal niet met een chemicus kan redetwisten. In zake schilderkunst moet het oog de hoogste instantie zijn, evenals in muziek het oor. Hier niet de stemvork, daar niet de reageerbuis." Hofstede de Groot, *Echt of onecht?*, 5.
- 9 Ash, *Expertise*; Klein, "Artisanal-Scientific Experts."
- 10 Following an approach adopted in Etienne and Hénaut, *L'histoire à l'atelier*.
- 11 Guichard, "Connoisseurship and Artistic Expertise."
- 12 For an overview of the literature on conservation history, see Marvelde, "From Roger Marijnissen's historical overview to the present day."
- 13 For a selection of the literature, see van Duijn and Marvelde, "Hopman and De Wild"; Deneffe and Vanwijnsberghe, *A Man of Vision*; van Duijn and Noble, *Rembrandt Conservation Histories*; Burmester, *Der Kampf*; Bewer, *A Laboratory for Art*; von der Goltz, *Kunsterhaltung*; Massing, *Painting Restoration*.
- 14 Bomford and Leonard, *Issues*.
- 15 Conti, *A History of the Restoration*.
- 16 Darrow, "Pietro Edwards," 308.
- 17 Massing, *Painting Restoration*; Etienne, *The Restoration of Paintings*; Véliz and Aterido, "Caring."
- 18 Bewer, *A Laboratory for Art*, 198–203; Vanpaemel, "X-rays," 72.
- 19 Blewett, "Helmut Ruhemann."
- 20 For the important role of Merrifield in this regard, see e.g. Véliz, "Marry Merrifield's Quest."
- 21 Kinseher, *Womit sollen wir malen?*; Burmester, *Der Kampf*, 27–70.
- 22 Gilberg, "Friedrich Rathgen"; for the history of archaeological conservation, see Micheli, *Il restauro archeologico*.
- 23 Pinto, *Science and Conservation*; Bewer, *A Laboratory for Art*; Vanpaemel, "Early Museum Laboratories."
- 24 Cardinali, De Ruggieri, and Falcucci, *Diagnostica artistica*.
- 25 Cardinali, "Technical Art History," 229–30.
- 26 For Burroughs, see Bewer, *A Laboratory for Art*, 95–104; for Gräff, see Burmester, *Der Kampf*, 53–65.
- 27 See e.g. Wood, *A History of Art History*.

Bibliography

- Ash, Eric H. (Ed.). *Expertise: Practical Knowledge and the Early Modern State*, *Osiris* 25 (Chicago: University of Chicago Press, 2010).
- Bewer, Francesca G. *A Laboratory for Art: Harvard's Fogg Museum and the Emergence of Conservation in America, 1900–1950* (New Haven and Cambridge, MA: Yale University Press, 2010).
- Blewett, Morwenna. "The Art of Conservation VI: Helmut Ruhemann, Paintings Restorer in Berlin and London," *The Burlington Magazine*, 158, 1363 (2016), 639–46.
- Bomford, David. "Introduction," in *Looking through Paintings: The Study of Painting Techniques and Materials in Support of Art Historical Research*, ed. Erma Hermens, Annemiek Ouwerkerk, and Nicola Costaras (Leiden: Archetype Publications, 1998), 9–12.
- Bomford, David, and Mark Leonard (Eds.). *Issues in the Conservation of Paintings* (Los Angeles: Getty Conservation Institute, 2004).
- Burmester, Andreas. *Der Kampf um die Kunst. Max Doerner und sein Reichsinstitut für Maltechnik* (Böhlau Verlag Köln Weimar, 2016). <https://doi.org/10.7788/9783412504748>
- Cardinali, Marco, Maria Beatrice De Ruggieri, and Claudia Falcucci. *Diagnostica artistica: Tracce materiali per la storia dell'arte e per la conservazione* (Rome: Palombi Editori, 2002).
- Cardinali, Marco. "Technical Art History and the First Conference on the Scientific Analysis of Works of Art (Rome, 1930)," *History of Humanities*, 2, 1 (2017), 221–43. <http://doi.org/10.1086/690580>
- Cardinali, Marco. *Dalla diagnostica artistica alla technical art history. Nascita di una metodologia di studio della storia dell'arte (1874–1938)* (Torino: Lexis editoriale, 2020).
- Clavir, Miriam. "The Social and Historic Construction of Professional Values in Conservation," *Studies in Conservation*, 43, 1 (1998), 1–8.
- Conti, Alessandro. *A History of the Restoration and Conservation of Works of Art* (London and New York: Routledge, 2015).
- Darrow, Elizabeth. "The Art of Conservation X: Pietro Edwards: The Restorer as 'Philosophe,'" *The Burlington Magazine*, 159, 1639 (2017), 310–17.
- Deneffe, Dominique, and Dominique Vanwijnsberghe (Eds.). *A Man of Vision. Paul Coremans and the Preservation of Cultural Heritage Worldwide* (Brussels: Royal Institute for Cultural Heritage, 2018).
- Etienne, Noémie. *The Restoration of Paintings in Paris, 1750–1815. Practice, Discourse, Materiality* (Los Angeles: Getty Conservation Institute, 2017). Translated by Sharon Grevet from the French: *La restauration des peintures à Paris: Pratique et discours sur la matérialité des œuvres d'art* (Rennes: Presses Universitaires de Rennes, 2012).
- Etienne, Noémie, and Léonie Hénaut (Eds.). *L'histoire à l'atelier: Restaurer les œuvres d'art (XVIIe–XXIe siècles)* (Lyon: Presses universitaires de Lyon, 2012).
- Gilberg, Mark. "Friedrich Rathgen: The Father of Modern Archeological Conservation," *Journal of the American Institute for Conservation*, 26 (1987), 105–20.
- Guichard, Charlotte. "Connoisseurship and Artistic Expertise London and Paris, 1600–1800," in *Fields of Expertise: A Comparative History of Expert Procedures in Paris and London, 1600 to Present*, ed. Christelle Rabier (Cambridge: Cambridge Scholars Publishing, 2007), 173–91.
- Hofstede de Groot, Cornelis. *Echt of onecht? Oog of chemie? Beschouwingen naar aanleiding van het mansportret door Frans Hals* (The Hague: Van Stockum, 1925).
- Kinseher, Kathrin. "Womit sollen wir malen? Farben-Streit und maltechnische Forschung in München. Ein Beitrag zum Wirken von Adolf Wilhelm Keim" (Munich: Siegl, 2014).
- Klein, Ursula. "Artisanal-Scientific Experts in Eighteenth-Century France and Germany," *Annals of Science*, 69, 3 (2012), 303–6. <https://doi.org/10.1080/00033790.2012.675195>

- Marvelde, Mireille te. "From Roger Marijnissen's Historical Overview to the Present Day: Some Thoughts Concerning Half a Century's Development of Conservation History as a Discipline," *CeRoArt: Conservation, Exposition, Restauration d'Objets d'Art*, June 2015: *Mélanges en l'honneur de Roger Marijnissen*. <https://doi.org/10.4000/ceroart.4623>
- Massing, Ann. *Painting Restoration before La Restauration: The Origins of the Profession in France* (London: Harvey Miller and Cambridge: Hamilton Kerr Institute, 2012).
- Micheli, Mario (Ed.). *1860–1970. Il restauro archeologico in Italia: Fonti storiche e pratiche disciplinari* (Rome: Archivio Centrale dello Stato, 2015).
- Muñoz Viñas, Salvador. *Contemporary Theory of Conservation* (Amsterdam Boston Heidelberg: Elsevier Butterworth Heinemann, 2005).
- Pinto, Mariana Leonor. *Science and Conservation at the British Museum Laboratory (1919–1934)* (Utrecht University, PhD dissertation, 2021).
- Vanpaemel, Geert. "X-rays and Old Masters. The Art of the Scientific Connoisseur," *Endeavour*, 34 (2010), 69–74. <https://doi.org/10.1016/j.endeavour.2010.04.004>
- Vanpaemel, Geert. "Early Museum Laboratories and the Pursuit of Objectivity," in *A Man of Vision. Paul Coremans and the Preservation of Cultural Heritage Worldwide*, ed. Dominique Deneffe, and Dominique Vanwijnsberghe (Brussels: Royal Institute for Cultural Heritage, 2018), 15–26.
- von der Goltz, Michael. *Kunsterhaltung - Machtkonflikte. Gemälde-Restaurierung zur Zeit der Weimarer Republik* (Berlin: Reimer, 2002).
- van de Vall, Renée. "Documenting Dilemmas: On the Relevance of Ethically Ambiguous Cases," *Revista de História da Arte*, 4 (2015), 1–11.
- van Duijn, Esther, and Mireille te Marvelde. "The Art of Conservation VII: Hopman and De Wild: The Historical Importance of Two Dutch Families of Restorers," *The Burlington Magazine*, 158, 1363 (2016), 812–23.
- van Duijn, Esther, and Petria Noble (Eds.). *Rembrandt Conservation Histories* (London: Archetype Publications, 2021).
- Véliz, Zahira, and Ángel Aterido. "The Art of Conservation V: Caring for the King's Pictures: Artists and Restorers in the Spanish Royal Collection, 1576–1814," *The Burlington Magazine*, 158, 1359 (2016), 447–59.
- Véliz, Zahira. "The Art of Conservation XI: Marry Merrifield's Quest: A New Methodology for Technical Art History," *The Burlington Magazine*, 159, 1371 (2017), 465–75.
- Wood, Christopher S. *A History of Art History* (Princeton and Oxford: Princeton University Press, 2019).



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